Ruwantissa Abeyratne

Law and Regulation of Air Cargo

Springer

Law and Regulation of Air Cargo

Ruwantissa Abeyratne

Law and Regulation of Air Cargo

Springer

Ruwantissa Abeyratne
Aviation Strategies International
Montreal, Québec, Canada

ISBN 978-3-319-92488-5 ISBN 978-3-319-92489-2 (eBook)
https://doi.org/10.1007/978-3-319-92489-2

Library of Congress Control Number: 2018943622

Printed on acid-free paper

This Springer imprint is published by the registered company Springer Nature Switzerland AG.
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Preface

The International Civil Aviation Organization (ICAO[1]), in its *World Civil Aviation Report for 2016*, records that cargo traffic recorded an annual growth of +1.7% in 2015 in terms of freight tonne kilometres reflecting a substantial decline as compared to +4.7% increase in 2014. The outlook for 2042 is an overall 4.5% growth rate. Boeing in its World Air Cargo Forecast 2016–2017 says: "world air cargo traffic has struggled to maintain sustained growth since the end of the global economic downturn in 2008 and 2009. After bouncing back in 2010, then stagnating in 2011 and 2012, air cargo began growing again in mid-2013, even growing 4.8% in 2014. Growth accelerated in the first quarter of 2015, but, then traffic volumes remained flat

[1] The International Civil Aviation Organization is the United Nations specialized agency dealing with international civil aviation. ICAO was established by the Convention on International Civil Aviation (Chicago Convention), signed at Chicago on 7 December 1944. Fifty-two States signed the Chicago Convention on 7 December 1944. The Convention came into force on 4 April 1947, on the thirtieth day after deposit with the Government of the United States. Article 43 of the Convention states that an Organization to be named the International Civil Aviation Organization is formed by the Convention. ICAO is made up of an Assembly, which is the sovereign body of the Organization composed of the entirety of ICAO member (Contracting) States, and a Council which elects its own president. The Assembly, which meets at least once every three years, is convened by the Council. The Council is a permanent organ responsible to the Assembly, composed of 36 Contracting States. These 36 Contracting States are selected for representation in the Council in three categories: States of chief importance to air transport; States not otherwise included which make the largest contribution to the provision of facilities for international air navigation; and States not otherwise included whose designation will insure that all the major geographic areas of the world are represented on the Council. Article 47 of the Chicago Convention provides that ICAO enjoys "such legal capacity as may be necessary for the performance of its functions" and goes on to say that "full juridical personality shall be granted to the Organization wherever compatible with the constitution of the laws of the State concerned." The Council has two main subordinate governing bodies, the *Air Navigation Commission* and the *Air Transport Committee*. *The Air Navigation Commission* is serviced by the Air Navigation Bureau and is responsible for the examination, coordination, and planning of all of ICAO's work in the air navigation field. This includes the development and modification of SARPS contained in the ICAO Annexes (all except Annexes 9 and 17), subject to the final adoption by the ICAO Council. At the time of writing, ICAO had 192member States.

for the rest of that year. Air cargo traffic gathered some strength after a weak first quarter of 2016 and is projected to return to trend growth by 2018. Despite the weak growth of the past decade, more than one-half of air cargo is still carried on freighters."[2]

ICAO and the World Customs Organization (WCO) convened their second Joint Conference on Enhancing Air Cargo Security and Facilitation on 16 and 17 April 2014 in Manama, Bahrain. The Conference hosted by Bahrain's Ministry of Transport (Civil Aviation Affairs) was expected to heighten awareness among aviation security authorities, customs administrations, and stakeholders of the challenges facing the global air cargo industry as well as their possible solutions. Both Organizations pledged to *inter alia* enhance international cooperation to prevent acts of unlawful interference; encourage close coordination between authorities at the State level responsible for aviation security and customs; support a risk-based approach to ensure additional security measures are applied to high-risk cargo while facilitating the movement of low-risk consignments; promote security measures that focus on outcomes and provide a level of operational flexibility to accommodate different circumstances; align policy and regulatory frameworks to achieve synergy, and avoid duplication; and promote mutual recognition of air cargo security regimes and joint oversight activities.

ICAO and WCO may take care of the regulatory aspects of air cargo. These aspects stem from fundamental principles of law. The law of air cargo involves many aspects—from security to liability and compensation for air cargo as well as safety in the context of the carriage of dangerous goods. In the context of security, the air cargo supply chain security is important and is addressed in Annex 17 to the Convention on International Civil Aviation (Chicago Convention) of 1944 by way of Standards and Recommended Practices (SARPs), the thrust of which is supported by provisions in the Aviation Security Manual of ICAO (Doc 8973—Restricted). In terms of liability for lost or damaged cargo the Montreal Convention[3] of 1999 contains provisions that require jurisdictions to comply with.

The 2013 case of *Durunna* v. *Air Canada* brings to bear several issues that affect both the consignor and consignee. *Durunna* was a case where a consignment of 10 laptop computers carried by air from Canada to Nigeria disappeared during carriage. The defendant Air Canada invoked the limitation of liability of the carrier guaranteed by the Montreal Convention, whereas the plaintiff claimed the total value of the computers along with shipping costs. On the flimsiest and most tenuous of reasons imaginable, the court awarded judgment to the plaintiff as claimed, on the ground that the defendant did not give sufficient notice to the plaintiff of the latter's limitation of liability and therefore the limitation provisions of the Convention did not apply.

For one, there is no provision in the Montreal Convention that requires notice by the carrier to the consignor that limitation of liability provisions would apply to the carriage of cargo. More compellingly, Article 9 of the Convention is explicit in that even in the absence of documents of carriage of whatever nature, the contract of

[2] Boeing World Air Cargo Forecast 2016–2017. http://www.boeing.com/commercial/market/cargo-forecast/.

[3] Convention for the Unification of Certain Rules for International Carriage by Air, done at Montreal on 28 May 1999.

carriage will remain valid and that limitations of liability will apply. The only window of opportunity the plaintiff would have had to justify his claim for the full value of cargo would have been for him to show that he had declared the value of the cargo as a basis for compensation for loss, as was decided in the 2003 case of *MDSI Mobile Data Solutions Inc.* v. *Federal Express* where the plaintiff had declared the value of cargo as $214,000, which the court interpreted to have replaced the limited liability of 250 Francs per kilogram.

The *Durunna* decision, which was incorrect, focuses our attention to a more serious issue, which is cargo theft which leaves the hapless consignor with compensation of 17 Special Drawing Rights per kilogram under the Montreal Convention, unless the consignor makes, at the time of delivery of the cargo to the carrier, a special declaration of interest at delivery at destination and pays a supplementary sum if required. It is only this measure that obligates the carrier to pay the declared sum, unless the carrier proves that the sum is greater than the consignor's actual interest in delivery at the destination.

Unlike in the context of liability for damage sustained by the passenger or his checked baggage, where a two-tier liability system operates where the carrier's liability exceeds the 100,000 Special Drawing Rights of the first tier unless the carrier proves that the damage was not due to the negligence of the carrier or his servants or that there was negligence on the part of the plaintiff or other wrongful act or omission of a third party, there is no such stringent onus placed on the carrier in case of loss or damage to cargo.

There is no room for doubt that cargo crimes, among which theft of cargo is significant, are prolific. The CRS Report for Congress on Air Cargo Security, updated in 2007, places the extent of cargo theft in the United States for all forms of transportation at 10–25 billion dollars per annum. The same report voices concern about cargo theft rings in JFK International, Logan International, and Miami International Airports. It identifies the insider threat as the most ominous where cargo workers assist in cargo theft and calls for more background checks and the enhancement of security of cargo operations.

Lack of effective cargo theft reporting, weaknesses in current transportation crime laws, lack of understanding of the nature of cargo carriers, and the need to improve expertise in countering cargo theft are some of the issues raised.

From the *Franklin Mint* case, argued in 1983, which involved the carriage of a cargo of valuable coins valued at $250,000 to date, the liability regime regarding the carriage of cargo has caused much debate. The solution seems to lie both at law and at containment of the crime. It is time to take another look.

This book is intended to provide some insight into the legal and regulatory principles applicable to the carriage of cargo by air as well as the principles of competition between carriers that govern such carriage.

Montreal, QC, Canada Ruwantissa Abeyratne
March 2018

Contents

Table of Cases

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

R

S

T

U

V

W

Z

Chapter 1
General Principles of the Carriage of Air Cargo

This chapter looks at the general principles applicable to the carriage of air cargo as a precursor to a discussion of specific areas in the chapters to follow. This is accomplished against the backdrop of the evolution of the air transport industry in the area of air cargo over the past 20 years—from 1998 to 2018. Like other growing industries, the air freight industry was expanding exponentially over this period of time and continues to do so. The issues faced by the industry continue to be complex and their impact on other business operators is tangible. Transportation, an essential service relied upon by the air freight industry, makes it inevitable that this industry affects almost every other business and brings to bear its relevance and interest to business management.

Looking at past years, air transport was the most expensive of all modes of transport (road, rail, air and sea) to operate in terms of per kilogram of mass carried.[1] This essentially means that commercial air transport is predominantly offered to the high value/high yield end of the market, i.e., to the business community, the tourism industry and the time-critical freight industry dealing with overnight documents and high value/highly perishable items.

The total scheduled traffic (domestic and international) carried by the airlines of the contracting States of the International Civil Aviation Organization (ICAO) in 1999 was 369 billion ton-kilometers performed, an increase of about 6% over 1998.[2] The airlines of these States carried a total of 1558 million passengers and some 28 million tons of freight in 1999. The freight figure compares with 26 million tons carried in 1998. Compared with previous years, the carriage of international freight in 1999 showed an increase of 9%.

ICAO has recorded that between 1989 and 1998, the reported number of commercial aircraft in service increased by about 60% from 11,253 to 18,139 aircraft.

[1] Bureau of Transport Economics, Commonwealth of Australia, The Supply of Air Freight Capacity to Asian Markets, Working Paper 42, (1999) at 200.

[2] *The World of Civil Aviation* 1999–2002, ICAO Circular 279-AT/116 at 27.

R. Abeyratne, *Law and Regulation of Air Cargo*,
https://doi.org/10.1007/978-3-319-92489-2_1

In 1998, 1463 jet aircraft were ordered, compared with 1309 in 1997, and 929 were delivered compared with 674 aircraft in 1997. In 1998,[3] the total scheduled traffic carried by airlines of the 185 contracting States of ICAO amounted to a total of about 1462 million passengers and about 26 million tons of freight. From 1988 to 1999, the total ton-kilometers performed described in terms of the total scheduled airline traffic, grew at an annual rate of 5.2%.[4] Passenger kilometer growth during this decade was 4.6% and freight ton-kilometers growth was 6.6% for the same period.[5]

These figures are reflective of the rapidly increasing frequency of aircraft movements at airports, mandating extensive management of airport capacity.[6] Scheduled and chartered freight tonnage is expected to grow by an average 5.3% per year over the period 1998–2002, according to the latest freight forecast of the International Air Transport Association (IATA). At a regional level, high growth regions (those likely to experience an average annual growth rate in excess of 6.0% between 1998 and 2002) will be Central America, South Asia, the South Pacific, Lower South America and Southern Africa.[7] Over the past 2 years, the world has come out of recession. Increased world trade has created better and faster cargo handling and clearance. Yet, there are other factors, apart from economic growth, in the ever-growing attraction of airfreight, since more and more wide-bodied aircraft are being used for passenger traffic and more freight can be carried on these flights. To cope with demand, airlines are forming strategic alliances among themselves by utilizing such commercial tools as franchising, leasing and interchange of aircraft.

Competent airline managers needed to know that in the foreseeable future there will be a few mega-carriers operating in America, Europe, Asia and the Pacific Rim, and that these carriers will probably be composites of strong strategic alliances between powerful airlines and powerful regional States. Air carriers would be well equipped to offer the quality of service and punctuality that modern glamour requires of air travel. To compete with these carriers for a fair share of the market, smaller airlines will have to offer a comparable product.

At the Fourth Air Transport Conference of ICAO, held from 23 November to 6 December 1994 at ICAO Headquarters in Montreal, it was observed that in terms of tons of international cargo loaded and unloaded at airports, 15 airports in 12 countries accounted for 50% of the total amount of international cargo loaded and unloaded worldwide.[8] Over the same year, 30 air carriers from 25 countries accounted for 76% of total international passenger-kilometers performed worldwide by 365 air carriers. The market share of the largest 30 carriers had increased slightly over the 10-year period between 1982 and 1993, while the market share of

---

[3] *Ibid.*

[4] *The World of Civil Aviation* 1999–2002, *supra* note 2 at para. 5.11.

[5] *Ibid.*

[6] The above figures were extracted from The Annual Report of the Council—1998 (Montreal), ICAO Doc 9732 at 6.

[7] Air Cargo Growth to 2002—Airlines Cautiously Optimistic? Airlines International 5:1 (January 1999) 18.

[8] AT Conf/4-WP/5, 8/8/94 at 5.

the largest ten carriers had increased by 2%. The tendency toward concentration of international passenger services in a few air carriers also manifested itself in international cargo. In 1993, 30 scheduled service air carriers from 26 States were responsible for the carriage of 75% of the total ton kilometers performed.[9] Many air carriers had concluded bilateral agreements relating to special commercial arrangements such as those relating to code-sharing, pooling, block space, yield management and schedule coordination, making themselves stronger in the market place.

These arrangements, though having the ability to strengthen existing commercial potential of air carriers, would also be calculated to obtain for them indirect market access, thus causing concern among those air carriers who depended entirely on their bilateral air services agreements for the carriage of commercial traffic between States.

Another consideration that influenced the deliberations of the Conference was the ICAO traffic forecasts up to the year 2003. According to these forecasts, total world airline scheduled passenger traffic in terms of passenger-kilometers is expected to grow at an annual rate of 5% during the period of 1992–2003, compared with 5.6% per annum over the period of 1982–1992. Freight traffic growth over the same period is forecast to be stronger, at 6.5% per annum in terms of freight ton-kilometers. International traffic is expected to continue to grow faster than total traffic—at 6.5% per annum for passenger-kilometers and 7% per annum for freight ton kilometers.[10] Over the 1992–2003 period, the annual total number of domestic and international aircraft departures on scheduled services is forecast to rise by nearly a quarter (to 18 million), the number of passengers carried by over half (to 1835 million) and the number of freight tons carried by over a half (to 27 million).[11] These figures show a sustained trend of growth over the past decade in the carriage of passengers and freight by air.

1.1 Early Trends in the Carriage of Air Freight

It is incontrovertible that air cargo was an important revenue generator. In 1992, about 12% of the world's total traffic revenue earned on scheduled services came from cargo. A more recent development that added importance to air cargo was the huge expansion of the courier and express/small package business, which offered door-to-door air service for time-sensitive documents or small packages, usually with delivery guaranteed by a specified time, subject to size or weight limitations. Some airlines also became more involved in door-to-door services, rather than limiting themselves to providing the air transport component. A major problem experienced by all-cargo operators is the lack of flexibility in market access rights under bilateral agreements, which treated air cargo as part of passenger service. In such

[9] *Ibid.*

[10] ICAO News Release, P1O 10/94 at 1.

[11] *Ibid.*

agreements, the limitations usually imposed on passenger service in respect of routes, traffic rights and frequency may also apply to all-cargo service. Other regulatory problems encountered by all-cargo operators may include airport curfews and limitation on airport slots.[12]

Many economies were becoming increasingly dependent on-air cargo because of changes in the organization of multinational companies. Businesses looked for ways to reduce working capital by reducing stocks and operating on the basis of just-in-time delivery. The air freight industry had been given a lot of attention lately with the change of global industry and, due to its particular characteristics, is in a much better position than most to appreciate the reality of the global economy. It has, by definition, an international view. As the world's economies intermesh more and more, the community of interests made up of airport authorities, customs, handling agents and airlines have found it more important than ever to pool information.[13]

Cargo revenue made a strong contribution to airline profits and is often the difference between profit and loss. Blue chip researchers forecast a tripling of revenues within the next 20 years, a faster growth than the passenger side of business. Economic integration was the catalyst for global markets, predicting that 20% of the world's products would grow to 80%, from six to seventy trillion dollars. Air cargo was to benefit dramatically, growing at three times the rate of the global economy. As the air cargo industry grows significantly, some reasons for concern arise, since, although air cargo is a US $200 billion industry, only 20% of this revenue actually accrued to air transportation. The rest remained in distribution.

One of the problems of growth in air transport is that unless initiatives are taken, airlines, major passenger airports, handling agents and forwarders will be left with lower yield consolidation. This is because integrators are both expanding the total market and carving out an increasing share of what was enjoyed previously solely by the traditional market players. With the growth of service industries, and process taking over from "batch," these integrators of cargo anticipate the triumph of delivery over dispatch.

The catalyst behind the current business paradigm relating to air freight was the advent of the Boeing 747. While its effect on the passenger business was well known, what is not generally appreciated is its effect on reshaping the cargo business. The 747 and other wide-bodied jets altered the capacity ratio between what was carried in belly holds and freighters. Airlines, in order to fill the additional space, gave control of the distribution system to a middleman, the forwarder. When the forwarder took over, the airlines assumed that they would only have one master airway bill and that freight space would be filled. However, forwarders, instead of reinvesting the enhanced margins from consolidations into new service options, used their newly found muscle to deepen discounts from airlines.

[12] ICAO (1996), pp. 4–5.

[13] Thomas and Gamper (1996), p. 29.

Another problem for the traditional industry was that Express will continue to grow both in its own right and at the expense of general cargo.[14] At that time, it was thought that Express will become the prime source of cargo revenues.

Equally, integrators were to continue to grow both their revenues and their own discreet aircraft fleets. As the Express traffic migrates, the traditional industry—airlines, airports, handling agents and forwarders will be left with the remaining lower yielding traffic. The opportunity lies in the huge potential market that Express offers the traditional industry, which does have many cards to play, including the Internet. The Internet has already been the means of survival for many small and medium forwarders, while cutting the costs of the larger ones.[15]

It is also noteworthy that a new system of air cargo, called GFX, had been introduced during the time in question. The System was a global Internet-based trading system for air cargo capacity tested in early 2001. It promised to bring air cargo all the benefits of e-business: reduced transaction costs, speedy quotes and a wealth of transaction data that will enable airlines and forwarders to implement more effective pricing. GFX also overcame the perceived wisdom in air cargo that electronic-capacity trading would never work because airlines would never reveal commercially sensitive information on the web site. With GFX, it is up to airlines how much capacity they reveal.[16]

The most striking development among leading players in the scheduled airline industry was a new tendency to reconstitute cargo departments as stand-alone entities that operate as independent profit centers. All carriers with any ambitions in international air cargo have moved away from the concept of simply filling their main line's spare belly space in passenger aircraft. Two years ago, the German airline Lufthansa created Lufthansa Cargo as a separate company within the group, operating as an independent unit. The wider role proposed by Lufthansa will rely on closer cooperation between carrier and forwarder. The German carrier said it did not want to develop new skills that already exist among forwarders. The carrier was looking to working with forwarders as partners instead of competing against the forwarders, which has generally been the standard in the industry.[17]

Air service providers were still highly restricted in their ability to develop the supply of services on the basis of technological and commercial considerations. There were differences between countries and regions as to the availability of cargo-relevant traffic rights, but as a general rule the international design of cargo carriage consists of different categories of carriers. These rules restrained their corporate and business structures, notably ownership and control structures, the possibility to

[14] Express included, inter alia, FedEx, DHL, Airborne Express and UPS. In many cases, the parcels were carried on-board passenger aircraft by a courier. As volume grew, to avoid grid locking passenger terminals, many airports developed discrete express facilities. Consignments accepted under express service will usually be available to the consignee or their agent(s) at the airport of destination on the next business day.

[15] Bridges (2000), pp. 14–19.

[16] Conway (2000), pp. 78–79.

[17] Swindell (1997), pp. 26–30.

contract freely with domestic/local carriers abroad and to diversify into complementary services such as trucking. In addition, in certain instances, freight-forwarders, in order to develop seamless transport services for domestic and international customers and to clear air cargo in airports that erode the advantage of the air mode, often have to overcome quality and cost problems in the ground handling of their cargo and access problems to airport runways at cargo-relevant periods of the day, notably because of airport curfews and noise restriction.

At that time, the air transport aspect of cargo services was predominantly governed by bilateral aviation agreements, prevailing in all countries, limiting air carriers' ability to respond to market developments and to exploit market potential. As a result, carriers could not plan international route structures and develop services in full competition with each other. It was thought that, from a strictly economic point of view, all categories of air carriers should be allowed to make use of the full range of traffic rights and have the same opportunities for unimpeded route design and network operations.

All cargo operators, and, where consistent with existing bilateral air service agreements, combination carriers, should enjoy full operational flexibility in order to exploit business opportunities and to enhance competition among air transportation providers. Leaving pricing to be set by the marketplace without any governmental intervention would certainly be the ideal economic solution. However, given the long history of direct and indirect governmental involvement in pricing of air transportation, a widespread agreement to such a provision may prove very difficult.

There were other factors specific to the air cargo industry, such as intermodal transportation, which brought to bear issues that need consideration. Virtually all sectors of transportation relied on intermodal transport services. Air cargo in particular depended to a large extent on other modes of transport. Goods were transported from the producers via airport-to-airport and are then channeled via different modes of transport to their final destination. Air cargo transport services were one piece in the logistical chain ensuring relatively new services, such as time definite deliveries and door-to-door integrated services, both of which are in high demand by shippers. The operation of intermodal transport services was therefore a unique feature of the air cargo industry.

Industry experts had noted that customs clearance procedures account for as much as 20% of average transport time and 25% of average transport costs of imports in many States. While expedited customs clearance was a crucial issue for the express delivery services industry, reductions in the time and cost of customs clearance would benefit all air cargo service providers.[18]

[18] OECD (2000), pp. 1–11.

1.2 Liberalization of Air Freight Market Access

One of the proposed future regulatory arrangements at the Fourth ICAO Air Transport Conference was that parties would grant each other full market access (unrestricted route, operational and traffic) rights for use by designated air carriers, with cabotage and so called seventh freedom rights exchanges optional. Of course, each party would have the right to impose a time limited capacity freeze as an extraordinary measure and in response to a rapid and significant decline in that party's participation in a country pair market. The latter measure, called the "safety net," was intended to form a buffer against a total swing towards favoring unregulated commercial operations of air carriers. The market access and "safety net" principles were designed to award to each party's air carrier unrestricted basic market access rights to the other party's territories for services touching the territories of both parties (to the exclusion of cabotage rights, i.e. rights to operate commercial air services within points in the territory of another party) optionally, for so called seventh freedom services (i.e., services touching the territory of the granting party without touching the territory of the designating party); and/or optionally, with cabotage rights. To these rights, the "safety net" brought in the caveat that each party would have the right to impose a capacity freeze as an extraordinary measure, fewer than six conditions that called for such a freeze. They were:

(1) To be implemented only in response to a rapid and significant decline in that party's participation in a country pair market;
(2) To be applied to all scheduled and non-scheduled flights by the air carriers of each party and any third State which directly serve the affected country-pair market;
(3) To be intended to last for a maximum finite period of, for example, 1 year, 2 years or 1 year, renewable once;
(4) To require close monitoring by the parties to enable them to react jointly to relevant changes in the situation (for example, an unexpected surge in traffic);
(5) To be responsible for creating a situation in which any affected party may employ an appropriate dispute resolution mechanism to identify and seek to correct any underlying problem; and
(6) To be aimed at requiring mutual efforts to ensure the earliest possible correction of the problem and removal of the freeze.[19]

It is noteworthy that the above framework of future regulatory arrangements was intended to function in different structures and relationships, for example bilaterally between two States, between a State and a group of States and between two groups of States and multilaterally with a small or large number of States. It was expected that this structure would also respect all rights, existing and newly granted.[20]

[19] AT Conf/4-WP/7; 14/4/94 at 3.

[20] See generally, AT Conf/4-WP/16; 23/6/94.

Airlines were therefore faced with the imminent prospect of the future realm of commercial aviation being controlled by a group of air carriers that may serve whole global regions and operated by a network of commercial and trade agreements. Regional carriers were to remain predominant, easing out niche carriers and small national carriers whose economics would be inadequate to compare their costs with the lower unit costs and joint ventures of a larger carrier. It is arguable that a perceived justification for "open skies" or unlimited liberalization exists even today in the bilateral air services agreement between two countries, where "fair and equal opportunity to operate air services" is a sine qua non for both national carriers concerned. This had been re-interpreted to mean "fair and equal opportunity to compete" and later still, "fair and equal opportunity to effectively participate" in the international air transportation as agreed.[21] Of course, there had been no universal acceptance of this evolution in interpretation and carriers and States whose nationality such carriers have maintained tendentiously their own positions.

ICAO had suggested the following preferential measures for the consideration and possible use of its member States who are at a competitive disadvantage when faced with the mega-trends of commercial aviation and market access:

(1) The asymmetric liberalization of market access in a bilateral air transport relationship to give an air carrier of a developing country: more cities to serve; fifth freedom traffic rights on sectors which are otherwise not normally granted; flexibility to operate unilateral services on a given route for a certain period of time; and the right to serve greater capacity for an agreed period of time[22];
(2) More flexibility for air carriers of developing countries (than their counterparts in developed countries) in changing capacity between routes in a bilateral agreement situation; code-sharing to markets of interest to them; and changing gauge (aircraft types) without restrictions;
(3) The allowance of trial periods for carriers of developing countries to operate on liberal air service arrangements for an agreed time;
(4) Gradual introduction by developing countries (in order to ensure participation by their carriers) to more liberal market access agreements or longer periods of time than developed countries' air carriers;
(5) Use of liberalized arrangements at a quick pace by developing countries' carriers;
(6) Waiver of nationality requirement for ownership of carriers of developing countries on a subjective basis;
(7) Allowance for carriers of developing countries to use more modem aircraft through the use of liberal leasing agreements;
(8) Preferential treatment in regard to slot allocations at airports; and

[21] Wassenbergh (1996), p. 80.

[22] The right to uplift or discharge passengers, mail and cargo in a country other than the grantor State.

(9) More liberal forms for carriers of developing countries in arrangements for ground handling at airports, conversion of currency at their foreign offices and employment of foreign personnel with specialized skills.[23]

These proposed preferential measures were calculated to give air carriers of developing countries a "head start" which would effectively ensure their continued participation in competition with other carriers for the operation of international air services. Furthermore, improved market access and operational flexibility were two benefits that are considered as direct corollaries to the measures proposed.

While the open skies policy sounds economically expedient, its implementation undoubtedly would phase out smaller carriers now offering competition in air transport and a larger spectrum of air transport to the consumer. Lower fares, different types of services and varied in-flight service profiles are some of the features of the present system. It is desirable that a higher level of competitiveness prevails in the air transport industry. In order to achieve this objective, preferential measures for carriers of developing countries would play a major role.

1.3 Early ICAO Initiatives

The carriage of air freight has no spectacular history or singular milestones in the annals of air carriage. It grew as a necessity, to transport merchandise needed for air transport. Earlier records show that the first instances of the carriage of air freight were in transporting mail in balloons or dirigibles from city to province, for example during the siege of Paris in 1870.[24] Air cargo has been defined a contrario from the definition of baggage contained in Article 4 of the Warsaw Convention[25] to simply mean "goods transported which are not baggage".[26] Annex 9 to the Chicago Convention[27] defines cargo as "any property carried on an aircraft other than mail, stores and accompanied or mishandled baggage".[28] Magdelenat makes the valid point that air cargo carries with it the advantage of being transported more quickly

[23] See Study on Preferential Measures for Developing Countries, ICAO Doc ATWP/1789; 22/8/96 at A-7–A-9.

[24] See Magdelenat (1983), p. 1.

[25] Convention for the Unification of Certain Rides Relating to International Carriage by Air, 12 October 1929, 137 L.N.T.S. 11, 49 Stat. 3000, TS No. 876, ICAG Doc 7838 [hereinafter Warsaw Convention].

[26] Mapeli (1968), p. 37.

[27] Convention on International Civil aviation signed at Chicago on 7 December 1944. ICAO Doc 7300/9:2006. Hereafter referred to as the Chicago Convention.

[28] ICAO (1997a), Ch. 1, Definitions. See also Miller (1977), p. 10, when the author states that while the French term "merchandises" and the English term "goods" is not the same, the French term denotes anything that can be the object of a commercial transaction. However, under common law, "goods" refer to inanimate objects only, thus excluding live animals.

than freight transported by other modes, and therefore frequently consists of articles of high value, urgently needed merchandise and extremely perishable goods.[29]

A milestone, if ever there were one for air freight, would be Chapter 4 of Annex 9 to the Chicago Convention, which opens with the initial requirement that regulations and procedures applicable to goods carried by aircraft shall be no less favorable than those that would be applicable if the goods were carried by other means.[30] In order to best serve consignors who send their urgently needed or perishable goods with expediency, the Annex, in Standard 4.3, impels contracting States to examine with operators and organizations concerned with international trade all possible means of simplifying the clearance of goods carried inbound and outbound by air.

Another positive requirement of Annex 9, in keeping with the electronic age, is to require that contracting States, when introducing electronic data interchange (EDI) techniques for air cargo facilitation, encourage international airline operators, handling companies, airports, customs and other authorities and cargo agents to exchange data electronically. This exchange of data, in conformance with UN/Electronic Data Interchange for Administration, Commerce and Transport (UN/EDIFACT) international standards, in advance of the arrival of aircraft, would facilitate cargo processing.[31] The Annex is supported in these proactive measures by its parent document, the Chicago Convention, which, in Article 22, provides that each contracting State agrees to adopt all practicable measures, through the issuance of special regulations or otherwise, to facilitate and expedite navigation by aircraft between the territories of contracting States, and to prevent unnecessary delays to aircraft, crews, passengers and cargo, especially in the administration of the laws relating to immigration, quarantine, customs and clearance. Article 23 of the Chicago Convention opens the door for Annex 9 to require of States, from time to time, to keep abreast with developments in the carriage of air freight when it provides:

> Each Contracting State undertakes, so far as it may find practicable, to establish customs and immigration procedures affecting international air navigation in accordance with the practices which may be established or recommended from time to time, pursuant to this Convention. Nothing in this Convention shall be construed as preventing the establishment of customs free airports.[32]

The overall aim of Annex 9, through its Chapter 4, which addresses entry and departure of cargo and other articles, is to retain the inherent advantage of speed in air transport. However, the Annex provides for recognizing the need for contracting States to adhere to the application of regulations relating to aviation security that are incorporated in Annex A to the Chicago Convention. For example, in Standard 4.2, Annex 9 requires that contracting States shall make provisions whereby procedures

[29] *Supra*, note 24 at 6.

[30] Chicago Convention, *supra* note 27, Annex 9, Standard 4.1.

[31] *Ibid.*, Standard 4.4.

[32] Chicago Convention, *supra* note 27, art. 23.

for the clearance of goods carried by air and for the interchange of cargo with surface transport will take into account applicable regulations which address issues of aviation security. For its part, Annex 17 recommends that each Contracting State should, whenever possible, arrange for the security measures and procedures to cause a minimum of interference with, or delay to, the activities of international civil aviation.[33]

Yet another ICAO initiative in the carriage of air freight is Annex 18 to the Chicago Convention relating to the safe transport of dangerous goods by air, developed by the Air Navigation Commission of the Organization in response to a need expressed by States for an internationally agreed set of provisions governing the safe transport of dangerous goods by air. The Annex draws the attention of States to the need to adhere to Technical Instructions for the Safe Transport of Dangerous Goods by Air developed by ICAO, according to which packaging used for the transportation of dangerous goods by air shall be of good quality and shall be constructed and securely closed so as to prevent leakage and labeled with the appropriate labels.[34]

The Second Facilitation Panel Meeting, which took place in Montreal, from 11 to 15 January 1999, had as its primary incentive the updating and revision of the provisions of Annex 9 for air cargo and was influenced by recent work which has been substantially completed by the World Customs Organization on the comprehensive revision of the Kyoto Protocol.[35] However, the scope of the revision process was broader than the alignment of the Annex with Kyoto Convention principles.

The facilitation strategy as reflected in Standards and Recommended Practices (SARPs), developed during the first 25 years of ICAO, contemplated a business environment of manual inspection and clearance procedures in which all information exchanges were dependent on the preparation and movement of paper document. International airlines and airports were largely owned and often administered by governments; hence, facilitation of cargo clearance activities was viewed essentially as a government responsibility.

The concept of an integrated transaction depends entirely on risk management and is particularly important for air freight because it is focused on those controls which are exercised by customs, during the relatively short time while goods are in their physical possession. It is a very powerful example of a premium procedure, for it offers very valuable benefits to both Customs and declarant. Customs gets an unambiguous single price and value statement, together with complete origin-destination information for control purposes, and therefore is privy to more than the export or import half of any transaction.

---

[33] ICAO (1997b), Recommendation 2.2.1.

[34] ICAO, Technical Instructions for the Safe Transport of Dangerous Goods by Air, ICAO Doc 9284. See also Chicago Convention, supra note 28, Annex 18 (The Safe Transport of Dangerous Goods by Air), 2 d Ed. (July 1989) Standard 5.2.1 and 6.1.

[35] Kyoto Protocol to the United Nations Framework Convention on Climate Change, (1997).

During the 1970s, with the advent of wide-body aircraft and the emergence of computers and other new technology, States began to find ways to rationalize their inspection process. Today, issues related to information requirements are more significant than the number and type of paper documents exchanged among parties to an import/export transaction. As computerization capabilities are almost universally available to both governments and industry, it is now possible to be more positive about advocating the use of information technology by all parties.

The revision of the Kyoto Convention is aimed at broad-front harmonization and improvement of basic Customs procedures, with an eye to primary Customs responsibilities for control as well as a growing sensitivity to the economic advantages of facilitation.[36] Premium Procedures are a means of bringing market forces to bear by linking specific facilitation advantages directly to prescribed-control improvements. The Integrated Transaction is an advanced Premium Procedure, in which the emerging concept of the "authorized trader" is applied in such a way that a single submission of minimal, standardized data, by such a declarant, will suffice for all Customs export/import purposes.

It is difficult to see how such concepts as Premium Procedures or the Integrated Transaction could be worked into the Recommended Practices/Standards Structure of the existing Annex. The revision of the Kyoto Convention will, of course, lend itself very well to this process of provision-by-provision adjustment and numerous Panel delegates can be expected to produce detailed proposals.

1.4 Legal Aspects

Liability of a carrier in loss of or damage caused to international air freight is contained in Article 18 of the Warsaw Convention, which provides that the carrier is liable for destruction or loss of or damage to the cargo by air over the period during which the goods are in the carrier's charge. As to what the time span is during which the carrier is in charge of the goods remains a contentious issue. Rene Mankiewicz offers one view:

> The liability of the carriers ends when the control of the cargo passes to a person authorized to receive it and who is not one of his servants or agents, e.g. when they are delivered to a successive or actual carrier […to the consignee or his broker or agent designated in the air waybill; and, in any event, when the cargo is put at the disposal of the consignee or his agent, because this act of the carrier completes the performance of the contract of carriage.[37]

Article 18(1) provides that liability of the carrier can be enforced for damage sustained in the event of destruction to air freight if the damage occurred during transportation by air. Article 18(2) identifies "transportation by air" as the period

[36] Facilitation Panel (FALP), The Kyoto Convention, Premium Procedures and the Integrated Transaction (4 January 1999) at pp. 1–6.

[37] Mankiewicz (1981), p. 172.

during which the goods are in the charge of the carrier, whether in an airport or on board an aircraft or, in the case of landing outside an airport, in any place whatsoever. Whatever the criteria may be regarding control, there is a fundamental difference in burden of proof issues with regard to injury or damage caused to persons in transportation by air and air freight. Whereas in the former case, liability of the carrier is presumed, in the case of air freight it is the claimant who has to prove that damage occurred to freight during transportation by air. It is claimed that there is no prima facie evidence that damage to cargo occurred during transportation by air, based on an evidentiary construction of Article 11(2) of the Warsaw Convention, which provides that statements related to quantity, volume and condition of the goods are prima facie evidence only in instances when the carrier checks the cargo in the presence of the consignor, and a stipulation to this effect appears to have been made in the air waybill.[38] This principle has been supported by judicial decisions.[39]

There are clear demarcations attributed to the element of control of goods on the part of the carrier. For instance, even though goods are eventually meant to be carried by air, if lost while being transported to the carrier under a composite transport agreement, the carrier's liability is deemed to be non-existent. This was firmly established in the case of *Railroad Salvage of Conn., Inc*. v. *Japan Airfreight et al.,* where the Warsaw Convention's provisions were not applied to damage caused to goods while in charge of a trucking company.[40] In this context, warehouse cases are of critical importance to liability issues pertaining to air cargo. In 1995, a California case brought to bear the principle that when goods are lost while being stored in a cargo facility outside the airport premises, such an instance cannot be deemed to be considered within the provisions of the Warsaw Convention.[41] Customs clearance, another exigency common to air freight, has also been settled in judicial terms to mean that while cargo is in the process of customs clearance in a warehouse the carrier cannot be deemed to be in charge of the cargo. In the 1997 Italian case of Cristofari v. Aeroport di Roma, the court applied the widest possible interpretation to Article 18 of the Warsaw Convention where, in considering the theft of a shipment of Rolex watches from an airport warehouse while under Customs inspection and under the control of the Customs authority, the Court held that when an air carrier hands over the goods to a handling agent, the responsibility for the safety of the goods is taken away from the carrier.[42] This is particularly so, according to the court, in instances where the handling agent was not the appointee of the carrier concerned, but rather a monopoly that offered ground handling services to the airport.

---

[38] See Ghemulla and Schmid (1998), p. 17 at para. 27. See also Goldhirsh (1998), p. 43.

[39] *Boeringer-Mannheim Diagnostics Inc*. v. *PanAm*, 16 Avi 18, 177 (D.C. Tex 1981) revised in 18 Avi 18,090 (5th Cir. 1984) at 18,178; *Arkwright-Boston* v. *lntertrane Airfreight,* 23 Avi 18,061 (D.C. Mass. 1991).

[40] 17 Avi 18,457 (D.C. NY 1983).

[41] *Leonid lgndesinan* v. *Air Cargo Handling Services* No. 694-0865 FMS, U.S. Dist. Lexis 1589 (D.C. Cal. 1995).

[42] Tribunal of Rome, 28 December 1997, Decision No. 22915 (1999) XXIV *Air & Sp. L.* at 41.

However, the overall applicability of this principle, in a global sense, can be questioned, in light of the principle established in the earlier US case of *Jaycees Paton* v. *Pier Air Intl*., where in instances similar to the *Cristofari* case, the Court held that the Warsaw Convention was indeed applicable, as the period of carriage was considered to last until the goods were delivered to the consignee.[43]

Multimodal transport features prominently in modern exigencies of air freight transportation, where a composite and singular contract of carriage may involve surface transportation and air transport. In such instances, one has to construe Article 11 of the Warsaw Convention, particularly in terms of evidentiary construction, in accordance with the circumstances under which damage caused to goods could be attributable to the air carrier. Miller suggests that if the carriage by surface transport is incidental to the carriage by air, the damage will be presumed to have occurred during the carriage by air. However, if the carriage by road is not incidental to the carriage by air, a plaintiff who sues a carrier on the basis of liability provisions of the Warsaw Convention would first have to establish that the damage occurred during the carriage by air.[44]

The 1999 Montreal Convention[45] has skillfully done away with the somewhat cumbersome Warsaw Convention provision regarding the place in which the goods are, i.e., in an airport or on board an aircraft or, in the case of landing outside an airport, in any place whatsoever, as provided in Article 18. Article 18(3) of the Montreal Convention provides: "The carriage by air within the meaning of paragraph 1 of this Article comprises the period during which the cargo is in charge of the carrier".[46]

According to the Rapporteur to the Montreal Convention proceedings, Article 18(3) makes a blanket statement that the operative period of the carrier's liability is when the cargo is in the carrier's charge, to ensure that the Convention applies whenever or wherever the cargo is in the possession, custody or charge of the carrier, be it on or off the airport premises.[47] Although the Montreal Convention falls short of identifying which carrier is responsible, whether it is the actual carrier or the contracting carrier, it nonetheless improves upon the Warsaw Convention by bringing in the elements of possession, custody and charge. The geographic imponderables to the equation of liability are removed. Article 18(3) of the Montreal Convention ensures that, when cargo is handed over by a consignee to an agent of the carrier, whether it be a trucking company or another carrier, liability can be imputed to the carrier for damage caused to the goods when they were in the possession of such agent, but that liability of the carrier cannot be enforced when goods

[43] 21 Avi 18, 496 (D.C. NY 1989).

[44] Miller (1977), p. 148.

[45] Convention for the Unification of Certain Rides for International Carriage by Air, 28 May 1999, ICAO Doc. 9740 [hereinafter Montreal Convention].

[46] *Ibid.,* Art. 18(3).

[47] Report of the Rapporteur on the Modernization and Consolidation of the Warsaw System, ICAO Doc LC/30-WP/4, App. A para. 5.4.14 at A-14.

were not in the charge of the carrier, such as when they were in a customs warehouse.

The Montreal Convention also provides for determination of liability in instances of substitutive carriage. Article 18(4) stipulates that if a carrier, without the consent of the consignor, substitutes carriage by another mode of transport for the whole or part of a carriage intended by the agreement between the parties to be carriage by air, such carriage by the other mode of transport is deemed to be within the period of carriage by air. This provision has been introduced to ensure that the carrier cannot unilaterally decide to substitute whole or part of the carriage by air by other means of transportation and at the same time exclude the application of the Montreal Convention to issues pertaining to his liability.

In instances covering interlining of air freight or carriage in code shared flights, considerations of liability of the actual carrier of the goods, as against liability of the carrier who contracts with the consignor to carry the goods, has to be carefully considered.

1.5 The Actual Carrier

An actual carrier can be broadly identified as the person who actually transports goods from one place to another. The phenomenon of actual carriage has been highlighted comparatively recently to accommodate the complexity of a modern commercial transaction where a contracting carrier employs another carrier to actually convey the goods. A typical instance of the creation of an actual carrier in carriage by-air transactions is where a contracting carrier (so termed since he contracts with the consignor to carry the consignor's goods on his air waybill) accepts for carriage from the consignor and places such goods in the charge of another carrier so that the latter carrier performs the carriage of goods by air.

The genesis of the concept "actual carrier" is seen in the typical maritime contract, which preceded the carriage by air contracts in the nineteenth century.[48] However, the term "carrier" was first used in definitive terms in the US in the Carriage of Goods by Sea Act (1936), where an inclusive provision considered an owner or charterer who enters into a contract of carriage as a carrier for the shipper.[49] It is a curious fact that this early reference to a carrier in the shipping contract did not mature into full bloom until somewhat recently in 1978, thus leaving for a

[48] See *The Harter Act* USC (1893) Sec. 1, which includes such categories as master, agent, manager or owner of a vessel in its liability provisions as one who would have privity of contract in an agreement to carry goods by sea.

[49] *Carriage of Goods by Sea Act* USC (1936) s. 1(a). Also found in USAC s. 46: 1301. See also The *Carriage of Goods by Sea Act* (UK) 1924 Schedule, art. 1(a) for English Law. Legislation in both the US and the UK have been influenced by the International Conference on Maritime Law in Brussels, 1922. See also *The Carriage of Goods by Sea Act (UK)* 1971 Schedule 1(a).

sustained period of time a hiatus in the modern shipping contract with regard to the definition of the term "actual carrier."[50]

The UN Conference on the Carriage of Goods by Sea (1978), which assembled in Hamburg, made a successful attempt for the first time in the history of the shipping contract to define the actual carrier as: "Any person to whom the performance of the carriage, of the goods, or part of the carriage has been entrusted by the carrier, and includes any other person to whom such performance has been entrusted".[51] Thus "actual carrier" is distinguished from a "carrier" who is a person by whom or in whose name a contract of carriage of goods by sea has been concluded with a shipper or consignor. The attempt at defining an actual carrier clearly indicates that there exists a separate category of carrier, and this has been acknowledged by the international community, together with his rights and liabilities.

The definition of "actual carrier" by air is stipulated in the Guadalajara Convention of 1961[52] which states, inter alia, that an actual carrier is: "A person other than the contracting carrier, who, by virtue of authority from the contracting carrier performs the whole or part of the carriage".[53] The actual carrier, therefore, contrasts in function with the contracting carrier, who is a person who makes an agreement with a passenger or consignor, or with a person acting on behalf of the passenger or consignor.[54]

The air waybill is the contractual document evidencing the contract of carriage of goods by air and is a product of the Warsaw Convention of 1929.[55] The Warsaw Convention requires that: "Every carrier of goods has the right to require the consignor to make out and hand over to him a document called an 'air waybill,' every consignor has the right to require the carrier to accept this document".[56] It is noteworthy that the Warsaw Convention does not make specific reference to an "actual carrier." It is therefore presumable that the reference to a "carrier of goods" implies the contracting carrier who obtains the air waybill from the consignor. It is also significant that at no place in the Convention appear the words "actual carrier." However, as may be seen in the discussion to follow, the liability of the actual carrier does not go unnoticed in the face of the law.

It is a platitude to say that an agreement for the carriage of goods is usually a simple instance of a contract that involves the moving of goods from the seller to the purchaser in exchange for the purchase money, which moves conversely. However,

---

[50] See United Nations Convention on the Carriage of Goods by Sea, which gave rise to a system of rules now identified as the Hamburg Rules.

[51] *Ibid.*, Art. 1.2.

[52] Convention Supplementary to the Warsaw Convention, for the Unification of Certain Rules Relating to International Carriage by Air Performed by a Person Other than the Contracting Carrier, 18 September 1961, ICAO Doc. 8181 [hereinafter Guadalajara Convention 1961].

[53] Guadalajara Convention 1961, *ibid*. Art. I(c). See also Carriage by Air Act 1962, Sch. Art. 11 (U.K.). 5 Ibid. art. 1(b).

[54] *Ibid*, Art. 1(b).

[55] Warsaw Convention, *supra* note 25, Art. 6.

[56] *Ibid.*

a contract for the carriage of goods, although in its genesis it is a simple contract with its accepted principles, involves a carrier—a notion unknown to a simple instance of a sale of goods. The role of the carrier, coupled with the fact that carriage of goods involves a transnational element, makes dispute resolution in terms of the liability of parties more complicated.

Prior to a discussion of the nature of a transnational contract in areas where it affects the liability of the actual carrier, it is necessary to analyze in limine a contract in general, as it is the principles of the latter from which the former derives and attenuates. To determine the position of an actual carrier in a contract it is necessary to analyze the concept and examine its development. The following discussion is founded on the basic premise that the liability of an actual carrier can be considered only in instances where he is privy to the contract with any party concerned.

A subjective identification and definition of a contract has always been considered difficult.[57] It is simply an agreement that does not lay down justiciable rights and duties in the form of a list but manifests itself in a few restrictive principles recognized in law. The parties to a contract, from a chronological perspective, originated from the Common Law practice, which dates back to the twelfth century, where courts resolved disputes between parties who had entered into a contract.[58] However, for clearer identification it can be traced to the sixteenth century action of Assumpsit.[59] The ingredients of a contract are laid out as follows:

(1) An actionable promise or promises involving two parties; and (2) An outward expression of common intention to fulfill the assurance contained in the promise; and (3) The moving of consideration from one party another as accepted by English common law principles.[60]

Although legal writing and judicial pronouncements have reached the sophistication of identifying the complexities arising out of a contractual agreement, the notion of contract still remains an enigma. By nature it is illusory and cannot be definitively discussed. This obscurity in the nature of a contract as a definable legal concept prompted Atiyah to say that there is no such thing as a typical contract at all.[61] Be that as it may, courts have never encountered difficulty in definition as a positive hindrance to determining the liability of a party to a contract that arises as a natural corollary to an agreement. What courts have considered in such instances is, inter alia, the nature of the agreement itself. In pursuit of this objective, courts have always examined what the parties actually said in contracting, whether orally or in writing. The point of significance of the principles of contract law in this article is the actual statement of the parties. The question that should be asked repeatedly in modern commercial transactions is whether the intention of the parties can be imputed from what the parties actually said at the point of agreement, or whether the

[57] See Guest (1979), p. 5.

[58] See Furmston (1981), p. 1.

[59] "Assumpsit" was an action whereby an aggrieved party to a parole agreement could seek a remedy in law.

[60] Furmston (1981), p. 33.

[61] See Atiyah (1978), p. 201.

expectation of the parties, whatever be the actual words used in the agreement, should be the primary consideration. In other words, should courts rigidly follow the exact words of the contract and infer the intention of the parties, or should they view the entire concept of offer and acceptance more subjectively? Thus, courts would look for what the parties expected to gain from the contract, irrespective of the rigid restrictive principles so far set.

In this context, what matters in a contemporary contract is not solely a consensus ad idem or a "meeting of the minds," but the legal expectations aroused by the conduct of the parties. This approach precluded the undue reliance upon the necessity to determine whether a promise reflects the intentions of the promisor.

It is now clear that to say an agreement revolves around the intention of the parties is fictional and trite. This becomes apparent with the complexities of modern commercial transactions. The parties to a contract can no longer be held rigidly to the subject matter of contractual negotiation jeopardizing their expectations. Perhaps the best illustration of this principle is the statement by Viscount Dilhorne who dismissed the general principle enunciated by Lord Atkin, to the effect that "to create a contract there must be a common intention of the parties to enter into legal obligations, mutually communicated expressly or impliedly."[62] According to Viscount Dilhorne, the express or implied communication of the parties to a contract cannot be relied upon strictly to denote their expectation. When the broad proposition of expectation rather than intention alone is applied to the widening spectrum of business contracts and commercial transactions in the nature of agreements for the transportation of goods, it becomes apparent that, in the present context, the business community operates with very little regard for established legal rules.[63] Although the various documents used still have standard form stipulations, in an instance where a Multimodal Transport Document is issued, in which routes, time factors and the general condition of the goods transported are relevant factors, the courts should veer from the path of rigid interpretation of a contractual document's provision. In the modern world, a contractual document does not often envisage all eventualities of the contractual carriage of goods.

The basic difficulty in relating the notion of contract in its present form to a transaction for the carriage of goods lies in the dichotomy of treating a complex transaction involving the carriage of goods with principles of contract law established through the ages. For instance, contract law is and always has been concerned with what parties intend and not what they expect to do. This approach from the perspective of an actual carrier who contracts with a carrier to transport goods is undesirable, as the notion of contract is not compatible with the needs of a complex document issued in the transportation of goods.

As well, a transnational contract does not have an identifiable definition. However, it is different in many respects. Speaking in the context of an international contract for the carriage of goods, there are more than two parties involved. They

[62] See *Esso Petroleum Ltd.* v. *Commissioner of Customs and Excise* (1976) 1 *All E.R.* 117 at 120. See *also Rose and Frank Co.* v. *J.R. Crompton and Bros. Ltd.*, (1924) *All E.R.* 245 at 252.

[63] Greig (1979), p. 196.

are the shipper (the exporter or seller), the consignee (the buyer or importer) and the carrier who agrees to transport the goods. Further, parties to an international contract cannot place reliance solely on domestic law, as attempts at unification of rules for the conduct of parties bind them to principles that are internationally acclaimed. This proposition has been judicially acknowledged in the following statement: "We cannot have trade and commerce in world markets and international waters exclusively on our terms governed by our laws and resolved in our courts".[64]

Unlike in a domestic contract, the above statement reflects a multitude of problem areas in the conflict of laws, which though not relevant to the present work, signifies the proportions to which the problems arising out of the basic principles of contract can be distended. The above dictum clearly surfaces the point that the parties to a transnational contract are free from the shackles of domestic law, as domestic law is usually not constituted to accommodate the demands of international relations.[65] This principle was discussed as early as 1934 when a court said:

> The international character of a transaction does not depend upon the location of the place of performance, but upon its nature and the varied elements to be taken into account, whatever the domicile of the parties, to give to the transfer of funds that are inherent to it a character beyond the limits of domestic economy.[66]

The initial transaction in an export-import negotiation is the contract of sale itself. This contract is further extended by subsequent contracts relating to the carriage by air, sea, rail or road.[67] The carriage of goods from one country to another can take the form of a unimodal agreement, whereby the carrier agrees with the shipper to transport the goods by way of two or more transport systems such as by sea or air. Usually, such a contract involves a single transaction even though the carrier contracts with another carrier to transport goods for him. The latter is the actual carrier whose responsibility is usually towards the carrier who originally transacts with the shipper.

The contract of sale can be utilized itself by the parties to it in order to demarcate the various risks and burdens which devolve upon each other. The variations of a contract of this nature arise when the shipper's intentions are to be absolved of responsibility once the goods leave the factory and the consignee prefers to be considered immune to responsibility until he actually has examined the goods. In pursuit of the shipper's objectives, a number of conditions attach to a transport document which are denoted by terms such as "ex works," "ex dock," or "c.i.f.," which are broadly identified as price terms of the contract.[68] The main purpose of these conditions is, inter alia, to denote the point of time at which the shipper receives payment

---

[64] *MIS. Bremien & Unterweser Reederei GmnbH* v. *Zapata Off-Shore Co*. 407 U.S.I. 92 S.Ct. 1907, 32 L. Ed. 2d. 513 (1972) at 524.

[65] Delaume (1979), p. 25. (This article generally conveys the principle mentioned in the text).

[66] Ban que *Hypothdcaire Franco Argentine* v. *Bonn and Reynaud*, cited in Delaume (1980), s. 4.08.

[67] See generally, Schmitthoff (1980), p. 6.

[68] It is not proposed at this juncture to delve deep into the details of such conditions. A detailed discussion of price terms of a contract can be found in Berman and Kaufman (1978), pp. 231–264.

for the goods. There are other conditions, such as risk shifting on the force majeure and the remedies for a breach of contract, all of which effectively obviate any principles of national laws. As such, the contract for the sale of goods in an export import situation stands self-reliant.

The Lex Mercatoria that applies to commercial transactions has its sources in two areas of established legal principles: customary contractual rules which, after practical application, have come to be accepted as norms of practice in international transactions, and international conventions. The former not only rules out any flavor of domestic law/ but also sets out uniformly a single accepted practice of shipping, banking and insurance throughout the world. Academically, the autonomy of such practices has been subjected to much controversy, where one view expressed is that such practices are not forceful enough to dispel the need for national laws, and the other clearly states the Lex Mercatoria is authentic and acceptable enough to be viewed independently of any national laws.[69] However, in the ultimate analysis, the Lex Mercatoria, having been accepted in modern practice and conventions, attempts to unify most problem areas regarding liability provisions in the international sale and carriage of goods. A forum can apply the principle only if the convention in question has been ratified nationally. In addition to these two sources, the elements of the contractual document itself govern the ultimate adjudication of a dispute concerning the liability of a carrier. A contractual clause stands to bind the parties independently of any source of law accepted as common practice. In this context, a discussion of the position of the carrier and the actual carrier in the face of the notion of transnational contract becomes a necessity.

The multimodal transport document is issued instead of segmented documents mentioned above. It contains information regarding the exact movement of goods and conditions of contract. Issued by the multimodal transport operator (the carrier), it need not contain information of the actual carrier(s). If the carrier(s) are not mentioned in the document, they cannot be held to have privity of contract with the shipper. The actual carrier's liability is contractual as far as the shipper is concerned.

For expediency, even the multimodal transport document is dispensed with in most commercial transactions and substituted by automatic data processing, which replaces the standardized document by passing information through a printout. To ascertain the liability of the actual carrier in this instance become difficult. In most cases, the actual carrier will be liable to the shipper or the consignee in tort unless the parties are actually mentioned in the printout. Usually, courts in such an instance will go back to the common law of contract to determine if there is privity between the parties. In other instances, the liability of the actual carrier will be in tort.

The conclusion that can be reached from the above discussion is that an actual carrier is not contractually linked to the shipper or the consignee in an air waybill or any other document discussed earlier. The only exception to the rule is evidenced in the instance where, on the construction of a through air waybill, the carrier acts as the actual carrier's agent under authority or ratification. *Non-obstante*, the actual

[69] Langer (1970), p. 215; Schmitthoff (1964), pp. 6–8.

carrier can be held liable for loss, delay or damage to the goods under the general principle of tort law.

In furtherance of the emphasis placed on the complexities of transactions leading to the carriage of goods by air, the United Nations Convention on International Multimodal Transport of Goods[70] emerged in 1980 to provide for the unification of multimodal transport. The Convention deals with only one person, the multimodal transport operator, who on his behalf or through another person acting on his behalf, concludes a multimodal transport contract assuming responsibility for performance of the contract.[71] When such a multimodal transport contract is concluded, according to the scope of the application of the Convention, it is mandatory that its provisions become applicable. The multimodal transport executed in pursuance of such a contract does not require the inclusion of an actual carrier as a part to the contract.[72] It requires only the journey route, the modes of transport and the places of transshipment. The multimodal transport operator is responsible for the goods from the time he takes over the goods until he hands the goods over to the consignee.[73] Article 15 states explicitly that the multimodal transport operator is liable for the acts or omissions of any person whose services he makes use of where such person acts in the performance of this contract.[74] This clearly makes him liable for any acts or omission of an actual carrier or his servant that occur from the time the goods are taken over from the consignor until they are handed over to the consignee. Such liability is presumed unless the multimodal transport operator can indicate the acts or omission of the actual carrier or his servants.[75] The liability arises both in contract and in tort.[76] In any action against the servant or agent of the multimodal transport operator, such servant or agent can rely upon the limitation of liability provisions set out in Article 18 of the Convention, if such person acted within the scope of his employment.[77] By virtue of this provision, an actual carrier can avail himself of the limitation of liability provision in this Convention if an action is brought against him. Any action under the Convention is limited to a period of 2 years.[78]

The liability of the actual carrier under this Convention is clear. Generally, he is not liable for his acts or omissions or those of his servants as the multimodal transport operator takes responsibility throughout the transaction. However, if the multimodal transport document cites him as a party to the contract, he can claim the same limitation provision included in Article 18 of the Convention. All the same, the

[70] United Nations Conference on International Multimodal Transport of Goods, reproduced in (1981) VI Ann. Air & Sp. L. at 657–691 [hereinafter Montreal Convention of 1980].

[71] See Art. 1.2 of the Convention, *ibid.*, for a complete definition.

[72] *Ibid.*, Art. 8.

[73] *Ibid.*, Art. 14.

[74] *Ibid.*, Art. 15.

[75] See generally Art. 16, *ibid.*

[76] *Ibid.*, Art. 20(1).

[77] *Ibid.*, Art. 20(2).

[78] *Ibid.*, Art. 25.

Convention in no way removes his liability in tort, which is open to any party connected with the transaction.

The relationship between the actual carrier and the carrier occurs quite independently of the main contract between the shipper and the carrier. The contractual relationship between the carrier and the actual carrier setting out the latter's liability depends mainly on the contractual document which passes between the two parties. The agreement itself can take the form of an ordinary offer and acceptance, although it is not unreasonable to assume that in most commercial transactions an air waybill passes from the actual carrier to the carrier. If this is the case, the liability of the actual carrier will be governed by the terms of the air waybill. However, even under any ordinary document setting out the contract, the liability of the actual carrier will be governed contractually by the terms of the contract laid therein.

The liability of the actual carrier towards the carrier becomes more involved and extended if there are no liability provisions set out in the document or air waybill. In a simple case where an actual carrier contracts to transport goods for and on behalf of a carrier with no specific liability provisions, courts, in determining the actual carrier's liability, would go back to the principles of common law. Lawyers in such an instance would have to return to the simplicity of a contract. The contract becomes a simple instance of bailment where the actual carrier acts as bailee in possession of the goods until they are transported by him. As a multimodal transportation process may involve numerous transport operations by land to port, by air from port to port, transit storage and air carriage to the consignee, the actual carrier in each segment acts as a bailee. Thus, in terms of liability, the entire transportation process can be divided into unconnected and individual segments. Palmer states that bailment is created by contract and enforceable in tort.[79] However, he later says that in fact bailment may arise in the absence of contract and that historically, bailment is older than contract.[80] One of the qualities of bailment as laid out by Lord Holt, is that it entails the carrying of goods or the performance of some service pertaining to such goods for reward.[81] Although the operative criterion regarding bailment is "custody," where the bailee is considered liable in tort until the goods are in his custody, it may arise even without delivery, without a contract and without the consent of the bailor.[82] Therefore, even in an instance where the actual carrier receives the goods through a person other than the carrier, he would still be a bailee to the carrier. The conclusion that can be reached is that while an actual carrier is liable to the carrier for loss, delay or damage caused to the goods by him under the common law principles of bailment in the absence of a contract between the parties, he is liable in contract if there passes a document between him and the carrier.

The liability of the actual carrier is demarcated in the four areas discussed above, although some vagueness and inadequacy prevailing in the areas of documentation, statute and convention. This is mainly due to a lack of specificity in isolating the

[79] Palmer (1979), p. 1.

[80] *Ibid.* at 14.

[81] *Cogg* v. *Bernard* 92 E.R. 107 at 109.

[82] See O'Hare (1978), p. 65. See also Palmer (1979), p. 3.

actual carrier. Until the advent of the Guadalajara Convention 1961, no specific mention of the actual carrier was made at all, leaving courts to isolate the carrier's liability by constructing and implying the application of statutory provisions and international conventions.

In common law, an actual carrier is liable for any loss, damage or delay, either in contract or in tort, the former applying when there exists privity of contract and the latter applying both with or without privity of contract. In determining contractual liability, courts should not be too objective and should not decide strictly on the verbal construction of the contract. For instance, if an actual carrier contracts to deliver goods via a specified route but takes another and delivers the goods without damage or delay, such digression should not be considered grounds for enforcing liability. The basis for liability should be the ultimate expectation of the parties and not what the parties to the contract expressed initially. In the area of documentation, it is clear that an actual carrier does not issue an air waybill to the shipper. However, he may issue an air waybill to the carrier, in which case he is contractually liable to adhere to the terms of the document as far as the carrier is concerned. Notwithstanding an absence of privity between the parties, the shipper or consignee may sue the actual carrier in tort.

Any segment of air carriage performed by the actual carrier is attributed to the actual carrier. Responsibility thereof would then naturally devolve upon the actual carrier. However, the contracting carrier would remain liable for the totality of the contracted journey, together with the portion of travel undertaken by the actual carrier. Thus, one sees a joint liability requirement operating in the segment of carriage performed by the actual carrier, both in contract and tort, the former being valid only if there is privity between the actual carrier and another. This principle is even extended to instances of acts or omissions of the contracting carrier or his servants which occur during the segment of transport undertaken by the actual carrier where the actual carrier is held prima facie liable.

Originally, only the consignor or consignee could sue the carrier (whether actual or contracting) for loss, damage or delay to goods. Now, however, it has been established that any person interested in a particular consignment of cargo (such as the owner), can sue the carrier for damage to cargo.[83] This decision certainly has widened the spectrum of claimants who can hold the carrier liable for mishandling of cargo.

It is not easy to prove that damage or loss of goods occurred during a particular carrier's segment. However, delay can be attributed to an actual carrier with ease. Furthermore, international conventions of this nature are always conceived with emphasis on economic factors, rather than on justice or equity. For that reason, it becomes difficult to view conventions from a lawyer's standpoint. Also, it is not surprising that there is inadequate risk distribution and that liability falls squarely on the carrier in most instances merely to make sure than an aggrieved person can be compensated by some person easily accessible and who takes responsibility for the

[83] Tasman Pulp & Paper Co. Ltd. v. Brambles,].B. O'Loghien Ltd. and Pan American World Airways Inc. (1982) NZ.L.R. 225.

carriage of goods at the outset of the contractual agreement. However, there is no reason for not dealing with an actual carrier more clearly than was done in the Guadalajara Convention 1961. It is hoped that any future attempt at unification of the rules pertaining to the international carriage of goods will lay down the actual carrier's liability more clearly and in a more detailed manner.

1.6 Multimodal Transportation of Freight

With international trade evolving steadily in the 1950s and 1960s, where the maritime sector in particular was in high demand, there was an increasing need to overhaul the already sluggish cargo handling system. An innovation in the cargo transportation system was seen in the 1960s and 1970s, where structural units forming an integrated rigid shell within a container could consolidate the handling of a number of heterogeneous individual packages as a single item. Called containerization, this collective system of freight handling and transportation made multimodal freight transportation easier. Container transport brought with it the need for regulation of all modes of transport into a standardized regime. In response to this need, the International Standards Organization adopted single standards for uniform dimensions of cargo to be carried in all forms of transport.[84] The development of international containerized carriage has also brought to bear the desirability of unifying the rates used in various modes of transport into a single rate. Nonetheless, variances were seen in liability regimes relating to surface and air transport. There were also differences in rates used by maritime transport and rail transport. For the development of efficient multimodal transport services, a conference was held under the auspices of the United Nations Conference on Trade and Development (UNCTAD), resulting in the adoption in 1980 of the Montreal Convention of 1980.[85]

The Montreal Convention of 1980 established a new liability regime applicable to a new player in the transportation field: the multimodal transport operator (MTO). The MTO undertakes full responsibility, under a single multimodal transport document, for the international transportation of goods by various operators of various modes of transport. The MTO was responsible under the multimodal transport contract as principal to both consignor and consignee. The multimodal transport contract was modelled on the Hamburg Rules[86] applicable to the carriage of goods by sea, in view of the extensive usage of maritime transport for the carriage of freight at that time.

Under the Montreal Convention of 1980, multimodal transport liability provisions often created some ambiguity when considered against unimodal transportation

[84] Cross (1993) [unpublished] at 11. See also Briant (1996) [unpublished] at 21.

[85] TD/MT/CONF/16, Geneva Conference (1979–1980) documents; Montreal Convention of 1980, supra.

[86] Italian Court de Cassation, Judgment No. 6841, 19 June 1993 discussed at (1994) XIX *Air & Sp. L.* at 288.

systems. Although the Warsaw Convention of 1929 stood on its own for purely air transport freight transactions, there was an element of doubt as to which regime would be applicable in instances of damage or delay caused in the transportation of cargo. Article 19 of the Montreal Convention of 1980 somewhat settles the question by introducing a national system for localized damage. In other words, the Montreal Convention of 1980 admits of the applicability of mandatory national or international law when damage or delay can be attributed to a particular mode of transportation only if, as per Article 18 of the Montreal Convention of 1980, these legal systems provide a higher quantum of damage than the 1980 Convention itself. This was not entirely satisfactory to the air transport industry, given the highly capital intensive nature of air transport and the security and safety implications that go with transportation of air freight.

It is arguable that the Warsaw Convention would prevail upon a claim for damage caused to air cargo, however founded, if it can be proven that the air transportation involved in the overall carriage of goods concerned had caused the damage, even if the contract of carriage was affected through a multimodal contract document under the Montreal Convention of 1980. The Warsaw Convention applies to different legal systems, as was demonstrated in the 1993 Italian case of *Odino Valperga Italeuropa* v. *New Zealand Ins.*[87] In this case, an action was brought against a freight forwarder acting as custodian of goods. The Court held that the action was sustainable under the Warsaw Convention and not under the law of contract notion of bailment as claimed, since the damage occurred while the goods were in charge of the air carrier, before the cargo was delivered to the consignee. Massey supports this view, asserting that liability of the carrier for loss or damage to the goods will essentially come under the purview of the international Convention or other law relating to the mode of transport in question and that each time goods are transferred from one mode of transport to another, so will the liability regime pertaining to those goods.[88] The Warsaw Convention, by Article 31, provides that in the case of combined carriage, the provisions of the Warsaw Convention shall apply only to the carriage by air, provided that the carriage by air falls within the terms of Article 1 of the Convention. All conventions pertaining to transportation of goods are, however, agreed that when the stage of transport during which the loss or damage occurred to goods is not known, the liability of each carrier will be determined by rules of liability prescribed by the Convention applicable to the multimodal transport operator or a carrier who issued the contract of carriage. In such an instance, the carrier who pays compensation shall be entitled to recover compensation from the other carriers who take part in the carriage.[89]

In addition to the liability standards already adopted regarding multimodal transport operations, there are other documents purporting to provide for standardized provisions for multimodal transport. In 1973, as a precursor to the UNCTAD Conference of 1979, the International Chamber of Commerce initiated uniform

[87] Massey (1972), p. 726.

[88] *Id*. at 732.

[89] Briant (1996), p. 67.

rules for a Combined Transport Document, which contained minimum standard rules for use in documents issued by operators. Revised in 1975, they form the basis of the Combidoc (Combined Transport Document) or Combined Transport Bill of Lading. The Combidoc is issued and signed by the Combined Transport Operator (C.T.O.) and reflects a contract for combined transport. Under agreement and per the Combidoc, the C.T.O. agrees to perform carriage of freight, whether by one single mode of carriage or by combined modes of carriage.[90] Both the Combidoc and the Combined Transport Bill of Lading, together with documentation under the Montreal Convention of 1980, bring to bear a compelling need to evaluate expedient means of contracting for services of freight forwarders and carriers. The air waybill under the Warsaw System also plays a key role in adding to the mass of documentation involved in the modern freight contract.

1.7 Emergent Trends of Contracting for Carriage by Air or Freight

1.7.1 E-Commerce

Telecommunications, air transport and electronic data processing will be landmarks of the twenty-first century in terms of globalization. Among them, air transport has become an indivisible and vital part of the world economy. Emergent trends in the carriage of air freight incontrovertibly link air transport to both communications and electronic data processing through the ubiquitous medium of the Internet. Cyberspace has opened the air transport industry to virtual product development, giving commercial air carriers the opportunity to conduct business via the Internet. The Internet explosion, occurring largely during the late-1990s, was due to three fundamental factors: deregulation of telecommunications, globalization and the acceptance of an Internet protocol as a de facto standard.[91] When the concept of e-commerce is applied to the average contract of carriage between the airline and the passenger, what immediately comes to mind are concerns related to the centuries-long practice of the exchange of paper-based documents that have been the predominant means to record commercial information pertaining to contracts between parties.

Ironically, the Internet explosion that resulted in e-commerce brings about a certain “back to basics” approach from a legal perspective. For centuries, before a documented form of contract was formally recognized as a valid means of recording a contract, the world frowned upon the somewhat widespread practice of entering into oral contracts, particularly in the case of certain types of agreement. This difficulty was obviated under English law with the enactment of the Statute of Frauds,

[90] ICC Publication No. 298 (October 1975).

[91] See Shepphard (2000), p. 24.

a legislation establishing the basic requirement of a contract having to be in writing, at least in the instance of particular contracts.[92] Although the Statute was repealed in 1954, its principles still subsist in some common law jurisdictions. The requirement of "writing," as envisioned in the Statute of Frauds, was arguably a stipulation for words and figures written in ink on paper (the prevalent means of putting things on paper at the time) and therefore left a perceived lacuna in the law on the issue of telegraphic contracts, which became popular in the mid nineteenth century. When faced with the question as to whether a telegraph message containing an offer and another reflecting acceptance would constitute "writing" as required by the statute, common law jurisdictions were consensual in assuming that a telegram constituted a written agreement.[93]

Courts even went to the extent of accepting a telephone message, conveyed by one of the parties to the contract to a phone clerk at the telegraph company, and later transcribed by the clerk into telegraphic form, as satisfying the criterion for a "written" agreement. In the seminal American case of the Selma Sav Bank decided in 1918, the court, dismissing as unimportant the mechanical means of making and signing the writing as a determinant, followed the principle enunciated in an earlier case that held:

> When a contract is made by telegraph, which must be in writing by the Statute of Frauds, if the parties authorize their agents either in writing or by parol, to make a proposition on one side and the other party accepts it through the telegraph, that constitutes a contract in writing [...] because each party authorizes his agents; the company or the company's operator, to write for him; and it makes no difference whether that operator writes the offer or acceptance in the presence of his principal and by his express direction.[94]

This approach reflects a strong judicial predilection, even at that early stage, to accommodate new developments in technology. It is encouraging that, with the acknowledgement of the first dynamic of computer law that technological advancement would be purposeless without due recognition of its efficacy, courts have pioneered a sensible approach with predictable ramifications.

The telecopier followed the telegram, and courts followed the path cleared through the telegraph cases. In 1988, a Canadian court ruled:

> [T]he law has endeavoured to take cognizance of, and to be receptive to, technological advances in the means of communication. The conduct of business has for many years been enhanced by technological improvements in communication. Those improvements should not be rejected automatically when attempts are male to apply them to matters involving the law. They should be considered and, unless there are compelling reasons for rejection, they should be encouraged, applied and approved.[95]

---

[92] The original Statute of Frauds, passed in 1677 as Charles II C.3 was intended as an act for the prevention of frauds and injuries. See Stollery(1976), p. 222.

[93] For Canadian law, see *Kinghorne* v. *The Montreal Telegraph Co.* (1859) 18 U.C.Q.B.R. at 60. For British law, see *McBlaine* v. *Cross* (1871) 25 L.T. 804; *Coupland* v. *Arrowsnith* (1868) 18 L.T. 755. For US law, see *Howley* v. *Whipple* 48 N.H. 487 (1869). For general reading, see Jones (1916).

[94] *Sehna Say Bank* v. *Webster County Bank* 206 S.W. 870 at 872 (Ky. App. 1918).

[95] *Beatty* v. *First Explor. Fund 1987 & Co*., (1988) 25 B.C.L.R. (2d) 377 (SC).

A subsequent case, which pertained to a fax transmission, endorsed the above view, urging encouragement and approval of contracts made through the electronic media.[96] This commonsensical approach may well be extended all the way to instances of computer-to-computer transactions (popularly called electronic data interchange) involving ecommerce conducted through e-mail.

In the case of carriage of passengers and cargo by air, e-commerce is becoming an increasingly popular medium of transaction. However, air carriage raises esoteric issues of liability brought about by a complex web of legal requirements pertaining to the delivery of the document that evidences the contract of carriage. This article will examine some of those legal issues.

1.7.2 The Contract of Carriage by Air

1.7.2.1 Encryption

When a contract of carriage by air is entered into through ecommerce, encryption, the most fundamental process of an electronic contract, takes place. In this context, an e-commerce contract for carriage by air is not dissimilar to any other e-commerce transaction. Encryption is a set of complex mathematical formulae that permit anyone transmitting electronic information to scramble the message so that only the intended recipient can decode and thus understand it. Without encryption, e-commerce is not only nearly impossible, but also insecure at best. When one buys something on-line such as an air ticket using a "secure server," his private information will be encrypted before it is sent over the Internet. Similarly, when one conducts Internet banking, the bank concerned uses encryption to make private financial information unreadable to anyone but that bank.

Encryption is essential for e-commerce because e-commerce largely takes place over the Internet, which is an open network. As a practical matter, this means that someone other than the intended recipient of information can intercept it and read it. Encryption protects such information as credit card numbers and all other private information sent through the Internet.

There are several ways to learn whether a browser used for an ecommerce transaction is encrypting information. For example, when one purchases something online using Netscape's browser, if the picture of a lock in the lower left-hand corner is in the locked position with a glow around it, proper encryption is being ensured. One can also look at the Internet address of the browser. If, for instance, the address starts with "https" instead of simply "http," it means that the browser is using a secure server that utilizes encryption.

The basic concept of how one encrypts information is simple. One uses a computer program that uses an encryption algorithm (essentially a mathematical equation). This algorithm, or equation, converts the intended data (confidential files,

[96] *Rolling* v. *Willann Investments Ltd*. (1989) 70 OR. (2d) 578 at 581.

credit card number, etc.) into an encoded message using a key (think of the "key" as your password for decoding or deciphering the message). The result of the encryption process is that the plain text message comes out unreadable on the other end because it appears as gibberish.

Encryption comes in two basic forms. One form uses a single key (or password) and the other uses dual keys. With single key encryption, the key to encode information is used, which is then sent to the intended recipient. The recipient then uses this same key to decipher the encrypted message. This means that the sender of information has to share the secret key with the recipient. A grave concern with this process is that the sender will need a secure way to share the key. This limits the usefulness of single key encryption in e-commerce, for it is rarely practical to whisper the key into someone's ear when conducting business on-line.

The other form, employing a dual key encryption, is prominent in e-commerce. This system works with two mathematically related keys. One key is called the "public key"and the other key is called the "private key." The public key is the key that the sender of information can and should announce to the world. The sender can post the public key on his web site and put it in an advertisement in a newspaper if he so wishes. It is a public document and therefore is not a secret. When someone wishes to send a confidential message that only an intended recipient should read, the sender could encrypt it using his public key. For instance, if he wants to send his credit card number to Utopiaairlines.com, his browser might encrypt it using Utopia airlines.com's public key. The interesting part of this two way process is that, should a thief intercept a credit card number over the Internet and try to decode it using Utopiaairlines.com's public key, it will not work. The advantage of a dual key system is that the public key is a one-way key. It encrypts information, but it will not decrypt it. That is the reason it is not important for a sender of information to keep the public key a secret. When Utopia Airlines is ready to read the credit card number sent to it, its software would use Utopiaairlines.com's private key to decrypt, or decode, the information. The private key is the key that must remain absolutely secret. It is the one that lets someone read messages intended only for them that were encrypted using their public key.

1.7.2.2 Offer and Acceptance

Usually a contract is concluded when, in response to an offer made by an offeror, the offeree indicates acceptance to the offeror. In cases of simultaneous communication of the offer and acceptance, made face to face by the offeror and offeree, the essentials of a contract are clear. However, when parties are not in close proximity and communicate their dealings over the telecommunications medium, the process may become slightly more complicated, in that it may not always be clear as to what constitutes an offer or an acceptance. In such instances, it largely becomes a matter of interpretation as to whether both the offeror and the offeree had the intent to conclude the contract.

The element of intention to contract and to conclude the process on the part of both the offeror and offeree is fundamental to the formation of the contract. Courts have insisted that proof of an offer to enter into legal relations upon definite terms must be followed by the production of evidence from which the courts may infer an intention by the offeree to accept that offer. Thus, the statements made by the parties in the process of negotiations are of extreme importance in the determination of a concluded contract. The 1840 case of *Hyde* v. *Wrench* offers the seminal principle that a series of communications from either party may impinge an original offer.[97] In Hyde, the defendant, on 6 June, offered to sell an estate to the plaintiff for £1000. On 8 June, in reply, the plaintiff made an offer of £950, which was refused by the defendant on 27 June. However, on 29 June, the plaintiff wrote to the defendant that he was now willing to pay £1000.

The importance of Hyde lies in the fact that the court determined that no contract existed. The plaintiff had, by rejecting the offer made on 6 June, precluded himself from reviving the offer later. In other words, once the offeree rejects an offer, he cannot proceed on the basis that the offer would still stand in its original form.

In the instance of a sale carried out over the Internet, it is important to note that, by placing its seats for sale on the Internet, an airline is placing itself in the same footing as a shop owner who displays his goods for sale in his shop, with price tags marked on the goods. By doing this, the shop owner is merely making an "invitation to treat." The buyer, who walks into the shop and selects an item for purchase, is making the offer, which the shop owner is entitled to accept or reject. Similarly, it is the purchaser of the airline ticket over the Internet who makes the offer, making him the offeror, and the airline then becomes the offeree.

The primary issue at stake in the determination of a contract is whether the parties intended the contract to be concluded. For instance, if a person offers to buy an airline ticket over the Internet and the airline gives him a reference number, the allocation of that number may not necessarily indicate acceptance of the offer by the airline. A good analogy of this is the 1989 United States case of *Corinthian Pharmaceutical Systems Inc.* v. *Lederle Laboratoriesis.*[98] Here, a person dealing in medicinal drugs on a wholesale basis ordered a consignment of drugs through a computerized telephone ordering system. The order was placed strategically a day before a price increase was to take effect. The wholesaler ordered through the manufacturer's automated telephone order system. After the order was placed in this manner, a "tracking number"was allocated by the manufacturer's computer system. There was no other human interaction in the transaction. Subsequently, when the manufacturer refused to sell the consignment of drugs as ordered by the wholesaler at the pre-increase price, the court favored the manufacturer's position. The court determined that the tracking number issued by the manufacturer's computer was not an acceptance of the offer, but an acknowledgment of receipt of the order, or, in contractual law terms, merely an offer. The court held that no contract had been concluded, and the wholesaler was denied purchase of the goods at the lower price.

[97] (1840) 3 Beav. 334.

[98] 100 724 F.Supp.605 (S.D. Ind. 1989).

The early case of *Henkle* v. *Pape*[99] brings out another difficulty that might arise from contracts transacted through the Internet. The *Henkle case*, decided in 1870, concerned a transaction carried out through telegraphic messages for the sale of up to fifty rifles. The offeror sent the offeree a telegraphic message offering to buy three rifles but the message was transcribed to the offeree as "the" instead of "three" rifles. Accordingly, the offeree held the offeror liable for the purchase of all fifty rifles. The court held that the offeror could not be held liable for the error of the telegraph clerk who had wrongly deciphered the message and therefore no contract had been concluded.[100]

The 1870 principle enunciated in *Henkle* still holds true in the instance of a contract transacted through the Internet. As in *Henkle,* a contract negotiated through electronic means is always subject to the risk that messages intending to create contractual obligations may not reach their destination, or worse, may be received by the recipient in a form other than the one originally sent. In the seminal Canadian case *Kinghorne* v. *The Montreal Telegraph Co*. decided in 1859, the Court subsumed the reasons behind the determination of an electronic contract that may still apply:

> We must look, I think, in the case of each communication, at the papers delivered by the party who sent the message, not at the transcript of the message taken through the wire at the other end of the wire, with all the chances of mistakes in apprehending and noting the signals, and in transcribing for delivery.[101]

Of course, compared to early telegraph systems that caused numerous problems, the modern Internet is more reliable and errors such as those encountered in Henkle and Kinghorne may not be commonplace. However, there is, of course, the possibility of garbled messages flowing through the Internet, where courts would have no hesitation in determining the real intent of the parties to conclude a contract as the preliminary issue.

The above concerns are by no means intended to suggest that contracts concluded through the Internet are questionable in general terms. In fact, current computer-based technologies are more effective than earlier technologies at assisting parties to the contract to unambiguously conclude their agreement. For example, electronic data interchange (EDI) as a commercial medium has evolved in Canada to the extent that the EDI Council of Canada's Model Trade Practices Act (TPA) encourages parties to be extremely precise in identifying particular messages as constituting an order (or offer) by introducing a two-phase process: the first using a functional acknowledgment of the offer (such as the tracking number in Corinthian) and the second using a purchase order acknowledgment.

---

[99] (1870) 23 L.T 419.). (102 See also *Harper* v. *Western Union Telegraph Co*., 130 S.E. 119 (S.C. 1925), *Postal Tel. Cable Co.* v. *Schaefer*, 62 S.W. 1119 (Ky.App.1901).1870), 23L.T. 419.

[100] See also *Harper* v. *Western Union Telegraph Co*., 130 S.E. 119 (S.C. 1925), *Postal Tel. Cable Co.* v. *Schaefer*, 62 S.W. 1119 (Ky.App.1901).

[101] (1859) 18 V.C.Q.B.R. 60 at 64.

1.7.2.3 Time and Place of Contract

When parties sign a contract simultaneously in a face-to-face setting, there is no doubt as to when and where the contract comes into being. It is often not a trivial legal task to determine when and where a contract comes into being, whether an offer, an acceptance, or both, are sent by telegraph, telex, fax, EDI, e-mail, or via the Internet, or are communicated by telephone. The uncertainty began even before the advent of the telegraph, with the mail delivery system. The general contract law principle is that an offer is not considered accepted until the acceptance of the offer is received by the offeror. In England in the nineteenth century, judges developed an exception to this rule for offers and acceptances sent by the mail. The so-called "mail box rule," or expedition theory, prescribes that where an offer is made in the mail, the contract takes effect immediately at the time acceptance is posted in the mail (rather than when the acceptance is actually received by the offeror) where use of the mail is reasonable in the circumstances or expressly contemplated by the parties. This rule effectively precludes the need to hold the offeree responsible for delays in communications and places the burden of uncertainly of the waiting period on the offeror; that is, the offeror does not know that it has earlier concluded a binding contract until it receives the offeree's acceptance in the mail, whereas the offeree knew the contract came into existence the moment it posted its reply letter. Shifting this risk to the offeror, and giving the concomitant assurance to the offeree, was reasonable because of the increased reliability of the Royal Mail in the 1800s, to the point where multiple deliveries a day in larger urban centers were the norm. The expedition theory is a good example of a legal doctrine being firmly grounded in the communication environment and commercial processes of its day.

As the telegraph, telephone and other new communications technology evolved into widespread use, cases established principles as to when and where contracts were concluded. In Carow Towing, an early Canadian case, courts held that a contract entered into by telephone should be treated like a letter and should follow the expedition theory, with acceptance occurring at the place the acceptance is spoken and not where the offeror hears the acceptance.[102] By contrast, in the Entores case, a later British decision, Lord Denning concluded that for simultaneous communications like the telephone, the place where the contract is concluded is where the offeror hears the acceptance, and thus, if the line goes dead during the telephone conversation, the onus is upon the offeree to call back the offeror to ensure the words of acceptance had been communicated to the offeror.[103] Subsequent cases in Canada have followed the decision in Entores rather than the approach in Carow Towing, with the exception of Quebec where, up until recently, the preponderance of case law has followed the principle that telephone contracts arise when and where the offeree speaks its acceptance.[104] Since the enactment of the current Civil Code

[102] *Carow Towing Co.* v. *The "Ed. McWilliams*" (1919), 46 D.L.R. 506 (Ex. Ct.).

[103] *Entores, Ltd.* v. *Miles Far East Corporation,* [1955] 2 All E.R. 493 (C.A.).

[104] See, for example, *McDonald & Sons Ltd.* v. *Export Packers Co. Ltd*. (1979), 95 D.L.R. (3d) 174 (B.C.S.C.). See also *Re Viscount Supply Co. Ltd*. (1963), 40 D.L.R. (2d) 501 (Ont. S. C.); *National*

of Quebec in January 1994, Article 1387 explicitly provides that in respect of telephone contracts acceptance occurs when and where the acceptance is received. It is interesting to note that the Entores decision was also followed in two fax cases, one in Nova Scotia and one in New Zealand, where each held that a contract made by fax arises when the offeror receives by fax the acceptance of the offered.[105]

The Court in *Entores* also held that telex technology results in instantaneous communications with the result that acceptance occurs when the message is received by the offeror. The House of Lords in *Brinkibon* confirmed this approach.[106] In *Brinkibon*, the Court held that although telex communications should be categorized as simultaneous in each case, the specific constituent elements and factors in the communications system concerned need to be carefully considered:

> The senders and recipients may not be the principals to the contemplated contract. They may be servants or agents with limited authority. The message may not reach, or be intended to reach, the designated recipient immediately; messages may be sent out of office hours, or at night, with the intention, or on the assumption, that they will be read at a later time. There may be some error or default at the recipient's end which prevents receipt at the time contemplated and believed in by the sender. The message may have been sent and/or received through machines operated by third persons. And many other variations may occur. No universal rule can cover all such cases; they must be resolved by reference to the intentions of the parties, by sound business practice and in some cases by a judgment where the risks should lie.[107]

The recognition of the above facts raises a number of emerging issues in respect of EDI, e-mail and Internet communications. Certain EDI transmissions, for example, will fall into the simultaneous communications category. Much of EDI is affected not between the trading principals, however, but by use of intermediaries, known as value-added networks (VAN) or service providers. An EDI message could likely go through the message sender's VAN, then through the recipient's VAN, and finally to the recipient. Similarly, e-mail messages may be routed to electronic mailboxes from which the recipient has to then download. In such instances, it may be more difficult to conclude that the simultaneous communication rules should apply. Also, it may be difficult to determine when exactly an electronic message arrives at the recipient's location for purposes of being recognized as legally effective. For instance, an early British case that held that a letter sent in a sealed envelope is not considered received until it is opened personally by the addressee.[108] Whether or not such a rule should apply in the case of e-mail, or whether an e-mail message should be deemed received when it is available to be viewed by the intended recipient, regardless of the time at which the recipient actually reads the message, is a moot

---

Bank of Canada v. *Clifford Chance* (1996), 30 O.R. (3d) 746 (Gen. Div.) [hereinafter Clifford Chance]; and *Rosenthal & Rosenthal Inc. v. Bonavista Fabrics Ltd.*, [1984] C.A. 52 (Que. C.A.).

[105] *Balcom (Joan) Sales Inc.* v. *Poirier* (1991), 288 A.P.R. 377 (N.S. Co. Ct.). See also *Gunac Hawkes Bay (1986) Ltd. v. Palmer,* [1991] 3 N.Z.L.R. 297 (H. Ct.).

[106] *Brinkibon Ltd.* v. *Stahag Stahl and Stahlwarenhandelsgesellschaft mbH,* [1982] 1 All E.R. 293 (H.L.).

[107] *Ibid.* at 296.

[108] *Arrowsinith* v. *Igle* (1810), 3 Taunt. 234.

point. Another question is when should a telex or fax be deemed to have arrived at a workplace? In one case, the answer pointed to when the message was received by the recipient's machine (on a Friday after business hours and not three days later on a Monday morning when a person actually reads the telex).[109]

Given these ambiguities, prudent users of electronic commerce should try to avoid having to refer these issues to a judge by providing, in their EDI Trading Partner Agreement or other similar document, precisely what electronic message must be received by which computer (i.e., the recipient's or the recipient's VAN) in order for a contract to arise. This protocol would bring clarity to the questions as to when and where the electronic contract arose. As to the "where" question, the parties to the TPA would be well advised to select a governing law in advance, and to make sure the VAN agreements contain the same jurisdiction, so that there is no question which law would apply if it were ever considered necessary to resort to adjudication. This is particularly true for EDI and Internet transactions where each trading part's VAN, or Internet service provider, may be in a jurisdiction different from the customer, and therefore possibly the laws of four different jurisdictions may apply if the parties remain silent on the governing law question. In such circumstances, as Lord Denning observed in Entores concerning two parties in different jurisdictions, the problems arise since the laws of the respective jurisdictions are different.[110] Therefore, predicting a court's probable response is difficult, given that the court will invariably seek the most just remedy under the circumstances. In many cases, this may be truly a difficult task. As an example, the Court's commentary in the Export Packers case, where the judge recommended that the various rules developed by the law over the years, such as the simultaneous communication rule in the Entores case, should not be applied in a rigid fashion:

> When the common law rules relating to offer and acceptance were under development the telephone did not exist. At that time two or more persons getting together and reaching a common understanding made agreements. As the postal system came into being elaborate the courts covering the mechanics of reaching a bargain by mail made rules. Today a person ordinarily resident in British Columbia may telephone from Japan where he is on a business trip to a person ordinarily resident in Ontario but who is also then visiting Italy. They may agree to the same kind of contract which is the subject-matter of this writ. It does not necessarily follow the place where the contract was made was Japan and that Japanese law governs its interpretation. Alternatively, it would be hard to argue the place where the contract was made was Italy and the law of that country ought to apply to its interpretation.[111]

This dictum clearly confirms the benefit accrued to users of electronic commerce in crafting their own rules for dealing with issues of formation of contract. Making commercial relationships more secure and predictable through contract, however, can be a costly and time-consuming exercise. Therefore, this may be an area ripe for law reform. In the US, the National Conference of Commissioners of Uniform State

---

[109] The "Pendrecht" [1980] 2 Lloyd's Rep. 56 (Q.B.).

[110] *Entores, supra* note 103 at 497.

[111] *McDonald and Sons Ltd.* v. *Export Packers Co. Ltd.* (1979), 95 D.L.R. (3dl 174 (B.C.S.C.) at 180.

Law are already working toward establishing new rules under the Uniform Commercial Code that would take the view that Internet communications are instantaneous in nature and that therefore a contract comes into existence when the sender of the offer receives an electronic message signifying acceptance. This does not, however, answer the question as to when the acceptance is effective, particularly if the offeror was not present before the computer. In other words, does receipt require a human intervention and acknowledgement? In considering this question, the following aspects should be observed: the purpose and function of the rule; who would be prejudiced by a particular holding; what the reasonable expectations of the parties are; and, on whom is it reasonable to place a burden for helping to fix the system if indeed it needs fixing.

1.7.2.4 Delivery of the Air Waybill

The Warsaw Convention states that for the transportation of freight, the carrier may require the consignor to make out and hand over to him an air consignment note which shall contain certain details.[112] The Convention also says that the absence, irregularity or loss of the air consignment note shall not affect the existence of the validity of the contract of transportation which shall nonetheless be subject to the rules of the Convention. Nevertheless, if the carrier accepts a passenger without an air consignment note having been delivered, he shall not be entitled to avail himself of those provisions of the Convention that exclude his liability.[113]

1.7.2.5 Issues of Jurisdiction

Perhaps the single most important issue in cyber contracts is that which pertains to jurisdiction. Given the worldwide web and its global application, the most compelling question in this regard would pertain to the trans-boundary applicability of an Internet contract. In this regard, the most convenient analogy comes from the two jurisdictions of Canada and the US. Would an offeror in Canada, who offers five hundred dollars over the Internet for a round trip between Toronto and Miami, be able to enforce an agreement concerning a sale against a US airline at its home base in Florida? In a case decided in 1952 in Canada where the plaintiff brought a case to the Ontario High Court against an American radio broadcasting station which was broadcasting from across the border, alleging libelous statements which could be heard over the air waves in Canada, the defendant radio station brought a motion of dismissal, alleging that the Ontario Court had no jurisdiction to hear a case against a party to the action which was an enterprise based in the United States.[114] The Court disagreed, and held:

---

[112] *Warsaw Convention, supra* Art. 5.

[113] *Ibid*., Art. 9.

[114] *Jenner* v. *Sun Oil Co. Ltd.* (1952) 16 C.P.R. 87 (Ont. H.C.J.).

> A person may utter all the defamatory words he wishes without incurring any civil liability unless they are heard and understood by a third person. I think it a "startling proposition" to say that one may, while standing south of the border or cruising in an aeroplane south of the border, through the medium of modern sound amplification, utter defamatory matter which is heard in a Province in Canada north of the border, and not be said to have published a slander in the Province in which it is heard and understood. I cannot see what difference it makes whether the person is made to understand by means of the written word, soundwaves or ether-waves in so far as the matter of proof of publication is concerned. The tort consists in making a third person understand actionable defamatory matter.[115]

In the case of *Pindling* v. *National Broadcasting Corporation* in respect of an American television broadcast received in Canada, the Ontario High Court held that the Prime Minister of the Bahamas was entitled to bring the case to Canada, instead of the United States.[116] The *Pindling* decision illustrates well the principle of "forum shopping," which can be culled from the television context and be held applicable to the analogous situation of a contract transacted over the Internet.

The above principle may be derogated from only in an instance where the court seized of the case could invoke the principle of *forum non conveniens*, which allows the transfer of a suit from an originally filed jurisdiction to some other jurisdiction which is better placed to hear the case concerned. In the 1996 case of National Bank of Canada v. Clifford Chance, the Canadian Courts charged with hearing a case where a Toronto-based firm had contracted with a law firm in the UK, transferred the case to the UK, although the contract was concluded in Toronto, on the grounds that the contract concerned a UK-based project and the legal advice obtained had been UK law given by lawyers in the UK.[117] Based on the Clifford Chance principle, it would not be unusual for a common law court to determine that in the sale of an airline seat, where, for example, the offer emanates from Canada over the Internet for a seat out of the UK on a UK-based carrier, the applicable jurisdiction would lie with the courts in the UK, although the contract itself may have been concluded in Canada.

There is a dichotomy in the judicial thinking with regard to cases involving contracts concluded over the Internet. On the one hand courts are refusing to bring a person into a jurisdiction purely because he contracted with a business entity that is based in the particular jurisdiction. This approach is illustrated by the 1994 US decision in the case of *Pres-Kap, Inc.* v. *System One, Direct Access Inc*., where the Court refused to grant jurisdiction to Florida where a resident in New York had used a Florida-based on-line network information service merely to gain access to a database.[118] Similarly, the Court in the famous 1997 *SunAmerica* case refused to find jurisdiction in a trade-mark case solely on the basis of the defendant's operation of a general access web site:

---

[115] *Id*. At 98–99.

[116] (1984) 49 O.R. (Ed) 58 (H.C.J.).

[117] *Clifford Chance, supra* note 104.

[118] 636 So. 2d. 1351 (Fla. App. 1994).

> Plaintiffs ask this Court to hold that any defendant who advertises nationally or on the Internet is subject to its jurisdiction. It cannot plausibly be argued that any defendant who advertises nationally could expect to be haled into Court in any state, for a cause of action that does not relate to the advertisements. Such general advertising is not the type of 'purposeful activity related to the forum that would make the exercise of jurisdiction fair, just or reasonable'.[119]

Similarly, in the 1997 case of Hearst Corporation v. Goldberger where the defendant operated a passive general access web site, the courts were of the view that to open worldwide jurisdiction merely because the Internet offered worldwide access, would be iniquitous:

> Where, as here, defendant has not contracted to sell or actually sold any goods or services to New Yorkers, a finding of personal jurisdiction in New York based on an Internet website would mean that there would be nationwide (indeed, worldwide) personal jurisdiction over anyone and everyone who establishes an Internet web site. Such nationwide jurisdiction is not consistent with traditional personal jurisdiction case law nor acceptable to the Court as a matter of policy.[120]

The Hearst Corporation decision seems to have followed the observation of a case decided one year earlier where the Court held:

> Because the Web enables easy worldwide access, allowing computer interaction via the Web to supply sufficient contacts to establish jurisdiction would eviscerate the personal jurisdiction requirement as it currently exists; the Court is not willing to take this step. Thus, the fact that Fallon has a Web site used by Californians cannot establish jurisdiction by itself.[121]

The second line of judicial thinking is the converse to the above approach, where courts have imputed to the non-resident defendant the responsibility for complexities brought about the Internet in its universal applicability. Therefore, in *Compuserv Incorporated* v. *Patterson*, the court held a Texas-based computer programmer legally responsible for his Ohio-based computer network online service, and found him to be so under Ohio Law.[122] Although the defendant had never visited Ohio, he was nevertheless found to be subject to Ohio law on the basis that an electronic contract had been concluded in Ohio where the defendant was distributing his product.

The principle of universal application of jurisdiction has been invoked in other instances, where courts have accepted jurisdiction on the basis of sales made to customers through the defendant's web site, based on soliciting donations, based on subscribers signed up by the defendant for services delivered over the Internet, or

---

[119] *IDS Life Insurance Co.* v. *SunAmerica, Inc.,* 958 F. Supp. 1258 (N.D. III. 1997), aff'd in part, vacated in part, 1998 WL 51350 (7th Cir.) (Westlaw) at 268.

[120] 1997 WL 97097 (S.D.N.Y.) (Westlaw).at para. 1. For a similar result see: *Cybersell, Inc.* v. *Cybersell, Inc*., 44 U.S.P.Q. 2d 1928 (9th Cir. 1997); and *Blackburn* v. *Walker Oriental Rug Galleries*, No. 97-5704 (E.D. Pa., 7 April 1998), reported in Computer & Online Industry Litigation Reporter, 21 April 1998 at 4.

[121] *McDonough* v. *Fallon McElligott Inc*., 40 U.S.P.Q. 2d 1826 (S.D. Cal. 1996) at 1828.

[122] 89 F. 3d. 1257 (6th Cir. 1996).

for having follow on contacts, negotiations, and other dealings in addition to, and often as a result of, the initial Internet-based communication.[123] The common thread which runs through the fabric of judicial thinking in this regard is that parties who seek to avail themselves of technology in order to do business in a distant place should not then be able to escape that place's legal jurisdiction. These cases are all-embracing, from contract breach claims to tort, including trade libel. In several cases, courts have even found jurisdiction in trade-mark infringement matters merely on the basis of a defendant's general access web site, or linking to a national ATM network through a telephone line indirectly through an independent data processor in a third state.[124] An overall evaluation of the US civil cases discussed above concludes that while the general trend is for courts to assert jurisdiction over non-residents based on their Internet activities, there are still a few situations where some courts may not apply jurisdiction.

Although the choice of forum may extend universally, it does not necessarily mean that enforcement from a judgment would automatically follow. In *Bachchan v. India Abroad Publications Incorporated,* the plaintiff, a national of India who had won the right to have his case heard in the United Kingdom, was unable to enforce judgment in New York.[125] The New York Court held that the UK law applicable to

[123] *Digital Equipment Corporation* v. *AltaVista Technology*, Inc. 960 F. Supp. 456 (D. Mass. 1997). See also *Cody* v. *Ward,* 954 F. Supp. 43 (D. Conn. 1997), where the Court took jurisdiction based on telephone and e-mail communications that consummated a business relationship begun over Prodigy's "Money talk" discussion forum for financial matters. In partially justifying this decision, the Court noted that the use of fax technology, and even live telephone conferences, can greatly reduce the burden of litigating out-of-state. See also H*eroes, Inc. v. Heroes Foundation,* 958 F. Supp. 1 (D.D.C. 1996). See also *Zippo Manufacturing Company v. Zippo Dot Con, hIc*., 952 F. Supp. 1119 (W.D. Pa. 1997). See also *Resuscitation Technologies, Inc. v. Continental Health Care Corp*., 1997 WL 148567 (S.D. Ind.) (Westlaw). The Court in this case was not concerned that the defendants had never visited the forum state in person and concluded at para. 5: "Neither is the matter disposed of by the fact that no defendant ever set foot in Indiana. The 'footfalls' were not physical; they were electronic. They were, nonetheless, footfalls. The level of Internet activity in this case was significant." See also *EDIAS Software International, L.L.C. v. BASIS International* Ltd., 947 F. Supp. 413 (D. Ariz. 1996). In this case the Court summed up the essence of many of the Internet jurisdiction cases by stating at 420: "BASIS [the defendant] should not be permitted to take advantage of modem technology through an Internet Web page and forum and simultaneously escape traditional notions of jurisdiction." See also *Gary Scott International, Inc. v. Baroudi*, 981 F. Supp. 714 (D. Mass. 1997).

[124] *Panavision International, L.P. v. Toeppen*, 938 F. Supp. 616 (CD-Cal. 1996); *Maritz, Inc. v. CyberGold, Inc.*, 947 F. Supp. 1328 (E.D. Mo. 1996); *Inset Systems, Inc. v. Instruction Set, Inc.*, 937 F. Supp. 161 (D. Conn. 1996). In the latter case the court observed at 165: "In the present case, Instruction has directed its advertising activities via the Internet and its toll-free number toward not only the state of Connecticut, but to all States. The Internet as well as toll-free numbers are designed to communicate with people and their businesses in every state. Advertisement on the Internet can reach as many as 10,000 Internet users within Connecticut alone. Further, once posted on the Internet, unlike television and radio advertising, the advertisement is available continuously to any Internet user. ISI has therefore, purposefully availed itself of the privilege of doing business within Connecticut." See also *Plus System, Inc. v. New England Network, Inc.*, 804 F. Supp. 111 (D. Colo. 1992).

[125] 585 N.Y.S. 2d. 661 (Supp. 1992).

the case did not accord with US law and therefore the decision could not be recognized as enforceable in the US.

1.8 Concluding Remarks

The air freight business impacts the world of business palpably and, like any other business, must follow basic economic rules. As markets open out and globalize, they must, as a necessity, begin to concentrate around fewer players. Strategic airline alliances are a first step in this equation, and it is inevitable that over time just a few players will dominate the world air transport market. The US market, arguably the world's most mature, will seek to mesh with the broadly deregulated intra-European market and make the North Atlantic the most powerful air transport market on an inter-regional basis. The Asia Pacific region, often misconstrued as a purely homogenous market owing to its geographic connotations, has shown that the region's strongest international traffic flows are between interregional sectors. This notwithstanding, Asia-Pacific carriers should immediately focus on strengthening their positions in local and regional markets, while at the same time emphasizing the need to enter into strong strategic alliances with carriers of other regions and those within the Asia-Pacific region.

As for aircraft manufacturers, their role in providing much needed freight capacity for the future is a critical one. The large aircraft planned at that time by Boeing and Airbus Industries, namely -the 747 XF and A 380F respectively, were expected to offer the world's major cargo airlines a 25% increase in payload. In this context, the aviation industry has voiced its concern on the cancellation by Boeing of the development of the 747 XF.[126]

The operative criterion for the provision of capacity in the carriage of air freight is whether carriers choose to band together through alliances or operate independently. This determination will depend on the competitive nature of the major players. It is incontrovertible in this context that the information revolution plays a major role as a determinant. The success story in air freight carriage, particularly in view of its link to various other aspects of business, will hinge on the operators' willingness to achieve dramatic reductions in the cost of obtaining, processing and transmitting information. The management of new information technology is the key to warding off competition. Ecommerce is a major player in marketing air freight services.

In the air freight business, information technology is more than fast computers. It broadly encapsulates information created by the businesses involved and uses a broad spectrum of convergent and linked technologies to process such information. The information revolution is rapidly changing industry structure and alters rules of competition, offering operators new and more innovative ways to outperform

[126] See Conway (2001), p. 11.

competitors. Information, deftly and strategically used, may also spawn whole new business opportunities from existing operations.

The ultimate success in providing total service in the air freight business world lies in the combination of using information that is available to deliver a unique mix of value. Operators should be able to attract consignors with a total package rather than with fragmented services. For example, a freight carrier could offer up-to-the-minute information on the whereabouts of a consignor's freight, which improves coordination between the consignor, consignee and the carrier. It is critical in this process that managers assess the information intensity applicable to the air freight industry, determine the role to be played by information technology in their industry structure, identify and rank the way in which information technology might create competition advantage and develop a plan for taking advantage of information technology.

In terms of strategy implementation, information technology could prove to be a useful tool in tracking progress toward milestones and success factors through efficient reporting systems. By using these systems, operators could measure their business activities more precisely and help managers motivate themselves toward implementing their strategies successfully.

Basic economic principles of the twenty-first century dictate that the global player is the winner in any international business enterprise. Competitive advantages of a global strategy usually rest with the preeminent stratagem of location of the business. Every global strategy usually begins with some kind of advantage in location, which plays a critical role in the business penetrating the international market. The successful air freight manager will therefore use information technology and location of his business as key factors in his marketing strategy.

Regarding legal issues that may arise from the modern exigencies of air freight carriage, particularly in instances where carriage is affected through a carrier who is not a contracting carrier, the subtleties of commercial alliances between the carriers concerned should be carefully evaluated. The various nuances of the law pertaining to air freight, as discussed in this article, could all be relevant considerations for the future.

References

Atiyah PS (1978) Contracts, promises and the law of obligations. Law Q Rev 94:193

Berman HJ, Kaufman C (1978) The law of international commercial transactions (Lex Mercatoria). Harv Int Law J 19:221

Briant A (1996) A critical look at the United Nations Convention on International Multimodal Transport of Goods (Geneva, 24th May 1980). LL.M. Thesis

Bridges G (Winter 2000) Air cargo in the 21st century. Int Airport Rev 4(4):14–19

Conway P (2000) Cargo on-line. Airl Bus 16(2):78–79

Conway P (2001) Cancelled 747 FX leaves cargo void. Airl Bus 8:11

Cross P (1993) Trucking air cargo: the application of the Warsaw system to bimodal transport. LL.M. Thesis, McGill University

Delaume GP (1979) What is an international contract? An American and Gallic dilemma. Int Comp LawQ 28:25
Delaume G (1980) Transnational contracts, vol I. Routledge, New York
Furmston MP (ed) (1981) Cheshire and Fifoot, law of contract, 10th edn. Butterworths, London, p 1
Ghemulla E, Schmid R (eds) (1998) Warsaw convention. Kluwer, The Hague, p 17
Goldhirsh LB (1998) The Warsaw convention annotated: a legal handbook. Nijhoff, Dordrecht, p 43
Greig DW (1979) Expectations in contractual negotiations. Monash Univ Law Rev 5:165
Guest AG (ed) (1979) Anson's law of contract, 25th Centenary edn. Butterworths, London, p 5
ICAO (1996) Manual on the regulation of international air transport, 1st edn. ICAO, Montreal, pp 4–5
ICAO (1997a) Annex 9 to the convention on international civil aviation (facilitation), 10th edn. ICAO, Montreal
ICAO (1997b) Annex 17 to the convention on international civil aviation (security), 6th edn. Montreal, IACO
Jones SW (1916) A treatise on the law of telegraph and telephone companies, 2nd edn. Vernon Law Book Co., Kansas City
Langer E (1970) Transnational commercial law, vol 215. Law Book Company, Sydney
Magdelenat J-L (1983) Air cargo regulations and claims. Butterworth, Toronto, p 1
Mankiewicz RH (1981) The liability regime of the international air carrier - a commentary on the present Warsaw system, vol 172. Kluwer, Deventer
Mapeli L (1968) El Contrato de transporte aereo interncional: coinentarios al Convenio de Varsovia. Editorial Tecnos (Biblioteca Tecnos de Estudios Juridicos), Madrid, p 37
Massey E (1972) Prospect for a new intermodal legal regime: a critical look at the TCM. J Marit L Com 3:726
Miller G (1977) Liability in international air transport. Kluwer, Deventer, p 10
O'Hare CW (1978) The duration of the sea Carrier's liability. Aust Bus Law Rev 6:65
OECD (2000) OECD workshop on principles for the liberalization of air cargo transportation. OECD, Paris, pp 1–11
Palmer NE (1979) Bailment. Oxford University Press, London, p 1
Schmitthoff C (1964) Unification of the law of international trade. Kluwer, Deventer, pp 6–8
Schmitthoff (1980) The export trade, 7th edn. Kluwer, Deventer, p 6
Shepphard I (2000) Cyberspace, Aerospace International, p 24
Stollery D (1976) Statute of frauds. Alta Law Rev 14:211
Swindell M (1997) Cargo comes back off the floor. Airl Int 3(2):26–30
Thomas E, Gamper D (1996) Cargo: increasing throughput. World Freight Int 28:29
Wassenbergh H (1996) De-regulation of competition in international air transport. Air Space Law 12:80

Chapter 2
Air Cargo

2.1 Regulatory Aspects

An air freight service is performed either by air carriers providing a multi-service or by all-cargo carriers and became popular in the post world war era in the 1940s and 1950s. Here, the distinction between "freight" and "cargo" become relevant. Technically, there is no difference and the terms could be used interchangeably. However, usually, "freight" is used for property transported by aircraft dedicated exclusively to property. "Cargo" is used for property transported in an aircraft which transports both passengers (their baggage) and other property. Air cargo effectively connects markets distant from each other creating global supply chains with speed and efficiency. This makes businesses deal easily with inventory management and built-to-order production.[1] The speed and efficiency inherent in air transport that makes transport of cargo by air more efficient is dependant on various factors including market access and liberalization as well as fair competition rules (which is discussed in the chapter to follow).

The International Air Transport Association (IATA)[2] has stated that air cargo represents more than 35% of global trade by value.[3] The carriage of cargo by air capitalizes on its advantage of speed over maritime and road transport as well as rail transport particularly in the context of the carriage of perishable goods. Additionally,

[1] *Impact of Air Cargo on Economic Development*, ICAO Information Paper, May 2015. See https://www.icao.int/Security/aircargo/Documents/AirCargo_EconomicDevelopment.pdf.

[2] The International Air Transport Association (IATA) is the trade association for the world's airlines, representing some 280 airlines or 83% of total air traffic. We support many areas of aviation activity and help formulate industry policy on critical aviation issues. IATA's mission is to represent, lead, and serve the airline industry and its vision is to be the force for value creation and innovation driving a safe, secure and profitable air transport industry that sustainably connects and enriches *our world.*

[3] See *IATA AIR CARGO STRATEGY*, July 2017 at 3. IATA's forecast for 2017 reflected that the value of international trade shipped by air would amount to US$5.5 trillion representing less than 1% of world trade by volume. *Id*. 5.

R. Abeyratne, *Law and Regulation of Air Cargo*,
https://doi.org/10.1007/978-3-319-92489-2_2

air cargo represents pharmaceutical products, electronic devices and express deliveries of e-commerce products as well as live animals. Although air cargo figures were static in terms of growth over the past few years, growth picked up in recent times in the context of freight tonne kilometers by 3.8% in 2016 compared to the previous year. IATA has revealed that this improvement represents nearly double the industry's average growth rate of 2.0% over the last 5 years (2012–2017). Furthermore, freight capacity, measured in available freight tonne kilometers (AFTKs), increased by 5.3% in 2016.[4]

Air Transport News recorded that world freight traffic grew by +3.9% year on year in August 2016, which was −1.1 percentage points lower than the growth in the previous month. The growth is mainly on account of low volumes of August last year. Ongoing sluggishness in global trade continues to be a negative for freight traffic. Both Europe and North America posted strong growth offsetting the weakness in some other regions. Traffic in Africa picked up as well while its growth remained negative. The strong upward trend in the Middle East paused and traffic growth dipped to less than +2.0%. Latin America/Caribbean posted the weakest performance with a contraction of around −3.0% in FTK. Freight capacity available expanded faster than freight traffic. As a result, the overall air cargo capacity utilisation continued to be poor with a low load factor of 40.8%.[5]

An UNCTAD Report States: "The growing proportion of high-value, time sensitive products traversing national boundaries by air creates increased opportunities for trade and economic development. High-tech manufacturers and other time critical shippers are locating at sites around or accessible to major airports; this provides a significant impetus for substantial investment in airport regions and the respective nations as a whole. Since jobs in time critical industries tend to be higher paying than country averages, they raise the income levels of the population, as well. For developing countries, including in particular landlocked developing countries, the potential development opportunities associated with air carriage are considerable. Air transport contributes to improved living standards in many developing countries by expanding opportunities to participate in the global economy. It is particularly important for landlocked and developing island countries, and for countries whose main exports are high value goods or perishables".[6]

The International Civil Aviation Organization (ICAO)[7] has made several attempts with regard to air cargo from a regulatory perspective. On the fringes of the 38th

[4] *Ibid.*

[5] https://www.atn.aero/content/c1764.pdf.

[6] CARRIAGE OF GOODS BY AIR: A GUIDE TO THE INTERNATIONAL LEGAL FRAMEWORK, Report by the UNCTAD Secretariat, Distr. GENERAL, UNCTAD/SDTE/TLB/2006/1, 27 June 2006, at 5.

[7] ICAO is the specialized agency of the United Nations handling issues of international civil aviation. ICAO was established by the Convention on International Civil Aviation, signed at Chicago on 7 December 1944 (Chicago Convention). The overarching objectives of ICAO, as contained in Article 44 of the Convention is to develop the principles and techniques of international air navigation and to foster the planning and development of international air transport so as to meet the needs of the peoples for safe, regular, efficient and economical air transport. ICAO has 192-mem-

Session of the Assembly of ICAO held from 24 September to 4 October 2013 in Montreal, Raymond Benjamin, Secretary General of ICAO and Kunio Mikuriya, Secretary General of the World Customs Organization held a joint press conference to highlight the ongoing efforts of ICAO and WCO to streamline and strengthen air cargo supply chain security. They were joined on the occasion by Oliver Evans, Chairman of the Board for The International Air Cargo Association (TIACA), who provided important cargo industry viewpoints on current developments and planning.

Emphasis at the Assembly about cargo security was on partnership and harmonization of standards, with some decisions being taken on security, including the need to move ahead with the finalization of reinforced air cargo security rules at global level. The Assembly agreed on the adoption by ICAO of a mechanism for the mutual recognition of security measures by which States would recognize the equivalence of aviation security measures with the same standards of security. It was hoped that this would pave the way to a One Stop Security approach.

The approach taken by all three Organizations is indeed laudable if the proposed mechanism can be developed by ICAO and implemented in a balanced manner. Earlier, at a Pre Assembly Symposium held also at ICAO on 20–21 September, Oliver Evans emphasized that mail and cargo posed similar risks and therefore WCO and the Universal Postal Union (UPU) must be kept in the loop of a coordinated cargo security approach.

Obviously, there are many players to be considered in the proposed ICAO mechanism. Regrettably, what was not discussed in this equation was the compelling need to seek an essential balance between cargo security and its supply chain and the possible effects a unified security approach might have in stultifying the one third of world trade enabled by air carriage if economic factors are not considered.

The ICAO Assembly adopted a Resolution on security with a single mention in a *Declaration* within the Resolution—that ICAO should develop and implement strengthened and harmonized measures and best practices for air cargo security, taking into account the need to protect the entire air cargo supply chain. There is also a general clause calling for stakeholders to cooperate with each other. The only other Resolution on this subject—on facilitation—has just one insignificant mention, urging States and operators, in cooperation with interested international organizations, to make all possible efforts to speed up the handling and clearance of air cargo, while ensuring the security of the international supply chain.

In developing the security mechanism, ICAO should take particular care not to place the cart before the horse. Any security mechanism should not be considered before considering the trade and economic aspects of the cargo supply chain. In this context the critical players are the cargo carrier, freight forwarder, shipper and customer (person who orders the product). All these four categories demand certain features in the carriage of cargo. As for the air carrier, it is primarily the right to operate with connectivity. The carriage of cargo must ensure fast and dependable

---

ber States the latest being Tuvalu which joined ICAO in 2017, who become members of ICAO by ratifying or otherwise issuing notice of adherence to the Chicago Convention.

connectivity to the world economy. There must also be harmonization of the air traffic management system and fast, efficient and effective border crossing. Ownership and control restrictions on air carriers must be relaxed and free trade agreements, including open skies agreements must be promoted.

Separate Resolutions dealing with trading through the cargo supply chain with security on the one hand and liberalization of trade on the other only help perpetuate the silo system under which ICAO operates. The horse is "trade" and "security" would be the cart. Without the air transport product, there would not be the need to talk about security, or for that matter safety or the environment.

ICAO has focused its attention on air cargo in Africa on more than one occasion. At the *ICAO Meeting on The Development of Air Cargo in Africa*, held in Lome, Togo from 5 to 7 August 2014 many people said many things while expounding statistics and figures. ICAO summarized the first day's discussion thus: "Air cargo is a catalyst for economic growth. Roughly 35 per cent of global trade by value is transported via air. Airfreight has allowed otherwise remote African regions to access world markets for agricultural and other products. The success of many economies and operations depends on rapid and reliable delivery in the best possible conditions–and airfreight is often the only transportation means to fulfill these requirements.

The Yamoussoukro Decision established the foundations for Africa's strategy for the sustainability of air transport, through the harmonization of the aviation regulatory framework and the objective of liberalization of market access. However, in order for Africa to fully reap the benefits of the Yamoussoukro Decision, in particular the opening of air routes and the enhancement of connectivity, increased political will is necessary".

Of course, one need not go all the way to Lome to hear these words of wisdom. They have been made known to all in aviation for decades, particularly in the countless ICAO meetings on air transport in Africa. However, there are two areas which deserve further examination. The first is the status and implementation of the celebrated Yamoussoukro Decision of 1999. Curiously, the Yamoussoukro Decision was taken to implement the Yamoussoukro Declaration of 1988, 11 years after the Declaration was finally recognized by the African States as going nowhere. Secondly, ICAO did its typical dance, of adopting a Declaration over a Declaration. Firstly, there is a Declaration, followed by a Decision, followed by a Declaration.

No one in the meeting seems to have challenged the African Civil Aviation Commission (AFCAC) which is the specialized agency of the African Union charged with implementing the Yamoussoukro Decision as to what they have been doing for the past 15 years about it.

Be that as it may, from a legal perspective one can be forgiven for wondering what these declarations and decisions are. They are certainly not treaties, which at least are considered legally binding on the parties. Are they pacts (like the Kellogg-Briand Pact of 1928 which discouraged States to regard war as a part of their national policy, which some signatory states cheerfully and blatantly flouted a few years after entering the Pact)?

Are the results of these declarations monitored? If their sole reason is to express commitment on the part of States Parties, how do they demonstrate their commitments? It is arguable that an international Declaration, signed by heads of States and setting s guidelines and timelines, is a recognizable instrument at international law (the Cairo Declaration, adopted and publicized 60 years ago by the United States, Britain and China on the status of Taiwan is one such instrument). However, is a piece of paper that is consensually "adopted" worth the paper it is written on? There have been instances at ICAO meetings where such declarations have been adopted by "acclamation" (i.e. by joint applause of the participants at a meeting!).

This brings me to part of the ICAO Summary at the Lome meeting : "However, in order for Africa to fully reap the benefits of the Yamoussoukro Decision, in particular the opening of air routes and the enhancement of connectivity, increased political will is necessary". Any member of the legal profession would admit that political will can only be demanded and obtained through a treaty—a binding agreement—and not by a declaration which will be quickly forgotten by those who appeared to show consensus at the time it was proclaimed to have been "adopted".

ICAO convened an air cargo development forum at the Zhengzhou International Convention and Exhibition Centre, Zhengzhou, China, from 2 to 5 September 2014. The forum was held in partnership with the Civil Aviation Administration of China (CAAC) and the People's Government of the Henan Province.

Participants at the Forum (which has been defined as "a place, meeting, or medium where ideas and views on a particular issue can be exchanged" with such synonyms as "conference", "seminar", "symposium", "meeting") would have attended with the expectation that they would get an insight into views on particular issues that would be exchanged. In ICAO's own words (appearing on its web site) discussions on the following items at the "Forum" were promised: recent trends in the delivery of air cargo services; the regulatory framework to be implemented for the sustainable development of air cargo; challenges preventing the air cargo industry from reaching its potential; the development of an air cargo security system; the enhancement of air cargo facilitation and the air cargo hub and its value chain.

As for recent trends, a host of statistics and graphs was presented both by ICAO and others without an analysis of the trends, both recent and emergent. What good do statistics and graphs serve if one cannot interpret those statistics as to where they are headed? Furthermore, there were absolutely no views expressed or discussions on the most important issue promised i.e. the regulatory framework to be implemented for the sustainable development of air cargo. ICAO grandiloquently quoted Assembly Resolution A38-14 (Consolidated Statement on ICAO's Policies in the Air Transport Field) adopted one year ago which requires the Council of ICAO to develop "a specific international agreement to facilitate further liberalization of cargo services". There was of course nothing said by ICAO as to what has been done towards developing this instrument and what elements and considerations (legal and economic) would go into it.

Another question on which discussions were promised was: what were the challenges preventing the air cargo industry from reaching its potential? Here again, only statistics were produced. Going to the next issue, what exactly is "the

development of an air cargo security system"? This item was approached with the regurgitation of provisions of Annex 9 (facilitation) to the Chicago Convention and an Assembly Resolution pertaining to aviation security which again ambivalently asks for cooperation. There was no suggestion as to how to develop and what an air cargo security system is. Is it the "supply chain" that was mentioned? There were only two proactive suggestions, one by the Association of Asia Pacific Airlines (AAPA)—that there must be global standards adopted under the auspices of ICAO—and another by the Universal Postal Union (UPU)—that cargo security must be enhanced on a risk based approach.

So where are these "global standards" of ICAO that would introduce a regulatory framework for air cargo. Certainly not Annexes 9 and 17 to the Chicago Convention, since the Assembly in 2013 asked for a new regulatory framework. Why didn't we hear of it in China, or Lomé a few weeks ago? Here are some thoughts: before thinking of developing a regulatory system for the liberalization of air cargo, ICAO must think of such a system for the entirety of air transport (which has been eluding ICAO for 70 years). How about starting with acquiring a thorough knowledge of air transport as a competitive industry that would must be regulated as such and not as a property held under rigid sovereign parameters and over protective national interest? This by no means implies that principles of State sovereignty and the overall regulatory control of States on the air transport industry must be abandoned. How about finding a way of getting States' agreement on this for starters? How about seeking an acceptable interpretation of Article 6 of the Chicago Convention?

At least there was no "declaration" signed unilaterally by the Chairman of the "Forum" as was done in Lomé. This is indeed a step forward.

2.2 Air Cargo and Artificial Intelligence

There is no doubt that artificial intelligence (AI) will play a prominent role in air transport, assisting professionals in the field in developing the industry to deliver even safer air transport while reducing its environmental impact. The term "artificial intelligence" has been challenged as connoting emotional intelligence that humans possess. Scientists cannot even imagine a time where computers would acquire emotional intelligence. IBM advocates terms such as "cognitive computing" or "augmented intelligence" to describe what is popularly known as AI for this reason. In this context, AI forms two broad categories: knowledge based intelligence delivered by knowledge based systems (KBS) and computational intelligence which involve neural networks fuzzy systems and evolutionary computing. The former is applied based on the reliance placed by information provided by a human (such as rules and algorithms) while the latter delivers through networks of computational systems. Air transport involves the use of qualitative and quantitative data but is primarily governed by human involvement, whether in maintenance, air traffic control or flight deck management. This factor makes it difficult to entirely rely upon mathematical computations or non emotive reasoning in air transport.

Artificial intelligence has been applied to air traffic control with some success and AI has been developed at The Lincoln Laboratory which has automated basic air traffic functions. However, it has been recognized that general planning with AI does not easily rest with air traffic control. An article published in the Lincoln Laboratory Journal says: "One difficulty in applying this method to ATC problems is that in ATC there exist no particular end states that need to be achieved. That is, in general a large number of possible future situations are acceptable. Another difficulty is that the use of logical assertions does not capture the continuous behavior of physical systems such as aircraft in flight. and it also introduces a number of artificial logical problems to the system".

In other words, considering the large number of decisions to be taken and actions to be carried out in the process of providing air traffic control for the safe navigation of aircraft which involve the consideration of numerous factors such as the presence of other aircraft in the vicinity such as; severe weather conditions; simultaneous communications between multiple controller in different segments of airspace; the impossibility of directing an aircraft to climb further than the maximum altitude already reached; and the coordination of timing with the speed of ascent or descent, could all be beyond the cognitive capacity of AI. However, this having been said, aviation could benefit largely from AI, particularly from neural networks. A neural network has been defined in The Transportation Research Circular as "a distributed, adaptive, generally nonlinear learning machine built from interconnecting different processing elements… The most commonly used architecture of NN is the multilayer perceptron (MLP). MLP is a static NN that has been extensively used in many transportation applications due to its simplicity and ability to perform nonlinear pattern classification and function approximation. It is, therefore, considered the most widely implemented network topology by many researchers".

DeepMind—a British AI company which Google bought in January 2014 pioneers research in AI and neural networks. The overall mission of the company is to create, as The Economist says: "multifunctional, general artificial intelligence that can think as broadly and effectively as a human". IBM's Watson is another find, which consists of 10 racks of IBM POWER 750 servers running Linux, uses 15 terabytes of RAM and 2880 processor cores (equivalent to 6000 top-end home computers), and operates at 80 teraflops. Watson needed this amount of power to quickly scan its enormous database of information, including information from the Internet. These technologies can substantially assist aviation in its many facets by providing correct information in a matter of seconds to assist humans involved in air navigation. The downside to this is that such marvels as Watson could also access questionable information available in the internet that could compromise its productivity and performance.

On the other side is the growing apprehension of "singularity" which is a concept that fears the uncontrollability of computers. Prominent figures such as physicist Stephen Hawking and Lord Rees, a former head of the Royal Society have cautioned against computers turning evil, which has prompted billionaire Elon Musk to call for openness and transparency in the development of AI so that the world community could be reassured of safety. So far, the lack of consciousness of AI has

allayed fears but in its actual use in transportation—particularly in air transport—could raise trepidation leading to its ultimate rejection.

Another danger in AI is classification where face recognition technologies such as Facebook's *DeepFace* could, while functioning at their most optimal, arrive at wrong or distorted conclusions. Ethical issues would also abound such as who a computer system would save in a crisis—the aircraft and the technical crew or the passengers on board. Before discussing ethical issues, it is relevant to note that there is a contentious issue on the economic aspects of robots as they purportedly replace the human workforce. Bill Gates, Co-founder of Microsoft has proposed taxing robots on the principle that if the human they replace had paid income tax, so should the robot and the tax imposed would ease the vacuum as well as pay for finding jobs elsewhere for the humans so displaced. The flaw in this argument is that the robot would replace a human so that efficiency is improved and a tax on a robot would be a tax on efficiency. Bloomberg says: "The fear isn't that *all* humans will become obsolete, but that automation will increase inequality among humans. Company owners and high-skilled workers -- people who tell machines what to do -- would be vastly enriched, while everyone else either works low-skilled jobs for meager wages or goes on welfare".

2.2.1 Ethical Issues

With regard to the ethical issues that warrant discussion, a good place to start is Musk's suggestion of transparency as a moral basis for the use of artificial intelligence. For this discussion, one has to go all the way back to the seventeenth century philosophers who had their own conception of prudent human conduct which can be used as a basis for the standard to be included in a computer algorithm. If computers drive air transportation or play a major role in air navigation (such as what is happening in driverless cars) there would must be a standardized system of preference for rules and sets of processes that would accord with acceptable moral philosophy.

The bottom line in this discussion would be "acceptable moral philosophy". This discussion should inevitably start with English philosopher Jeremy Bentham (1748–1832) who rejected the concept of natural rights and instead introduced the philosophy of utilitarianism which espoused the happiness of the most as the apex of his moral philosophy. In plain terms, Bentham's utilitarianism which is also called "consequentialism" when applied to an aircraft with its full complement of passengers that is plunging towards a sports stadium full of 10,000 spectators, could be could be shot down should there be a danger of it hitting the stadium and killing more than the number of person in the aircraft. One could also look at the other side of the coin and inquire whether the lives of the passengers on board the aircraft could be considered paramount as the primary and sacrosanct duty of the pilot is to ensure the safety of persons and property on board. Could he then land the aircraft in the stadium area which would carry the risk of killing more persons on the ground

than those on board but at the same time ensuring with certainty that the passengers' lives would be saved?

This hypothetical issue can be infused with some reality with the recent debate in the automotive industry where the question was asked whether a driverless car should be programmed to save the driver when it was veering towards four persons on the sidewalk who could be killed with the maneuver to save the driver of the car. A typical example given is when a person is in a driverless car and a child suddenly darts across in front of your car. The car would be programmed to run over the child so as not to jeopardize the life of the passenger in the car. In Business Insider Deutschland International this example was reported as follows: "the manager of driver-assistance systems at Mercedes-Benz, Christoph von Hugo, revealed that the company's future autonomous vehicles would always put the driver first. In other words, in the above dilemma, they will be programmed to run over the child every time". A judicial analogy of this principle is *R* v. *Dudley and Stephens* which involved a shipwreck and the defence of necessity. On May 19, 1884 the English yacht Mignonette set sail for Sydney, Australia from Southampton, England with a crew of four. The crew consisted of Tom Dudley, the captain; Edwin Stephens; Edmund Brooks; and Richard Parker, the cabin boy.

Owing to bad weather, the yacht sank off the Cape of Good Hope on May 19, 1884. The four crew mates were cast away, forcing them to abandon the ship and escape in an open boat that was in the yacht. Food and water were scarce, except for two tins of turnips that the captain saved before they abandoned ship. From the sea, they only caught a small turtle, which they had eaten by the twelfth day of their floating in the sea. Their diet, for twenty days adrift was only the turnips and the small turtle. Stephens and Dudley decided, without the consent of Brooks that they would kill and eat Parker. He was the youngest and weakest of them all. Parker did not consent to his killing, but he was too weak to resist. A few days later, the three crew members were rescued by a passing ship just in time as they too were dying of starvation and dehydration.

Back in England, Dudley and Stevens were arraigned for murder on the ground that at English law where a private person, acting on his own judgment, takes the life of another, he is guilty of murder, unless his act can be justified by selfdefense. The defendants were not protecting themselves against any act of the hapless Parker. The verdict was that the two defendant's were guilty of murder. The court disagreed with Lord Bacon, who, in his commentary on the maxim, "necessitas inducit privilegium quoad jura privata," lays down the law as follows: "Necessity carrieth a privilege in itself. Necessity is of three sorts -- necessity of conservation of life, necessity of obedience, and necessity of the act of God or of a stranger. First of conservation of life; if a man steal viands to satisfy his present hunger, this is no felony nor larceny. So if divers be in danger of drowning by the casting away of some boat or barge, and one of them get to some plank, or on the boat's side to keep himself above water, and another to save his life thrust him from it, whereby he is drowned, this is neither se defendendo nor by misadventure, but justifiable." Instead the Court held: "We are certainly not prepared to suggest that necessity should in every case be a justification. We are equally unprepared to, suggest that necessity

should in no case be a defence; we judge it better to leave such questions to be dealt with when, if ever, they arise in practice by applying the principles of law to the circumstances of the particular case".

Bentham's theory of utilitarianism—which is seemingly consistent with the position taken by the two defendants—can be considered as being opposed to the basic human rights phenomenon—that all human lives are equal and it is morally reprehensible to treat them as subjects of collective happiness. When this theory is applied to the aircraft descending on the sports arena, the credibility (or lack thereof) of Bentam's theory can be queried. An alternate dimension to human conduct in its moral setting is posited by German philosopher Immanuel Kant (1724–1804) who based his philosophy on human dignity and what he called the Categorical Imperative. Kant argued that Bentham's utilitarianism was fundamentally flawed because it left human rights vulnerable to desires which were of lesser importance, and that considering happiness as the primordial essence of human life is wrong. The categorical imperative stands for giving morality precedence over empirical considerations. Unlike Bentham's utilitarian theory and arguments that oppose it as reflected in the judicial decision of the *Dudley and Stephens* case which could be associated with a stochastic algorithm applicable to artificial intelligence in the context of air transport, at least in theory, it would be difficult to ascribe such an analogy to Kant's categorical imperative which appeals more to subjective reasoning and morality that leads to emotional intelligence—an area which scientists can only think of at the present time. The categorical imperative has, as its base, a certain autonomy that we give ourselves to act according to a law we give ourselves. This is diametrically opposed to what Kant calls heteronomous determination, where, as in the utilitarian theory, we do something for the sake of something else.

To conclude, one could only ask the following question: on 15 January 2009, Captain Chesley Sullenberger and First Officer Jeffrey Skiles operated US Airways Flight 1549 (AWE1549) with an Airbus A320-214 from New York's LaGuardia Airport to Charlotte Douglas International. A few minutes after takeoff, a flock of Canada geese hit the aircraft rendering both engines incapacitated, necessitating an emergency landing. There being no engine thrust to return to LaGuardia Airport, the captain decided to make an emergency water landing on the Hudson River. The two pilots safely glided the plane to ditch in the river. All 155 passengers on board were saved. The question here would be whether a robot pilot could have shown the decision-making acumen shown by the captain, and more importantly whether a robot pilot could or would have gone several times up and down the cabin to make sure all passengers and crew were out of the aircraft before it sank.

It is incontrovertible that the first application of artificial intelligence to air transport in the context of pilotless aircraft would be in carriage of cargo. In this regard a brief insight into what artificial intelligence represents to air transport is relevant. We are living in a world confronted by megatrends, which are large, global transformative forces that affect our existential life. Air transport is inevitably affected by these trends which range from global shifts in economies to climate change, as well as the advancement of information technology which are essential catalysts to

growth.[8] At the same time, air transport is profoundly involved in two basic concepts: standardization—which means that the industry runs on compliance with laws, regulations and specifications—and harmonization—which means that the industry is required to comply with such standards with global consistency, seamlessly. One might argue that, on the face of these two driving forces, air transport could well run smoothly, depending entirely on Artificial Intelligence (AI). However, air transport also requires discretion in certain circumstances which require human qualities not entirely within the purview of AI.

On 2–3 November 2017, Montreal hosted The Forum on the Socially Responsible Development of Artificial Intelligence (AI),[9] at which a Draft Declaration was discussed containing certain statements and principles. The principles before the Forum were that the development of AI should ultimately promote the well-being of all sentient creatures; the development of AI should promote the autonomy of all human beings and control, in a responsible way, the autonomy of computer systems; the development of AI should promote justice and seek to eliminate all types of discrimination, notably those linked to gender, age, mental/physical abilities, sexual orientation, ethnic/social origins and religious beliefs; the development of AI should offer guarantees respecting personal privacy and allowing people who use it to access their personal data as well as the kinds of information that any algorithm might use; the development of AI should promote critical thinking and protect us from propaganda and manipulation; the development of AI should promote informed participation in public life, cooperation and democratic debate; and the various players in the development of AI should assume their responsibility by working against the risks arising from their technological innovations.

Some key words emerge from these draft principles: promoting the well being of sentient creatures; autonomy of humans and control; autonomy of computer systems; promotion of justice; elimination of all forms of discrimination; respect of privacy; promotion of critical thinking; participation, cooperation and democratic debate; avoidance of risk arising from technological innovations.[10]

---

[8] The World Bank, in its January 2015 Report, expects overall, global growth to rise moderately, to 3.0% in 2015, and average about 3.3% through 2017. The Report posits that a growth rate of 2.2% will be seen in high income countries in 2015–17, which would be an increase of 1.8% as against 2014, on the back of gradually recovering labour markets, ebbing fiscal consolidation, and still low financing costs. Growth is projected to gradually accelerate in developing countries, rising from 4.4% in 2014 to 4.8% in 2015 and 5.4% by 2017. See *Global Economic Prospects: Having Fiscal Space and Using it*, January 2015, at 21. For a detailed discussion, see Abeyratne (2017a).

[9] http://www.montrealinternational.com/en/about-us/events/forum-ai-responsible-november-2-3-2017/.

[10] The renowned science fiction writer Isaac Asimov envisioned a world where human-like robots would act like servants and would therefore need a set of programming rules to prevent them from causing harm. He propounded three laws of robotics in his short story "Runaround: a robot may not injure a human being or, through inaction, allow a human being to come to harm; a robot must obey the orders given it by human beings except where such orders would conflict with the First Law; a robot must protect its own existence as long as such protection does not conflict with the First or Second Laws. Some believe that there is a fourth law: a robot may not harm humanity, or, by inaction, allow humanity to come to harm. See Asimov (1991). See also, after 75 years, Isaac

On the face of these words, the draft principles sound like a *Magna Carta*[11] for Artificial Intelligence. However, according to some, AI might well have the opposite effect on the well being of sentient creatures. Bill Gates, the founder of Microsoft opines that super intelligent systems will become "strong enough to be a concern". Theoretical physicist Stephen Hawking is more vocal, stating that AI could be both a miraculous and catastrophic "biggest event in human history but also potentially the last unless we learn how to avoid the risks".[12] Nick Bostrom—a recognized AI Guru from Oxford University—warns that AI could quickly turn dark and dispose of humans. Elon Musk, founder of SPACEX calls AI "our biggest existential threat" which would be tantamount to "summoning the demon" and that AI could cause a third world war.[13]

Others are more sanguine: Michio Kaku—a theoretical physicist and author—says that even if robots get out of control, we could "put a chip in their brain to shut them off".[14] Sam Altman—a renowned computer programmer—says that AI could be programmed to work towards benevolent ends only.[15] Inventor Ray Kurzweil—Director of Engineering at Google—who says that by 2029 computers will read at human levels and will have certain human characteristics—is of the view that the world is under a moral imperative to use AI for benevolent purposes, such as the use of AI to find cures for diseases while ensuring that "we control the peril".[16]

The bottom line is that we must use AI in a manner that will work in the best interest of humankind. In other words, we must ensure that robots conduct themselves like moral human beings. *The Economist*, in its journal *1843*[17] cites

---

Asimov's Three Laws of Robotics need updating, *The Conversation*, March 17, 2017 at http://theconversation.com/after-75-years-isaac-asimovs-three-laws-of-robotics-need-updating-74501. In February 2007 The European Union made reference to Asimov's laws on robotics in European Parliament resolution of 16 February 2017 with recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL)). See http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P8-TA-2017-0051+0+DOC+XML+V0//EN.

[11] *Magna Carta Libertatum* (Medieval Latin for "the Great Charter of the Liberties"), commonly called Magna Carta (also *Magna Charta*; "(the) Great Charter"), is a charter agreed to by King John of England at Runnymede, near Windsor, on 15 June 1215. Magna Carta, which means 'The Great Charter', is one of the most important documents in history as it established the principle that everyone is subject to the law, even the king, and guarantees the rights of individuals, the right to justice and the right to a fair trial.

[12] *Stephen Hawking says A.I. could be 'worst event in the history of our civilization',* https://www.cnbc.com/2017/11/06/stephen-hawking-ai-could-be-worst-event-in-civilization.html.

[13] Elon Musk says global race for A.I. will be the most likely cause of World War III, https://www.cnbc.com/2017/09/04/elon-musk-says-global-race-for-ai-will-be-most-likely-cause-of-ww3.html.

[14] *Predictions by theoretical physicist, trendwatcher and futurist Dr Michio Kaku*, https://www.richardvanhooijdonk.com/en/predictions-theoretical-physicist-trendwatcher-futurist-dr-michio-kaku/.

[15] Peckham (2016). See http://time.com/4278790/smart-people-ai/.

[16] Thompson (2015). Kurzweil says: "When I say about human levels, I'm talking about emotional intelligence. The ability to tell a joke, to be funny, to be romantic, to be loving, to be sexy, that is the cutting edge of human intelligence, that is not a sideshow." See https://www.cnbc.com/2014/06/11/computers-will-be-like-humans-by-2029-googles-ray-kurzweil.html.

[17] *The Economist, 1843* June and July 2017, Teaching Robots Right from Wrong, 64–69 at 66.

Robear—a robot that provides care for the elderly and disabled—which is strong enough to lift patients from their beds but could also turn around and crush them with their strength. Robots wielding machine guns in the armed forces could go berserk and should be subject to human command. Could a robot discern whether to destroy a house in which a terrorist is in hiding where such destruction would also kill his infant daughter? On the other hand, robots do not rape and sack villages. The answer seems to lie in in teaching robots morality as we humans know it—the difference between right and wrong. This difference inevitably lies in the values we place on ourselves, making right and wrong subjective experiences.

Rosalind Picard, Director, Affective Computing Group, Massachusetts Institute of Technology(MIT) has said: "the greater the freedom of a machine, the more it will need moral standards".[18]

Could we teach robots to be guilty—which is an affectation of the mind that impel us not to repeat a wrong and at the same time feel remorse? Would a robot make reparation for a wrong committed and how would it do so? David Gelernter[19] states that the human mind is not just a creation of thoughts and data but it is also a product of feelings that are the end result of sensations, images and ideas.[20] We weep over and over when thoughts come into our heads in recurrent order, as Proust said: "the last vestige of the past, the best of it, the part which, after all our tears seem to have dried, can make us weep again".[21]

Artificial intelligence merely mimics human biology to solve problems that cannot be solved by classical mathematics: but it does not mimic human reasoning. It only mimics human biology. We do not even have a definition of "natural intelligence" to distinguish it from artificial intelligence. Robots learn, and are capable of even learning by themselves, which is called singularity. We humans must learn under supervision and that is why we must initially go to school. As humans we have feelings that are integrally associated with sensations such as remorse; guilt; recrimination; gratitude and sadness. We practice integrity, which is doing the right thing even when no one is looking. This is our limbic system of the brain in action. We rescue others in distress even without thinking or waiting for algorithms to kick in.

Merriam-Webster dictionary defines wisdom as knowledge that is gained by having many experiences in life: the natural ability to understand things that most other people cannot understand. It is also "ability to discern inner qualities and relationships" or just plain good sense. It may even be accumulated philosophical or scientific learning. One may argue that one day, AI in robots could be programmed to have these qualities. But would a robot be able to discern the true meaning of the word "harm"? and what about compassion and forgiveness?

---

[18] *Ibid.*

[19] *The Tides of Mind: Uncovering the Spectrum of Consciousness,* W. W. Norton & Company: New York, 2016.

[20] See Von Drehle (2017), p. 92.

[21] De Beistegui (2007), p. 48.

This is perhaps why MIT uses the word "extended intelligence"[22] instead of "artificial intelligence" and IBM's Watson is considered not a replacement for human intelligence but a tool that would augment human intelligence. In this context the principles of the Montreal Forum (discussed above) are seemingly attainable and keep within the realm of control of AI by the human. If one day we are able to find some inscrutable way of transplanting the human conscience in a robot, perhaps we might gain justification in ascribing morality to robotic intelligence. We are just not there yet.

Information technology, and in particular, machine learning,[23] speaks a language that is completely different from those spoken by other disciplines such as law, social sciences and politics. Psychologically, cognitive behavior of humans has been identified in three different areas under what is called the Affect Control Theory. The three categories are *Evaluation; which is associated with a categorization between* approval or disapproval that can lead to judgments of morality, aesthetics, functionality, hedonism, or other standards; *Potency* which is equivalent to a sense of power wielded in terms of social strength and forcefulness; and *Activity* which is reflective of spontaneity, which can be demonstrated by movement, speed, perception.[24] The gap between AI and human intelligence may well lie mostly in *Evaluation*.

This gap brings to bear the need to apply as far as possible the realities of AI to industries such as air transport which would exponentially depend on AI as a source of augmented intelligence in the years to come. In particular, this article will identify the nature and various forms of AI and the role of AI in air transport in the context of the legal and regulatory regime applicable to the technical aspects of international civil aviation.

2.2.2 Artificial Intelligence

AI has been defined as "the broadest term, applying to any technique that enables computers to mimic human intelligence, using logic, if-then rules, decision trees and machine learning".[25] AI has been categorized into two main areas: Symbolic AI which is based on knowledge-based systems (KBS); and computational intelligence which involves neural networks, fuzzy systems and evolutionary computing.[26]

---

[22] https://www.media.mit.edu/videos/ai_joi-2017-01-09/.

[23] Machine learning is a subset of artificial intelligence which, through the use of algorithms and statistical analysis, enable machines to perform tasks with speed and efficiency. See Artificial Intelligence: The Future of Humankind, *TIME* Special Edition, at 7.

[24] Heise (2002). See http://www.indiana.edu/~socpsy/papers/UnderstandingInteraction.htm.

[25] Heise (2002). Another definition is: "AI refers to methods and approaches that mimic biological intelligent behavior in order to solve problems that so far have been difficult to solve by classical mathematics". See Sadek (2007), p. 1.

[26] Sadek (2007).

Arguably, the birth of AI lies in the "Turing test" introduced by British mathematician Alan Turing in 1945 with the question "can machines think"? The test itself is simple and goes on to inquire whether machines could think (as against exclusively learning).[27] The term "artificial intelligence" was coined by John McCarthy in 1956.[28]

A subset of machine learning is *Deep Learning*, where machines use algorithms to train themselves to perform key functions such as image recognition and speech. This process exposes multilayered neural networks to enormous amounts of data. A neural network has been defined in *The Transportation Research Circular* as "a distributed, adaptive, generally nonlinear learning machine built from interconnecting different processing elements… The most commonly used architecture of NN is the multilayer perceptron (MLP). MLP is a static NN that has been extensively used in many transportation applications due to its simplicity and ability to perform nonlinear pattern classification and function approximation. It is, therefore, considered the most widely implemented network topology by many researchers[29]".

There is also *Big Data* which comprise large data sets that are used in computational analysis that give out trends and patterns. Big Data is helpful in the context of meteorological forecasts and analysis. AI is also associated with *Quantum Computing* which is a methodology that meshes quantum physics with digital computing. AI is recognized to culminate in *Singularity* where computers reach a time/state of superintelligence, improving themselves independently of human intervention or involvement. There is a concern that this state may well reach a point where AI could be well beyond the reach of human comprehension. *Harvard Business Review* cites three possible concerns where humans would not comprehend how a machine reached a conclusion. They are: hidden biases cultivated by the machine through the learning process; since machines are mostly neural networks that work with statistical data, it would be difficult to think that the solutions given by a machine would work in every case, particularly where there are variables and random circumstances; and when a machine error occurs, it would be difficult to correct the error for the first concern cited—that humans may not understand how the machine came to its conclusion.[30] This is the loss of control that Stephen Hawking and Elon musk are referring to. Additionally, the neural networks in the human brain and are understood to work in a particular way and software constructions are modelled to replicate this process.

Of direct relevance and assistance to air transport is Deep Learning, which is immensely helpful in image recognition. Machine readable travel document would be a beneficiary. By feeding the computer a learning algorithm and exposing it to terabytes of data, the computer can be left to figure out how to precisely recognize

[27] Turing (1950), pp. 433–460.

[28] See The History of Artificial Intelligence, History of Computing CSEP 590A, University of Washington December 2006. https://courses.cs.washington.edu/courses/csep590/06au/projects/history-ai.pdf.

[29] *Supra* note 23, *Ibid.*

[30] Brynjolfsson and MCafee (2017).

objects and images. The rapid speed in which Deep Learning has developed can be seen in Google, which now has more than 1000 learning projects whereas it had only two Deep Learning projects being worked on in 2012. Microsoft, which introduced Deep Learning into its programme in 2011, uses neural networks to perfect photo searches that could also be used in both facilitation of air transport as well as aviation security. Other social networks that utilize neural networks to pursue photo searches and voice recognition are Facebook and Baidu.

The particular significance of AI to air transport lies in the fact that issues in air transport inevitably attenuate both qualitative and quantitative data. In the realm of accident investigation as well as breaches of aviation security, traditional approaches often cannot be used or modelled and therefore the Big Data and Deep Learning in particular could be of considerable assistance. The human factor in air transport has been seen to optimize the challenge in emergency situations which renders traditional mathematical programming destitute of effect.

It is estimated that there are currently more than 1700 AI start-ups with over $14.6 billion in total funding from 70 different countries. Revenues from AI applications are expected to reach $47 billion by 2020, from $8.0 billion in 2016.[31] There is growing concern that the jobs of 63 million aviation workers could be at risk when AI ultimately replaces human resources in aviation.[32]

SITA[33] has recorded that both airlines and airports are attracted to AI and the technologies that come with it in the context of service quality and customer service. Heavy investment has been planned until 2020 by airports on research and development (45% of all airports), whereas 52% of global airlines are currently using AI technology and programmes. Airlines are particularly interested in using AI to minimize disruption of service to their customers and enhance their warning systems.[34]

Artificial intelligence has been applied to air traffic control with some success and AI has been developed at The Lincoln Laboratory which has automated basic air traffic functions. However, it has been recognized that general planning with AI does not easily rest with air traffic control. An article published in the *Lincoln*

[31] Artificial Intelligence in Aviation. What is it and when is it Coming? *ICAO Now*, 17 August 2006, at https://www.icaonow.com.br/single-post/2017/04/16/Artificial-Intelligence-in-Aviation-What-is-it-and-when-is-it-coming-English-Practice.

[32] *Ibid.* Identified as at risk are physical jobs that are repetitive in nature and data collecting and processing jobs.

Less at risk further down the line are: physical unpredictable jobs and Jobs that require application of expertise. Jobs that are most difficult to replace are Jobs that involve emotional interaction with people. A separate study has concluded that the computer/digital revolution favours more skilled over less skilled workers and it reduces employment and constrains wage growth. See Tyson and Spence (2017), p. 171.

[33] SITA is a multinational information technology company providing information technology and telecommunication services to the air transport industry. The company provides its services to over 430 members and 2800 customers worldwide which is around 90% of the world's airline business. It is the world's leading specialist in air transport communications and information technology.

[34] Air Transport Sector Turning to Artificial Intelligence, *CXOtoday.com*. Sep 26, 2017. See http://www.cxotoday.com/story/air-transport-sector-turning-to-artificial-intelligence/.

Laboratory Journal says: "One difficulty in applying this method to ATC problems is that in ATC there exist no particular end states that need to be achieved. That is, in general a large number of possible future situations are acceptable. Another difficulty is that the use of logical assertions does not capture the continuous behavior of physical systems such as aircraft in flight. and it also introduces a number of artificial logical problems to the system".[35]

In other words, considering the large number of decisions to be taken and actions to be carried out in the process of providing air traffic control for the safe navigation of aircraft which involve the consideration of numerous factors such as: the presence of other aircraft in the vicinity; severe weather conditions; simultaneous communications between multiple controller in different segments of airspace; the impossibility of directing an aircraft to climb further than the maximum altitude already reached; and the coordination of timing with the speed of ascent or descent, these factors could all be beyond the cognitive capacity of AI.

Current thinking has transcended the dependence on ground-based controls. Lockheed intends to build a fully autonomous aircraft which could sense obstacles and enable itself to land safely at identified sites. The device that could be installed in automated helicopters is called *Matrix,* which is a super computer with numerous sensors that could detect objects that are hundreds of meters away and enable interpretation of information received.[36]

It is incontrovertible that aviation could benefit largely from AI, particularly from neural networks. DeepMind—a British AI company which Google bought in January 2014 pioneers research in AI and neural networks. The overall mission of the company is to create, as *The Economist* says: "multifunctional, general artificial intelligence that can think as broadly and effectively as a human". IBM's Watson is another find, which consists of 10 racks of IBM POWER 750 servers running Linux, uses 15 terabytes of RAM and 2880 processor cores (equivalent to 6000 top-end home computers), and operates at 80 teraflops. Watson needed this amount of power to quickly scan its enormous database of information, including information from the Internet. These technologies can substantially assist aviation in its many facets by providing correct information in a matter of seconds to assist humans involved in air navigation. The downside to this is that such marvels as Watson could also access questionable information available in the internet that could compromise its productivity and performance.

[35] https://www.ll.mit.edu/mission/aviation/aviationresearch.html.

[36] Back to the Unicopter, *The Economist*, November 4th–10th 2017, at 78.

2.3 Application of Artificial Intelligence to Air Transport

2.3.1 Operation of Aircraft

In the context of air transport, the inevitable first consideration is *Matrix* and its role in the Unicopter which has already been discussed *Matrix* obviates human control in an aircraft by taking total control and is therefore directly applicable to the Chicago Convention[37] which fundamentally regulates international civil aviation. Article 8 of the Convention, which pertains to pilotless aircraft, provides that: "No aircraft capable of being flown without a pilot shall be flown without a pilot over the territory of a contracting State without special authorization by that State and in accordance with the terms of such authorization. Each contracting State undertakes to ensure that the flight of such aircraft without a pilot in regions open to civil aircraft shall be so *controlled* as to obviate danger to civil aircraft". Here, the operative word is "controlled". The sensors in the computer has a rapid reaction of milliseconds as compared to the human's two seconds to react. This advantage makes the aircraft much safer than if it were to be operated by a human. Safety of operation is therefore a distinct advantage and if the machine were to fail, *Matrix* could locate a safe area to land without human assistance or intervention.

In this sense, a Unicopter becomes an "unmanned aerial vehicle". However, an unmanned aerial vehicle is defined by ICAO as a pilotless aircraft in the sense of Article 8 of the Chicago Convention which is flown without a pilot in command on board and is either remotely or fully controlled from another place (ground, another aircraft, space).[38] ICAO further states that "humans will play an essential and, where necessary, central role in the global ATM system. Humans are responsible for managing the system, monitoring its performance and intervening, when necessary, to ensure the desired system outcome. Due consideration to human factors must be given in all aspects of the system".[39] This definition, and the convenient dependence on human control (at least for the time being) is at variance with the *Matrix* concept of fully automated and autonomous aircraft. In other words, a "pilot"—as we know such a person—could be effectively expunged from the equation of flight and management of air navigation in the years to come.

Confusion could well be worse confounded when one considers Article 32 of the Chicago Convention which requires that "[T]he pilot of every aircraft and the other members of the operating crew of every aircraft engaged in international navigation shall be provided with certificates of competency and licenses issued or rendered valid by the State in which the aircraft is registered. Each contracting State reserves

[37] Convention on International Civil Aviation, signed at Chicago on 7 December 1944. See ICAO doc 7300/9 Ninth Edition: 2008.

[38] Global Air Traffic Management Operational Concept, *ICAO Doc 9854, AN/458*, First Edition: 2005. This Concept was endorsed by ICAO's Eleventh Air Navigation Conference held in 2003 under the Global Air Traffic Management (ATM) Operational Concept.

[39] *Id*. Chapter 1, at 1–3.

the right to refuse to recognize, for the purpose of flight above its own territory, certificates of competency and licenses granted to any of its nationals by another contracting State". Article 29 of the Convention requires that the flight crew members carry their appropriate licences on board every aircraft engaged in international air navigation. In this context, what would the licensing process of *Matrix* be? Would the Chicago Convention must be revisited? At the time of writing, there was no categorization of unmanned aerial vehicles by ICAO.[40] Furthermore, Annex 1 to the Chicago Convention (Personnel Licensing) requires that a Contracting State, having issued a licence, shall ensure that the privileges granted by that licence, or by related ratings, are not exercised unless the holder maintains competency and meets the requirements for recent experience established by that State.[41] Again, the question arises as to how this licensing requirement would translate to a computer using AI.

Appendix 6 to Annex 6 to the Chicago Convention (Operation of Aircraft) contains an air operator Certificate (AOC) template which requires information pertaining to a particular aircraft model and for each aircraft model in the operator's fleet, identified by aircraft make, model and series, a list of authorizations, conditions and limitations. Included as requirements in the Template are: issuing authority contact details, operator name and AOC number, date of issue and signature of the authority representative, aircraft model, types and area of operations, special limitations and authorizations.[42] There is nothing to indicate the accommodation of advanced technology posed by AI on an aircraft that could impact on the issuance of an AOC.

Based on a development from The Massachusetts Institute of Technology (MIT) the Transportation Security Administration (TSA) of the United States has certified 3-D carry-on bag screeners based on analog technology, bringing machines one step closer to being deployed at airports around the U.S. When this technology is used, the analogic machines will speed up the current sluggish process that takes TSA officers an inordinate time to screen carry-on bags for weapons and explosives.[43] Additionally, The US Department of Homeland Security is looking at the use of neural networks to improve the speed of security screening at airports. With the assistance of a Google programme—in the form of a contest—is said to cost $1.5-million (U.S.) to build computer algorithms that can automatically identify concealed items in images captured by checkpoint body scanners.[44]

---

[40] An ICAO Working Group was working on the development of such a categorization to be included as a separate part of Annex 6 (Operations of Aircraft) to the Chicago Convention.

[41] Annex 1, Eleventh Edition, July 2011, Standard 1.2.5.1.

[42] Annex 6 Appendix 6, at 3.1.

[43] Phil le Beau, TSA certifies 3-D bag screeners designed to speed up airport security lines, https://www.cnbc.com/2017/09/12/tsa-approves-3d-bag-screeners-designed-to-speed-up-airport-security-lines.html.

[44] Metz (2017). See https://www.thestar.com/business/2017/06/23/how-deep-neural-networks-could-improve-airport-security.html. The article in the New York Times goes on to say: "In theory, neural networks can accelerate the evolution of airport security, mainly because such systems can learn so quickly from data, relying less on individual rules and code painstakingly built by engineers. To help data scientists and machine-learning researchers train their algorithms, Homeland Security is supplying more than 1,000 three-dimensional body scans". *Ibid.*

The initiatives are consistent with regulatory requirements as set out in Annex 17[45] to the Chicago Convention which recommends that each Contracting State should promote research and development of new security equipment, processes and procedures which will better achieve civil aviation security objectives and should cooperate with other Contracting States in this matter.[46] The Annex goes on to say that each Contracting State should ensure that the development of new security equipment takes into consideration Human Factors principles,[47] and that each Contracting State should consider implementing innovative processes and procedures to allow operational differentiation of screening and security controls based on clearly defined criteria.[48]

AI could feature in many areas of air transport as a tool of efficiency and accuracy. However, the various sub-sets of AI—as discussed—would only be useful in aspects such as Deep Learning and Quantum Computing. Air transport as a thriving and necessary industry involving human interaction also requires emotional intelligence that is composed of the human qualities mentioned in the introduction to this article. Areas such as cabin services[49] and obligations and functions of the pilot-in-command[50] in looking after the welfare of airline passengers cannot be delegated to AI.

The above notwithstanding, there are compelling reasons for considering AI as indispensable to the technical areas of air transport discussed in this article. For one, the machine, through AI learns rather than being programmed for a specific task. This would be invaluable in search and rescue operations and accident investigation. A speciality of machine learning is supervised learning systems where the machine is provided with numerous examples of a correct answer and the machine arrives at the most desired solution. This would apply in areas such as image identification in security screening.

The good news is that, as already discussed, AI systems are proliferating rapidly. They are made available by companies through the Cloud. AI improves with data submitted and, through self learning, could advance at a rate so rapid that it could surpass human performance in many areas of human endeavour. This also brings concerns on the scientific front. On the ethical front as well, there are points to consider. The application of AI to air transport should be based on the highest values of human rights and must not intrude on the contemporary aspirations of people living in the twenty-first century. The World Conference on Human Rights held in Vienna in 1993 recognized and affirmed that all human rights derive from the dignity and worth inherent in the human person, and that the human person is the central subject of human rights and fundamental freedoms, and consequently should be the principal beneficiary and should participate actively in the realization of these rights and

[45] Annex 17 Safeguarding International Civil Aviation Against Acts of Unlawful Interference Tenth Edition, April 2017.

[46] Recommendation 2.5.1.

[47] Recommendation 2.5.2.

[48] Recommendation 2.5.3.

[49] See Abeyratne (2017b), pp. 1–13.

[50] See Abeyratne (2017a), Robotic Pilots, pp. 23–26 and 199–200.

freedoms. The Conference also reaffirmed the solemn commitment of all States to fulfil their obligations to promote universal respect for, and observance and protection of, all human rights and fundamental freedoms for all in accordance with the Charter of the United Nations, other instruments relating to human rights, and international law, stating that the universal nature of these rights and freedoms is beyond question.

The second moral principle is that AI should result in optimal benefit to humankind. This benefit should be measurable both in scientific and economic terms. This would largely hinge on governance and the way AI is applied to assist the consumer whilst not eroding rights of privacy, life and liberty. There should also be a clear legal and regulatory regime that would identify responsibility and accountability of those applying AI to air transport. As a follow-up to responsibility and accountability should be the sensitivity of AI to a clear retrospective understanding in the way AI worked when something went wrong with the AI application used. Until these various issued become clearer AI should be used as a mathematical and scientific tool that provides extended intelligence to humankind.

2.3.2 Air Cargo and Market Access

Like any other growing industry, the air freight[51] industry is expanding exponentially. The issues faced by the industry are complex ones and its impact on other business operators is tangible. Transportation, which is an essential service relied upon by the air freight industry, makes it inevitable that this industry affects almost every other business and brings to bear its relevance and interest to business management.

Air transport is the most expensive of all modes of transport (road, rail, air and sea) to operate in terms of per kilogram of mass carried.[52] This essentially means that commercial air transport is predominantly offered to the high value/high yield end of the market, i.e. to the business community, the tourism industry and the time-critical freight industry dealing with overnight documents and high value/high perishable items.

However, in air transport, in the field of international air transport, attention is often paid to passenger air services, yet air cargo is also an important component of air transport. To many States, air cargo services are important to their national development and international trade, for example, landlocked countries and States whose main export commodities are high value goods or perishables.

---

[51] Throughout this chapter, terms such as "air freight", "air cargo" and "cargo" will be used interchangeably. Air cargo or freight refers to any property carried on an aircraft other than mail, stores and passenger baggage. See Annex 9 to the Chicago Convention, Chapter 1, Definitions.

[52] *The Supply of Air Freight Capacity to Asian Markets*, Working Paper 42, Bureau of Transport Economics, Commonwealth of Australia, 200, at p. 1.

To freight shippers, air services render a competitive alternative to other forms of transport (rail, trucking or shipping) in meeting their shipping requirements in terms of speed, quality (much less en-route damage) and cost. As more companies adopt the philosophy of "just in time" (i.e. goods arrive when needed for production or for use rather than being stockpiled and becoming expensive inventory), aircraft will be used increasingly as, in effect, airborne extensions of warehouses in order to reduce inventory carrying cost.

To airlines, air cargo can be an important revenue generator. On some major international routes (e.g. across the North Atlantic, between Europe and Asia and across the North/Mid Pacific), air cargo has contributed roughly one-fifth of the total revenue on international scheduled air services.

A more recent development that adds importance to air cargo is the huge expansion of the courier and express/small package business, which offers door-to-door air service for time-sensitive documents or small packages, usually with the delivery guaranteed within specified time limits (e.g. same day or next day) but subject to size or weight limitations. Some airlines have also become more involved in door-to-door services, rather than limiting themselves to provision of the air component. Air cargo transportation has become increasingly integrated and globalized via cross-equity investments between airlines and cooperative arrangements such as co-branding (i.e. a commercial arrangement under which involved air carriers market a service under one brand name, but carry out the operation with each carrier's own aircraft bearing both the brand name and its own carrier identity) and franchising.

Cargo, by nature, is generally less sensitive than passengers to time between origin and destination (except express), routes and stops. While passengers must be transported to their destinations without delay, cargo can often wait if space is not immediately available, can move on different routes and make numerous stops.

While passengers tend to make round trips, air cargo generally moves only one way. There are few routes where the volume of cargo traffic is the same or similar in both directions, but many where the volume is several times greater in one direction than the other.

Air cargo tends to use more intermodal transport, i.e. more than one form of transport, e.g. aeroplane, truck, rail or ship between origin and destination. Special devices are often used for air cargo, such as standardized pallets (i.e. platforms on which goods are assembled and secured by nets or straps) and containers (i.e. specially designed receptacles that fit in the cargo compartments of the widebody aircraft)—such devices are often referred to by the generic term ULDs (unit load devices). The use of these devices has not only helped enhance efficiency, but has also facilitated interlining and intermodal transport.

Most scheduled international airlines regard air cargo carried in the aircraft's lower deck compartment as an additional source of revenue, treating it as a by-product of their passenger services. However, air cargo can assume greater importance on a route with a sufficient volume of cargo traffic to justify using a combi aircraft (which carries both passengers and cargo on the main deck) and is the sole generator of revenue with respect to an all-cargo aircraft or a freighter.

Although airlines sell air cargo transportation directly to customers, a substantial proportion of their cargo sales activity involves intermediaries, such as: cargo agents, who act as retailers, selling air cargo transportation to shippers on behalf of airlines on a commission basis; and freight consolidators/forwarders, who act for shippers as forwarding agents (though some may also operate their own aircraft)and often consolidate shipments from more than one shipper into larger units which are tendered to airlines, benefiting from reduced freight rates for bulk shipments.

In many ICAO member States, commercial enterprises that are freight consolidators/forwarders are also cargo agents, although in some States this is prohibited by law. In terms of economic regulation of international air transport, air cargo transportation is generally treated as a component of government regulation with respect to market access, tariffs, capacity and non-scheduled operations, etc. These elements are examined in separate chapters of the Manual.

Most governments traditionally regard air cargo as part of passenger air services, because most national airlines carry cargo in combination with their scheduled passenger services, with relatively few having all-cargo operations. Thus, in the bilateral exchange of market access rights, States typically grant the right for their designated airlines to transport passengers, cargo and mail on the agreed scheduled international air services. The right to operate all-cargo air services is generally considered as implicit in such grant, but some bilateral agreements are more specific, referring to "passengers, cargo and mail, separately or in any combination".

Some bilateral air transport agreements assign special routes for all-cargo services. Recognizing the distinct nature of air cargo, some agreements provide for special route flexibility for all-cargo services, for example, by allowing the use of different intermediate points than those authorized for passenger or combination services, while permitting such services to be operated by the designated airlines on any combination service routes.

Government regulation on air carrier capacity also extends to all-cargo operations, but tends to be less restrictive than that applied to passenger air services because cargo is generally of less concern to national airlines in terms of revenue generation and market share. Air transport regulators also deal with cargo rates as part of the government regulation of airline tariffs.

A great number of non-scheduled international air transport activities are all-cargo charter operations, such as those operated by or for freight forwarders/consolidators, couriers and express/small package services. These charter flights are regulated by States as part of the non-scheduled air transport services.

One major problem all-cargo operators experience is the lack of flexibility in market access rights under bilateral agreements in which air cargo is treated as part of passenger services. In such agreements, the limitations usually imposed on passenger services in respect of routes, traffic rights, frequency, etc., may also apply to all-cargo services. Since there are minimal synergies between passenger and cargo operations (e.g. different customers, different departure/arrival time requirements, directional imbalance of traffic movement), such regulatory restrictions often make it difficult for air carriers to sustain an economically viable all-cargo service.

Other regulatory problems all-cargo operators may encounter include: airport curfews which often limit the flexibility in flight scheduling, particularly for courier and express services which tend to wait until late in the day to receive their shipments and operate overnight for next day delivery; and in some cases, limitation on airport slots that can be used by cargo flights, especially at congested airports where all-cargo operations are often given lower priority than passenger services.

It is incontrovertible that air cargo is an important revenue generator. In 1992, about 12% of the world's total traffic revenue earned on scheduled services came from cargo. In that year freight carried was 32 million tonnes. When the 1992 figure is compared with figures for 2010, nearly 20 years later 18% of the world's total traffic revenue earned on scheduled services came from cargo during 2010. The Boeing World Air Cargo Forecast reflects that "demand for air cargo transport rebounded sharply in 2010 after a calamitous 18-month decline that began in May 2008. In spite of this downturn, world air cargo traffic will triple over the next 20 years, compared to 2009 levels, averaging 5.9% annual growth. As against the 1992 figure, 20 years later in January 2012, ICAO reported that cargo volume for 2011 was : 49 million tonnes and cargo traffic freight tonne kilometres (FTKs) for 2011 was 0.7% than the previous year.[53] A more recent development that adds importance to air cargo is the huge expansion of the courier and express/small package business, which offers door-to-door air service for time-sensitive documents or small packages, usually with the delivery guaranteed within specified time limits but subject to size or weight limitations. Some airlines have also become more involved in door-to-door services, rather than limiting themselves to provision of the air transport component.

The number of airplanes in the freighter fleet will increase by more than two thirds over the same period".[54] The same report says that this growth will happen as demand for air cargo services more than triples, compared to the depressed level of 2009. The percentage of large freighters in the fleet will climb dramatically from 27% today to 33% by 2029. Increased average freighter size will help carriers meet the projected tripling of demand without adding a proportionate number of airplanes.[55]

The problem presented by cargo at the air transport industry is that demand for air cargo is not as consistent as passenger carriage and therefore tends to be highly unstable and irregular. Also, whereas the demand for a seat is one-dimensional seat, the demand for cargo space is multi-dimensional with length, height, width, that is volume/weight and Unit Load Devices (ULD) position requirements. Furthermore, unlike in passenger travel, air cargo is not susceptible to a particular itinerary demanded by a human or the route taken to deliver air cargo as long as service level agreements are respected. One commentator adds:

---

[53] *Asia Pacific Airline Daily*: 09 January 2012.

[54] *Boeing World Air Cargo Forecast 2010–2012*, at 2.

[55] *Id*. 76.

> A key factor that distinguishes air cargo demand as well is the fact that by and large the market is accounted for by relatively few customers (intermediaries). This leads to shipment consolidation and has significant impact on contract negotiations and dependency on the part of air cargo operators. Finally, passengers – when they show up – tend to be flown as booked in terms of capacity requirements; whereas under- and over-tendering with regards to volume and weight tends to occur regularly, requiring precise overbooking.[56]

A major problem experienced by all-cargo operators is the lack of flexibility in market access rights under bilateral agreements in which air cargo is treated as part of passenger service. In such agreements, the limitations usually imposed on passenger service in respect of routes, traffic rights, frequency, etc. may also apply to all-cargo service. Other regulatory problems all-cargo operators may encounter include airport curfews and limitation on airport slots.[57] Many economies are becoming increasingly dependent on air cargo because of changes in the way that multi-national companies are organized. They are looking for ways of cutting their working capital by reducing their stocks and working based on just-in-time delivery. The air freight industry has been given a lot of attention lately with the change of global industry and, due to its particular characteristics, in a much better position than most to appreciate the reality of the global economy. It has, by definition, an international view. As the world's economies mesh more and more with each other, the community of interests made up of the airport authorities, the customs, the handling agents and the airlines have found it more important than ever that they pool information.[58]

Cargo revenue makes a strong contribution to airline profits and is often the difference between profit and loss. Blue chip researchers forecast tripling of revenues within the next 20 years, a faster growth than the passenger side of business. Economic integration is the catalyst for global markets, now 20% of the world products will grow to 80% i.e. 6 to 70 Trillion Dollars. Air cargo will benefit dramatically, growing at three times the rate of the global economy. As the air cargo industry grows significantly, some reasons for concern arise, since, although air cargo is a US$200 billion industry, only 20% of this revenue actually accrues to air transportation. The rest stays in distribution.

One of the problems of growth in air transport is that, unless initiatives are taken, airlines, major passenger airports, handling agents and forwarders will be left with lower yielding consolidation. This is because integrators are both expanding the total market and carving out an increasing share of what was enjoyed by the traditional market players. With the growth of service industries, and process taking over from 'batch', these integrators of cargo anticipate the triumph of delivery over dispatch.

The catalyst behind the current business paradigm relating to air freight was the advent of the 747. Whilst its effect on the passenger business was well known, what

---

[56] Pilon (2010).

[57] Manual on the Regulation of International Air Transport, *ICAO Doc 9626* Second Edition, 2004, at 4.5-1.

[58] Thomas and Gamper (1996), pp. 28–29.

is not generally appreciated is its effect on reshaping the cargo business. The 747 and other wide-bodied jets altered the capacity ratio between what was carried in belly holds and freighters. Airlines, in order to fill the additional space, gave control of the distribution system to a middleman, the forwarder. When the forwarder took over, the airlines assumed that they would only have one master airway bill and that freight space would be filled. However, forwarders, instead of reinvesting the enhanced margins from consolidations into new service options, used their newly found muscle to deepen discounts from airlines.

Another problem for the traditional industry is that Express[59] will continue to grow both in its own right and at the expense of general cargo. Express will become the prime source of cargo revenues. Equally, integrators will continue to grow both their revenues and their own discreet aircraft fleets. As the Express traffic migrates the traditional industry—airlines, airports, handling agents and forwarders—will be left with the remaining lower yielding traffic. The opportunity lies in the huge potential market that express offers the traditional industry, which does have many cards to play including the Internet. The Internet has already been the means of survival for many small and medium forwarders and cut the costs of the large ones.[60]

It is also noteworthy that a new system of air cargo, called GFX, has been introduced recently. The System is a global Internet-based trading system for air cargo capacity and was tested in early 2001. It promises to bring air cargo all the benefits of e-business-reduced transaction costs, speedy quotes and a wealth of transaction data that will enable airlines and forwarders to implement more effective pricing. GFX also overcomes the perceived wisdom in air cargo that electronic-capacity trading would never work because airlines would never reveal commercially sensitive information on the web site. On GFX, it is up to airlines how much capacity they reveal.[61]

The most striking development among leading players in the scheduled airline industry is a new tendency to take cargo departments and reconstitute them as standalone entities, operating as independent profit centers. All carriers with any ambitions in international air cargo have moved away from the concept of simply filling their main-line's spare belly space in passenger aircraft. Two years ago, the German airline Lufthansa created Lufthansa Cargo as a separate company within the group, operating as an independent unit. The wider role proposed by Lufthansa will rely on closer cooperation between carrier and forwarder. The German carrier says it does not want to develop new skills that already exist among forwarders.

[59] Express includes inter alia FedEx, DHL, Airborne Express and UPS. In many cases, the parcels were carried on board passenger aircraft by a courier. As volumes grew, to avoid grid locking passenger terminals, many airports developed discrete express facilities. Consignments accepted under express service will be usually available to the consignee or their agent(s) at the airport of destination on the next business day.

[60] Bridges (2000), pp. 14–19.

[61] Conway (2000), pp. 78–79.

The Carrier will work with forwarders as partners instead of competing against the forwarders, which has been the standard in the industry.[62]

Air service providers are still highly restricted in their ability to develop the supply of services on the basis of technological and commercial considerations. There are differences between countries and regions as to the availability of cargo relevant traffic rights, but as a general rule, the international design of cargo carriage consists of different categories of carriers. These rules restrain their corporate and business structures, notably their ownership and control structures, the possibility to contract freely with domestic/local carriers abroad, and to diversify into complementary services such as trucking. In addition, in certain instances, freight-forwarding, in order to develop seamless transport services for domestic and international customers and to clear air cargo in airports that erode the advantage of the air mode, have often to overcome quality and costs problems in the ground handling of their cargo and access problems to airport runways at cargo-relevant periods of the day, notably because of airport curfews and noise restriction.

Currently, the air transport aspect of cargo services is predominantly governed by bilateral aviation agreements prevailing in all countries limiting air carriers' ability to respond to market developments and to exploit the market potential. As a result, carriers cannot plan international route structures and develop services in full competition with each other. From a strictly economic point of view, all categories of air carriers should be allowed to make use of the full range of traffic rights and have the same opportunities for unimpeded route design and network operations.

All cargo operators, and, where consistent with existing bilateral air service agreements, combination carriers, should enjoy full operational flexibility to exploit business opportunities and to enhance competition among air transportation providers. Leaving pricing to be set by the marketplace without any governmental intervention would certainly be the ideal economic solution. However, given the long history of direct and indirect governmental involvement in pricing of air transportation, a widespread agreement to such a provision may prove very difficult.

There are other factors to the air cargo industry, such as intermodal transportation, which bring to bear issues that need consideration. Virtually all sectors of transportation rely on intermodal transport services. Air cargo depends to a large extent on other modes of transport since goods are transported from the producers via airport-to-airport and are then channelled via different modes of transport to their final destination. Air cargo transport serves as one piece in the logistical chain to ensure relatively new services, such as time definite deliveries and door-to-door integrated services, which are in high demand by shippers. The operation of intermodal transport services is therefore a unique feature of the air cargo industry.

Industry experts have noted that customs clearance procedures account for as much as 20% of average transport time and 25% of average transport costs of imports in many States. While expedited customs clearance is a crucial issue for the

[62] Swindell (1997), pp. 26–30.

express delivery services industry, reductions in the time and cost of customs clearance will benefit all air cargo service providers.[63]

2.3.3 Liberalizing Air Cargo Market Access

One of the proposed future regulatory arrangements at the 4th ICAO Air Transport Conference was that parties would grant each other full market access (unrestricted route, operational and traffic) rights for use by designated air carriers, with cabotage and so called seventh freedom rights exchanges optionally. Of course, each party would have the right to impose a time limited capacity freeze as an extraordinary measure and in response to a rapid and significant decline in that party's participation in a country pair market. The latter measure, called the "safety net" was intended to form a buffer against a total swing towards favouring unregulated commercial operations of air carriers. The market access and "safety net" principle was designed to award to each party's air carrier unrestricted basic market access rights to the other party's territories for services touching the territories of both parties (to the exclusion of cabotage rights, i.e. rights to operate commercial air services within points in the territory of another party) optionally, for so called seventh freedom services (i.e. services touching the territory of the granting party without touching the territory of the designating party); and/or optionally, with cabotage rights. To these rights, the "safety net" brought in the caveat that each party would have the right to impose a capacity freeze as an extraordinary measure, under six conditions that called for such a freeze. They were:

(a) To be implemented only in response to a rapid and significant decline in that party's participation in a country pair market;
(b) To be applied to all scheduled and non-scheduled fights by the air carriers of each party and any third State which directly serve the affected country-pair market;
(c) To be intended to last for a maximum finite period of, for example, 1 year, 2 years or 1 year, renewable once;
(d) To require close monitoring by the parties to enable them to react jointly to relevant changes in the situation (for example, an unexpected surge in traffic);
(e) To be responsible for creating a situation in which any affected party may employ an appropriate dispute resolution mechanism to identify and seek to correct any underlying problem; and
(f) To be aimed at requiring mutual efforts to ensure the earliest possible correction of the problem and removal of the freeze.[64]

It is worthy of note that the above framework of future regulatory arrangements was intended to function in different structures and relationships, e.g. bilaterally

[63] OECD workshop on principles for the liberalization of air cargo transportation (2000), pp. 1–11.
[64] AT Conf/4-WP/7; 14/4/94, at 3.

between two States, between a State and a group of States and between two groups of States and multilaterally with a small or large number of States. It was expected that this structure would also respect all rights, existing and newly granted.[65]

Airlines are therefore faced with the imminent prospect of the future realm of commercial aviation being controlled by a group of air carriers which may serve whole global regions and operated by a network of commercial and trade agreements. Regional carriers will be predominant, easing out niche carriers and small national carriers whose economics would be inadequate to compare their costs with the lower unit costs and joint ventures of a larger carrier. It is arguable that a perceived justification for "open skies" or unlimited liberalization exists even today in the bilateral air services agreement between two countries, were, fair and equal opportunity to operate air services is a sine qua non for both national carriers concerned. This has been re-interpreted to mean fair and equal opportunity to compete and later still, fair and equal opportunity to effectively participate in the international air transportation as agreed.[66] Of course, there has been no universal acceptance of this evolution in interpretation and carriers and States whose nationality such carriers have maintained their own positions tendentiously.

ICAO has suggested the following preferential measures for the consideration and possible use of its member States who are at a competitive disadvantage when faced with the mega trends of commercial aviation and market access:

The asymmetric liberalization of market access in a bilateral air transport relationship to give an air carrier of a developing country: more cities to serve; fifth freedom traffic rights[67] on sectors which are otherwise not normally granted; flexibility to operate unilateral services on a given route for a certain period of time; and the right to serve greater capacity for an agreed period of time;

(a) More flexibility for air carriers of developing countries (than their counterparts in developed countries) in changing capacity between routes in a bilateral agreement situation; code-sharing to markets of interest to them; and changing gauge (aircraft types) without restrictions;
(b) The allowance of trial periods for carriers of developing countries to operate on liberal air service arrangements for an agreed time;
(c) Gradual introduction by developing countries (to ensure participation by their carriers) to more liberal market access agreements for longer periods of time than developed countries' air carriers;
(d) Use of liberalized arrangements at a quick pace by developing countries' carriers;
(e) Waiver of nationality requirement for ownership of carriers of developing countries on a subjective basis;

[65] See generally, AT Conf/4-WP/16; 23/6/94.

[66] Wassenbergh (1996), p. 80.

[67] The right to uplift or discharge passengers, mail and cargo in a country other than the grantor State.

(f) Allowance for carriers of developing countries to use more modern aircraft through the use of liberal leasing agreements;
(g) Preferential treatment regarding slot allocations at airports; and
(h) More liberal forms for carriers of developing countries in arrangements for ground handling at airports, conversion of currency at their foreign offices and employment of foreign personnel with specialized skills.[68]

These proposed preferential measures are calculated to give air carriers of developing countries a "head start" which would effectively ensure their continued participation in competition with other carriers for the operation of international air services. Furthermore, improved market access and operational flexibility are two benefits which are considered as direct corollaries to the measures proposed.

While the open skies policy sounds economically expedient, its implementation would undoubtedly phase out smaller carriers who are now offering competition in air transport and a larger spectrum of air transport to the consumer. Lower fares, different types of services and varied in-flight service profiles are some of the features of the present system. It is desirable that a higher level of competitiveness prevails in the air transport industry, and to achieve this objective, preferential measures for carriers of developing countries would play a major role.

2.3.4 ICAO Initiatives

The carriage of air freight has no spectacular history nor singular milestones in the annals of air carriage. It grew as a necessity, to transport merchandise which was needed for air transport. Earlier records show that the first instances of the carriage of air freight were in transporting mail in balloon or dirigible from city to province, for example during the siege of Paris in 1870.[69] Air cargo has been defined a contrario from the definition of baggage contained in Article 4 of the Warsaw Convention[70] to simply mean "goods transported which are not baggage".[71] Annex 9 to the Chicago Convention defines cargo as "any property carried on an aircraft other than mail, stores and accompanied or mishandled baggage".[72] Magdelenat

[68] See Study on Preferential Measures for Developing Countries, ICAO Doc AT-WP/1789; 22/8/96 at A-7–A-9.

[69] See Magdelenat (1983), p. 1.

[70] Convention for the Unification of Certain Rules Relating to International Carriage by Air, 12 October 1929, ICAO Doc 7838, 137 L.N.T.S. 11, 49 Stat 3000, T.S. No. 870.

[71] L. Mapelli, El Contrato de Transporte Areo Internacionale: Commentarios al Convenio de Varsovia, Editoial Tecnos, Madrid Biblioteca Tecnos de Estudios Juridicos.

[72] Annex 9 to the Convention on International Civil Aviation (Facilitation), Tenth Edition: April 1997, ICAO, Montreal, Chapter 1, Definitions. See also Miller (1977) at p. 10 when the author states that while the French term "merchandises" and the English term "goods" is not the same, the French term denotes anything that can be the object of a commercial transaction. However, under common law, "goods" refer to inanimate objects only, thus excluding live animals.

makes the valid point that air cargo carries with it the advantage of being transported quicker than other modes of transport are and therefore frequently consists of articles of high value, urgently needed merchandise and extremely perishable goods.[73]

A milestone, if ever there were one for air freight, would be Chapter 4 of Annex 9 to the Chicago Convention which opens with the initial requirement that regulations and procedures applicable to goods carried by aircraft shall be no less favourable than those which would be applicable if the goods were carried by other means.[74] In order to serve best consignors who send their urgently needed or perishable goods with expediency, the Annex, in Standard 4.3, impels Contracting States to examine with operators and Organizations concerned with international trade all possible means of simplifying the clearance of goods carried inbound and outbound by air.

Another positive requirement of the Annex, in keeping with the electronic age and its requirements, is to require that Contracting States, when introducing electronic data interchange (EDI) techniques for air cargo facilitation, should encourage international airline operators, handling companies, airports, customs and other authorities and cargo agents to exchange data electronically, in conformance with UN/Electronic Data Interchange for Administration, Commerce and Transport (UN/EDIFACT) international standards, in advance of the arrival of aircraft, to facilitate cargo processing.[75] The Annex is supported in these proactive measures by its parent document, the Chicago Convention, which, in Article 22 provides that each Contracting State agrees to adopt all practicable measures, through the issuance of special regulations or otherwise, to facilitate and expedite navigation by aircraft between the territories of Contracting States, and to prevent unnecessary delays to aircraft, crews, passengers and cargo, especially in the administration of the laws relating to immigration, quarantine, customs and clearance. Article 23 of the Convention opens the door for Annex 9 to require of States, from time to time, to keep abreast with developments in the carriage of air freight when it provides:

> Each Contracting State undertakes, so far as it may find practicable, to establish customs and immigration procedures affecting international air navigation in accordance with the practices which may be established or recommended from time to time, pursuant to this Convention. Nothing in this Convention shall be construed as preventing the establishment of customs free airports.

The overall aim of Annex 9, through its Chapter 4, which addresses entry and departure of cargo and other articles is to retain the advantage of speed inherent in air transport. However, the Annex makes provision for recognizing the need for Contracting States to adhere to application regulations relating aviation security which are incorporated in Annex A to the Chicago Convention. For example, in Standard 4.2, Annex 9 requires that Contracting States shall make provisions whereby procedures for the clearance of goods carried by air and for the interchange

[73] Magdelenat (1983), p. 6.

[74] Annex 9, Standard 4.1.

[75] Id. Standard 4.4.

of cargo with surface transport will take into account applicable regulations which address issues of aviation security. For its part, Annex 17 recommends that each Contracting State should, whenever possible, arrange for the security measures and procedures to cause a minimum of interference with, or delay to the activities of international civil aviation.[76]

Yet another ICAO initiative in the carriage of air freight is Annex 18 to the Chicago Convention—on The Safe Transport of Dangerous Goods by Air—which was developed by the Air Navigation Commission of the Organization in response to a need expressed by States for an internationally agreed set of provisions governing the safe transport of dangerous goods by air. The Annex draws the attention of the States to the need to adhere to Technical Instructions for the Safe Transport of Dangerous Goods by Air[77] developed by ICAO, according to which packaging used for the transportation of dangerous goods by air shall be of good quality and shall be constructed and securely closed so as to prevent leakage[78] and labelled with the appropriate labels.[79]

The Second Facilitation Panel Meeting, which took place in Montreal, from 11 to 15 January 1999, had, as its primary incentive, the updating and revision of the provisions of Annex 9 for air cargo and was influenced by recent work which has been substantially completed by the World Customs Organization on the comprehensive revision of the Kyoto Convention. However, the scope of the revision process was broader than the alignment of the Annex with Kyoto Convention principles.

The facilitation strategy as reflected in the SARPs which were developed during the first 25 years of ICAO contemplated a business environment of manual inspection and clearance procedures in which all information exchanges were dependent on the preparation and movement of paper document. International airlines and airports were largely owned and often administered by governments; hence facilitation of cargo clearance activities was viewed as essentially a government responsibility.

2.3.5 Multimodal Trade

The concept of an integrated transaction depends entirely on risk-management, and is particularly important for airfreight because it is focussed on those controls which are exercised by customs, during the relatively short time while goods are in their physical possession. It is a very powerful example of a premium procedure because

[76] Annex 17 to the Convention on International Civil Aviation (Security), Sixth Edition—March 1997, ICAO: Montreal, Recommendation 2.2.1.

[77] Doc 9284.

[78] Annex 18 to the Convention on International Civil Aviation (The Safe Transport of Dangerous Goods by Air), Second Edition—July 1989, Standard 5.2.1.

[79] *Id.* Standard 6.1.

it offers very valuable benefits to both Customs and declarant. The Customs get an unambiguous single price and value statement, together with complete origin–destination information for control purposes, and therefore is privy to more than the export or import half of any transaction.

During the 1970s, with the entrance of wide-body aircraft and the emergence of computers and other new technology, States began to find ways to rationalize their inspection process. Today, issues related to information requirements are more significant than the number and type of paper documents which are exchanged among the parties to an import/export transaction. As computerization capabilities are almost universally available to both governments and industry, it is now possible to be more positive about advocating the use of information technology by all parties.

The revision of the Kyoto Convention[80] is aimed at a broad-front harmonization and improvement of basic Customs procedures, with an eye to primary Customs responsibilities for control as well as a growing sensitivity to the economic advantages of facilitation. Premium Procedures are a means of bringing market forces to bear by linking specific facilitation advantages directly to prescribed control improvements. The Integrated Transaction is an advanced Premium Procedure, in which the emerging concept of the "authorized trader" is applied in such a way that a single submission of minimal, standardized data, by such a declarant, will suffice for all Customs export/import purposes.

It is difficult to see how such concept as Premium Procedures or the Integrated Transaction could be worked into the Recommended Practices/Standards Structure of the existing Annex. The revision of Kyoto will, of course, lend itself very well to this process of provision-by-provision adjustment and numerous Panel delegates can be expected to produce detailed proposals.

With international trade evolving steadily in the 1950s and 1960s where the maritime sector in particular was in high demand, there was an increasing need to overhaul the already sluggish cargo handling system. An innovation in the cargo transportation system was seen in the 1960s and 1970s where structural units forming an integrated rigid shell within a container could consolidate the handling of a number of heterogeneous individual packages as a single item.

Called containerization, this collective system of freight handling and transportation made multimodal freight transportation easier. Container transport brought with it the need for regulation of all modes of transport into a standardized regime. In response to this need, the International Standards organization adopted single standards for uniform dimensions of cargo to be carried in all forms of transport.[81] The development of international containerized carriage has also brought to bear the desirability of unifying the rates used in various modes of transport into a single rate. Nonetheless, variances were seen in liability regimes relating to surface and air transport. There were also differences in rates used by maritime transport and rail transport. For the development of efficient multimodal transport services, a

[80] Facilitation Panel (FALP) (1999), pp. 1–6.

[81] Cross (1993), p. 11. See also Briant (1980), p. 21.

conference was held under the auspices of the United Nations Conference on Trade and Development (UNCTAD), resulting in the adoption in 1980 of the United Nations Convention on International Multimodal Transport of Goods (hereinafter referred to as the Montreal Convention of 1980).[82]

The Montreal Convention of 1980 established a new liability regime applicable to a new player in the transportation field—the multimodal transport operator (MTO). The MTO undertakes full responsibility, under a single multimodal transport document for the international transportation of goods by various operators of various modes of transport. The MTO was responsible under the multimodal transport contract as principal, to both consignor and consignee. The multimodal transport contract was modelled on the Hamburg Rules[83] applicable to the carriage of goods by sea, in view of the extensive usage of maritime transport for the carriage of freight at that time.

Multimodal transport liability provisions, under the Montreal Convention of 1980, often created some ambiguity when considered against unimodal transportation systems. Although the Warsaw Convention of 1929 stood on its own for purely air transport freight transactions, there was an element of doubt as to which regime would be applicable in instances of damage or delay caused in the transportation of cargo. Article 19 of the Montreal Convention of 1980 somewhat settles the question by introducing a national system for localized damage. In other words, the Montreal Convention of 1980 admits of the applicability of mandatory national or international law when damage or delay can be attributed to a particular mode of transportation only if, as per Article 18 of the Montreal Convention of 1980, these legal systems provide a higher quantum of damage than the 1980 Convention itself. This was not entirely satisfactory to the air transport industry, given the high capital-intensive nature of air transport and the security and safety implications that go with transportation of air freight.

It is arguable that the Warsaw Convention would prevail upon a claim for damage caused to air cargo, however founded, if it can be proved that the air transportation involved in the overall carriage of goods concerned had caused the damage, even if the contract of carriage was affected through a multimodal contract document under the Montreal Convention of 1980. The Warsaw Convention applies to different legal systems, as was demonstrated in the 1993 Italian case of *Odino Valperga Italeuropa* v. *New Zealand Ins*.[84] In this case, an action was brought against a freight forwarder acting as custodian of goods. The Court held that the action was sustainable under the Warsaw Convention and not under the law of contract notion of bailment as claimed, since the damage occurred while the goods were in charge of the air carrier, before the cargo was delivered to the consignee. Massey supports this view, asserting that the liability of the carrier for loss or damage to the goods will

[82] TD/MT/CONF/16, Geneva Conference (1979–80) documents; United Nations Conference on International Multimodal Transport of Goods, Annal Air & Sp. L. 1981, Vol VI, pp. 657–691.

[83] Italian Court de Cassation, Judgment No. 6841, 19 June 1993 discussed at 1994 Vol XIX Air & Sp. L. 288.

[84] Massey (1972), p. 726.

essentially come under the purview of the international Convention or other law relating to the mode of transport in question and that each time the goods are transferred from one mode of transport to another, so will the liability regime pertaining to those goods. The Warsaw Convention, by Article 31, provides that in the case of combined carriage, the provisions of the Warsaw Convention shall apply only to the carriage by air, provided that the carriage by air falls within the terms of Article 1 of the Convention. All conventions pertaining to transportation of goods are, however, agreed that when the stage of transport during which the loss or damage occurred to goods is not known, the liability of each carrier will be determined by rules of liability prescribed by the Convention applicable to the multimodal transport operator or a carrier who issued the contract of carriage. In such an instance, the carrier who pays compensation shall be entitled to recover compensation from the other carriers who take part in the carriage.[85]

In addition to the liability standards already adopted regarding multimodal transport operations, there are other documents purporting to provide for standardized provisions for multimodal transport. In 1973, as a precursor to the UNCTAD Conference of 1979, the International Chamber of Commerce initiated uniform rules for a Combined Transport Document which contained minimum standard rules for use in documents issued by operators. Revised in 1975,[86] they form the basis of the Combidoc (Combined Transport Document) or Combined Transport Bill of Lading. The Combidoc is issued and signed by the Combined Transport Operator (C.T.O.) and reflects a contract for combined transport. Under agreement and per the Combidoc the C.T.O. agrees to perform carriage of freight whether by one single mode of carriage or by combined modes of carriage. Both the Combidoc and the Combined Transport Bill of Lading, together with documentation under the Montreal Convention of 1980 bring to bear a compelling need to evaluate expedient means of contracting for services of freight forwarders and carriers. The air waybill under the Warsaw System also plays a key role in adding to the mass of documentation involved in the modern freight contract.

References

Abeyratne R (2017a) Megatrends and air transport: legal; ethical and economic issues. Springer, Heidelberg. ISBN 978-3-319-61123-5

Abeyratne R (2017b) The cabin crew member as an integral link in the air transport chain legal and regulatory issues. Zeitschrift für Luft- und Weltraumrecht/ZLW (German J Air Space Law), ZLW 66(Jg. 4):1–13

Asimov I (1991) I Robot. The Gnome Press

Briant AM (1980) A critical look at the United Nations Convention on international multimodal transport of goods, 24 May 1980. LL.M Thesis, Geneva, p 21

Bridges G (2000) Air cargo in the 21st century. Int Airport Rev 4(4):14–19

[85] Briant (1980), in this chapter at p. 67.

[86] ICC Publication No. 298 (October 1975).

Brynjolfsson E, MCafee A (2017) The business of artificial intelligence, what it can – and cannot- do for your organization. Harvard Business Review. https://hbr.org/cover-story/2017/07/the-business-of-artificial-intelligence
Conway P (2000) Cargo on-line. Airl Bus 16(2):78–79
Cross P (1993) Trucking air cargo: the application of the Warsaw Convention to bimodal transport. LL.M Thesis, McGill, p 11
De Beistegui M (2007) Proust as philosopher, the art of metaphor. Routledge, Oxon, p 48
Facilitation Panel (FALP) (1999) The Kyoto Convention, premium procedures and the integrate transaction; 4 January 1999, pp 1–6
Heise DR (2002) Understanding social interaction with affect control theory. In: Berger J, Zelditch M (eds) New directions in sociological theory. Rowman and Littlefield, Boulder Chapter 2
Magdelenat J-L (1983) Air cargo regulations and trade. Butterworth, Toronto, p 1
Massey EA (1972) Prospect for new international regime: a critical look at the TCM. Marit Law Com 31:726
Metz C (2017) How deep neural networks could improve airport security. The New York Times, 23 June 2017
Miller G (1977) Liability in international air transport. Kluwer, Deventer
Peckham M (2016) What 7 of the World's smartest people think about artificial intelligence. TIME, May 5, 2016
Pilon R (2010) Innovative air cargo revenue management-reinstating air cargo profitability. Revenue Management Forum, Friday, 22 January 2010
Sadek AW (2007) Artificial intelligence applications in transportation. Artificial intelligence in transportation: information for application, Transportation Research Circular Number E-C113, January 2007, p 1
Swindell M (1997) Cargo comes back off the floor. Airl Int 3(2):26–30
Thomas E, Gamper D (1996) Cargo: increasing throughput. World Freight International, pp 28–29
Thompson C (2015) Computers will be like humans by 2029: Google's Ray Kurzweil, Exponential Finance June 2–3, 2015
Turing A (1950) Computing machinery and intelligence. Mind 49:433–460
Tyson L, Spence M (2017) Exploring the effects of technology on income and wealth inequality. In: Boushey, Delong, Steinbaum (eds) After Piketty: the agenda for economics and inequality. Harvard University Press, pp 170–208
Von Drehle D (2017) In the mind of humankind. Artificial intelligence: the future of humankind. TIME Special Edition, p 92
Wassenbergh H (1996) Deregulation of competition in international air transport. Air Sp L XII:80

Chapter 3
General Principles of Competition in Air Carriage

It has become a platitude to say that the genesis of the Convention on International Civil Aviation (Chicago Convention)[1] lay in the Chicago Conference of 1944. The Conference was convened through a letter of invitation dated 11 September 1944 sent from the Government of the United States to 53 sovereign States[2] and two Ministers.[3] The letter said inter *alia* that, pursuant to bilateral exploratory discussions that the United States had with several States and in view of the imminent defeat of Germany and the potential liberation of parts of Europe and Africa from military interruption of traffic set up the urgent need for the establishment of an international air service "pattern" (my emphasis) so that all important trade population areas of the world may obtain the benefits accrued through air transportation. A pattern denotes a regular, intelligible form that reflects a regular and repeated way in which something is done. Accordingly, the letter called for a conference to discuss relevant issues, among which was the formation of principles of a "permanent international structure for civil aviation and air transport"[4] to be developed through various committees set up during the Conference. Foremost in the philosophy of the United States proposal was the setting up of provisional world route arrangements to be arrived at by general agreement so that international air transport services could be promptly established. The overall philosophy of the Conference was seemingly structured both on air transport and the technical principles of air navigation which can be brought under the rubric of international civil aviation. The direction set for the conference was therefore both economic and technical, at least as a preliminary issue.[5]

[1] ICAO Doc 7300/9: Ninth Edition, 2006.

[2] The 53 States are listed in Proceedings of the International Civil Aviation Conference, Chicago, Illinois, November 1–December 7, 1944 Vol. I& II, Washington D.C. US Department of State: US Government Printing Office, 1948 (State Department Publication 2820), at 13.

[3] The Danish Minister in Washington and the Thai Minister in Washington.

[4] Proceedings of the International Civil Aviation Conference, *supra*. Note 2 at 11.

[5] For background reading, see Abeyratne (1994), pp. 3–80.

R. Abeyratne, *Law and Regulation of Air Cargo*,
https://doi.org/10.1007/978-3-319-92489-2_3

It must be mentioned that, coupled with the acute awareness of the world—that the outmoded concept of national sovereignty within territorial borders conferring unlimited powers to States which effectively precluded international cooperation, which World War II perpetuated, must be revisited—an important precursor to the American thinking had existed in 1932 when, at the first conference for the reduction and limitation of weapons held in Geneva, the French Delegation had submitted to the Conference a draft suggesting that air routes be internationalized. The United States' view was that at the core of this philosophy was the fact that air transport must be commercialized and the parochial "separate skies" practice should be obviated. The pervasive animosity of the war had to give way to friendship and understanding, projected through an international Organization with "auxiliary and consultative functions".[6]

The initiator of the conference process was President Franklin D. Roosevelt who, by the time the war was tilting in favour of the allied forces showed a distinct interest in air transport. He was the first President in office to choose to fly on official work (to Casablanca), preferring air travel to surface transport (by sea) saying he had less knowledge of terrain than of the oceans. President Roosevelt baffled, and even terrified his top aides as flying to Morocco would have presented many ominous threats and risks.[7] It was President Roosevelt who formulated the idea of the United Nations that would end the era of colonialism and usher in an era of connectivity and globalization. His thoughts, as recorded by his biographer Nigel Hamilton was that "certain trusteeships would be exercised by the United Nations where the stability of government for one reason or another cannot at once be assured".[8]

President Roosevelt's thinking is epitomized in the statement of Adolf A. Berle, President of the Chicago Conference and Head of the American Delegation: "The use of the air has this in common with the use of the sea: it is a highway given by nature to all men. It differs in this from the sea: that it is subject to the sovereignty of the nations over which it moves. Nations ought therefore to arrange among themselves for its use in that manner which will be of the greatest benefit to all humanity, wherever situated. The United States believes in and asserts the rule that each country has the right to maintain sovereignty of the air which is over its lands and its territorial waters. There can be no question of alienating or qualifying this sovereignty".[9] It was emphasized by the American delegation that there should be friendly intercourse between nations within the umbrella of sovereignty and that air

[6] Matte (1981), p. 128. It is noted that Great Britain (as it was then called) opposed this characterization of the proposed international Organization, and proposed considerable authority to the body. Australia and New Zealand went even further by asserting that, for the future prevention of war, international ownership of air routes must vest with such an Organization vested with an international flag. Canada suggested that an international air ownership should be substituted by an international air service. See Matte (1981), pp. 129–130.

[7] See Hamilton (2016), pp. 4–5.

[8] *Id*. 23.

[9] *Id*. 55.

navigation, communication and commerce should be fostered between all peaceful States.

Explicit in this philosophy was the dual factors of routes and air navigation, which could be determined through the establishment of an international organization designed on the principle of cooperation among States that would obviate the parochial use of aircraft within State boundaries. In the context of routes, the twin issues of commerce and economics surfaced at the conference, bringing to bear the importance of competition between routes and transit lines. Also addressed was the issue of technical aspects of air navigation that would keep aircraft within safe distance of each other. The basic tenets of these philosophical thinking were enshrined in the finalized Chicago Convention within the parameters of its Preamble which looked to the future development of international civil aviation as helping to preserve friendship and understanding among the people of the world and the importance of avoiding the abuse of this development which, if not averted would adversely affect general security. The corollary to this approach is outlined further in the Preamble which says that States should avoid conflict and cooperate so that the safe and orderly conduct of the industry could be carried out soundly and economically with equality of opportunity. The key words here are "friendship" and "understanding" as well as "safe", "orderly" "economically" and "equality of opportunity". In other words, connectivity in an orderly and regular manner.

This chapter will critically evaluate the words "equality of opportunity" against the backdrop of 70 years of the International Civil Aviation Organization (ICAO) which was established with aims and objectives to drive the evolution of air transport as well as to foster the development of civil aviation. To do this, one has to first look at the process the five-week long conference took and arrive at a conclusion as to the real meaning and purpose of the Convention and whether the aviation community is being guided in the direction that was envisioned.

3.1 Philosophy of the Conference in 1944

The conference process reveals the underlying philosophy that led to the adoption of the 96 provisions of the Chicago Convention. The Chinese Delegate summed it up well when he said that the intent of the Conference (as he saw it) was to transform the air—which had been used as a medium of aggression—into a highway serving all people of the world. The Delegate of Mexico—who identified Mexico as a vast land- held the view that the Conference could enable Mexico ultimately to connect various points in the land, thereby benefitting his people socially and economically. These sentiments echoed the fundamental premise posited by the United States—that the new mechanism being discussed could bring about the greatest benefit to humanity, wherever situated. A note of caution was sounded by Lord Swinton—the British Delegate—who said: "[W]e want to encourage enterprise and initiative and the development and application of all that science, design and craftsmanship and industry can give us. But we want to avoid disorderly competition with

the waste of effort and money and loss of good will which such competition involves".[10] As a modality that would achieve this objective, the British Delegate opined that there should be a correlation between the number of services and the traffic demand. In other words, the availability or demand for traffic should be predetermined before air services are operated between points in States.

Interestingly, Lord Swinton went on to emphasize the need to avoid economic waste and obviate subsidies.[11] A solution to this conundrum—in the eyes of the British Delegate—was to establish minimum rates. It was also suggested that until the Chicago Convention entered into force, any bilateral air services agreement should have entered into force in accordance with the principles included and embodied in the Convention. The Canadian Delegate followed Lord Swinton, with a strong recommendation that an international air authority which promoted competition, and consisting of an assembly or board and a number of regional councils must be established along the lines of the Civil Aeronautics Board of the United States. C.D. Howe, the Canadian Delegate, stressed the fact that consultations Canada had in the preceding years with other States brought to bear a consensus that the international authority should be able to require of States on which routes their airlines could fly and on which routes they were prohibited to fly. It was also mentioned that the regional councils should have the authority to issue licences and certificates of airworthiness.

The strongest argument for coalescing all air traffic rights in one international authority lay in the words of Mr. Howe: "Nations can exercise, in an anti social way, their present right to refuse foreign airlines air transit over their territories. Nations can likewise exercise, in an anti social way, their present right to prevent foreign airlines from landing on their territories to pick up and discharge traffic. The obstructionist use of the one right can be an outrageous exploitation of geography for purely negative and destructive purposes by nations which are situated athwart the great airways of the world…".[12]

The Delegate of France submitted to the Conference that States should have a reasonable share of air transportation and that the international organization proposed was the only conduit to facilitate this objective. Australia and New Zealand, as already mentioned, went a step further by recommending that for the sake of future peace in the world and with a view to developing the world's air commerce rationally, an international air transport authority should be established through an international organization that would own aircraft and operate air services on behalf of the States. In pursuance of this objective the two countries suggested further that this international authority should be given every flexibility by the States to carry out its mandate so that air commerce could develop without let or hindrance.

[10] *Proceedings of the International Civil Aviation Conference, supra*, note 2 at 64.

[11] The words of the British Delegate were prophetic. The subject of subsidies in air transport became contentious and is currently a much-debated subject among the air transport community. See Abeyratne (2017), pp. 31–49.

[12] *Proceedings of the International Civil Aviation Conference, supra*, note 2 at 73.

Additionally, it was submitted that such an authority should comprise the best technical and research expertise and other aviation resources.

Accordingly, signatory States to the Interim Agreement on International Civil Aviation—the precursor to the Chicago Convention—agreed in Article 1 of the finalized Provisional Agreement to establish a provisional international organization—the precursor to ICAO—that such organization would be of a "technical and advisory" nature (my emphasis) of sovereign States for the purpose of collaboration in the field of international civil aviation.[13]

A surprising shortcoming in the discussions—one of omission rather than commission—was the insouciant ignoring of the dimensions of air space. If air commerce was to be rationally apportioned or shared, and sovereignty was to be liberally interpreted, it is curious that the term "sovereignty" over airspace was nonchalantly ignored by the delegates. It still remains ignored, presumably because some States would like to keep the issue open for reasons of military strategy. However, this military concern need not have been a factor at the Chicago Conference because it was then all about establishing peaceful commerce and connectivity, away from military considerations. Besides, if the States were finally entitled to exercise total and exclusive sovereignty over the airspace above their territory, the term "airspace" needed to be definitively identified. A logical and sensible measurement in this respect would be to consider airspace as reaching a height in the atmosphere where the atmosphere would not be able to offer an aircraft its aerodynamic lift. Called the Von Karman line, the altitude where the atmosphere cannot offer aerodynamic lift has been identified as 80,000 m or 50 miles which is about 110 km high.[14]

3.2 Philosophy of the Convention

All the above views went into the making of the Chicago Convention through a series of compromises that kept the concept of the suggested international organization in the form of ICAO *albei*t without the power and authority to ascribe route structures or to own aircraft. The overall philosophy of the Convention is couched in two areas: specific provisions on air transport and air navigation; and the aims and objectives of ICAO as well as the functions of the ICAO Assembly and ICAO Council. It is not the intent of this article to analyse and comment upon the provisions of the Chicago Convention or the overall functions of the ICAO Assembly and Council as it has already been done elsewhere.[15] This article does not offer an expose of the technicalities of air navigation which has also been addressed.[16] ICAO has performed well in the technical field and continues to do so. What this article discusses is how the original intent of the Chicago Conference of the establishment of

[13] *Id.* 132.

[14] Cooper (1967), pp. 26–27.

[15] See Abeyratne (2013).

[16] Abeyratne (2012).

an international air service "pattern" so that all important trade population areas of the world may obtain the benefits accrued through air transportation is translated into the philosophy of the Chicago Convention as reflected in its Preamble in ensuring "equality of opportunity" for carriers to compete in operating air services against the backdrop of the principles of competition and their legal ramifications and how all factors mesh with ICAO's aim of "meeting the needs of the people of the world for safe, regular, efficient and economical air transport" as required by Article 44 (e) of the Convention.

To begin with, ICAO has not strictly adhered to its aim as stipulated in Article 44 (e) of the Convention but has opted to stay within the "advisory" role as mentioned in Article 1 of the Provisional Agreement to establish a provisional international organization. Even as an advisor, ICAO has been ambivalent merely choosing to advocate the overarching principle of "liberalization" of air transport. It has not given any advice to its member States on how to achieve liberalization.[17] The closest ICAO has come is to publish a study on competition and air connectivity[18] which contains some statistics that are called "efficiency diagnosis in the context of air carriers' network[19] competition. Some useful information can also be gleaned from ICAO's Competition Compendium of 2017[20] which gives the results of a competition survey carried out by ICAO of its member States. This having been said, one must hasten to add that ICAO has not been idle through the years and has published numerous guidelines through its manuals and other documents.[21] It therefore behoves both the ICAO Council and ICAO member States to interpret what "equality of opportunity" means in the philosophy of the Convention and apply their understanding to relations with other States.

At the 6th Air transport Conference convened by ICAO in 2013, it was agreed that "States should pursue liberalization at their own pace and apply approaches suitable to their needs and national situation. At the same time, there was general agreement on the need to modernize the global regulatory framework on market access so as to adapt to the changes of a globalized business environment. Also recognized was the need for ICAO to play a leadership role in facilitating regulatory evolution. In this regard support was voiced for the proposal that ICAO develop a long-term vision for global liberalization of air transport, including multilateral solutions, bearing in mind the interests of all States and aviation stakeholders."[22]

---

[17] See Abeyratne (2013a), pp. 9–29. See also by the Abeyratne (2013b).

[18] *ICAO-ICM Study on Competition and Air Connectivity*, ICAO HQ, Montreal, 31 March 2016.

[19] A network is any market in which the consumption of a good by one consumer has a positive impact on the value of that good's consumption by another consumer. See Schanzenbach (2002), p. 4.

[20] http://www.icao.int/sustainability/Compendium/Documents/ICAO%20Competition%20Compendium%20(Jan.%202017).pdf.

[21] *Policy and Guidance Material on the Economic Regulation of International Air Transport*, Doc 9587 (Third Edition—2008), *Manual on the Regulation of International Air Transport (*Doc 9626*), and ICAO's Policies on Taxation in the Field of International Air Transport* (Doc 8632).

[22] ATConf/6-WP/104, 22/3/13, 2.1-3.

The 38th session of the ICAO Assembly which followed the Conference adopted Resolution A38-14 which requested the ICAO Council, *inter alia*, "to develop and adopt a long-term vision for international air transport liberalization, including examination of an international agreement by which States could liberalize market access…; to develop a specific international agreement to facilitate further liberalization of air cargo services", and "to initiate work on the development of an international agreement to liberalize air carrier ownership and control".[23]

It is clear, when one goes back to the statements made by the delegates at the Chicago Conference, that "equality of opportunity" did not mean equal opportunity to operate air services. This would amount to the misnomer attached to the bilateral "open skies" concept where the equal right to operate air services would give one carrier with more resources an undue advantage over another carrier which is disadvantaged. The British delegate at the conference clearly said that disorderly competition should be avoided, and unrestricted competition should be the goal of future air transport.[24] By this the British delegate meant that all States should have the opportunity to have a fair share of traffic by fair competition. The preeminent objective is, as the United States delegate said at the conference, to give the benefits accrued through air transportation to all important trade population areas of the world. When translated to more recent times the United States' position at ICAO's 6th Worldwide Air Transport Conference held in 2013 is worthy of note where the United States said that cooperation in the aviation industry is needed to ensure fair competition and for that to attain fruition what was needed was: "constructive engagement with the aviation industry, which must operate in many jurisdictions to compete effectively. Constructive engagement allows regulators to understand how the airline business is affected by regulatory, geographic, and technological factors, and to exercise more responsible oversight, with a view towards adopting approaches that are compatible with those of other jurisdictions, to the extent possible".[25] These views would bring one to the ineluctable conclusion that the Preamble to the Chicago Convention embodies the practice of equality of opportunity to compete.

In an unusual break from its economic indolence, ICAO became unobtrusively creative when it suggested that airlines, particularly of a developing State at a disadvantage when competing with other stronger airlines, should have access to "preferential measures" such as the opportunity to serve more cities; market access to fifth freedom sectors not otherwise granted; ability to change capacity in routes included in a bilateral air services agreement in a flexible manner; unilateral operations on a given route for a certain period of time; opportunities to enter into code sharing agreements on attractive routes and the unrestricted change of aircraft type. ICAO also suggested that air carriers with a competitive disadvantage should be allowed

[23] Progress Report on The Development of International Agreements on The Liberalization of Market Access, Air Cargo and Air Carrier Ownership and Control, Presented by the ICAO Council, *A39-WP/5* EC/3 5/7/16, at 2.

[24] *Proceedings of the International Civil Aviation Conference, supra*, note 2 at 65.

[25] FAIR COMPETITION AND REGULATORY COOPERATION IN THE AVIATION SECTOR, ATConf/6-WP/62 14/2/13, at 2.

trial periods to operate in certain routes liberally, that could also turn into the gradual introduction of more liberal market access agreements with developed States. Other preferential treatment measures were: the use of liberalized arrangements at a quick pace by developing countries carriers; a waiver of the nationality requirement for disadvantaged carriers; preferential treatment in ground handling at airports and slot clearance; and flexibility in currency conversions.[26]

Although these suggested measures were both well intended and practical and were calculated to alleviate the disadvantageous position some carriers of the developing world might have been in, they remain mere suggestions that are not followed across the board.

3.3 Equality of Opportunity to Compete

Arguably, the founding fathers of the Chicago Convention deliberately made ICAO a toothless tiger in the context of air transport and deprived it of the vast powers called for by the Australian and New Zealand delegations and allowed what the Canadian delegation feared—that States should not be allowed to arbitrarily and capriciously close their air space and stultify connectivity—which is the antithesis of the meaning and purpose of the Preambular text of the Convention. Article 6 of the Convention, which provides that no scheduled international air service may be operated over or into the territory of a contracting State, except with the special permission or other authorization of that State, and in accordance with the terms of such permission or authorization, essentially established an absolute prerogative of a State to dictate which air services operated into its territory and further seemingly shackled ICAO's role which was relegated in Article 44 to "fostering" air transport. However, paradoxically and as already stated, the same provision identifies as one of the aims and objectives of ICAO as being "to meet the needs of the peoples of the world for safe, regular, efficient and economical air transport".

The ICAO Council, still, after 70 years, does not seem to know what to make of this paradox and has conveniently left the issue unaddressed, with only a Strategic Objective (whatever that means) of *Economic Development of Air Transport* aimed at fostering the development of a sound and economically-viable civil aviation system. Also included in the Strategic Objective is the recognition of the need for ICAO's leadership in harmonizing the air transport framework focused on economic policies and supporting activities. Again, this is confusion worse confounded as ICAO could not just "foster" the development of air transport while at the same time leading the harmonization of the air transport framework that is run on competition.

---

[26] See *Study on Preferential Measures for Developing Countries,* ICAO Doc AT-WP/1789, 22/8/96 at A-7–A-9. For a more recent revision of guidelines, see, *Policy and Guidance Material on the Economic Regulation of International Air Transport*, ICAO Doc, 9587, Second Edition, 1999, Appendix 3 at A3-1–A3-3.

This fundamental flaw in the Chicago Convention's paradoxical statements on ICAO's role as well as ICAO's insouciant view of its admitted "leadership" role has given rise to market forces taking over the "equality of opportunity" concept of the Chicago Convention. Antithetically, this has given rise to protectionism across the board where States are accusing other States of aiding their carriers in engaging in anti competitive practices. Therefore, it becomes necessary to go into greater detail on the extent to which the principles and attendant ramifications of competition in air transport can be viewed.

3.4 Competition

3.4.1 State Involvement

In air transport, as in any other commercial activity, competition is a balance between maximising profits and ensuring consumer welfare. In both these factors one of the key drivers is location of the enterprise, and the ability of such enterprises to coordinate their regional and area activities across borders and global networks. Another factor is government policy which can either effectively facilitate the development of an industry or run it to the ground with regulations. A forward looking dynamic local environment can deeply facilitate advancement. Michael Porter says: "in a world of increasingly global competition, nations have become more, not less important…competitive advantage is created and sustained through a highly localized process…ultimately, nations succeed because their home environment is the most forward looking, dynamic, and challenging."[27] In the context of e the air transport industry, the active involvement of the Government of the United Arab Emirates (UAE) in the development of its airlines Emirates and Etihad, along with the exponential growth of the Dubai and Abu Dhabi airports as hubs show the importance of both location and governmental commitment. Emirates is owned by the Investment Corporation of Dubai (ICD)—the commercial investment arm of the Dubai Government. In 1985 Emirates was given US $ 10 million as a start up for the lease of 2 Boeing 737 aircraft and an additional US $ 88 million for infrastructure building. Oxford Economics cites the Emirates business model as "consensus-based, highly-competitive and consumer-centric; generating significant economic benefits for Dubai and the countries it connects".[28] In the Report HH Sheikh Ahmed Bin Saeed Al Maktoum, Chairman and Chief Executive of Emirates Airline and Group, Chairman of Dubai Airports and President of Dubai Civil Aviation Authority has said: "[T]hat is why we have created a business and regulatory environment that supports its growth by encouraging open competition between all airlines, efficient operations and customer satisfaction. There is no magic here. It's just good

[27] Porter (1996), p. 155.

[28] *Oxford Economics report on why Dubai's aviation model works*, http://theemiratesgroup.com/english/news-events/news-releases/news-details.aspx?article=680905&offset=88.

business".[29] Using its strategic location of fast growing Dubai, Emirates has pared growth with an aggressive business strategy that faces its competitors squarely in their faces. A substantial investment to buttress its operations on long haul services has enabled the airline to quote cheaper rates on such services than its competitors. Additionally, the airline approaches its mission as a whole, diversifying to other related aspects of the air transport product, investing in airports, airport services and even taxi services. This enables the airline to offer a product with a difference and compete in a new market relying on their brand or promise of superior service.

Emirates uses its strategic location to encourage competition through the UAE government's open sky policy. This in turn generates activity in the market forces that enables Emirates to forge ahead with its creative and innovative initiatives calculated to overtake its competitors which are allowed to operate air services to Dubai untrammeled. One of the strategies of Emirates is to optimize its competitive advantage by relentless innovation and creativity in marketing. Etihad—the airline operating with Abu Dhabi as its hub—also concentrates heavily on innovation. As an example, one can cite the Etihad Innovation Centre where the walk-through of the Centre features business class cabins on the A380 and B787, with the airline's new Business Studio, as well as Economy Class cabins with the Economy Smart Seat. This state of the art facility has been built for forward thinking and the exchange of innovative ideas that could take the airline into the next decade.

The success stories of the Middle East carriers (including Etihad, Qatar Airways and Turkish Airlines) is not so much that their constant innovation is the sole factor that gives them their competitive advantage but the fact that their competitors have stopped improving. This fact alone underscores the significance of the "equality of opportunity" to compete clause in the Chicago Convention. Every State has the opportunity to develop its location; encourage and support its airline/s and create an investment environment that would energize market forces.

In many States, there is no policy for national competitiveness through its aviation sector, whether it be in air transport or the airport industries. Entrepreneurial principles are not pursued with enthusiasm. Commercial entities are often lumped together and are not given separate entity status. Singapore is another example where the State shows entrepreneurial interest in its separate entities through which both Singapore Airlines and Changi International Airport have thrived over its competitors.

3.4.2 Corporate Strategy

As the above discussion indicates, the advantages brought about by location must be matched with a corporate strategy and it is imperative that such a strategy be carried out though a global networks and platforms. A business enterprise achieves equality in competition by creating opportunities such as conceptualizing change in an

[29] *Ibid.*

unprecedented manner based on conceptual and strategic thinking, taking into consideration global technical, political, economic, legal and demographic trends. Corporate strategy in competing with others requires exposure to new forms of intellectual openness and curiosity, and, above all, an enduring capacity to identify and analyze the effects of emergent trends on aviation. "Strategy" is defined in The *Harvard Business Review* as "*the creation of a unique and valuable position, involving a different set of activities from your competitors"*. A Strategic Plan is a dynamic process, not a one-time event and this process will become an integral part of the way a competitor seeking to create equal opportunity does business and leads the company.

The "different set of activities" for a progressive airline would involve incisive analysis of megatrends as they impact on aviation. However, strategy should not only be about competition nor should it be about planning. Neither should it be only about tactics or achieving goals. It should also be based on uplifting the company's profile as a specialist in the area. The strategic plan should have three key drivers*: the company's look at the world*—this initiative may need a fresh look at the world that is an extension of the company's current focus on innovation and marketing. This would be followed by an in depth look at the playing field, meaning a comprehensive look at what is out there; *Redefining the company's ambition*—the company's purpose explains why it exists. A determination of redefining would bring to bear the nature of the company and whether its approach should change with the involvement in emergent trends. This could involve transcending best practices and going into strategic analysis and innovation*; reshaping the business model*—this would need a look at what the company wants to achieve in its involvement in the competitive world. This may involve either elevation of profile or profit making or both.

Reshaping the business model is a key element in contemporary competition in air transport. Networks and platforms now form a key component in successful business planning. Airlines that use networks and platforms can connect stakeholders in air transport more efficiently than airlines who are disadvantaged in not having access to such tools. A platform is essentially a business model that links or connects groups of inter related and mutually dependent groups, persons or bodies to exchange and create value.[30] Virgin Atlantic's attraction to Google Glass and the platform offered by Sabre to airlines are examples of modern marketing tools. Sabre, which delivers travel data to the air transport industry, offers developers 150 Application Programming Interfaces (APIs) and software hooks into core Sabre products. Sabre 2.0, helps in the development of smart applications. Sabre saw an average of 3000 transactions per second using its data in the 1990s and claims: "[T]oday that number has ballooned up to 99,000 transactions per second. All of that data is a fantastic opportunity for useful tools to be created – tools that personalize and contextualize the broader travel experience – buying, planning, searching.

[30] See Moazed and Johnson (2016), p. 5.

Many of these APIs are based around intelligent searching, allowing developers to build applications that offer far more refined and granular search options".[31]

Networks and platforms fit nicely into the value capture model (VCM) propounded by Michael Ryall in the Harvard Business Review, which involves a predictive theory using big data, the game theory as applied to competitors and involves all parties to a transaction.[32] This is where networks and platforms come in, creating a web that weaves the entire fabric of the contract of carriage and potential transactions between the provider and client through simultaneous communications and connectivity. Ryall says: "The VCM framework replaces the firm's value chain with what I call a *value network map*—essentially, a productive social network with linkages defined by actual and potential transactions. The map has two major components… [T]he first is the firm's value network, which comprises the agents (typically, suppliers and customers) who conduct actual, value-creating transactions with the firm. If no opportunities to create value exist beyond the network itself, there is no competition. Competition renders undeniable certain claims on the value produced. Without competition, the parties are left haggling among themselves, each attempting to persuade the others of the value they merit".[33]

Data which gives the travel habits and travel history of customers, their individual travel preferences and other relevant personalized information that can be integrated in a corporate marketing strategy can immensely boost the competitive edge of an airline. Providers like Sabre offer such platforms to airlines, implicitly offering all airlines equality of opportunity to compete. Those who do not use these tools would do so at their own peril.

3.5 Legal Issues

3.5.1 Europe

Equality of opportunity to compete is protected by law, both to protect the consumer and to ensure fairness to the competitors in a market. While monopolies could effectively harm the consumer by degrading the quality of the product; raising prices or simply reducing production or provision, in the context of competition, disingenuous and devious competitors who have dominance in a market can employ various methods to ensure that their competitors do not have an equal opportunity to compete by simply making it impossible for the latter to enter the fray. They could do so by entering into anti-competitive agreements with others; merging with other dominant players; abusing dominant position or distorting the market. The philosophy of the Chicago Conference was that air services should connect the world by being

[31] Kepes (2014).

[32] See Ryall (2013).

[33] *Ibid.*

available to consumers at a reasonable price and offer value for money, all of which should be corollaries of perfect competition. One of the tools that the Chicago Convention employs to ensure this objective is to identify as one of ICAO's aims the prevention of economic waste caused by unreasonable competition.[34]

It is incontrovertible that at the heart of the purpose of perfect competition that ensures equality of opportunity is consumer welfare. This is achieved by making competition deliver two basic products: enhanced consumer welfare and the efficient allocation of resources.[35] The constraints that any undertaking faces is determined by market definition which identifies the product; the undertaking and competitors involved and their commercial practices; and the geographic location of the market. The undertaking includes every entity involved in an economic activity irrespective of the legal status or the manner in which such entity is funded.[36] An airline is deemed to be offering goods and services to the consumer and is by definition engages in an economic activity.[37]

A good analogy that enables one to glean some concepts of anti-competitive conduct that would effectively preclude equality of opportunity of competitors is the Treaty on the Functioning of the European Union (TFEU).[38] Article 101(1) makes all agreements void *ab initio* where all agreements between undertakings, decisions by associations of undertakings; and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market, and in particular those which: directly or indirectly fix purchase or selling prices or any other trading conditions. Also included were: limit or control production, markets, technical development, or investment; share markets or sources of supply; application of dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; and making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts. This provision also appears in Article 85 of the Treaty of Rome[39] which established the European Economic Community in 1957, which later became the European Union.

Abuse of dominant position is covered in Article 102 (which initially appeared in the Treaty of Rome as Article 86) which provides that any abuse by one or more undertakings of a dominant position within the internal market or in a substantial

[34] Chicago Convention, *supra,* note 3, Article 44 (e).

[35] See speech of European Commissioner for Competition Policy Neelie Kroes, SPEECH/05/512, 15 September 2005.

[36] *Hofner & Elser* v. *Macrotron GmbH*, Case C-41/90 [1991] ECR I -1979.

[37] In re. *Pavlov*, Case C-180/98 etc. [2000] ECR I-6451.

[38] Version of the Treaty on the Functioning of the European Union, 2012/C 326/01, Official Journal C 326, 26/10/2012 P. 0001 – 0390, http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12012E/TXT.

[39] The Treaty of Rome, 25 March 1957. See http://ec.europa.eu/archives/emu_history/documents/treaties/rometreaty2.pdf.

part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in: directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions; limiting production, markets or technical development to the prejudice of consumers; applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts. A special responsibility devolves upon enterprises in a dominant position not to let its business conduct distort the market In *Michelin* v. *Commission*[40] it was held that: "the purposes of investigating the possibly dominant position of an undertaking on a given market, the possibilities of competition must be judged in the context of the market comprising the totality of the products which, with respect to their characteristics, are particularly suitable for satisfying constant needs and are only to a limited extent interchangeable with other products. However, it must be noted that the determination of the relevant market is useful in assessing whether the undertaking concerned is in a position to prevent effective competition from being maintained and bemust an appreciable extent independently of its competitors and customers and consumers".[41]

Abuse of dominant position must apply to competitors who are as efficient and who offer a similar product to the market.[42] It has been held that the dominant position relates to a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to bemust an appreciable extent independently of its competitors, its customers and ultimately of consumers.[43] In *Ahmed Saeed Flugreisen and Others* v *Zentrale Zur Bekämpfung Unlauteren Wettbewerbs Ahm*[44]—a case involving price fixing by dominant carriers on a route by the aeronautical authorities concerned—the European Court of Justice held that such an act was an infringement of the provisions in Article 4(3) of the Treaty of the European Union (TEU)[45] and Articles 101 and 102 of the TFEU. The Court upheld the position submitted by the European Commission that: "airlines authorized to serve a route which satisfies those requirements occupy, on that route, a joint dominant position, since price competition is eliminated by the concerted action with regard to tariffs, and other

[40] *Michelin* v. *Commission*, Case 322/81 [1983] ECR 3461.

[41] http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A61981CJ0322.

[42] *Deutsche Telekom AG* v. *Commission*, [2010] ECR 1 000.

[43] see *Hoffmann-La Roche* v *Commission* [1979] Case 85/76 ECR 461, paragraph 38, and Case C-202/07 P and *France Télécom* v *Commission* [2009] ECR I-2369, paragraph 103.

[44] Case 66/86 [1989] ECR 803.

[45] Article 4(3) stipulates that, pursuant to the principle of sincere cooperation, the Union and the Member States are required, in full mutual respect, to assist each other in carrying out tasks which flow from the Treaties (Treaty on European Union and the Treaty on the Functioning of the European Union). The Member States are further required to take any appropriate measure, general or particular, to ensure fulfilment of the obligations arising out of the Treaties or resulting from the acts of the institutions of the Union.

sorts of competition, for example with respect to capacity, frequently suffer the same fate as well under agreements concluded between the airlines".[46]

3.5.2 United States

The Sherman Antitrust Act of 1890 stipulates in Section 1 that every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is illegal. Any person (including corporations and associations existing under or authorized by the laws of either the United States, the laws of any of the Territories, the laws of any State, or the laws of any foreign country who contracts or conspires to restrain trade that is found to be is guilty of a felony, and, on conviction thereof, punishable by fine, not exceeding $10,000,000 if a corporation, or, if any other person, $350,000, or by imprisonment not exceeding 3 years, or by both said punishments, in the discretion of the court seized of the matter. Section 2 is against the monopolization of trade, charging anyone who monopolizes, or attempts to monopolize, or combines or conspires with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, is guilty of a felony, and, on conviction thereof, to be liable to be punished by fine not exceeding $10,000,000 if a corporation, or, if any other person, $350,000, or by imprisonment not exceeding 3 years, or by both said punishments, at the discretion of the court. In the 1945 case of *United States* v. *Aluminium Co. of America*[47] the Court upheld the principle of extra territoriality by saying that any state (in the United states) could legislate for its laws to apply to a foreign person outside its borders against an act committed by that person if such act affected the state concerned. This principle was later clarified by the *Foreign Trade Antitrust Amendment Act 1982* which provides that the Sherman Act would only apply to trade or commerce with foreign nations if an act has a direct, substantial and foreseeable effect on trade and commerce in the United States.[48]

In 1914 the United States Legislature passed the Clayton Act, which essentially prohibits any conduct that restricts trade. It must be noted that the philosophy behind these acts, particularly the Sherman Antitrust Act, as elucidated in the 1911 case of *Standard Oil Co. of New Jersey* v. *United States*,[49] was based on the "then existing practical conception of the law against restraint of trade, and the intent of Congress was not to restrain the right to make and enforce contracts, whether resulting from combinations or otherwise, which do not unduly restrain interstate or foreign commerce, but to protect that commerce from contracts or combinations by methods,

[46] http://eur-lex.europa.eu/resource.html?uri=cellar:0a2ec299-1971-44b3-aca584c88b161aaa.0002.06/DOC_1&format=PDF.

[47] 148 F2d 416 (2nd Cir 1945).

[48] See *Hartford Fire Insurance Co*. v. *California* 509 US 764 (1993).

[49] 221 U.S. 1 (1911).

whether old or new, which would constitute an interference with, or an undue restraint upon, it".[50]

In August 16, 1977, an indictment was returned on Braniff Airways, charging the airline with participation in a combination and conspiracy in restraint of trade and commerce in violation of Section 1 of the Sherman Act, and with participation in combination and conspiracy to monopolize trade and commerce in violation of Section 2 of the Sherman Act. It was claimed that, by this collusion, Braniff intended to impair its competitor—Southwest Airlines—and eliminate it from the market. Braniff alleged that its actions had been within the knowledge of the Civil Aeronautics Board (CAB) and that the CAB had acquisced in the process. The Court rejected this claim—that the CAB had acted inappropriately—and dismissed Braniff's claim. In this context the issue of predatory pricing as an anti-competitive measure comes into focus, particularly in the context of networks which would give carriers much flexibility in adversely affecting their competition. It must be noted that there is a balance of interest—that of competition ethics and giving the customer the optimal deal. In the 1986 case of *Zenith Radio Corp*. v. *Matsushita Electric Industrial Co.*[51] the Supreme Court suggested an approach of caution and compromise, while on the one hand warning against the effect of predatory pricing litigation on procompetitive conduct, and on the other hand imposing on the plaintiff the requirement of showing that the defendant would likely succeed in driving out competition and have the ability to recoup short-run losses after predation.

A case that would have an analogous reference to anti competitive conduct in air transport is *Otter Tail Power C*o. v. *United States*[52] where a power supplier used its ownership of a network (the power lines) to foreclose retail competition. The Court held: "the defendant has a monopoly in the relevant market and has consistently refused to deal with municipalities which desired to establish municipally owned systems on the alleged justification that to do so would impair its position of dominance in selling power at retail to towns in its service area. The court concludes that this conduct is prohibited by the Sherman Act. It is well established that the unilateral refusal to deal with another, motivated by a purpose to preserve a monopoly position, is illegal".[53]

An interesting question arises in the use of networks by enterprises. Applying this example to air transport, could an airline, which bundles the use of various networks and platforms and thereby gains cost advantages as well as sales over other airlines operating in the routes operated, be guilty of anti-competitive conduct under the Sherman Act? Furthermore, could an airline make a sale of its core product conditional upon the customer purchasing a subsidiary but relevant product available in its network or through a platform used by that airline? In *United States* v. *Jerrold Electronics Corp.,*[54] a case involving a tie of maintenance and installation

[50] *Id.* 3.

[51] 475 U.S. 574 (1986).

[52] 331 F. Supp. 54 (1971).

[53] *Id*. 58.

[54] 187 F. Supp. 545 (D.C. Pa. 1960).

services in the sale of television antenna networks where the defendant developed a system whereby a single, large antenna would be installed at a high elevation, and then cables would carry the signal to subscribers below which gave him a distinct advantage over the competitors in the market, and enabled the defendant to connect to many more users and clients than his competitors. This additionally gave him huge cost benefits over them. The court held: "The defendants' sales of community television antenna system equipment upon the condition that the purchaser subscribe to Jerrold engineering services and purchase their full requirements for system equipment from Jerrold, during some of the time sales on such conditions were made, constitute violations of § 1 of the Sherman Act".[55]

Another interesting decision can be seen in the 1992 case of *Eastman Kodak Co*. v. *Image Technical Services, Inc*.,[56] where Kodak claimed that a tie in should be held an infringement of the Sherman Act only if such act was illegal. The Court had to determine whether Kodak's requirement of its customers—that repair services would be carried out by Kodak only if the customer purchased spare parts from Kodak. Kodak anchored its argument—that this requirement was not illegal—on the basis that it did not have a monopoly on copiers. The Supreme court held that the customers had been forced to a no-option aftersales situation that gave Kodak undue power. In *United States* v. *Microsoft Corp.*[57] a similar issue arose. In the mid-1990s the competitor to Microsoft was Netscape which started in 1994 offering its browser called Netscape. Microsoft came a year later with its own browser called Internet Explorer, which was offered at a zero price and pre-installed on all Windows machines. Microsoft owns the Windows operating system—a software program that runs the computer by assigning memory and allotting tasks—along with a number of popular software programs that run on Windows. The government's case against Microsoft was that it was blatantly acting as a monopoly in operating systems, sustaining and advancing that monopoly through illegal exclusive contracts, incompatibilities, and illegal ties that foreclose possible competition from Netscape and Java. Microsoft argued that consumers were not harmed by Microsoft's offer and that they were free to choose between Microsoft and Netscape. Microsoft also denied that it had monopoly over the market. Finally, Microsoft argued that it included Internet Explorer in its operating system for technical functionality and efficiency.

Both the District Court and later the Appeals Court upheld the Government's position, on the basis that Microsoft had retarded competition and implicitly warned competitors of an ominous fate if they competed against it.

The above discussions bring us back to the philosophy of the Chicago Convention 70 years on. We are in the threshold of momentous change and well into the world of networks, platforms and megatrends. In this context "equality of opportunity" to compete is not merely offering safety nets or preferential measures to disadvantaged carriers, but to bring the rest of the under developed world of air transport to the forefront. It is evident that there are strong anti-competitive laws and practices in

[55] http://law.justia.com/cases/federal/district-courts/FSupp/187/545/2095116/.

[56] 504 U.S. 451 (1992).

[57] 87 F. Supp. 2d 30 (2000), 2001 U.S. App. LEXIS 14324 (D.C. Cir. 2001).

place not only in Europe but also in Asia and other parts of the world. The first step is to establish the use to which the modern tools are put by airlines, whether it be economic or technical. The second step is to determine whether such use goes against the principles that have been discussed in this article. The third step is for the three watch dogs—ICAO, IATA (International Air Transport Association) and ACI (Airports Council International) to collectively conduct a study and identify anti-competitive practices in relation to the current situation and legal regime. ICAO could address this issue under its "no country left behind" objective. IATA could address this issue under its mission to represent, lead and serve the airline industry and the simplifying the business programme. ACI could focus on this issue through its aim to keep airports affordable and airline prices stabilized. Interpretation of the Chicago Convention is in the hands of the Council of ICAO and if "equality of opportunity" to compete is in question with any ICAO member State against another, the Council is given the authority under Article 84 of the Convention to decide on any disagreement between two or more contracting States relating to the interpretation or application of the Convention and its Annexes that cannot be settled by negotiation. Any concerned State can apply to the Council. Furthermore, Article 84 provides that any contracting State may, subject to Article 85, appeal from the decision of the Council to an ad hoc arbitral tribunal agreed upon with the other parties to the dispute or to the Permanent Court of International Justice. Any such appeal has to be notified to the Council within 60 days of receipt of notification of the decision of the Council. *A fortiori*, and more compellingly, Article 86 provides that unless the Council decides otherwise, any decision by the Council on whether an international airline is operating in conformity with the provisions of the Convention remains in effect unless reversed on appeal. On any other matter, decisions of the Council shall, if appealed from, be suspended until the appeal is decided. The decisions of the Permanent Court of International Justice and of an arbitral tribunal shall be final and binding. Finally, Article 87 puts the lid on the issue by bringing in the Council strongly. It provides that each contracting State undertakes not to allow the operation of an airline of a contracting State through the airspace above its territory if the Council has decided that the airline concerned is not conforming to a final decision rendered in accordance Article 86.

The first question to be addressed is whether the intent of the letter of invitation to the Chicago Convention calling for the establishment of an international air service "pattern" so that all important trade population areas of the world may obtain the benefits accrued through air transportation already exists and if so what is it. If there is no such pattern what could be done about it.

Notwithstanding the perceived ambivalence of the Convention's provisions on the aims and objectives of ICAO in Article 44, the fact remains that ICAO has to meet the needs of the people of the world for safe, regular economical and efficient air transport. The Council can interpret the meaning and purpose of the Chicago Conference and interpret the Chicago Convention in the current context without being hung up on past constraints on this issue. It should take a more active part in air transport economics and show the "leadership" which both the 6th Air Transport Conference called for and is recognized in ICAO's Strategic Objective on air

transport. The equality of opportunity phrase has been misunderstood and the Chicago Convention has been misquoted at many ICAO conferences on this point and it is time this matter was put to rest.

3.6 Open Skies the Theory of Contracts

The spat between the three United States carriers—American, Delta and United Airlines on the one hand and the carriers of the United Arab Emirates on the other—where the former accused the latter of unfair practices buffered by State aid and allegedly practiced under an open skies agreement between the US and UAE brought to bear a global inquiry on whether an open skies agreement which gave unlimited rights on market access could result in the erosion of the "fair and equal opportunity" to compete embodied in the Chicago Convention. The US carriers alleged that the UAE carriers received zero interest loans from the UAE government with no arrangements for repayment; grants of land which could be regarded as subsidies; development of massive airports, built and paid by the State, and very cheap rent facilities and landing charges; low labor rates because the home State bans unions; and low personal and corporate tax rates to promote the growth of business.[58] The UAE carriers counted that they had not received subsidies and were not operating into and out of the United States with under cut pricing and therefore were within their rights under the agreement. The 2016 award of the Nobel Prize in economics to two economists for their Theory of Contracts highlights the significance of the theory in its application to open skies agreements which this article analyses in some detail.

In October 2016, The Nobel Committee decided to award the Sveriges Riksbank Prize in Economic Sciences for 2016 to Oliver Hart of Harvard University and Bengt Holmström of Massachusetts Institute of Technology for their contributions to contract theory, through which the two prize winners gave an insight into real-life contracts and institutions, as well as potential pitfalls in contract design. The Theory addresses conflict of interest between the parties through a comprehensive framework for analysing many diverse issues in contractual design. The genesis of contributions in this area lies in a paper presented in 1985 by Hart and Holmström titled "*The Theory of Contracts*" at the World Congress of the Economic Society, Cambridge, Massachusetts—the revised version of which was published in August 1986.[59] In the paper, the authors subsume the main feature of the Theory of Contract as follows:

[58] See generally, Cline (2016), p. 529.

[59] Hart and Holmström (2016), https://dspace.mit.edu/bitstream/handle/1721.1/64265/theoryofcontract00hart.pdf%3Bjsessionid%3DD2F89D14123801EBB5A616B328AB8CFC?sequence%3D1. See also Hart and Holmström (2016).

> The design of a Pareto optimal contract[60] proceeds by maximizing one Party's expected utility subject to the other Party (or parties) receiving a minimum (reservation) expected utility level. Which Party's utility level is taken as a constraint does not matter usually, because most analyses are partial equilibrium. When there is perfect competition ex ante, this reservation utility can be interpreted as that Party's date zero opportunity cost determined in the date zero market for contracts. When ex ante competition is imperfect, the parties will presumably bargain over the ex ante surplus from the relationship and so the reservation expected utility levels become endogenous.[61]

The authors addressed the above principle with regard to the question of economic credibility of a contract in three scenarios: Judicial; qualitative and aggregate features of a contract; and the penalties for breach of contract as related to indirect costs that would affect equilibrium conduct by the parties. With regard to the judicial approach—allowing the courts to decide on the merits and demerits of a contract based on penalties—determinations of the judiciary were not always found to be consistent, as a judicial approach would not take into account how costly or costless the implementation of a contract or portion thereof would be. In other words, the economic throwback of a contract that would be grounded on the equitable nature of a contract would not enter a process of adjudication. With regard to the second option—the primacy of qualitative and aggregate feature of the contract—the authors argue that this option is practical for the equilibrium of the contract to be maintained rather than the first option which was entirely predicated on the terms of the contract. The third approach—which is preferred over the other two approaches mentioned—is based on a combination of the two approaches and is predicated upon reputational concerns.

The Pareto optimal contract and the three options discussed above fit in well in an analysis of the Theory of Contracts as it applies to the open skies agreements entered into by States today. Simply put, an open skies agreement is a bilateral or multilateral reciprocal agreement between States which admits of untrammelled and unrestricted air transport to and from the parties to such a contract. It could even be a one sided permission where a State would open its skies to any national carrier without necessarily seeking reciprocity. The open skies practice would bring to bear the need to consider the combination of judicial penalties and costliness of the operation of air services in two situations: whether there is a breach of contract that necessitates adjudication and penalties; and whether one Party to the contract reduces costs of an operation with anti-competitive practices.

Open skies agreements are entered into by States with a view to circumventing an obstacle to air transport services contained in Article 6 of the Convention on International Civil Aviation (Chicago Convention)[62] which provides that no scheduled international air service may be operated over or into the territory of a

[60] A contract where resources are allocated with optimal efficiency, ensuring that a reallocation of such resources cannot be done where one Party's situation is improved and another Party's situation is made worse.

[61] Hart and Holmström (2016), p. 5.

[62] Convention on International Civil Aviation signed at Chicago on 7 December 1944. See ICAO doc. 7300/9 Ninth Edition; 2006.

contracting State, except with the special permission or other authorization of that State, and in accordance with the terms of such permission or authorization. Opening skies, with a view to obviating governmental interference restricting air transport operations, is a common practice in the commercial air transport world today (The United States has signed more than a hundred open skies agreements) and it mostly serves as a progressive measure towards ensuring liberalization of air transport. At the heart of the issue would be whether an open skies agreement can be carved out in conformity with the basic theory of contracts to be consistent with the Pareto optimal contract.

One of the key drivers of the Theory of Contract is equilibrium of the contract which, in air transport terms, is the equality of opportunity to compete with one another.[63] The equilibrium of the contract in the Theory of Contract does not always mean that both parties should have an absolutely equal share of results. However, if there is an imbalance and an imperfect competition process, the parties can bargain over the ex ante surplus from the relationship and so the reservation expected utility levels become endogenous based on the resources growing from within. The first consideration in this equation in the context of open skies is the nature and current state of competition.

3.7 Competition in Air Transport

The strongest thrust of globalization in the business world is its ability to generate competition within and between nations to offer the best goods and services at the lowest prices. The quality of services and pricing in China as an off-shore base have encouraged other nations, such as Indonesia, Malaysia, Thailand, Ireland, Vietnam, Brazil and Mexico to vigorously compete as viable off-shore bases. Commercially, if this view applies to the industrial world in general, there is no reason it should not apply to air transport. Niall Ferguson, Professor of Business Administration at Harvard University draws the interesting parallel of Marco Polo's visit to China in the 1270s when he was impressed by the volume of traffic in the Yangzi. Polo observed that the quantity of merchandize carried up and down made the Yangzi looked like a sea rather than a river. In comparison to this Ferguson argues that the Thames in the early fifteenth century was the back water. Ferguson goes on to suggest that one of the reasons for the success of European States in the sixteenth Century onwards was its opening out to commerce and competition.[64]

[63] The Preamble to the Chicago Convention states *inter alia* that, the governments which signed the Convention agreed on certain principles and arrangements in order that international civil aviation may be developed in a safe and orderly manner and that international air transport services may be established on the basis of equality of opportunity and operated soundly and economically;

[64] It was Adam Smith who said: "a country which neglects or distrusts foreign commerce, and which admits the vessels of foreign nations into one or two of its ports only, cannot transact the same quality of business which it might do with different laws and institutions" Adam Smith, *The Wealth of Nations*, (1776) cited in Ferguson (2011), p. 19.

China seemingly underwent, in the 1980s through the 1990s a similar experience to that of Europe with a radical change in the advancement of competition which was spontaneous and speedily executed. The change came in transferring agricultural property from communes to households. Jeffrey Sachs, an internally renowned economic advisor to many countries says this of his experience with China:

> There was nothing gradual about this change. Around seven hundred million individuals in farm household were suddenly farming on plots assigned to the household rather than to the commune. This new household responsibility gave massive incentives to individual farmers to work harder, apply inputs with more care, and to obtain higher yields.[65]

At the Chicago Conference several States—seemingly in line with an approach reminiscent of the transformation of China—proposed a multilateral authority that would establish global principles on commercial air transport where air transport could be open to everyone, foreigners and locals alike. There was opposition to this proposal by States who recognized that they held a position of power and negotiatory advantage in the dispensation of air traffic rights. Historian David MacKenzie records that the Canadian Representative to the Chicago Conference Herbert Symington, on his return to Canada from Chicago wrote to Sir Arthur Street, the permanent under-secretary in the Air Ministry saying that he (Symington) was:

> [A]pprehensive that the international authority was not going to amount to anything much unless we can get a regulatory convention fairly soon.[66]

There was considerable support for this concept in Chicago. The United Kingdom contended:

> While recognizing national interests we want to encourage enterprise and efficiency which are indeed themselves a national as well as an international interest. And we want therefore to encourage the efficient and to stimulate the less efficient...only by common action on some such lines as indicated can we reduce and gradually eliminate subsidies, thereby putting civil aviation on an economic footing and incidentally very considerably relieving the tax payer. Unrestricted competition is their most fruitful soil.[67]

The United Kingdom seems to have adopted a balanced approach that supported the establishment of air services to serve the needs of the travelling public, while not unduly affecting the rights of States to have a fair share of traffic for themselves.

India, while believing that it was essential for air services to develop rationally with a certain degree of freedom of the air being the inherent right of every State, went on to say:

> We believe that the grant of commercial rights – that is to say, the right to carry traffic to and from another country, - is best negotiated and agreed to on a universal reciprocal basis, rather than by bilateral agreements. We think that only such an arrangement will secure to all countries the reciprocal rights which their interests require. But the grant of any such freedoms and rights must, in our opinion, necessarily be associated with the constitution of

---

[65] Sachs (2005), p. 160.

[66] MacKenzie (1989), p. 226.

[67] See *Proceedings of the International Civil Aviation Conference*, Chicago, Illinois, November 1–December 7, 1944 United States Government Printing Office: Washington, 1948 at 65.

> an authority which will regulate the use of such freedoms. It will be the function of such authority…to ensure that the interests of the people, both of the most powerful and of the smaller countries, are secured.[68]

India's position therefore has been to recommend a liberal approach of universal reciprocity within the parameters of control by an authority which could ensure that the smaller nations were protected from being swamped by larger States.

It is important to note that the economic significance of the Chicago Convention lies entirely in its main theme—of meeting the needs of the peoples of the world for economical air transport, whilst preventing waste through unfair competition and providing for a fair opportunity for all States concerned to operate air services. In order to accomplish this goal, the Convention, through the International Civil Aviation Organization (ICAO), has to consider all aspects of economic implications that the operation of international air services by commercial air transport enterprises of the world, particularly those of the member States of ICAO, pose.

In August 1945, at the first meeting of the Opening Session of the Interim Council of the Provisional International Civil Aviation Organization (PICAO), the Hon. C.D. Howe, Minister of Reconstruction, Canada said:

> We (Canada) believe that there must be greater freedom for development of international air transport and that this freedom may best be obtained within a framework which provides equality of opportunity and rewards for efficiency.[69]

Dr. Edward Warner, Representative of the United States of America (later the first President of the ICAO Council) said at the same meeting:

> Our first purpose will be to smooth the paths for civil flying wherever we are able. We shall seek to make it physically easier, safer, more reliable, more pleasant; but I believe it will be agreed also that we should maintain the constant goal that civil aviation should contribute to international harmony. The civil use of aircraft must so develop as to bring the peoples closer together, letting nation speak more understandingly unto nation.[70]

Dr. Warner had notably stressed on the purpose of civil aviation to be the promotion of international harmony and dialogue between nations. He had also made it clear that the seminal task of civil aviation is to bring the people of the world together through understanding and interaction. It is clear that at this stage at least, civil aviation was recognised more as a social necessity rather than a mere economic factor. In addition, through the statements of Minister Howe and Dr. Warner, one can glean the attitude of the international community towards aviation at that time:

(a) that civil aviation was based on equality of opportunity: and,
(b) that it was a social need rather than a fiscal tool.

The above notwithstanding, the American approach at the Conference to market access, particularly in terms of air traffic rights, is embodied in the statement of

---

[68] *Id*. 76.

[69] *PICAO Documents*, Montreal, 1945, Volume 1, Doc 1, at 3.

[70] *Id*. Doc 2, at 2.

Adolf Berle, the Assistant Secretary at that time in the State Department when he said:

> I feel that aviation will have a great influence on American foreign interests and American foreign policy than any other non-political consideration…it may well be determinative in certain territorial matters which must do with American defence, as well as with transportation matters affecting American commerce, in a degree comparable to that which sea power has had on our interests and policy.[71]

This certainly goes above and beyond using air transport as a social need on the basis of equality of opportunity.

The First Interim Assembly of PICAO was held in May 1946. This Session set the scene for identifying issues that had culminated in the provisions of the Chicago Convention. In the period that followed the First Interim Assembly Session, PICAO commissioned a group of experts called Commission 3 to draft a multilateral agreement on commercial rights for aircraft, which culminated in a Draft Multilateral Agreement on Commercial Rights. The Draft Agreement contained three basic elements:

1. a grant of the right to operate commercially to a reasonable number of traffic centres serving as conveniently as is practicable each State's international traffic;
2. a basic regulatory provision dealing with the amount of capacity to be provided, with subsidiary provisions designed to prevent abuses; and,
3. a provision for the settlement of differences between contracting States through arbitral tribunals with power to render binding decisions.[72]

3.8 Theory of Contract Law

The problem with contract law is that it is neither descriptive nor normative in that it neither explains what it is in terms of its norms nor does it explain what contract law should be. When this ambivalent and dubious characteristic is translated into the intentions of the forefathers of the Chicago Convention—of connecting the world and ensuring fair and equal opportunity in competition—the law can only determine the legitimacy of actions of parties to the contract and cannot determine or facilitate the interests of the parties in terms of maximising gains. Therefore, in the instance of an open skies agreement which merely speaks to liberalization of air transport and certain caveats the theory of contract law is relegated to the background. On the other hand, the Theory of Contracts would provide for maximising the gains of parties and is amply suited to drive the liberalization process through an open skies agreement. The weaknesses in contract law when it comes to

[71] Mackenzie (2010), p. 3.

[72] *Views of Commission No 3*, *Doc 4023*, A-1 - P/3, 1/4/47. See also *C-WP/369*, 22/6/49 for a detailed discussion on the Commission's work on the Agreement.

competition in air transport is that the law cannot adequately address the adverse consequences of an airline's activity if it goes bankrupt as the original intent of an open skies policy would be joint gain between the parties. Secondly, contract law is parochial in that it would only address the terms of a contract and not externalities that emerge from the implementation of a contract such as environmental damage which is contrary to principles of justice and equity. Finally, the law would not take into account efficiency of implementation of an open skies agreement.

3.8.1 Theories of Competition

There are three theories that are applicable to competition in air transport that would go towards helping carriers compete with each other. Jordan Ellenberg, a professor of mathematics at the University of Wisconsin-Madison, in his book *How Not to Be Wrong*[73] explains how one can go wrong if one does not follow mathematical logic in the reasoning and decision making process. The book is about the proper use of probability and statistics and how to reject counterintuitive precincts of mathematical thinking. This approach would apply almost to any discipline or practice, from running a business to politics.

There are seemingly three theories that lend themselves to the logic behind success at a business. One is the *Probability Theory*. *Encyclopaedia Britannica* identifies the Probability Theory as: "a branch of mathematics concerned with the analysis of random phenomena. The outcome of a random event cannot be determined before it occurs, but it may be any one of several possible outcomes. The actual outcome is considered to be determined by chance".[74]

The second theory is the *Game Theory*, which is a philosophy drawn on the discipline of applied mathematics that could be applied to politics and economics. *Investopedia* defines the Game Theory as: "the process of modeling the strategic interaction between two or more players in a situation containing set rules and outcomes".[75] The Game Theory—a quantum theory on anticipatory intelligence—is about maximising returns based on the strategic decisions to be made by contestants at economics, trade or politics. In air transport, the theory would help analyze interactions of carriers and strategies between them, thus enabling the airlines competing with each other to study strategic interactions between them. The outcome is a formal modelling approach to economic situations in which decision makers interact with other decision makers.

The third theory is called *Disruptive Innovation*, a business concept which is an innovation that helps create a new market and value network that disrupts the existing market. The theory of disruptive innovation was first coined by Harvard professor Clayton M. Christensen in his research on the disk-drive industry and later

[73] Ellenberg (2014).

[74] http://www.britannica.com/EBchecked/topic/477530/probability-theory.

[75] http://www.investopedia.com/terms/g/gametheory.asp.

popularized by his book *The Innovator's Dilemma*, published in 1997. Examples of disruptive innovation abound in the commercial world. For instance, Wikipedia disrupted the market established for more than 200 years by *Encyclopedia Britannica*. The *IPhone* disrupted the market of the desktop computer and the laptop computer. A good example in the air transport industry which replaced legacy carriers in certain segments and routes, purely by the use of a new product that was more cost effective and efficient, is the low cost carrier that appealed to a new tourist market.

As for the *Game Theory*, the carriers which consider themselves displaced could well apply their anticipatory intelligence to their opponents. The opposition could also do likewise in anticipating and countering the strategies of its opponent. However, most importantly, disruptive innovation could play its part with a new tool that introduces an "economic market" with a new value network and cluster that could disrupt a repetitive economic environment that deprives the public of its needs for connectivity.

3.8.2 Defragmentation of Air Transport

The fragmentation and "divide and rule" in air transport economics must go, even if it means political and military sacrifices of the United States and the rest of the Atlantic States. This would mean relaxation of national interests and foreign ownership and control restrictions on airlines as well as ensuring the best interests of the consumer of air transport. Aviation should be truly globally shared, with other partners, particularly at a regional level, getting together with the so called world powers and devising a universally applicable market economy for air transport. As one commentator aptly puts it:

> The liberalization of markets, the construction of a globalized economy and the spread of prosperity are defining legacies of the era of Western primacy. The fundamentals of this order are firmly in place, anchored by institutions like the World Bank and the World Trade Organization. But the maintenance of this order faces significant challenges. Due to the West's political and economic troubles, the Atlantic democracies may no longer be up to minding the store. The United States already seems to have lost its traditional enthusiasm for being the engine behind the global liberalization of trade.[76]

Someone must take over minding the store, and no State has structured and developed air transport as a vertically integrated public utility that is privatized and open to market forces. China is going to be the biggest economy in the world in the years to come. Just as an example, when this equation is applied to aviation one sees a phenomenal trend in China. More than two thirds of the world's new airports are being constructed in China and it is expected that Chinese airlines will triple in fleet size over the next decade, generating phenomenal sales for the world's major aircraft manufacturers—particularly Boeing and Airbus. Better still, China aims to have its own aircraft manufacturers by that time. Of Chinas five-year plan—expiring

[76] Kupchan (2012), p. 198.

in 2017—one commentator, who has researched China's aviation dreams thoroughly, has said:

> The twelfth five-year plan, the one that included aerospace as a strategic industry, wouldn't officially begin until later in the year (2011) but at the start of 2011 the steps toward China's ambitious future in the skies kept coming…they paralleled the leaps the country had previously made in electronics, automobiles and many other fields, and the operative principle did seem to be "everything is about to take off" all at once.[77]

In 1950, the western world had 20% of the global population. Now it has only 10%. If China were to be divided into countries along the lines of the European Union in terms of population spread, it would have 99 countries. However, China has to be vigilant and guard against a possible collapse in the future of its "growth targets" in its massive growth impetus that sees what some call "phantom cities and towns" being developed and make sure its managed growth can accommodate this initiative.

The key decisions to be made over the next 20 years are going to be made in the East and not in the West. The rest is going to be stronger than the West in the years to come. There will be a shift in thinking on many issues including the economic future of air transport—one of the most powerful drivers of the world economy. It will be only a matter of time before market economies of the East dominate the world and global consensus on applicable principles on competition are put in place. The time has come.

3.9 Application of the Theory of Contracts to Competition Under Open Skies

The concept of open skies in air transport brings to bear an implicit contract of free competition between the parties—in other words a free for all—which would ineluctably bring in the Pareto Optimal contract model where, when the model is tied in with the Preamble to the Chicago Convention, the parties must be able to operate air services between their territories with equality of opportunity to compete and therefore maintain equilibrium of the profits derived from the contract. The slightest change of these circumstances would bring in indigenous factors such as State aid and subsidies as well as other natural and imposed factors of competitive advantage to one Party over the other.

Competition among air carriers that is based on an open skies agreement are not usually enforced and adjudicated by courts and is therefore reliant upon good faith, practice or custom and reputation. This makes matters more nuanced than in instances where an adjudicatory body could pronounce upon breach of contract for non-observance of a fundamental term by a contracting Party. This is where the Theory of Contract—which, apart from starting from formal obligations—adds on

[77] Fallows (2012), p. 32.

a design of formal and informal agreements that impel those with conflicting interests to adopt mutually beneficial measures. In other words, the Theory of Contracts provides a workable base for parties to compromise effectively together with mutually agreed upon motivations and incentives.

One could argue that the Theory of Contract would stretch the "equality of opportunity" to compete that is contained in the Chicago Convention by adding a new dimension of mutual cooperation to fill in the gaps caused by asymmetry through a flexing of endogenous resources that might benefit one Party to the detriment of another. In other words, an open skies agreement—or any other agreement for that matter—cannot be expected to be comprehensive in all aspects and to cover all exigencies of commercial significance. Therefore, when there is a disturbance of equilibrium in the implementation of an open skies agreement, it should be redesigned by the parties to offer each other mutual benefits through compromises. In the least it should be interpreted to achieve symmetry through concessions and mutually beneficial interpretations of the agreement.

3.10 Anatomy of an Open Skies Agreement

3.10.1 Key Provisions

A typical open skies agreement is signed by and between the aeronautical authorities of the parties concerned—whether bilateral or multilateral—and each Party confers on the other Party's airlines: the right to fly across its territory without landing; the right to make stops in its territory for non-traffic purposes; and the right to operate international air transportation services between points on specified routes and any other rights stipulated in the agreement. Parties may operate flights in either or both directions and combine different flight numbers within one aircraft operation. The singularly important provision, which makes the open skies agreement deviate from the typical bilateral (or multilateral) air services agreement which imposes restrictions on the uplift and discharge passengers freight and mail from a grantor State is that the former grants the airline of the other Party the right to serve behind, intermediate, and beyond points and points in the territories of the Parties in any combination and in any order (e.g. under the United States/United Arab Emirate open skies agreement Emirates can carry passengers from India, through to Dubai and London into New York with full rights); omit stops at any point or points; transfer traffic from any of its aircraft to any of its other aircraft at any point; serve points behind any point in its territory with or without change of aircraft or flight number and hold out and advertise such services to the public as through services; make stopovers at any points whether within or outside the territory of either Party; carry transit traffic through the other Party's territory; and combine traffic on the same aircraft regardless of where such traffic originates without any geographic or directional constrains or imposed requirements. Usually an open skies agreement

ineluctably requires that such operations pass through the home base of the airline. In other words, a carrier cannot exercise seventh freedom[78] traffic.

An open skies agreement usually prohibits *cabotage* traffic.[79] However, on any city pair or segments of the routes, as stipulated in the agreement, any airline of a Party may usually operate international air transportation services without any limitation as to change, at any point on the route, in type or number of aircraft operated, provided that, [with the exception of all-cargo services,] in the outbound direction, the transportation beyond such point is a continuation of the transportation from the homeland of the airline and, in the inbound direction, the transportation to the homeland of the airline is a continuation of the transportation from beyond such point.

A typical open skies agreement would also have a provision to the effect that the airlines of each Party will have the right to establish offices in the territory of the other Party for the promotion and sale of air transportation and be entitled, in accordance with the laws and regulations of the other Party relating to entry, residence, and employment, to bring in and maintain in the territory of the other Party managerial, sales, technical, operational, and other specialist staff required for the provision of air transportation.

Each airline would also have the right to perform its own ground-handling in the territory of the other Party ("self-handling") or, at the airline's option, select among competing agents for such services in whole or in part. The rights would be subject only to physical constraints resulting from considerations of airport safety. Where such considerations preclude self-handling, ground services would be available on an equal basis to all airlines; charges would be based on the costs of services provided; and such services would be comparable to the kind and quality of services as if self-handling were possible.

Another provision often found in open skies agreements is that an airline of a Party may engage in the sale of air transportation in the territory of the other Party directly and, at the airline's discretion, through its agents, except as may be specifically provided by the charter regulations of the country in which the charter originates. Each airline would have the right to sell such transportation, and any person would be free to purchase such transportation, in the currency of that territory or in freely convertible currencies. The airlines of each Party would be permitted to pay for local expenses, including purchases of fuel, in the territory of the other Party in local currency. At their discretion, the airlines of each Party may pay for such expenses in the territory of the other Party in freely convertible currencies according to local currency regulation.

---

[78] The right or privilege, in respect of scheduled international air services, granted by one State to another State, of transporting traffic between the territory of the granting State and any third State with no requirement to include on such operation any point in the territory of the recipient State, *i.e.* the service need not connect to or be an extension of any service to/from the home State of the carrier.

[79] Traffic between two points in the territory of the granting State on a service which originates or terminates in the home country of the foreign carrier.

In operating or holding out the authorized services under the Agreement, any airline of one Party may enter into cooperative marketing arrangements such as blocked-space, code-sharing, or leasing arrangements, with an airline or airlines of either Party; an airline or airlines of a third country provided that all participants in such arrangements hold the appropriate authority and meet the requirements normally applied to such arrangements.

3.10.2 Meaning and Purpose of Open Skies

An open skies agreement is calculated to increase competition among carriers by increased efficiency and cost reduction, thereby bringing down market prices with the ultimate objective of giving the customer increased availability of air transport services at reasonable prices and value for money.[80] In many instances such agreements increase the number of airlines in a given route or market operating in liberalized market conditions. Under open skies agreements, airlines have more flexibility to restructure their fleets and schedules and engage in code share agreements with other carriers to optimise revenues and operations. A corollary would be the increase in the number of routes and number of flights between points, and increasing connectivity. Liberalization under open skies brings in cost reduction and effective gains for carriers. One commentator has categorically stated that the trend towards a very liberal open skies international regime is unstoppable,[81] which implicitly gives the industry the assurance that the problem would solve itself in the years to come. Others have vigorously advocated that, as a panacea to the problem of rigid regulation, market access in air transport should be in the domain of a liberalized international regime. While the former view cannot be disputed, the latter approach brings to bear the compelling need to address the issue squarely, both in terms of whether the desirable approach would be to bring the industry from the current bilateral structure of air services negotiations into a more generalized regime and if so, what the modalities of such an exercise might entail. As to the former, it is largely a matter of political will. The latter would need some discussion on the legalities involved.

Although admittedly some States are giving effect to the liberalization of air transport by entering into open skies agreements with each other (nationally and regionally), it must be noted that reciprocal open skies policies are only cosmetically liberal, as they are almost always carefully crafted with every consideration

[80] "A study released in May by the Brookings Institution found U.S. travelers already save an average of $4 billion per year because of Open Skies agreements—including those that have allowed the Middle East carriers to offer so many new flights to the U.S. The researchers estimated travelers could save an additional $4 billion annually if the U.S. reaches new deals with more countries, including those with a "significant amount of U.S. international passenger traffic." One such destination? China, where treaties still limit the number of flights between the nations". See Sumers (2015).

[81] Doganis (2001), p. 11.

being given to protecting one's interests while at the same time taking care not to jeopardize such interests through open, untrammelled competition. One way to approach this issue might be, again with the political will of States, to revise Article 6 of the Chicago Convention, from its negative position to a positive one, where the provision could permit airlines of States to freely operate air services into the territories of each other, subject to the requirement that States whose airlines are seeking to operate services should convince the State which agrees for such operation that such services would benefit all concerned, including the consumer, while at the same time giving the latter the right to refuse if there is no convincing for such operations. This would not only preserve the bilateral element as a last resort, but would also encourage competition and, above all, bring some universality to the concept of liberalization which is much vaunted but rarely put in practice.

As already stated, an open skies agreement usually does not represent a complete agreement and therefore may result in asymmetry of gains for one Party or another. Often when a dispute under an open skies agreement arises, the solution sought is political and therefore various other factors of economic relevance come into focus, leaving an aggrieved Party no recourse to ensuring of fair and equal opportunity to compete.[82] The law offers only *stricto sensu* application of the contractual terms which does not help in ensuring the objectives of the Pareto optimal agreement.[83] The Theory of Contracts brings in the psychological and sociological factors of a contract that could provide an equitable base and an alignment of conflicting interests for open and untrammelled competition under an open skies agreement. A classic example offered by the Theory of Contract is the principal-agent relationship where the principal has no control over the agent's commercial management of a contract that could adversely affect the other party to the contract. Here, analogically, the government is the principal and the airline would be the agent. This can be directly applied to the open skies situation where the government of a State signs an open skies agreement with another government but the agreement is implemented by the airlines which have a position analogous to that of an agent. The principle propounded by the Theory of Contract in this case is called *paying for performance* where an airline unduly benefitting from a legal but asymmetrical practice could be held accountable to the government. Enforcement of an open skies agreement is the responsibility of a State Party which has to monitor investments relating thereto and the effects of such agreement on all parties to the agreement.[84]

The air transport industry is large—accounting for almost 1% of the GDP of the United States and Europe[85]—and also capital intensive and complex. In most developed States, control over fares, capacity and market access which were originally under the purview of States have been given over to their national carriers, which devolves upon those States increasing responsibility to ensure that their carriers do not unfairly affect their competitors. The ICAO Model Bilateral Air Services

[82] Abeyratne (2016), pp. 191–206.

[83] Supra, note 3.

[84] Schwartz and Scott (2003), p. 19.

[85] Button (2008), p. 8.

Agreement (BASA) recommends that the Parties should inform each other about their competition laws, policies and practices or changes thereto, and any particular objectives thereof, which could affect the operation of air transport services, while identifying the authorities responsible for their implementation. BASA also recommends that the Parties to the agreement should, to the extent permitted under their own laws and regulations, assist each other's airlines by providing guidance as to the compatibility of any proposed airline practice with their competition laws, policies and practices. A sociological approach to the open skies concept, as contained in the theory of Contracts could address any imperfections of implementation of an open skies agreement where the parties could bargain over the ex ante surplus from the relationship so that the expected utility levels could be resolved through endogenous factors.

3.11 Subsidies in Air Transport

A subsidy, which has been a contentious issue in international trade, is defined by the Agreement on Subsidies and Countervailing Measures ("SCM Agreement") of the World Trade Organization (WTO)[86] as the conferring of a benefit by way of a financial contribution by the government or any public body.[87] This would include the transfer of funds, such as grants, loans, equity infusion and potential transfer of loan guarantees; forgone government revenue, such as tax credits or any other form of fiscal incentives; government provided goods and services excluding infrastructure or purchases of goods; government sponsored payments to a funding mechanism, or if a government entrusts or directs private bodies to carry out the same functions and practices mentioned in the above three categories; and any form of income or price support. The SCM Agreement, which only applies to goods, does not address nor does it define a subsidy in air transport.

In general terms a subsidy can take many forms and is therefore amorphous in nature. Alan Sykes[88] says that a subsidy is a synonym for government transfer of money to an entity in the private sector and it could also mean the provision of a service or product at a price below its marked price that the entity receiving the subsidy would usually must pay for it. In other instances, subsidies could even mean

[86] The World Trade Organization (WTO) headquartered in Geneva, is the only global international organization dealing with the rules of trade between nations. At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. The goal is to help producers of goods and services, exporters, and importers conduct their business. The WTO is run by its member governments. All major decisions are made by the membership as a whole, either by ministers (who usually meet at least once every 2 years) or by their ambassadors or delegates (who meet regularly in Geneva). WTO has a Dispute Settlement Body which compellingly pronounces on trade disputes including those related to subsidies. See Abeyratne (1997), p. 397.

[87] See https://www.wto.org/english/tratop_e/scm_e/subs_e.htm.

[88] Sykes (2003), pp. 2–3.

governmental policy that act to the advantage of entities in other commercial practices. Overall, however, all the above measures may not mean that they for subsidies at all.[89]

To make matters worse, there is no mention of a subsidy in the Convention on International Civil Aviation (Chicago Convention)[90] which is the preeminent multilateral international treaty containing principles of conduct of States in international aviation. A remote and indirect reference is found in the Preamble to the Convention which provides that the signatory States agree on certain principles and arrangements in order that international civil aviation may be developed in a safe and orderly manner and that international air transport services may be established on the basis of equality of opportunity and operated soundly and economically. One could take it that "equality of opportunity" would encompass the rejection of iniquitous use of subsidies by States to give their national carriers an undue advantage over their competitors. Slightly more to the point, Article 44 (f) of The Convention has, as one of ICAO[91]'s aims and objectives to foster the planning and development of air transport, by insuring that the rights of contracting States are fully respected and that every contracting State has a fair opportunity to operate international airlines. One way of ensuring that this objective is reached is found in Article 54 (i) of the Chicago Convention which imposes on the Council of ICAO the mandatory duty and obligation of requesting, collecting, examining and publishing information of international air services, including information about the costs of operation and particulars of subsidies paid to airlines from public funds. According to one commentator, there is no evidence of the Council having published information pertaining to subsidies as required in Article 54 (i).[92]

It is interesting to note that Tim Clark, President, Emirates has said that a common set of transparent financial reporting metrics to measure and apply against all international carriers should be determined by IATA and ICAO on what defines a subsidy. One can certainly agree with this proposition as, if the ICAO Council met

---

[89] *Ibid.*

[90] Convention on International Civil Aviation, signed at Chicago on 7 December 1944. See Doc 7300/9 Ninth Edition:2006.

[91] The formation and purpose of The International Civil Aviation Organization (ICAO) is given in the Proceedings of the International Civil Aviation Conference (Chicago, Illinois, November1–December 7, 1944) as follows:

> On November 1944, representatives of 52 nations came together at Chicago, to create a framework for the growth anticipated in world civil aviation. The Convention on International Civil Aviation, also known as the Chicago Convention, provided the establishment of the International Civil Aviation Organization (ICAO) - an international body to guide and regulate international civil aviation. ICAO came into existence on 4 April 1947, after 26 states had ratified the convention. Between 1944 and 1947 a provisional organization (PICAO) operated, the purpose of which was to be of a technical and advisory nature of sovereign States for the purpose of collaboration in the field of international civil aviation and to lay down the foundation for a new international organization to be headquartered in Montreal, Canada. Today, ICAO has 191 member States.

[92] Milde (2008), p. 153.

its obligation of carrying out its mandatory duty imposed upon it by Article 54 (i), the natural corollary would have been for the Council to firstly define what a subsidy was (not merely give examples of subsidies in its guidance material) and its many forms and seek to establish at least a code of conduct with defined rules of conduct that would erode the Preambular concept of the Chicago Convention (as well as subsequent provisions already mentioned) of equality of opportunity for all carriers. Furthermore, in pursuance of Article 54 (i) the Council can require States to report finance assistance given to their carriers for purposes of publication. States should be encouraged to use the dispute resolution provisions[93] of ICAO to come before the Council for its decision where restrictive subsidies granted by other States to their carriers adversely affect the carriers of the complaining State.

The ICAO *Manual on The Regulation of International Air Transport* recognizes that State aids/subsidies to air carriers by governments have existed since the beginning of commercial air transport and that they have been provided at all stages of national or aviation development and have taken a wide variety of forms[94] and goes on to say that "State aids/subsidies which confer financial benefits on national air carriers that are not available to competitors in the same international markets could distort trade in international air services and can constitute or support unfair competitive practices".[95] Some of the undesirable subsidies identified in the ICAO Manual as distorting competition are: the provision of State funds for the purposes of covering operating losses, avoiding insolvency, financing of restructuring or expansion; partial or full cancellation of air carrier debt to the government; the guarantee of loans; the giving of "soft" loans (i.e. at below-market rates of interest or with insufficient collateral); and the assumption of air carrier debt owed to other parties.

The Manual also identifies indirect subsidies that may affect fair and equal competition: preferential tax treatment; funding of unemployment benefits to national air carrier workers whose services are declared redundant; measures in bankruptcy laws which, after a declaration of insolvency, grant legal relief from certain financial obligations for extended periods in order to permit the air carrier to continue operations while attempting to reorganize; and cross-subsidization measures, for example, charging higher airport fees for international than domestic flights, thereby

[93] Article 84 of The Chicago Convention provides that if any disagreement between two or more contracting States relating to the interpretation or application of the Convention and its Annexes cannot be settled by negotiation, The Council can and indeed shall decide on the issue on the application of any State concerned in the disagreement. No member of the Council is entitled to vote in the consideration by the Council of any dispute to which it is a party. Any contracting State has the option of subject to Article 85, appealing from the decision of the Council to an ad hoc arbitral tribunal agreed upon with the other parties to the dispute or to the Permanent Court of International Justice. Within 60 days of receipt of notification of the decision of the Council, an appeal will be notified to the Council. Article 85 provides for an arbitration process if the Article 84 process fails to bring about resolution to the issue under dispute.

[94] Manual on The Regulation of International Air Transport, Effects of State Aids and Subsidies, *Doc 9626*, 2nd Edition: 2004 at 2.3.6.

[95] *Ibid*.

benefiting national air carriers which operate both types of flights.[96] It must be mentioned that *The Manual* is mere guidance material issued by ICAO which does not carry with it compelling obligation to States to adhere to its recommendations nor does it carry any consequences if States do not follow its guidelines.

Sovereign States are entitled to enact their own laws pertaining to fiscal and competition policy and therefore, under the aforementioned parameters, bankruptcy laws that provide solace to companies that are failing and seek protection are not subsidies; nor are employment environments that are free of labour unions. Similarly, an airline that uses an airport as a hub that is subsidized, and derives some benefits therefrom cannot be identified as being subsidized.[97]

There have been several instances where airlines have been found to have enjoyed a subsidy to the detriment of its competitors,[98] with one significant instance of blatant subsidizing.[99] There have also been instances where States have been found guilty of providing anti-competitive subsidies to aircraft manufacturers.[100] In the latter instance WTO, in its judgment rendered in March 2012 found that Boeing received between $3 billion and $4 billion in U.S. subsidies, and by contrast WTO had said in December 2011 that Airbus received $18 billion in subsidies from European governments.[101] The operative provision under WTO in this context is Article XVI.4 which provides that as from 1 January 1958 or the earliest practicable date thereafter, contracting parties are required not to grant either directly or indirectly any form of subsidy on the export of any product other than a primary product[102] which subsidy would result in the sale of such product for export at a price lower than the comparable price charged for the like product to buyers in the domestic market. Until 31 December 1957 contracting parties could not extend the scope of any such subsidization beyond that existing on 1 January 1955 by the introduction of new, or the extension of existing, subsidies.

3.11.1 The Us Carriers Vs *the Middle East Carriers*

At the centre of the subsidies debate are the "super connected" middle east (Gulf) carriers[103] who have robustly followed a business model capitalizing both on their advantages brought to bear by their geographic locations as well as generous

[96] *Ibid*.

[97] Lumbroso (2015).

[98] See Abeyratne (2015), pp. 119–121.

[99] Abeyratne (2004), pp. 585–601.

[100] Abeyratne (2005), pp. 379–398.

[101] Rooney (2012).

[102] A primary product has been defined in The Havana Charter of 1948, Article 56 (1) (which the WTO adopted) which states that a primary product is a product of a farm, forest or fishery or mineral in its natural form.

[103] For purposes of this article, the words "Middle East" and "Gulf" will be used interchangeably.

government support and understanding of the inherent advantages that accrue to the economic well being of their States. The passengers of these carriers merely switch planes at hubs in their cities on their way to their ultimate destinations. These carriers—Emirates Airways (hereafter Emirates), Etihad Airways (hereafter, Etihad) and Qatar Airways—along with Turkish Airlines, carried 115 million passengers in 2014 as against 50 million in 2008[104] on more than 700 aircraft.[105] These carriers, with Emirates at the helm, are threatening the market share of the US carriers as well as those of European carriers, particularly to the East (There are four major routes in contention: North America—South Asia; Europe—South Asia; Europe—Southeast Asia; Europe—Australia/NZ). One of the complaints of the allegedly affected carriers of the West is that States in the Middle East are building super airports to encourage hubbing[106] by their carriers to the detriment of the carriers of the West, and that additionally, the airports concerned are applying drastically reduced landing charges for their carriers, which is an anti-competitive practice. Other practices, it is claimed, which act to the unfair advantage of the Middle East carriers are low wage structures and low tax bases in their countries, which the writer believes to be not strictly within the parameters of anti-competitive practices.

By far the largest allegation aimed at the Gulf carriers is that these carriers receive State aid in the nature of subsidies which, together with the advantages mentioned above, are robbing the carriers of the West of their "market share" by moving into the American and the European markets with undue and unfair advantages grted to them by their States. A lobby group[107] representing the three major airlines that brought the complaint against the Gulf carriers—American Airlines, Delta and United Airlines—has said that the three carriers of the United Arab Emirates and Qatar have received $42 billion in subsidies and other benefits.[108] The claim goes on to say that, over the past decade, the three Middle East carriers have spent more than $100 billion on acquiring bloated fleets of modern wide body aircraft.[109] The request of the three American carriers was that the "open skies" agreements between The United States and The United Arab Emirates and between The United States and Qatar be "renegotiated" and modified as the alleged subsidies had distorted international trade.[110] It was also claimed that the Gulf carriers have grown their seat capac-

[104] Super Connecting the World, *The Economist*, 25 April 2015, http://www.economist.com/news/business/21649509-advance-emirates-etihad-and-qatar-latterly-joined-turkish-airlines-looks-set.

[105] Zhang (2015).

[106] Hubbing is a practice by some airlines where airline hubs or hub airports are used by one or more carriers to concentrate passenger traffic and flight operations at a given airport, and in the context of the Middle East, airports such as Dubai for Emirates, Abu Dhabi for Etihad Airways and Doha (Qatar) for Qatar Airways. They serve as transfer (or stop-over) points to get passengers to their final destination.

[107] Partnership for Fair and Open Skies. See the Deck is Stacked, http://www.openandfairskies.com/subsidies/.

[108] See Zhang (2015), *Ibid*.

[109] *Ibid.*

[110] See Carey (2015), See also, Carey and Jones (2015).

ity (combined) over the U.S. carriers by 1500% and that their daily departures had shot up by 32% from the U.S carriers in 2014.[111] The same lobby group stated that: "The systematic subsidization of Qatar, Etihad and Emirates is part of a closely managed effort by the governments of Qatar and the UAE to direct the flow of international traffic through their own hubs and grow their economies. Qatar, Etihad and Emirates operate as arms of the state carrying out the will of their respective governments – not as independent companies"… and that "the massive government subsidies provided to Qatar, Etihad and Emirates are not only a clear violation of Open Skies policy, but they also pose a direct threat to the U.S. airline industry and thousands of American jobs. These state-owned carriers are using their huge, artificial advantage to rapidly expand their fleets and take over international routes, unfairly capturing U.S. airline market share and shifting U.S. aviation jobs overseas".[112]

The United States airlines claimed that they are the back one of the country's infrastructure and a critical component of the entire infrastructure system, and that the $ 42 billion of subsidies the Gulf carriers were favoured with would critically impair the ability of the U.S. carriers to service American communities. Another allegation aimed at the Gulf carriers is that the subsidies they receive would drive the U.S. carriers to reduce their fleets, thus threatening the security of The United States, where commercial carriers in the country are to stand ready to be deployed for military operations.

It is not only subsidies to the tune of $42 billion that the Gulf carriers have apparently enjoyed, the complaint goes. In addition, the U.S. carriers claim that the Gulf airlines' States made good losses associated with the airlines' hedging fuel contracts and gave them interest free loans—which governments the U.S. carriers claim are the main shareholders of the Gulf carriers. Furthermore, it is alleged that the carriers enjoyed benefits from the use of land at no cost, partial airport revenues and loans guaranteed by the government. Although admittedly, these benefits may be perceived as anti-competitive anomalies calculated to reflect a subsidy,[113] one could only match these measures with the definition of a subsidy as presented at the outset of this article and draw one's own conclusions. The Europeans have had the same complaint against the Gulf carriers, alleging that Emirates has had € 1.9 billion in unquantified subsidies of purchases of goods and services from other companies owned by the Government of the United Arab Emirates, as well as € 2.1 billion Euro in government assumption o fuel hedging losses, and another € 2.1 billion on subsidized airport infrastructure at Dubai International Airport.[114] As for Etihad, the

[111] Britton (2015). The author states that Emirates alone links The United States via Dubai with 17 cities in the Middle East; 21 cities in Africa; 86 cities in the South, South East and East Asia and 7 in Australia and New Zealand. India is the largest connecting market where the Gulf carriers have quadrupled capacity from 2008 to 2014. *Ibid.*

[112] Partnership for Fair and Open Skies *supra, ibid*.

[113] Kingsley (2016), p. 2. See https://mei.nus.edu.sg/themes/site_themes/agile_records/images/uploads/Download_Insight_140_Kingsley.pdf.

[114] It's Time for Europe to Stand Up For Fair Competition, European Commission Executive Summary at http://e4fc.eu/executive-summary/.

Europeans claim that the airline benefitted from € 5.9 billion in government "loans" with no repayment obligation. The other figures submitted against Etihad are that the airline received € 5.6 billion in capital injections by the United Arab Emirates; € 3.1 billion additional undisclosed government funding in 2014; € 630 million in government grants; and € 450 million in airport fee exemptions at Abu Dhabi International Airport. Against Qatar Airways, the European figures are that the airline received € 7.5 billion+ in "loans" and "shareholder advances" by the State of Qatar with no obligation for repayment; € 6.1 billion in government loan guarantees; € 550 million in airport fee exemptions and rebates at Doha International Airport; and € 403 million in free land.[115] These figures differ substantially from those provided by the three United States carriers.[116]

One commentator claims that at least one airline—Etihad—has shown a clear case of subsidies in the nature of € 14.3 billion in capital from the government that comprised equity of € 9.1 billion and € 5.2 billion in loans, calling Etihad a "State funded boondoggle".[117] American Airlines, which has a code share agreement with Etihad, has added that it has no objection to Gulf carriers flying into the U.S. but the subsidies issue has made airlines of the US competing with governments and not with airlines.[118] The threat to the U.S. carriers from the Gulf carriers is a relatively new phenomenon, as one commentator has said: "for a while the Gulf carriers' expansion drew only modest complaints from US airlines (they were busy going through massive restructuring after the 9–11 terrorist attacks and a series of deep, long economic upheaval that followed). For the first decade of the twenty-first century the Gulf carriers were viewed almost like experiments in the Petri dish of global airline competition. Emirates was a very small operation when the U.S. and The U.A.E agreed to an open skies treaty in 1999 and Etihad didn't even exist.[119]

The United States carriers allege in specific terms that there are two provisions of the open skies agreement between the United States and the United Arab Emirates are being violated by the conduct of Emirates and Etihad. Article 11 Sections 1 & 2 on Fair Competition is the first provision cited. Section 1 grants each Party the right to allow a fair and equal opportunity for the designated airlines of both Parties to compete in providing the international air transportation governed by the Agreement. Section 2 allows each designated airline to determine the frequency and capacity of the international air transportation it offers based upon commercial considerations in the marketplace. Consistent with this right, neither Party can unilaterally limit the volume of traffic, frequency or regularity of service, or the aircraft type or types operated by the designated airlines of the other Party, except as may be required for

[115] *Ibid.*

[116] Clampet and Schaal (2015).

[117] Levine-Weinberg (2015).

[118] Schaal (2015).

[119] Reed (2015).

customs, technical, operational, or environmental reasons under uniform conditions consistent with Article 15 of the Chicago Convention.[120]

Article 12 Section 1 provides that each Party is obligated to allow prices for air transportation to be established by each designated airline based upon commercial considerations in the marketplace. It must be noted that the term "marketplace" is a significant consideration in the context of the intention of the two parties—The United States and The United Arab Emirates. It is incontrovertible that an open skies agreement would intrinsically refer to exclusive third and fourth freedom traffic rights. Therefore, in this context the "marketplace" is "U.S.-UAE traffic" which makes the position of the United States unconvincing.

Intervention by the Parties shall be limited to: prevention of unreasonably discriminatory prices or practices; protection of consumers from prices that are unreasonably high or restrictive due to the abuse of a dominant position; and protection of airlines from prices that are artificially low due to direct or indirect governmental subsidy or support.

It is submitted that none of these provisions is linked to the issue of subsidies and there has been no indication that the carriers of the United Arab Emirates prevented the three American carriers (or any other carrier for that matter) from having fair and equal opportunity to compete nor had they resorted to "unreasonably discriminatory prices or practices". Prior to addressing the position of the Gulf carriers which has been documented in response to the complaints of the American and European carriers, it is relevant to discuss a report released by *Oxford Economics* in June 2011 according to which the success of Emirates is the result of strategy formulation and decisions jointly taken by the Dubai government and the airline along with the entire aviation sector of the Dubai government of the importance of developing aviation in Dubai; transparency and openness; consensus in investment policy; and a focus on servicing underserved markets, the last of which is now identified as "disruptive innovation".[121] One commentator, analyzing the European situation

[120] Article 15 of The Chicago Convention provides inter alia that every airport in a contracting State which is open to public use by its national aircraft shall likewise, subject to the provisions of Article 68, be open under uniform conditions to the aircraft of all the other contracting States. The like uniform conditions shall apply to the use, by aircraft of every contracting State, of all air navigation facilities, including radio and meteorological services, which may be provided for public use for the safety and expedition of air navigation. Any charges that may be imposed or permitted to be imposed by a contracting State for the use of such airports and air navigation facilities by the aircraft of any other contracting installations shall not be higher as to aircraft not engaged in scheduled international air services, than those that would be paid its national aircraft of the same class engaged in similar operations, and as to aircraft engaged in scheduled international air services, than those that would be paid by its national aircraft engaged in similar international air services.

[121] Explaining Dubai's Aviation Model, A Report for Emirates and Dubai Airports, June 11 at 5. See http://www.dubaiairports.ae/docs/default-source/Publications/oxford-economics_explaining-dubai's-aviation-model_june-2011.pdf?sfvrsn=4 An article on disruptive Innovation in the Harvard Business Review says that disruptive innovation originates in low-end or new-market footholds.: "Disruption" describes a process whereby a smaller company with fewer resources is able to successfully challenge established incumbent businesses. Specifically, as incumbents focus on improving their products and services for their most demanding (and usually most profitable)

vis a vis competition with the Gulf carriers opines that: "All in all, the unlevel playing field is primarily caused by Ricardian comparative advantages of States in the Gulf region. The playing field is further tilted by EU policy measures to the detriment of the European network carriers. The third and least important category of factors that also tilt the playing field emerges from the economic and institutional conditions in the Gulf States. In contrast with the European approach these conditions work in the Gulf carriers' favor. Protectionist measures in Europe are primarily justified by this third and least important category".[122]

Emirates responded to the allegations of the American carriers by saying that the subsidy claim was a "smoke and mirrors" attempt to cover a "professional bid to restrict consumer choice",[123] and that, in the words of Tim Clark, President of Emirates: "all governments should pursue liberalization and open skies with the objective to end the greatest subsidy of all – aero-political protectionism".[124] Emirates further claimed that the world's largest airline group—Star Alliance—composed of 15 carriers, has had nearly half its member airlines receiving subsidies from their governments totaling € 6.8 billion,[125] citing inter alia Lufthansa and KLM which have received cash injections from their governments during hard times or prior to privatization.[126] Having said that, Emirates categorically denied that the airline was subsidized, emphasizing that it was completely financially independent of the Government of Dubai and had no access to cheap or free fuel.

Emirates supported its claims that in 1985 the airline started with US $ 10 million received from the Dubai government as startup capital along with US $ 88 for infrastructure development, which paid for two Boeing 727 aircraft and a training school. These amounts, Emirates claimed, had since been repaid through dividend payment to the government of Dubai which has amounted to US $ 2.5 billion up to 2015, Emirates has also stated that the aviation policy of the Government of Dubai is that the airline should be self-sufficient, self-sustaining and profitable.

Qatar Airways, in its response to the American carriers' claim has said that the United States is one of the few countries in the world that allows bankrupt companies to continue in business and the U.S. carriers have received up to $ 30 billion in cost savings related to Chapter 11 bankruptcy proceedings. Asserting that the claim against Qatar Airways is a thinly veiled "subsidy" argument against true competition, Qatar Airways claims that American carriers have received several benefits from their government in the nature of access to government funded traffic under

---

customers, they exceed the needs of some segments and ignore the needs of others. Entrants that prove disruptive begin by successfully targeting those overlooked segments, gaining a foothold by delivering more-suitable functionality—frequently at a lower price". See Christensen et al. (2015).

[122] de Wit (2013). See https://www.researchgate.net/publication/259519730.

[123] Carp (2015).

[124] Airlines Subsidy: Our Position, Emirates:2015, Preface, at 1. See http://www.emirates.com/english/images/Airlines%20and%20subsidy%20-%20our%20position%20new_tcm233-845771.pdf.

[125] *Id*. Introduction, at 4.

[126] *Id.* At 9. Emirates also cites Air France which was given three capital injections between 1991 and 1994 totaling € 5.8 billion.

the Fly America Scheme and subsidies through the Essential Air Services Programme for the provision of air services to small communities within the United States, along with fuel tax exemptions and rebates.

In a 400-page document, Emirates responded to the allegations of the American carriers claiming that the latter's arguments against Emirates were rife with errors, misstatements and legal distortions. The first legal distortion identified by Emirates was that the WTO Agreement on Subsidies and Countervailing Measures did not apply to air services and that rules against subsidies did not even form part of the Agreement.[127]

As for subsidies, Emirates pointed out in its rebuttal to the United States carriers charges that what it received from the United Arab Emirates government could not be categorized as subsidies as they were only loans and equity infusions and, in any case the only connection between subsidies and the US/UAE open skies agreement was that subsidies (if at all subsidies had been granted to Emirates by its government) should not be linked to price reduction, which was not a practice of Emirates in the United States market. It was also pointed out that United States carriers have had huge U.S. government support of their own at the Federal, state and local government levels.

Etihad, in its response to the United States carriers' allegations regarding subsidies pointed out that, as against the latter's claim that Etihad received US $ 750 million cash grants from the Abu Dhabi government, The United States carriers had received $ 70 billion in government benefits.[128]

The Department of Justice of the United States rejected the claims made by the United States carriers against the Gulf carriers, calling their allegations "a call for protectionism that hurts U.S consumers", and that the open skies agreements signed by and between the United States and the United Arab Emirates and Qatar do not preclude financial assistance received by the Gulf carriers inasmuch as they do not preclude financial assistance the United States airlines have received from the United States. Additionally, Emirates claimed that the open skies agreement between the United States and The United Arab Emirates encompassed enhanced competition, more consumer choices and connectivity as well as increased flight frequency, improved service and innovation.[129]

In a meeting convened in July 2016 with the Gulf carriers that discussed the open skies agreement and the complaints of the three American carriers the United States government decided to take no action against the Gulf carriers. The United States government recognized that any action to curb or freeze operations of the Gulf

[127] The WTO Agreement on Subsidies and Countervailing Measures Agreement applies to goods and not services. He only WTO Agreement that apples to air transport in The General Agreement of Trade in Services (GATS) which again does not apply to market access and the provision of air transport services.

[128] Etihad: US carriers got $70B in government aid, Reuters, 14 May 2015. http://www.cnbc.com/2015/05/14/.

[129] For a detailed discussion on the debate see Abeyratne (2016), Chapter 6, Market Access and Subsidies in Air Transport: The US UAE Debate and WTO, pp. 113–130.

carriers into the United State would put an end to the open skies agreement and that there was no need to do so in the absence of any unfair competitive conduct on the part of the Gulf carriers. It was said that "of the 1,700 routes flown by the Big Three and the Gulf carriers, they compete head-to-head on exactly two… furthermore, according to a comprehensive study by Oxford Economics, only 0.7 per cent of passengers who flew on a Big Three flight to the US could have flown the same route on a Gulf carrier".[130]

3.11.2 The Law of Subsidies in Air Transport Services

The underlying principle that would determine the law of subsidies in air transport is that a State aid in the nature of a subsidy would be unacceptable if it would erode the principle of equality of opportunity for carriers to compete with each other on a level playing field, as required by the Chicago Convention's Preamble and the subsequent provisions—that the operation of international air transport services should meet the needs of the people of the world *inter alia* for economical and efficient air services; unreasonable competition through economic waste be obviated; and every State has an fair opportunity to operate international airlines, as reflected in Article 44 of the Convention. The American carriers failed to prove that any of these principles was eroded by the business practices of the carriers of the United Arab Emirates.

Given the absence of the overarching WTO umbrella on subsidies for air transport services, the laws that would apply in any given jurisdiction would hinge upon anti-competitive conduct of a commercial entity. In the United States the *Sherman Act* of 1890[131] (a law to protect trade and commerce against unlawful restraints and monopolies) starts off in Article 1 by providing that every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is illegal. Furthermore, any legal person who conducts business in the United States (which includes foreign carriers operating air services to the United States) is prohibited from monopolizing, or attempting to monopolize, or combining or conspiring with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations.

Section 2 of The *Clayton Act* of 1914[132] makes it unlawful for any commercial entity or other person to discriminate on pricing or fix prices that would put a competitor off the market. There are well established anti competitive policies both in the United States and Europe, which are calculated t prevent and punish anti competitive conduct. However, the measures taken against anti-competitive conduct in Europe differ from those of the United States in that while in Europe there is an

[130] McAuley (2016).

[131] *Sherman Act*, 26 Stat. 209, 15 U.S.C.

[132] *Clayton Act*, 15 U.S.C Section 13.

administrative system for anti-competitive enforcement, where fines are imposed on the offenders, in the United States remedies lie at criminal law with financial penalties as well as custodial measures are imposed on those transgressing the law, where private compensation is offered to victims at rates disproportionate to the actual damage suffered.[133]

The fundamental principle of anti-competitive conduct in European trade was introduced in the Paris Treaty of 1951 which provided inter alia that measures or practices which discriminate between producers, between purchasers or between consumers, especially in prices and delivery terms or transport rates and conditions, and measures or practices which interfere with the purchaser's free choice of supplier were prohibited under the treaty and that subsidies or aids granted by States, or special charges imposed by States, in any form whatsoever were also prohibited.[134] The Treaty of Rome of 1957 establishing the European Common Market has specific anti-competitive provisions. Article 85 of the treaty prohibits and deems null and void the application to parties to transactions of unequal terms in respect of equivalent supplies, thereby placing them at a competitive disadvantage; or the subjecting of the conclusion of a contract to the acceptance by a party of additional supplies which, either by their nature or according to commercial usage, have no connection with the subject of such contract. Any agreements or classes of agreements between enterprises, or any decisions or classes of decisions by associations of enterprises, and any concerted practices or classes of concerted practices which contribute to the improvement of the production or distribution of goods or to the promotion of technical or economic progress while reserving to users an equitable share in the profit resulting therefrom, and which: neither impose on the enterprises concerned any restrictions not indispensable to the attainment of the above objectives; nor enable such enterprises to eliminate competition in respect of a substantial proportion of the goods concerned are however exempted from the aforementioned restrictions.

Article 86 of the treaty considers inconsistent of the principles of the treaty which lays down policy for the Common Market, action by one or more enterprises to take improper advantage of a dominant position within the Common Market or within a substantial part of it shall be deemed to be incompatible with the Common Market and shall hereby be prohibited, to the extent to which trade between any Member States may be affected thereby. Some practices that are deemed unacceptable by the prohibition in Article 86 are: (a) the direct or indirect imposition of any inequitable purchase or selling prices or of any other inequitable trading conditions; (b) the limitation of production, markets or technical development to the prejudice of consumers; (c) the application to parties to transactions of unequal terms in respect of equivalent supplies, thereby placing them at a competitive disadvantage; or (d) the subjecting of the conclusion of a contract to the acceptance, by a party, of

[133] See Private anti-trust remedies under US law, Kenneth Ewing, Steptoe & Johnson LLP, http://www.steptoe.com/assets/attachments/2804.pdf.

[134] *Treaty Establishing the European Coal And Steel Community And Annexes I-Iii* Paris, 18 April 1951, Article 4 (b) and (c).

additional supplies which, either by their nature or according to commercial usage, have no connection with the subject of such contract.

Article 92 of the Treaty of Rome explicitly prohibits State aid in certain circumstances by saying that, except where otherwise provided for in the Treaty, any aid, granted by a Member State or granted by means of State resources, in any manner whatsoever, which distorts or threatens to distort competition by favoring certain enterprises or certain productions shall, to the extent to which it adversely affects trade between Member States, be deemed to be incompatible with the Common Market. There are of course certain practices that are acceptable to Europe. They are aids of a social character granted to individual consumers, provided that such aids are granted without any discrimination based on the origin of the products concerned; aids intended to remedy damage caused by natural calamities or other extraordinary events; and aids granted to the economy of certain regions of the Federal Republic of Germany affected by the division of Germany, to the extent that such aids are necessary in order to compensate for the economic disadvantages caused by such division.

Also compatible with the principles of the treaty are aids intended to promote the economic development of regions where the standard of living is abnormally low or where there exists serious under-employment; aids intended to promote the execution of important projects of common European interest or to remedy a serious disturbance of the economy of a Member State; and aids intended to facilitate the development of certain activities or of certain economic regions, provided that such aids do not change trading conditions to such a degree as would be contrary to the common interest and any other practices of State aid as are permitted on a case by case basis by the European Commission which could submit such practices for approval of the European Council.

Enforcement of the EU competition laws are the purview of national competition authorities by virtue of Regulation 1/2003 (which came into force on 1 May 2004). *The Treaty on the Functioning of the European Union* (TFEU) also contains provisions on anti-competitive practices within the European Union. Article 101 inclusively prohibits certain agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market. Some of the prohibited commercial practices under the TFEU which are rendered *null and void ab initio* are those which directly or indirectly fix purchase or selling prices or any other trading conditions; limit or control production, markets, technical development, or investment; share markets or sources of supply; apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; and make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

Article 102 of TFEU follows through with a provision on the abuse of dominant position by stating that any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it is prohibited as

incompatible with the internal market in so far as it may affect trade between Member States. Again this is an inclusive provision which particularly mentions such practices as those that directly or indirectly impose unfair purchase or selling prices or other unfair trading conditions; limit production, markets or technical development to the prejudice of consumers; apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; and make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

Under a special agreement signed between the United States and The European Communities, both parties have agreed to cooperate in combatting anti-competitive practices. The agreement[135] states that the parties agree to establish cooperative procedures to achieve the most effective and efficient enforcement of competition law, whereby the competition authorities of each Party will normally avoid allocating enforcement resources to deal with anti-competitive activities that occur principally in and are directed principally towards the other Party's territory, where the competition authorities of the other Party are able and prepared to examine and take effective sanctions under their law to deal with those activities.

The legal justification for prohibiting State aid in certain circumstances where markets are distorted and competitors face dire circumstances as a result of not having access to equality of opportunity to compete with each other is based on the simple theory that if a government only subsidizes a particular entity or company and not its competitors, that entity would gain an undue advantage and an automatic dominant position over its competitors which could lead to abuse of dominant position, monopoly and inequity. Furthermore, the entity at an advantage as a result of receiving exclusive subsidies would be complacent and not compete on merit, thus creating an imbalance in the competition process. Although this problem could be overcome by competitors in an expanding market by aggressively and robustly competing with the subsidy recipient, it would not be possible in a depleting market. Another danger would be the monotonous reliance of the subsidy recipient on State aid which would decrease the efforts of that entity to be more competitive, resulting in a depletion of consumer choices for a product and also a minimizing of quality of the product.

In order to obviate the dangers of subsidies distorting the market there has to be strict rules of transparency and justification, that subsidies are granted to obviate market failure Require demonstration that aid is targeted at market failure and that there was no other alternative for the State to prevent such market failure. Furthermore, subsidies cannot be provided ad infinitum but must be for a limited to sufficient to rectify a situation of failure in the market. Also, the subsidy recipient must adhere to proactive conditions imposed by the State to enhance availability and quality of service.

---

[135] *Agreement between the European Communities and the Government of the United States of America on the application of positive comity principles in the enforcement of their competition laws*, signed on 04/06/1998.

Although there is a great degree of ambivalence on the subject of subsidies for services, and an inherent disadvantage of subsidies for services do not come under the WTO umbrella, many WTO members grant subsidies for services in such sectors as construction services, education and audio-visual services as well as for air transport services. One commentator mentions that the airline industry receives state support amounting on average to more than US$7 billion a year.[136] There is implied reference to subsidies in the service sector under the General Agreement on Trade in Services (GATS) in Article XV which provides that members of WTO are cognizant of the fact that, in certain circumstances, subsidies may have distortive effects on trade in services and that members should enter into negotiations with a view to developing the necessary multilateral disciplines to avoid such trade-distortive effects. Special mention has been made in the provision to the role of subsidies in relation to the development programs of developing countries which should take into account the relevant needs of the member countries with flexibility and fluidity.

This could be a cue to ICAO, which has several provisions in the Chicago Convention that impels the Organization to achieve a level playing field through its Council, as discussed in the introduction to this article, which mandatorily requires the Council to request, collect, examine and publish details pertaining to subsidies paid to airlines from public funds. Along the premise and rationale of the Most Favored Nations Treatment clause contained in GATS the level playing field could be considered on the basis of Article II (1) of the GATS which states: "With respect to any measure covered by this Agreement, each Member shall accord immediately and unconditionally to services and service suppliers of any other Member treatment no less favorable than that it accords to like services and service suppliers of any other country."

Anchoring itself on this philosophy the Council could, as per Article 55 (d) of the Chicago which details the permissive functions of the Council submit to the Assembly details of a study on subsidies conducted by ICAO with the assistance of its member States with plans to introduce global principles of conduct on the application of subsidies only in instances where fair competition and equality of opportunity to compete are not eroded by the grant of such subsidies. The study should engage all ICAO member States to arrive at a consensus on what constitutes fair subsidies under the meaning, purpose and spirit of the Chicago Convention. States should report on all subsidies granted to their carriers under the already existing requirement for the Council of ICAO in Article 54 (i) of the Convention which mandatorily imposes an obligation on the Council to publish details of subsidies. Given that States would have different criteria and structures relating to aid, States should adhere to the guidelines issued in the ICAO *Manual on the Regulation of International Air Transport.*[137]

---

[136] Benitah (2004), p. 3.

[137] Doc 9626 (Second Edition-2004), In Chapter 2.2—Structure of Bilateral Regulation, section 2 on typical provisions of bilateral air services agreements, description is given to "a fair and equal opportunity article", "a fair competition article", and "a settlement of disputes article" (pages

Finally, a dispute settlement process under Articles 84 and 85 of the Chicago Convention should enable the Council to decide on any disagreement or complaint arising out of subsidies that may distort competition and adopt a resolution that would in the least impose a moral obligation on an offending State to make reparation to a victim State that has suffered economically as a result of unfair subsidies that disrupts and adversely affects its air transport obligations.

References

Abeyratne R (2004) The decisión in the Ryanair case – the low cost carrier phenomenon. Eur Transp Law XXXIX(5):585–601

Abeyratne R (2005) The Airbus-Boeing subsidies dispute – some legal issues. Air Space Law XXX(6):379–398

Abeyratne R (2012) Air navigation law. Springer, New York

Abeyratne R (2013) The convention on international civil aviation: a commentary. Springer, New York

Abeyratne R (Autumn 2013a) Reinventing ICAO'S role in air transport – a compelling need? Issues Aviat Law Policy 13(1):9–29

Abeyratne R (2013b) Regulation of international air transport – the slumbering sentinels. Springer, New York

Abeyratne R (2015) Competition and investment in air transport. Springer, Heidelberg, pp 119–121

Abeyratne R (2016) Competition and investment in air transport. Springer, Heidelberg, pp 191–206

Abeyratne R (2017) The law of subsidies in air transport services. Estey J Int Law Trade Policy 18(1):31–49

Abeyratne RIR (1994) The economic relevance of the Chicago Convention: a retrospective study. Ann Air Space Law XIX(Part II):3–80

Abeyratne RIR (1997) The settlement of international aviation disputes under the GATS and the ICAO council – a comparative analysis. In: Petersman E-U (ed) International trade law, the GATT/WTO dispute settlement system, studies in transnational economic law. Kluwer Law International, Part 11, p 397

Benitah M (2004) Subsidies, services and sustainable development. International Centre for Trade and Sustainable Development, Issue Paper No 1, p 3

Britton R (2015) The Big Three: U.S. Airlines versus Persian Gulf carriers. Forbes Magazine, 15 May 2015, http://www.forbes.com/forbes/welcome/

Button K (2008) The impact of globalization on international air transport activity: past trends and future perspectives. OECD, pp 1–40

Carey S (2015) U.S. Airlines detail claims of subsidies to Persian Gulf Rivals. Wall Street J, 5 Mar 2015

Carey S, Jones R (2015) DJ - U.S. Airlines claim to document subsidies at Gulf Rivals. IFX – International Foreign Exchange. https://www.internationalfx.com/uk/news/2015042014963/u-s-airlines-claim-to-document-subsidies-at-gulf-rivals

Carp G (2015) Emirates airline lashes back at U.S. carriers. Chicago Tribune, 30 June 2015. http://www.chicagotribune.com/business/ct-emirates-rebuttal-0701-biz-20150630-story.html

Christensen CM, Raynor ME, McDonald R (2015) What is disruptive innovation? Harv Bus Rev. https://hbr.org/2015/12/what-is-disruptive-innovation

2.2–2 to 2–4). Some description on the issue of "predatory pricing" can be found in Chapter 4.3-Air Carrier Tariffs (pages 4.3–10 to 4.3–11). These are reproduced in Appendix G.

Clampet J, Schaal D (2015) U.S. Airlines reveal evidence they say proves Gulf carriers get unfair subsidies. Skift, 5 Mar 2015. https://skift.com/2015/03/05/u-s-airlines-reveal-evidence-they-say-proves-gulf-carriers-get-unfair-aid/
Cline HE (2016) Hijacking open skies: the line between tough competition and unfair advantage in the international aviation market. J Air Law Com 81:529
Cooper JC (1967) Backgrounds of international public air law. In: Yearbook of air and space law 1965. McGill University Press, pp 26–27
de Wit J (2013) Unlevel playing field? Ah yes, you mean protectionism? J Air Transp Manag. December 2013, Abstract
Doganis R (2001) The airline business in the 21st century. Routledge, London, p 11
Ellenberg J (2014) How not to be wrong: the power of mathematical thinking. Penguin Press
Fallows J (2012) China airborne. Pantheon Books, New York, p 32
Ferguson N (2011) Civilization- the west and the rest. Penguin Press, New York, p 19
Hamilton N (2016) Commander in chief: FDR's Battle with Churchill, 1943. Houghton Mifflin Harcourt, Boston, pp 4–5
Hart O, Holmström B (2016) The theory of contracts. Kungl..Vetenskaps Akademien, Royal Academy of Sciences, Stockholm, 10 Oct 2016
Kepes B (2014) Sabre helps to deliver Airline 2.0, launches a developer platform. Forbes, 7 Aug 2014. https://www.forbes.com/sites/benkepes/2014/08/07/sabre-helps-to-deliver-airline-2-0-launches-a-developer-platform/#76bb6dc972e4
Kingsley J (2016) Open skies no more, Middle East insights. Middle East Institute, National University of Singapore, 22 Feb 2016, p 2
Kupchan CA (2012) No one's world – the west, the rising rest and the coming global turn. Oxford University Press, New York, p 198
Levine-Weinberg A (2015) At least one Middle Eastern airline giant is fuelled by subsidies. The Motley Fool. http://www.fool.com/investing/general/2015/08/30/at-least-one-middle-eastern-airline-giant-is-fuele.aspx
Lumbroso A (2015) Subsidies in aviation: the elusive flight towards fair competition. OECD Insights: Debate The Issues, 14 Aug 2015. http://oecdinsights.org/2015/08/24/subsidies-in-aviation-the-elusive-flight-towards-fair-competition/
MacKenzie D (1989) Canada and international civil aviation 1932–1948. University of Toronto Press, p 226
Mackenzie D (2010) ICAO – a history of the international civil aviation organization. University of Toronto Press, Toronto, p 3
Matte NM (1981) Treatise on air-aeronautical law. Institute and Centre of Air and Space Law, McGill University, p 128
McAuley A (2016) Victory for Gulf airlines as US government ends open skies row with no further action. The National, 27 July 2016. http://www.thenational.ae/business/aviation/victory-for-gulf-airlines-as-us-government-ends-open-skies-row-with-no-further-action#page1
Milde M (2008) International air law and ICAO, essential air law series. Eleven International Publishing, Utrecht, p 153
Moazed A, Johnson NL (2016) Modern monopolies. St. Martin's Press, New York, p 5
Porter M (1996) On competition. Harvard Business Review Book Series, Boston, p 155
Reed D (2015) In debate Vs, Persian Gulf carriers, U.S's Big Three airlines can't win – even if they win. Forbes Magazine. http://www.forbes.com/sites/danielreed/2015/03/18/in-debate-vs-persian-gulf-carriers-u-s-s-big-three-airlines-cant-win-even-if-they-win/#89cdb6e35f11
Rooney B (2012) U.S. and EU claim victory in Boeing subsidy case. CNN Money, 12 Mar 2012. http://money.cnn.com/2012/03/12/markets/boeing-airbus-wto/
Ryall M (2013) The new dynamics of competition. Harv Bus Rev. https://hbr.org/2013/06/the-new-dynamics-of-competition
Sachs JD (2005) The end of poverty, economic possibilities of our time. The Penguin Press, New York, p 160

Schaal D (2015) Future of open skies hinges on the definition of the word: subsidy. Skift. https://skift.com/2015/04/28/future-of-open-skies-hinges-on-the-definition-of-one-word-subsidy/

Schanzenbach M (2002) Network effects and antitrust law: predation, affirmative defenses, and the Case of U.S. v. Microsoft. Stanf Technol Law Rev 2002:4

Schwartz A, Scott RE (2003) Contracts theory and the limits of contract law. Yale Law Sch Leg Scholarship Repository, 25 Apr 2003, p 19. http://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1011&context=lepp_papers

Sumers B (2015) The $4 billion dollar reason why airlines are debating "Open Skies". Conde Nast Traveler. http://www.cntraveler.com/stories/2015-08-04/the-dollar4-billion-dollar-reason-why-airlines-are-debating-open-skies

Sykes AO (2003) The economics of WTO rules on subsidies and countervailing measures. John M. Olin & Economics Working Paper No. 186 (2D Series), University of Chicago Law School, pp 2–3

Zhang B (2015) The Middle East's 3 best airlines have infuriated their US competitors. Business Insider, 28 July 2015. http://ca.finance.ret1p.global.media.yahoo.com/news/middle-eastern-us-airlines-having-massive-dispute-future-133000846.html

Chapter 4
Regulation of Air Cargo

4.1 Regulations Under ICAO'S Preview

4.1.1 Facilitation

Annex 9 to the Chicago Convention[1] in its Chapter 4 has several provisions pertaining to cargo which comes under the purview of ICAO. With a view to facilitating and expediting the release and clearance of goods carried by air, Contracting States are required to adopt regulations and procedures appropriate to air cargo operations and shall apply them in such a manner as to prevent unnecessary delays. Standards and Recommended Practices[2] on Facilitation were first adopted by the Council on 25 March 1949, pursuant to the provisions of Article 37 of the Convention on International Civil Aviation (Chicago, 1944), and designated as Annex 9 to the Convention with the title "Standards and Recommended Practices — Facilitation".[3] They became effective on 1 September 1949. To begin with, States are advised that

[1] Thirteenth Edition, July 2011.

[2] The Standards and Recommended Practices on Facilitation are the outcome of Article 37 of the Convention, which provides, *inter alia,* that the "International Civil Aviation Organization shall adopt and amend from time to time, as may be necessary, international standards and recommended practices and procedures dealing with . . . customs and immigration procedures . . . and such other matters concerned with the safety, regularity and efficiency of air navigation as may from time to time appear appropriate".

[3] The Standards and Recommended Practices on Facilitation inevitably take two forms: first a "negative" form, e.g. that States shall not impose more than certain maximum requirements in the way of paperwork, restrictions of freedom of movement, etc., and second a "positive" form, e.g. that States shall provide certain minimum facilities for passenger convenience, for traffic which is merely passing through, etc. Whenever a question arises under a "negative" provision, it is assumed that States will, wherever possible, relax their requirements below the maximum set forth in the Standards and Recommended Practices. Wherever there is a "positive" provision, it is assumed that States will, wherever possible, furnish more than the minimum set forth in the Standards and Recommended Practices.

R. Abeyratne, *Law and Regulation of Air Cargo*,
https://doi.org/10.1007/978-3-319-92489-2_4

with respect to cargo moving by both air and surface transport under an air waybill, Contracting States should apply the same regulations and procedures and in the same manner as they are applied to cargo moving solely by air. When introducing or amending regulations and procedures for the release and clearance of goods carried by air, Contracting States are required to l consult with aircraft operators and other parties concerned, with the aim of accomplishing the actions set forth in the Annex. Furthermore, Contracting States are required to develop procedures for the pre-arrival and pre-departure lodgement of an import and export goods declaration to enable expeditious release/clearance of the goods. Where the nature of a consignment could attract the attention of different public authorities, e.g. the customs, veterinary or sanitary controllers, Contracting States shall endeavour to delegate authority for release/clearance to customs or one of the other agencies or, where that is not feasible, take all necessary steps to ensure that release/clearance is coordinated and, if possible, carried out simultaneously and with a minimum of delay. Contracting States are not normally expected to require the physical examination of cargo to be imported or exported and are required to use risk management to determine which goods shall be examined and the extent of that examination. Where practicable, and with a view to improving efficiency, modern screening or examination techniques are required to be used to facilitate the physical examination of goods to be imported or exported.

The Annex recommends that, in connection with international airports, Contracting States should establish and either develop and operate themselves, or permit other parties to develop and operate, free zones and/or customs warehouses and should publish detailed regulations as to the types of operations which may or may not be performed therein. In all cases where free-zone facilities and/or customs warehouses are not provided in connection with an international airport but have been provided elsewhere in the same general vicinity, Contracting States are required to make arrangements so that air transport can utilize these facilities on the same basis as other means of transport. With regard to information required by the public authorities, Contracting States should provide for the electronic submission of cargo information prior to the arrival or departure of cargo. Contracting States shall limit their data requirements to only those particulars which are deemed necessary by the public authorities to release or clear imported goods or goods intended for exportation. And are further required to provide for the collection of statistical data at such times and under such arrangements so that the release of imported goods or those intended for exportation is not delayed thereby. Subject to the technological capabilities of the Contracting State, documents for the importation or exportation of goods, including the Cargo Manifest and/or air waybills, will be accepted when presented in electronic form transmitted to an information system of the public authorities.

The production and presentation of the Cargo Manifest and the air waybill (s) are to be the responsibility of the aircraft operator or his authorized agent. The production and presentation of the other documents required for the clearance of the goods shall be the responsibility of the declarant. Where a Contracting State has requirements for additional documents for import, export or transit formalities, such as

commercial invoices, declaration forms, import licences and the like, it shall not make it the obligation of the aircraft operator to ensure that these documentary requirements are met nor shall the operator be held responsible, fined or penalized for inaccuracies or omissions of facts shown on such documents unless he is the declarant himself, is acting on his behalf or has specific legal responsibilities. When documents for the importation or exportation of goods are presented in paper form, the format is required to be based on the UN layout key, as regards the goods declaration, as regards the Cargo Manifest. To promote trade facilitation and the application of security measures, Contracting States are further required, for the purpose of standardization and harmonization of electronic data interchange, to encourage all parties concerned, whether public or private, to implement compatible systems and to use the appropriate internationally accepted standards and protocols.

Electronic information systems for the release and clearance of goods should cover their transfer between air and other modes of transport. Contracting States requiring supporting documents, such as licences and certificates, for the importation or exportation of certain goods are required to publish their requirements and establish convenient procedures for requesting the issue or renewal of such documents. They also should to the greatest extent possible, remove any requirement to manually produce supporting documents and should establish procedures whereby they can be produced by electronic means. Contracting States cannot require consular formalities or consular charges or fees in connection with documents required for the release or clearance of goods.

In the context of release and clearance of export cargo**,** Contracting States requiring documents for export clearance are required to normally limit their requirement to a simplified export declaration and provide for export cargo to be released up to the time of departure of an aircraft. Contracting States are required to allow goods to be exported, to be presented for clearance at any customs office designated for that purpose. Transfer from that office to the airport from which the goods are to be exported will be carried out under the procedures laid down in the laws and regulations of the Contracting State concerned. Such procedures shall be as simple as possible. Contracting States are precluded by the Annex to require evidence of the arrival of exported goods for import, export or transit formalities as a matter of course. When the public authorities of a Contracting State require goods to be examined, but those goods have already been loaded on a departing aircraft, the aircraft operator or, where appropriate, the operator's authorized agent, should normally be permitted to provide security to the customs for the return of the goods rather than delay the departure of the aircraft.

On the release and clearance of import cargo**, w**hen scheduling examinations, priority shall be given to the examination of live animals and perishable goods and to other goods which the public authorities accept are urgently required. Consignments declared as personal effects and transported as unaccompanied baggage will be cleared under simplified arrangements and Contracting States are required to provide for the release or clearance of goods under simplified customs procedures provided that: (a) the goods are valued at less than a maximum value below which no import duties and taxes will be collected; or (b) the goods attract

import duties and taxes that fall below the amount that the State has established as the minimum for collection; or (c) the goods are valued at less than specified value limits below which goods may be released or cleared immediately on the basis of a simple declaration and payment of, or the giving of security to the customs for, any applicable import duties and taxes; or (d) the goods are imported by an authorized person and are goods of a specified type.

For authorized importers who meet specified criteria, including an appropriate record of compliance with official requirements and a satisfactory system for managing their commercial records, it is recommended that Contracting States establish special procedures, based on the advance supply of information, which provide for the immediate release of goods on arrival. Goods not afforded the simplified or special procedures referred to in provisions should be released or cleared promptly on arrival, subject to compliance with customs and other requirements. Contracting States should establish as a goal the release of all goods that do not need any examination, within 3 h of their arrival and the submission of the correct documentation. Public authorities, and aircraft operators and importers or their authorized agents, should coordinate their respective functions to ensure that this goal is met. Contracting States should also process requests for the release of part consignments when all information has been submitted and other requirements for such part consignments have been met, they are required to allow goods that have been unladen from an aircraft at an international airport to be transferred to any designated customs office in the State concerned for clearance. The customs procedures covering such transfer is required to be as simple as possible. When, because of error, emergency or inaccessibility upon arrival, goods are not unladen at their intended destination, Contracting States cannot impose penalties, fines or other similar charges provided: (a) the aircraft operator or his authorized agent notifies the customs of this fact, within any time limit laid down; (b) a valid reason, acceptable to the customs authorities, is given for the failure to unload the goods; and (c) the Cargo Manifest is duly amended.

In an instance where, because of error or handling problems, goods are unladen at an international airport without being listed on the Cargo Manifest, Contracting States shall not impose penalties, fines or other similar charges provided: (a) the aircraft operator or his authorized agent notifies the customs of this fact, within any time limit laid down; (b) a valid reason, acceptable to the customs, is given for the non-reporting of the goods; (c) the manifest is duly amended; and d) the goods are placed under the appropriate customs arrangements. Where applicable, the Contracting State is required to, subject to compliance with its requirements, facilitate the forwarding of the goods to their correct destination. If goods are consigned to a destination in a Contracting State but have not been released for home use in that State and subsequently are required to be returned to the point of origin or to be redirected to another destination, the Contracting State is required to allow the goods to be re-forwarded without requiring import, export or transit licences if no contravention of the laws and regulations in force is involved. A Contracting State has to absolve the aircraft operator or, where appropriate, his authorized agent, from liability for import duties and taxes when the goods are placed in the custody of the

public authorities or, with the latter's agreement, transferred into the possession of a third party who has furnished adequate security to the customs.

On the subject of spare parts, equipment, stores and other material imported or exported by aircraft operators in connection with international services**, s**tores and commissary supplies imported into the territory of a Contracting State for use on board aircraft in international service will be relieved from import duties and taxes, subject to compliance with the customs regulations of the State. Contracting States should not require supporting documentation (such as certificates of origin or consular or specialized invoices) in connection with the importation of stores and commissary supplies. They should also permit, on board aircraft, the sale or use of commissary supplies and stores for consumption without payment of import duties and other taxes in the case where aircraft, engaged in international flights: (a) stop at two or more international airports within the territory of a Contracting State without intermediate landing in the territory of another State; and (b) do not embark any domestic persons. Subject to compliance with its regulations and requirements, a Contracting State should allow relief from import duties and taxes in respect of ground and security equipment and their component parts, instructional material and training aids imported into its territory, by or on behalf of an aircraft operator of another Contracting State for use by the operator or his authorized agent, within the boundaries of an international airport or at an approved off-airport facility.

Contracting States are required by the Annex to grant prompt release or clearance, upon completion of simplified documentary procedures by the aircraft operator or his authorized agent, of aircraft equipment and spare parts that are granted relief from import duties, taxes and other charges under Article 24[4] of the Chicago Convention. Contracting States are required to grant prompt release or clearance, upon completion of simplified documentary procedures by the aircraft operator or his authorized agent, of ground and security equipment and their replacement parts, instructional material and training aids imported or exported by an aircraft operator of another Contracting State. Contracting States must allow the loan, between aircraft operators of other Contracting States or their authorized agents, of aircraft equipment, spare parts and ground and security equipment and their replacement parts, which have been imported with conditional relief from import duties and taxes, and should provide for the importation, free of import duties and taxes, of

[4] Article 24, which addresses customs duty provides that: (a) aircraft on a flight to, from, or across the territory of another contracting State shall be admitted temporarily free of duty, subject to the customs regulations of the State. Fuel, lubricating oils, spare parts, regular equipment and aircraft stores on board an aircraft of a contracting State, on arrival in the territory of another contracting State and retained on board on leaving the territory of that State shall be exempt from customs duty, inspection fees or similar national or local duties and charges. This exemption shall not apply to any quantities or articles unloaded, except in accordance with the customs regulations of the State, which may require that they shall be kept under customs supervision; (b) Spare parts and equipment imported into the territory of a contracting State for incorporation in or use on an aircraft of another contracting State engaged in international air navigation shall be admitted free of customs duty, subject to compliance with the regulations of the State concerned, which may provide that the articles shall be kept under customs supervision and control.

aircraft operators' documents as defined in the Annex, to be used in connection with international air services.

In the context of containers and pallets**, s**ubject to compliance with their regulations and requirements, Contracting States are required to grant the aircraft operators of other Contracting States temporary admission of containers and pallets—whether or not owned by the aircraft operator of the aircraft on which they arrive—provided they are to be used on an outbound international service or otherwise re-exported. They should require a temporary admission document for containers and pallets only when they consider it essential for the purposes of customs control. Where proof of the re-exportation of containers and pallets is required, the Contracting State should accept the appropriate usage records of the aircraft operator or his authorized agent as evidence thereof. Under Annex 9, Contracting States must make arrangements to allow aircraft operators, under supervision of the public authorities concerned, to unload transit cargo arriving in containers and pallets, so that they may sort and reassemble shipments for onward carriage without having to undergo clearance for home use. Containers and pallets imported into a Contracting State under the provisions of will be allowed to leave the boundaries of the international airport for the release or clearance of imported loads, or for export lading, under simplified documentation and control arrangements. Where circumstances so require, Contracting States must allow the storage of temporarily admitted containers and pallets at off-airport locations. They are also required to allow the loan between aircraft operators of containers and pallets admitted without payment of import duties and taxes, provided they are to be used only on an outbound international service or otherwise re-exported Contracting States must allow temporarily admitted containers and pallets to be re-exported through any designated customs office. They also must allow the temporary admission of replacement parts when they are needed for the repair of containers and pallets.

In terms of mail documents and procedures**,** Contracting States shall carry out the handling, forwarding and clearance of mail and shall comply with the documentary procedures as prescribed by the Acts in force of the Universal Postal Union. On the subject of radioactive material**,** a Contracting State is required to facilitate the prompt release of radioactive material being imported by air, particularly material used in medical applications, provided that applicable laws and regulations governing the importation of such material are complied with. The Annex adds that the advance notification, either in paper form or electronically, of the transport of radioactive materials would likely facilitate the entry of such material at the State of destination. The Annex further stipulates that a Contracting State should avoid imposing customs or other entry/exit regulations or restrictions supplementary to the provisions of Doc 9284, Technical Instructions for the Safe Transport of Dangerous Goods by Air, and that where a Contracting State adopts customs or other entry/exit regulations or restrictions that differ from those specified in Doc 9284, *Technical Instructions for the Safe Transport of Dangerous Goods by Air*, it is required to notify ICAO promptly of such State variations for publication in the Technical Instructions, in accordance with Chapter 2, 2.5 of Annex 18 on security.

4.1.2 Facilitation Manual

The basic philosophy applicable to both the Annex on Facilitation and the Facilitation Manual[5] is based on strategy formulation and risk management as a basis for selecting shipments to be examined or for selecting the level of control to be imposed on a shipment or class of shipments. The strategy is to standardize information requirements and formats (including machine readable data). Annex 9 defines the terms "release" and "clearance", where "clearance" is given only when all official requirements have been met, while "release" means that customs put the goods at the disposal of the person concerned whether or not all the customs formalities have been completed and whether or not the goods can actually be cleared at that time.

Goods shipped by air are often cleared and released at virtually the same time, particularly when everything is in order and automated clearance processes are being used. In many instances, however, in order not to hold up goods unnecessarily, customs may release them, and actual clearance is granted only subsequently. This happens on an agreed basis under the Annex. The Manual recommends that when releasing goods in such circumstances, customs needs to be satisfied that there is no risk of non-compliance with the law, all official requirements will be met, and formalities will be completed in due course. In addition, where import duties and taxes have not been paid, customs must be assured that security for their payment has been provided. The rapid release of goods is clearly a major facilitation indicator for importers and exporters.

In practice, the application of sound, effective, modern procedures as specified in Annex 9, regarding the treatment of goods, makes it possible to offer a wide range of useful facilitative measures without compromising security and compliance procedures. In fact, such measures usually serve to enhance the capability of the authorities to manage their control processes and enforce the laws. This depends, however, on good levels of communication and information exchange among all concerned, both nationally and internationally.

Risk management is defined in Annex 9 as "The systematic application of management procedures and practices which provide border inspection agencies with the necessary information to address movements or consignments which represent a risk." In this context, "risk" means the potential for non-compliance with the law; while "risk management" means risk analysis, risk indicators, risk assessment and risk profiling. It also includes the acceptance of a certain level of risk in consignments in the interests of focusing resources on those goods and circumstances where risk is considered to be highest and enforcement action most likely to be needed. Customs and other authorities, whose size and resources are static or actually decreasing, have to deal with the considerable growth in international trade volumes while at the same time provide simplified documentation and procedures, as well as immediate release/clearance of goods to meet business demands for on-schedule delivery. This means that they can no longer use traditional methods of controlling

[5] Doc 9957: First Edition, 2011.

goods on an individual consignment basis to ensure that the correct revenue is collected, trade policy agreements (quotas, preferences) are enforced and that prohibited or restricted goods are detected and dealt with appropriately. To attempt to do so would place unrealistic burdens on customs and result in unacceptable delays in releasing/clearing goods.

Risk management is the overarching principle in modern customs control arrangements. Essential elements in a successful programme include: identification and analysis of the risk; selectivity, profiling and targeting; monitoring and review; and the measurement of compliance; all supported by appropriate information technology, customs/trade cooperation and mutual assistance among customs administrations.

Customs have therefore introduced a range of special procedures for importers/exporters whom they are satisfied comply with official requirements, as well as introduced controls based on risk analysis and assessment to enable them to release/clear the great majority of goods (innocent goods) without delay, so that their efforts and resources can be concentrated on those goods considered to pose a high risk.

Automation of the air cargo clearance process is high on the agenda of customs services worldwide as it is the most efficient means of managing a vast amount of data which is exchanged among a number of parties, i.e. customs, shippers, consignees, air carriers, customs brokers, and agriculture and other interested government agencies. The need to enhance controls in the face of increased risks posed by drug trafficking, violations of intellectual property rights, smuggling of endangered species and other illegal activities, combined with the growth in international trade volumes, has made it increasingly difficult for government inspection agencies to perform their enforcement duties with manual procedures alone. Moreover, studies of traditional air cargo systems without the assistance of information technology have concluded that the average "dwell-time" of an imported shipment (from its arrival to its release for delivery) is 4.5 days—a delay which to most air cargo customers is unacceptable. Automated solutions are sought by air carriers, customs brokers, and the authorities, to ensure better compliance with laws and faster clearance of low-risk cargo by managing the traffic more efficiently.

There are many facets to the use of information technology at international airports such as: documentation relating to the arrival and departure of aircraft; the goods and stores carried, unloaded and taken on board; temporary stores accounting; customs warehouse control; the electronic granting of release/clearance of goods; and electronic payment arrangements.

Automated cargo systems consist of two principal components: (1) a system for processing entries in an automated manner is fundamental to the States in which customs is automated; and (2) the automated manifest component, used in some States, completes the air cargo clearance process.

Cargo Manifest and air waybill data, which are transmitted by the air carrier, are matched in the automated customs system with entry data that has been transmitted by the importer or customs broker. These data are then reviewed by the inspector, with the aid of databases to determine whether the goods can be released or whether a further documentary check or a physical examination needs to be made. If the

information from both components of the system is transmitted early enough, this decision can be made before the arrival of the flight.

In some countries, release/clearance can be granted before the goods arrive. In other countries, the goods must be physically present before release/clearance can be granted; however, if practical arrangements are in place, traders should not suffer any delay in obtaining their goods. Prompt release of consignments from customs is of particular interest to consignees, cargo agents, and operators. Annex 9 encourages the simplification and standardization of the documents, procedures and requirements for: the release and clearance of import/export cargo; the reduction, to a minimum, of cargo "dwell-time" in airport terminals; transferring cargo to an authorized customs office for customs entry and clearance; releasing a part of a consignment when certain requirements have been met; and facilitating the tax free or temporary admission and use of spare parts, equipment, stores, containers, pallets, and other material imported/exported by operators in connection with international services. All these measures help to alleviate congestion and prevent unnecessary delays.

In the context of the movement of cargo by air and subsequently by surface, the principles for the release and clearance of goods are similar whether by air or surface transport—they both include the lodgement of the goods declaration and supporting documents, documentary checks, examination of the goods when necessary, security for, or payment of, the import/export duties and taxes. In practice, however, given that a relatively high proportion of goods carried by air is composed of small consignments which are usually urgently required (parcels transported by express carriers, postal items, etc.), there is frequent use of the special procedures referred to the Annex. In the case of bi-modal shipments, the fact that they are contracted under an air waybill should indicate their treatment by the authorities as air cargo, notwithstanding delivery by surface transport to their destination.

4.2 Carriage of Dangerous Materials

Provisions on the regulation of dangerous goods are contained in Annex 18 to the Chicago Convention.[6] The Annex starts with dangerous goods technical instructions saying that each Contracting State is required to take the necessary measures to achieve compliance with the detailed provisions contained in the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284), approved and issued periodically in accordance with the procedure established by the ICAO Council. Each Contracting State shall also take the necessary measures to achieve compliance with any amendment to the Technical Instructions which may be published during the specified period of applicability of an edition of the Technical Instructions. In this regard each Contracting State should inform ICAO of

[6] Third Edition July 2001.

difficulties encountered in the application of the Technical Instructions and of any amendments which it would be desirable to make to them.

The latest edition of Annex 18 (at the time of writing) released in 2001 states that although an amendment to the Technical Instructions with an immediate applicability for reasons of safety may not yet have been implemented in a Contracting State, such State should, nevertheless, facilitate the movement of dangerous goods in its territory which are consigned from another Contracting State in accordance with that amendment, providing the goods comply in total with the revised requirements. In the context of domestic civil aircraft operations. The Annex states that in the interests of safety and of minimizing interruptions to the international transport of dangerous goods, Contracting States should also take the necessary measures to achieve compliance with the Annex and the Technical Instructions for domestic civil aircraft operations.

The Annex provisions do not apply to articles and substances which would otherwise be classed as dangerous goods, but which are required to be aboard the aircraft in accordance with the pertinent airworthiness requirements and operating regulations, or for those specialized purposes identified in the Technical Instructions. Where articles and substances intended as replacements for those described above or which have been removed for replacement are carried on an aircraft, they are required to be transported in accordance with the provisions of this Annex except as permitted in the Technical Instructions. Specific articles and substances carried by passengers or crew members are excepted from the provisions of the Annex to the extent specified in the Technical Instructions.

Where a Contracting State adopts different provisions from those specified in the Technical Instructions, such State is required to notify ICAO promptly of such State variations for publication in the Technical Instructions. Contracting States are expected to notify a difference under Article 38 of the Convention only if they are unable to accept the binding nature of the Technical Instructions. Where States have adopted different provisions from those specified in the Technical Instructions, they are expected to be reported only under the provisions of the Annex specified for that purpose. The State of the Operator must take the necessary measures to ensure that when an operator adopts more restrictive requirements than those specified in the Technical Instructions, the notification of such operator variations is made to ICAO for publication in the Technical Instructions.

In terms of surface transport States should make provisions to enable dangerous goods intended for air transport and prepared in accordance with the ICAO Technical Instructions to be accepted for surface transport to or from aerodromes. Each Contracting State must designate and specify to ICAO an appropriate authority within its administration to be responsible for ensuring compliance with this Annex. The Annex goes on further to say that the transport of dangerous goods by air shall be forbidden except as established in this Annex and the detailed specifications and procedures provided in the Technical Instructions. The dangerous goods described hereunder shall be forbidden on aircraft unless exempted by the States concerned under the provisions of 2.1 or unless the provisions of the Technical Instructions indicate they may be transported under an approval issued by the State of Origin:

articles and substances that are identified in the Technical Instructions as being forbidden for transport in normal circumstances; and infected live animals. Articles and substances that are specifically identified by name or by generic description in the Technical Instructions as being forbidden for transport by air under any circumstances shall not be carried on any aircraft.

The classification of an article or substance shall be in accordance with the provisions of the Technical Instructions. The detailed definitions of the classes of dangerous goods are contained in the Technical Instructions. These classes identify the potential risks associated with the transport of dangerous goods by air and are those recommended by the United Nations Committee of Experts on the Transport of Dangerous Goods.

An important area in the carriage of goods and their regulation is packing. Annex 18 addresses this issue in chapter 5. Packagings used for the transport of dangerous goods by air shall be of good quality and must be constructed and securely closed so as to prevent leakage which might be caused in normal conditions of transport, by changes in temperature, humidity or pressure, or by vibration. Packagings are required to be suitable for the contents and those packagings that are in direct contact with dangerous goods must be resistant to any chemical or other action of such goods. Most importantly, packagings must meet the material and construction specifications in the Technical Instructions and be tested in accordance with the provisions of the Technical Instructions.

Packagings for which retention of a liquid is a basic function, must be capable of withstanding, without leaking, the pressure stated in the Technical Instructions. Inner packagings must be so packed, secured or cushioned as to prevent their breakage or leakage and to control their movement within the outer packaging(s) during normal conditions of air transport. Cushioning and absorbent materials shall not react dangerously with the contents of the packagings. Additionally, no packaging shall be re-used until it has been inspected and found free from corrosion or other damage. Where a packaging is re-used, all necessary measures shall be taken to prevent contamination of subsequent contents. If by virtue of the nature of the packaging, there is a likelihood that uncleaned empty packagings may present a hazard, they must be tightly closed and treated according to the hazard they constitute. No harmful quantity of a dangerous substance must adhere to the outside of packages. Unless otherwise provided for in the Technical Instructions, each package of dangerous goods must be labelled with the appropriate labels and in accordance with the provisions set forth in those Instructions.

In terms of markings, unless otherwise provided for in the Technical Instructions, each package of dangerous goods must be marked with the proper shipping name of its contents and, when assigned, the UN number and such other markings as may be specified in those Instructions. Unless otherwise provided for in the Technical Instructions, each packaging manufactured to a specification contained in those Instructions must be so marked in accordance with the appropriate provisions of those Instructions and no packaging has to be marked with a packaging specification marking unless it meets the appropriate packaging specification contained in those Instructions. Unless otherwise provided for in the Technical Instructions, each

package of dangerous goods shall be marked with the proper shipping name of its contents and, when assigned, the UN number and such other markings as may be specified in those Instructions. Furthermore, unless the Technical Instructions provide otherwise, each packaging manufactured to a specification contained in those Instructions shall be so marked in accordance with the appropriate provisions of those Instructions and no packaging shall be marked with a packaging specification marking unless it meets the appropriate packaging specification contained in those Instructions.

In addition to the languages required by the State of Origin and pending the development and adoption of a more suitable form of expression for universal use, English should be used for the markings related to dangerous goods.

Responsibilities of the shipper are addressed in Chapter 7 of the Annex which stipulates that in addition to the languages required by the State of Origin and pending the development and adoption of a more suitable form of expression for universal use, English should be used for the markings related to dangerous goods. that they are classified, packed, marked, labelled, and in proper condition for transport by air in accordance with the relevant regulation. In addition to the languages which may be required by the State of Origin and pending the development and adoption of a more suitable form of expression for universal use, English should be used for the dangerous goods transport document. Responsibilities of the operator, which are in Chapter 8 state that an operator shall not accept dangerous goods for transport by air: unless the dangerous goods are accompanied by a completed dangerous goods transport document, except where the Technical Instructions indicate that such a document is not required; and; until the package, overpack or freight container containing the dangerous goods has been inspected in accordance with the acceptance procedures contained in the Technical Instructions.

Packages and overpacks containing dangerous goods and freight containers containing radioactive materials shall be loaded and stowed on an aircraft in accordance with the provisions of the Technical Instructions. Packages and overpacks containing dangerous goods and freight containers containing radioactive materials must be inspected for evidence of leakage or damage before loading on an aircraft or into a unit load device. Leaking or damaged packages, overpacks or freight containers shall not be loaded on an aircraft. A unit load device must not be loaded aboard an aircraft unless the device has been inspected and found free from any evidence of leakage from, or damage to, any dangerous goods contained therein.

Where any package of dangerous goods loaded on an aircraft appears to be damaged or leaking, the operator is required to remove such package from the aircraft or arrange for its removal by an appropriate authority or organization, and thereafter shall ensure that the remainder of the consignment is in a proper condition for transport by air and that no other package has been contaminated. Packages or overpacks containing dangerous goods and freight containers containing radioactive materials must be inspected for signs of damage or leakage upon unloading from the aircraft or unit load device. If evidence of damage or leakage is found, the area where the dangerous goods or unit load device were stowed on the aircraft shall be inspected for damage or contamination.

Dangerous goods must not be carried in an aircraft cabin occupied by passengers or on the flight deck of an aircraft, except in circumstances permitted by the provisions of the Technical Instructions. An aircraft which has been contaminated by radioactive materials shall immediately be taken out of service and not returned to service until the radiation level at any accessible surface and the non-fixed contamination are not more than the values specified in the Technical Instructions. Packages containing dangerous goods which might react dangerously one with another must not be stowed on an aircraft next to each other or in a position that would allow interaction between them in the event of leakage.

Packages of toxic and infectious substances shall be stowed on an aircraft in accordance with the provisions of the Technical Instructions. Packages of radioactive materials must be stowed on an aircraft so that they are separated from persons, live animals and undeveloped film, in accordance with the provisions in the Technical Instructions. When dangerous goods subject to the provisions contained herein are loaded in an aircraft, the operator is required to protect the dangerous goods from being damaged and shall secure such goods in the aircraft in such a manner that will prevent any movement in flight which would change the orientation of the packages. For packages containing radioactive materials, the securing shall be adequate to ensure that the separation requirements of 8.7.3 are met always.

Each Contracting State is required to establish inspection, surveillance and enforcement procedures with a view to achieving compliance with its dangerous goods regulations. Cooperation between States is essential, and each Contracting State should participate in cooperative efforts with other States concerning violations of dangerous goods regulations, with the aim of eliminating such violations. Cooperative efforts could include coordination of investigations and enforcement actions; exchanging information on a regulated party's compliance history; joint inspections and other technical liaisons, exchange of technical staff, and joint meetings and conferences. Appropriate information that could be exchanged include safety alerts, bulletins or dangerous goods advisories; proposed and completed regulatory actions; incident reports; documentary and other evidence developed in the investigation of incidents; proposed and final enforcement actions; and educational/outreach materials suitable for public dissemination.

Furthermore, Each Contracting State should take appropriate action to achieve compliance with its dangerous goods regulations, including the prescription of appropriate penalties for violations, when information about a violation is received from another Contracting State, such as when a consignment of dangerous goods is found not to comply with the requirements of the Technical Instructions on arrival in a Contracting State and that State reports the matter to the State of Origin.

Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284), provides that Security awareness training should address the nature of security risks, recognizing security risks methods to address and reduce such risks, and actions to be taken in the event of a security breach. It should include awareness of security plans (if appropriate) commensurate with the responsibilities of individuals and their part in implementing security plans.

It must be noted that the technical instructions are mainly for the operator of the aircraft. However, as dangerous goods are in the premises of the airport operator at some point, the airport operator has to be aware of and application of provisions for dangerous goods that may be carried by the passenger in the cabin. Addendum 1 to the Technical Instructions in 2017 includes certain categories of equipment that are carried by the passenger which may be harmful.

4.3 Carriage of Human Remains

If a person dies in a country other than his own, there are no global rules or guidance that dictates the manner in which his remains could be transported back to his country, with dignity and care. This matter was highlighted in 2003 before the European Parliament with a real example of a British national who died while on holiday in Greece. The Greek authorities had carried out an autopsy which concluded that the deceased tourist had died of a heart attack. When the body was transported back home the deceased's family had requested a second autopsy, only to find that most of the deceased's organs had been removed in Greece after the autopsy and destroyed, according to Greek law. This had caused severe mental distress to the deceased's kin. To their credit, airlines, under the guidance of the International Air Transport Association (IATA), have adopted their own principles in carrying human remains with compassion and dedication. The conclusion suggests a way forward in binding the threads of this issue in a harmonious manner.

Human dignity is an international concept which is extended both to the living and the dead. The 1948 *Universal Declaration of Human Rights* of the United Nations—the cornerstone of human dignity—declares that the inherent dignity and the equal and inalienable rights of all members of the human family are the foundations of freedom, justice and peace in the world and that all human beings are born free and equal in dignity and rights. This statement establishes human dignity as the conceptual basis for human rights. 75% of the constitutions of ICAO's 192 member States use the concepts of "human dignity" or "personal dignity" explicitly.[7] It follows therefore that if the remains of a human being are not given equal respect and dignity, the moral imperative of the doctrine of human dignity[8] would be rendered destitute of meaning and purpose.

From an aviation perspective, most airlines in the world offer services for the transportation of human remains and cremated remains. These services are varied according to the policies of each airline, but all share a common thread of dedication and compassion in offering the service in the transportation of funeral shipments.

[7] http://www.constitution.org; http://www.oefre.unibe.ch/law/icl; http://www.psr.keele.ac.uk.

[8] Human dignity has not been comprehensively defined and has remained a somewhat squishy subject, often explained theologically. However, the dictionary definition of dignity is that it is *inter alia* "the quality or state of being worthy of esteem or respect". See http://www.thefreedictionary.com/dignity.

Usually, airlines employ specially trained staff to address all the travel-related issues that may arise when shipping such very sensitive cargo. The tasks assigned to these staff include providing advice to those seeking the airlines' services on applicable regulations, taking into account the delicateness of the responsibility that devolves upon the carrier.

In terms of property rights pertaining to some cadaver or other remains, such rights do not exist at common law. However, for the purpose of transportation—whether it be for embalming, cremation or internment—the corpse or cremated remains of a human being is considered to be property or quasi-property, the rights to which are held by the surviving spouse or next of kin. This right cannot be transferred and does not exist while the deceased is living. A corpse or urn carrying cremated remains may not be retained by either an undertaker or a carrier as security for unpaid funeral expenses, particularly if such were kept without authorization and payment was demanded as a condition precedent to its release. Upon burial the body accrues to the ground and any appurtenant property such as jewelry which was on the corpse on burial accrue to their rightful owner as determined by applicable principles of property laws and wills and testaments as they might exist.

The purpose of this discussion is to inquire into *de lege lata* the fragmented regime applicable to the carriage by air of human remains. Two antiquated multilateral agreements, one Resolution and one Regulation all in Europe; some maundering by the ICAO Council decades ago; two Annexes to the Chicago Convention which may have applicability to this subject; some proactive guidelines by the International Air Transport Association and the World Health Organization and procedures and policy of individual air carriers comprise the history of this subject. Against this backdrop, this article will inquire into the need for a global regulatory process that would properly address this esoteric but important area of carriage by air.

4.3.1 The Berlin Agreement of 1937

The *International Arrangement Concerning the Conveyance of Corpses*[9] (Berlin Agreement), signed at Berlin on 10 February 1937 was the first recorded attempt at the unification of rules relating to the carriage of human remains. The agreement, which applied to the international transport of corpses immediately after decease or exhumation, was designed to avoid the difficulties resulting from differences in the regulations concerning the conveyance of corpses, and recognized the necessity and the convenience of laying down uniform regulations in this area of transportation. Accordingly, the signatory States[10] undertook to accept the entry into their territory,

[9] League of Nations, Treaty Series 1938, No. 439r at 315–325.

[10] Germany, Belgium, Chile Denmark, Egypt, France, Italy, the Netherlands, Switzerland, Czechoslovakia and Turkey.

or the passage in transit through their territory, of the corpses of persons deceased in the territory of any one of the other contracting countries upon certain conditions, which were incorporated in the Agreement.

The initial condition, as laid out in Article 1 of the Agreement was that, for the conveyance of any corpse by any means and under any conditions, a special laissez-passer be issued for a corpse which would state the surname, first name and age of the deceased person, and the place, date and cause of decease. The competent authority for the place of decease or the place of burial in the case of corpses exhumed had to issue the laissez-passer and it was recommended that the laissez-passer should be made out, not only in the language of the country issuing it, but also in at least one of the languages most frequently used in international relations.

The Berlin Agreement further stated that neither the country of destination nor the countries of transit shall require, over and above such papers as are required under international conventions for the purpose of transports in general, any document other than the laissez-passer referred to in Article 1. The following had to be presented to the competent authority for the issuance of laissez-passer: a certified true copy of the death certificate; and official certificates to the effect that conveyance of the corpse is not open to objection from the point of view of health or from the medico-legal point of view, and evidence that the corpse has been placed in a coffin in accordance with the regulations laid down in the Agreement.[11]

As for packaging the human remains, the Agreement, in Article 3 provided that corpses must be placed in a metal coffin, the bottom of which has been covered with a layer approximately 5 cm. of absorbent matter such as peat, sawdust, powdered charcoal or the like with the addition of an antiseptic substance. Where the cause of decease was a contagious disease, the corpse itself was required to be wrapped in a shroud soaked in an antiseptic solution. A further requirement was that the metal coffin must thereupon be hermetically closed (soldered) and fitted into a wooden coffin in such a manner as to preclude movement. The wooden coffin was required to be of a thickness of not less than 3 cm. and its joints must be completely watertight. It was also required that the coffin be closed by means of screws not more than 20 cm. distant from one another, and strengthened by metal hoops. In the case of transport by air, The Agreement, in Article 7, required that coffins must be conveyed either in an aircraft specially and solely used for the purpose or in a special compartment solely reserved for the purpose in an ordinary aircraft.

The Agreement precluded bodies of persons who had died as a cause of plague, cholera, small-pox or typhus from being conveyed between the territories of the contracting parties until the lapse of at least one year after the demise. No articles were permitted to be transported along with the coffin in the same aircraft or in the same compartment, other than wreaths, bunches of flowers and the like.[12]

[11] Berlin Agreement, *supra*, note 9, Article 2.

[12] *Id*. Article 4.

4.3.2 *Agreement on the Transfer of Corpses (Strasbourg—1973)*

The second international agreement was in 1973 called the *Agreement on the Transfer of Corpses*, and it was drawn up within the Council of Europe by the European Public Health Committee. The Strasbourg Agreement was opened for signature by the member States of the Council of Europe on 26 October 1973. This agreement was designed to adapt the provisions of the Berlin Agreement concerning the conveyance of corpses, to the new situation arising from developments in the field of communications systems, international relations and commercial and tourist activities. A proposal to examine anew the problem of the transfer of corpses with a view to drawing up a new instrument was approved by the Committee of Ministers of the Council of Europe in 1967 and this task was entrusted to the European Public Health Committee which, in the course of its work, gave due consideration to the observations, among others, of the European Federation of Funeral Directors (Brussels) and the European Funeral Directors Association (Vienna). The text of the draft Agreement was submitted to the European Committee on Legal Co-operation (CCJ) before its final adoption by the Committee of Ministers of the Council of Europe in April 1973. It was opened for signature by member States of the Council of Europe on 26 October 1973.

The Strasbourg Agreement defines the transfer of corpses as the international transport of human remains from the State of departure to the State of destination. Accordingly, the State of departure is that in which the transfer began; in the case of exhumed remains, it is that in which burial had taken place; the State of destination is that in which the corpse is to be buried or cremated after the transport. The Agreement does not apply to the international transport of ashes. Article 3 of the Agreement states that during the transfer, any corpse is required to be accompanied by a special document (laissez-passer for a corpse) issued by the competent authority of the State of departure. The laissez-passer has to include at least the information set out in the model annexed to the Agreement; and be made out in the official language or one of the official languages of the State in which it was issued and in one of the official languages of the Council of Europe.

Article 4 provides that, with the exception of the documents required under international conventions and agreements relating to transport in general, or future conventions or arrangements on the transfer of corpses, neither the State of destination nor the transit State shall require any documents other than the laissez-passer for a corpse. The laissez-passer is issued by the competent authority referred to in Article 8 of the Agreement,[13] after it has been ascertained that: all the medical, health, administrative and legal requirements of the regulations in force in the State of departure relating to the transfer of corpses and, where appropriate, burial and

[13] Article 8 states that each Contracting Party shall communicate to the Secretary General of the Council of Europe the designation of the competent authority referred to in Article 3, paragraph 1, Article 5 and Article 6, paragraphs 1 and 3 of the Agreement.

exhumation have been complied with; the remains have been placed in a coffin which complies with the requirements laid down in Articles 6 and 7 of the Agreement; and that the coffin only contains the remains of the person named in the laissez-passer and such personal effects as are to be buried or cremated with the corpse.

Article 6 requires that the coffin must be impervious and that the inside must contain absorbent material. If the competent authority of the State of departure, consider it necessary the coffin must be provided with a purifying device to balance the internal and external pressures. It may consist of: either an outer coffin in wood with sides at least 20 mm thick and an inner coffin of zinc carefully soldered or of any other material which is self-destroying; or a single coffin in wood with sides at least 30 mm thick lined with a sheet of zinc or of any other material which is self-destroying. If the cause of death is a contagious disease, the body itself is required to be wrapped in a shroud impregnated with an antiseptic solution.

Article 6 further provides that the coffin, if it is to be transferred by air, has to be provided with a purifying device or, failing this, present such guarantees of resistance as are recognised to be adequate by the competent authority of the State of departure. If the coffin is to be transported like an ordinary consignment, it has to be packaged so that it no longer resembles a coffin, and it shall be indicated that it be handled with care.[14]

4.3.3 Resolution 2003/2032 (INI)

The European Community was dissatisfied with both the Berlin Agreement and the Strasbourg Agreement (which only some member States had signed), claiming that these Agreements advocated indirect discrimination by providing for non-European Community residents. Also it was claimed that these two agreements imposed strict rules on the cross-border transfer of mortal remains, applied essentially to 'non-nationals' and hence ran counter to the Community scheme of things. Accordingly, and with a view to addressing the case where a Community citizen expired in a Community country other than his own and his remains had to be repatriated to his country, a Committee was appointed by the European Parliament to consider an instrument that addressed the conveyance of mortal remains suggested in 2003 Resolution 2003/2032 (INI). This Resolution noted that, on account of the above agreements, the death of a Community citizen in a Member State other than his country of origin results in more complex procedures, a longer period of time before burial or cremation takes place and higher costs than if the death had occurred in the deceased person's country of origin,

Another compelling reason for this Resolution was the recognition that, in view of the growth in intra-Community tourism, the increasing numbers of retired people who choose to live in a country other than their own and, more generally, greater intra-Community mobility which is actually encouraged, the number of Community

[14] Article 7 of the Strasbourg Agreement.

citizens who die in a country other than their country of origin was bound to increase. This was considered against the backdrop that Community citizens should, *mutatis mutandis*, be able to move between and reside in Member States in similar conditions to nationals of a Member State moving around or changing their place of residence in their own country, and that exercising the right to freedom of movement and freedom of residence should be facilitated to the utmost by reducing administrative formalities to an absolute minimum.

The European Community was of the view that, at the time the Resolution was proposed, it was still far from true that a Community citizen who dies in a Member State other than his own is treated in the same way as a national who dies in his home country. For, example, the fact that a zinc coffin is required for the repatriation of a corpse from Salzburg to Freilassing (a distance of 10 km) but not for the transfer of a body from Ivalo to Helsinki (a distance of 1120 km) (2).

Therefore it was pointed out that the repatriation of mortal remains without excessive cost or bureaucracy in the event of the death of a European Community citizen in a country other than the one in which either burial or cremation was to take place may be regarded as a corollary of the right of each EU citizen to move and reside freely within the territory of the Member States.

The Resolution called upon the Commission to see that the standards and the procedures applied in the cross-border transportation of corpses were harmonized throughout the Community and to endeavor to ensure that, as far as possible, Community citizens were treated in the same way as nationals in their home country.

A Regulation, covering intra-community transport of bodies according to the European Standard CEN/BT/TF 139 on Funeral Services and approved on 27 July 2005 goes on to say in Article 1 that the identification of the deceased must be performed before the body is placed in the coffin by the funeral enterprise or operator of the country of departure. The elements of identification relate to the civil status of the deceased and are indicated on the laissez-passer for the body. For identification, the body must be provided with: an identification bracelet attached to the body part (wrist, ankle…,); and a non-removable and tamper-proof identification tag attached to the coffin and its wrapping, if any. The information required on the bracelet were: surname and first name(s); sex; date and place of birth; date and place of death; and nationality. The information required on the identification tag were to be: surname and family name(s); date of birth; and date of death.

Article 2 of the Regulation required that the coffin or casket that carried the remains must be made of solid material—the main material used in Europe being wood (excluding the use of carton or chipboard). The material used for the coffin must be biodegradable. It also required that the coffin must be impervious; the products used to make it impervious must be biodegradable and in conformity with the standards applicable to crematorium emissions. In particular, the coffin must be impervious to decomposition liquids and fitted with absorbent material. The out cover of the coffin/casket was required to meet necessary sanitary requirements.

The Regulation had chemical requirements that were not contained in the 1937 Berlin Agreement and the 1973 Strasbourg Agreement. For instance, Articles 2.3

and 2.5, specified conditions for international carriage of corpses by providing that if the cause of death was a contagious disease (as per the WHO official list), the outer container (usually wooden) used for the transport of the body may be lined with a hermetically sealed container. The hermetically sealed container must be provided with a purifying filter. If the consecutive treatments (thanatopraxy) have been performed within 36 h after the death the body must be encoffined within 6 days. The transport must be done not more than 48 h after encoffining and sealing. The conditions required for long distance international transport outside Europe under the Agreement were: hermetically sealed container; and/or embalming/thanatopractical treatment; and/or refrigeration. In the case of refrigeration at no time shall the temperature inside the container exceed 80 °C during transport.

The Regulation requires two types of documents for carriage of corpses: medical certificate upon death; and a laissez passer. The medical certificate is required to be drawn up, on the one hand, in the language of the country of departure in which the death had occurred and, on the other hand, in one of the following languages: English, German or French. It must contain information relating to the deceased such as: surname and maiden name in the case of a married woman; first name(s); date and place of birth; date and place of death; sex; and cause of death.

4.3.4 ICAO Initiatives

The Council of ICAO, at its Thirty Second Session in 1957 addressed the carriage under the heading "Carriage of Sick Persons, Pregnant Women, Live Animals and Coffins – Sanitation on Board Aircraft" at which IATA recommended that in addition to the prevailing requirement—that human remains be placed in hermetically-sealed coffins which are enclosed in outside cases—human remains should be embalmed prior to being placed in the coffin. IATA further suggested that acceptance of such coffins is dependent upon the type of aircraft, requirements of entry and clearance and prior approval of the countries of origin, transit and destination.[15] The Council noted that comments on the carriage of coffins had been received from twenty seven States (from a total of 72 member States at that time) and two overseas territories. Three of these States reported that they were bound by the provisions of the 1937 Berlin Agreement and Eight States advised ICAO that the carriage of corpses existed in their national legislations. Thirteen States commented that they had not, in their experience encountered serious difficulties in this area. The United States made the comment:

> Because of known effects of rare atmosphere at high altitude on sealed caskets, such caskets should not be carried by aircraft.[16]

[15] C-WP/2448, 5/6/57, Addendum and Corrigendum, 21/11/576 at 3.

[16] *Id*. Paragraph 20.1 at p. 10.

The ICAO Secretariat responded in assent:

> Differences in atmospheric pressure are known to have caused bursting of coffins, particularly when sealed hermetically (by welding) according to provisions of Articles 5 and 7 of the Berlin Arrangement, or similar provisions in national legislation. Prompted by rapid decomposition in flight, such transports occasionally arrive in appalling conditions; in some States (Australia, Philippines, Venezuela, Netherlands Antilles), therefore, it is required that corpses be embalmed prior to air transport, thus eliminating at least certain difficulties. If some pressure-relief system were applied to sealed caskets, the difficulties caused by pressure differences might disappear, but international transport would not have permitted by existing laws.

It is noteworthy that during these discussions, cremated human remains were not mentioned, except by Belgium which said that "incinerated corpses are accepted without any restrictions and are carried on all types of aircraft".[17] The ICAO Council concluded that the difficulties reported by States were caused by variations of atmospheric pressure; a characteristic of transport by air, while for international transport coffins must be hermetically sealed.

ICAO has approached this subject from another dimension *i.e*. the carriage of human remains of an aircraft accident victim. In 2001 the Council released its *Guidance on Assistance to Aircraft Accident Victims and their Families*[18] where ICAO recognizes that in an accident context the identification, custody and return of human remains are very important forms of family assistance but remains are often difficult to recover and identification can be an arduous and time-consuming process. The ICAO guidance goes on to say that legislation often requires a post mortem examination of those killed in an accident and in some instances, there may be remains that cannot be identified.[19] ICAO also calls for personal effects of the deceased to be correctly handled and returned to their lawful owners.[20] The Guidance also calls for the State of occurrence to provide for the return of human remains[21] while also devolving that burden—of the carriage of such remains—upon the aircraft operator involved in the accident.[22]

4.4 Annexes 9 and 18 to the Chicago Convention

There are two Annexes to the Chicago Convention which bear some relevance to the carriage of human remains by air—Annex 9 (Facilitation) and Annex 18 (The Safe Transport of Dangerous Goods by Air). The Annex 9 definition of cargo implies that

[17] C-WP/2448, 5/6/57, *supra* note 15, Appendix "A" at 25.

[18] *Guidance on Assistance to Aircraft Accident Victims and their Families, ICAO Circular 285 – AN/166.*

[19] *Id*. Paragraph 3.10.

[20] *Id*. Paragraph 3.11.

[21] *Id*. Paragraph 5.1.

[22] *Id*. Paragraph 5.7.

human remains could be categorized as cargo by giving the definition of cargo as "*any property carried on an aircraft other than mail, stores and accompanied or mishandled baggage*". This definition is slightly different from the one contained in another ICAO document—*Technical Instructions for the Safe Transport of Dangerous Goods by Air*[23] which defines "cargo" as "*any property carried on an aircraft other than mail and accompanied or mishandled baggage*". Annex 18 does not define the word "cargo" but defines "dangerous goods" as articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those instructions. The Technical Instructions do not list human remains as being dangerous cargo. However, it behooves the international aviation community to inquire, along the lines of ICAO discussions in the Council, whether human remains could be ruled out as not posing a risk to health or the environment under any circumstances of carriage by air or whether human remains, depending on the way it is packed for transport, could be considered as dangerous goods.[24]

Getting back to Annex 9, there is a whole chapter in the Annex—Chapter 4—dedicated to the entry and departure of cargo and other articles. Surprisingly, there is no provision in the Annex for priority of clearance or transport of human remains over other cargo, despite the prominence given to the subject in ICAO *Circular 285 – AN/166.*[25] Another surprise is that, although there is a *Recommended Practice* in the Annex which suggests that electronic information systems for the release and clearance of "goods" (my emphasis) should cover their transfer between air and other modes of transport,[26] there is no definition of "goods" in the Annex. Do corpses or cremated human remains come under the purview of "goods"? This question is valid in the context of Appendix 3 to the Annex which has a template for a cargo manifest where there exists a column for "Nature of Goods". There is no mention of the word "cargo" in this template.

In view of the above discussion it might be worthwhile for a detailed discussion on the status of human remains in the global aviation context and a re-visit of the 1957 discussions in the ICAO Council. The added dimension of related ICAO documentation such as Circular 285 – AN/166 makes it all the more compelling.

[23] ICAO Doc 9284, AN/905 (2011–2012 Edition).

[24] American Airlines requires that human remains packed in dry ice are subject to dangerous goods regulations. https://www.aacargo.com/shipping/humanremains.jhtml.

[25] *Supra*, note 18.

[26] Annex 9 to the Convention on International Civil Aviation, Thirteenth Edition: July 2011, *Recommended Practice* 4.18.

4.5 IATA, WHO and United States Guidelines

The International Air Transport Association has clear, cogent guidance on the carriage by air of human remains. In its *Airport Handling Manual* (AHM) IATA prescribes that for special cargo, such as valuable cargo, perishables, vulnerable cargo, human remains and shipments of special importance or urgency, particular points to be considered are: that all personnel concerned are made fully aware of the nature and handling requirements of all such shipments; suitable arrangements are made for the security of valuable and vulnerable cargo; perishables are handled in accordance with the requirements of the particular commodity and in particular the most recent edition of the Perishable Cargo Regulations Manual; that a check is made to ensure that the final load assembled for dispatch to the aircraft *does* include shipments of special importance or urgency; and that shipments considered as special cargo have "special consignment" labels visibly attached to each package.[27]

The *IATA Ground Operations Manual* (IGOM) provides that human remains should be carried in an aircraft only if accepted by the operating airline for transport. The IGOM requires the carrier to make sure that a Human Remains Acceptance Checklist has been used (if required by the operating airline). Carriers are required, according to the IGOM, not to accept any human remains that are consolidated with any cargo other than other human remains. With regard to cremated human remains the Manual requires that only urns or other suitable containers as cargo with no special restrictions are accepted for carriage and that the carrier should make sure that the urn or other container is packed in a neutral outer pack that will protect the urn from breakage and/spillage.[28] It also prescribes that human remains in coffins should not be stored next to food or live animals, adding that there appears to be no scientific or technical reason why live animals and human remains should be segregated in aircraft cargo compartments, except that it may be ethical for cultural reasons to segregate them.

IATA in AHM 333 states that, should a body fluid leakage occur while transporting dead bodies, the usual accepted guidelines endorsed by WHO for dealing with spilled body fluids should be followed and the handler is advised to: wear disposable gloves and, if available, a plastic apron. If the spillage has occurred on an aircraft, the AHM provision advises the handler to only use cleaning materials suitable for aircraft use. He should not try to clean the body fluids by hosing with water or air and should use material that will adsorb the body fluids and scrape the material into a biohazard bag. Afterwards, he should wash the area with water/disinfectant after removal of the adsorbent material, dispose of gloves and apron in a biohazard bag and wash hands thoroughly with soap and water afterwards.

WHO has also some guidance pertaining to the handling of human remains, and recommends as a fundamental measure that the handling of human remains should be kept to a minimum. Additionally, WHO recommends, particularly in the case of

[27] IATA Airport Handling Manual, AHM 310 at 149.

[28] IATA IGOM, Chapter 3.

deaths caused by infectious diseases that remains should not be sprayed, washed or embalmed and that only trained personnel should handle remains during the outbreak. Personnel handling remains should wear personal protective equipment (gloves, gowns, apron, surgical masks and eye protection) and closed shoes.[29]

In the United States, there are no requirements for importation into the country if human remains consist entirely of: clean, dry bones or bone fragments or human hair; teeth; fingernails or toenails; and human remains that are cremated before entry into the United States. Human remains intended for interment or subsequent cremation after entry into the United States must be accompanied by a death certificate stating the cause of death. If the death certificate is in a language other than English, then it should be accompanied by an English language translation.

If the cause of death was a quarantinable communicable disease (i.e., cholera, diphtheria, infectious tuberculosis, plague, smallpox, yellow fever, viral hemorrhagic fevers, SARS, or pandemic influenza), the remains must meet the applicable standards and may be cleared, released, and authorized for entry into the United States only if: the remains are cremated; or the remains are properly embalmed and placed in a hermetically sealed casket; or the remains are accompanied by a permit issued by the Director of the Centre for Disease Control and Prevention (CDC). The CDC permit (if applicable) must accompany the human remains at all times during shipment. If the cause of death was anything other than a quarantinable communicable disease, then the remains may be cleared, released, and authorized for entry into the United States if: the remains meet the standards for applicable or properly embalmed and placed in a hermetically sealed casket, or are accompanied by a permit issued by the CDC Director); or the remains are shipped in a leak-proof container.

Federal quarantine regulations (42 CFR Part 71) state that the remains of a person who is known or suspected to have died from a quarantinable communicable disease may not be brought into the United States unless the remains are; properly embalmed and placed in a hermetically sealed casket, cremated, or accompanied by a permit issued by the CDC Director. Quarantinable communicable diseases include cholera; diphtheria, infectious tuberculosis; plague; smallpox, yellow fever; viral hemorrhagic fevers (Lassa, Marburg, Ebola, Congo-Crimean, or others not yet isolated or named); severe acute respiratory syndrome (SARS); and influenza caused by novel or re-emergent influenza viruses that are causing or have the potential to cause a pandemic. A CDC permit may be required when the remains are not embalmed or cremated, especially if the person is suspected or known to have died from a communicable disease.

Persons wishing to import human remains, including cremated remains, into the United States must obtain clearance from CDC's Division of Global Migration and Quarantine (DGMQ). Clearance can be obtained by presenting copies of the foreign death certificate and if needed, a CDC/DGMQ permit to the CDC Quarantine Station with jurisdiction for the U.S. port of entry. A CDC/DGMQ permit may be

[29] Interim Infection Control Recommendations for Care of Patients with Suspected or Confirmed Filovirus (Ebola, Marburg) Haemorrhagic Fever, BDP/EPR/WHO, Geneva March 2008.

needed to import human remains if the deceased is known or suspected to have died from a quarantinable communicable disease. A copy of the foreign death certificate and the CDC/DGMQ permit must accompany the human remains at all times during shipment. The foreign death certificate should state the cause of death and must be translated into English.

The basic principle that should apply to the handling of human remains must be consistent with the policy which currently applies in case of aircraft accident investigations, in that the country in which the death occurred must act contemporaneously and in close consultation with the country of nationality. This would obviate the case of the British tourist who died in Greece. The second principle should be that the principles of *ICAO Circular 285 – AN/166* should be incorporated into Annex 9 along with a Standard in Chapter 4 that human remains should be accorded priority and dignity and that specially reduced rates should be promulgated by States on their airlines for this purpose. This Standard should be adopted in accordance with the basic philosophy of Article 44 d) of the Chicago Convention which states that ICAO should strive to meet the needs of the people of the world for safe, regular, efficient and economical air transport.

Annex 9 should contain a separate Appendix for the carriage of human remains by air, which would lay down global principles for the handling, care and commitment that States could ensure. This Appendix should have a cross reference to Annex 18 and the *Technical Instructions* contained in Doc 9284[30] with appropriate linkages that ensure the harmonious application of both Annexes to this sensitive subject.

As for Annex 18, a study should be undertaken to determine as to when a cadaver or cremated remains would, if at all, become a dangerous good. The focus area would be both on the condition the human remains are at the point of acceptance for carriage, and the manner in which they are packaged. In the ultimate analysis, there has to be core global rules in place for this important area of air transportation. It cannot be left for individual States or airlines to decide.

Enhancing global civil aviation security and facilitation is one of ICAO's Strategic Objectives as adopted by the Council in May 2012. This is the first-time facilitation has been mentioned in ICAO's strategic language and it should be a harbinger of new studies and new cooperation with the international community between ICAO and its member States o the carriage by air of human remains.

4.6 Carriage of Live Animals

Airlines have carried live animals since the 1930s culminating in a pets-only airline in 2009.[31] According to IATA, the number of pet shipments increased 3.3% in 2016 as against 2015, although revenue from these shipments fell 2.5%.[32] Animals are

[30] *Supra*, note 28.

[31] See Bomkamp (2009).

[32] Krems (2017). On a regional basis shipments from Latin America region increased 22.4% / rev-

transported either in the cabin (in case of small pets such as cats and dogs); as excess baggage or accompanied baggage and as cargo. Boeing states that "the safe transportation of live animals as air cargo is based on controlling three environmental factors: temperature, relative humidity level, and cargo compartment carbon dioxide (CO_2) concentration. Each type of animal has unique environmental requirements for optimal health. Failure to properly control these environmental factors may have an impact on animal welfare, comfort, and survivability, affecting animal cargo revenue".[33]

In Gluckman v. American Airlines Inc.,[34] The plaintiff sued the defendant American Airlines for emotional distress damages, *inter alia*, suffered as a result of his dog dying of a heatstroke while being transported in the cargo hold of defendant's aircraft where the heat had reached 140 °F—a temperature that was in violation of applicable guidelines. in violation of the airline's cargo hold guidelines. The court held that a value could not be placed on emotional damage caused by loss of companionship and that the plaintiff's only recourse could be the recovery of the value of the pet. The basis of the court's decision was that under the applicable jurisdiction's laws (New York), a cause of action for negligent infliction of emotional distress "arises only in unique circumstances, when a defendant owes a special duty only to plaintiff, or where there is proof of a traumatic event that caused the plaintiff to fear for her own safety."[35]

In the 1987 case of *Deiro* v. *American Airlines*[36] where the Plaintiff-appellant appealed from a district court order granting partial summary judgment for defendant-appellee American Airlines, Inc. The district court held that the Airlines' liability for the death of seven greyhound racing dogs and injuries to two others, caused by heat exposure while the dogs were being transported in the cargo area of a jet on which plaintiff was a passenger, was limited to a total of $750 pursuant to a liability limitation provision in Deiro's passenger ticket. Diero claimed that the dogs were not baggage. the court denied Deiro's cross-motion for partial summary judgment, rejecting his argument that animals are not "baggage" and therefore not subject to American's baggage liability limitation. That ruling was not appealed. Second, the court held as a matter of law that, under Oregon law, Deiro was not entitled to punitive damages. Although this second ruling was appealed, we do not reach it because our decision upholding the $750 liability limitation makes the punitive damages issue moot. The court of first instance ruled that Deiro's cross-motion for partial summary judgment was denied, rejecting his argument that animals are not "baggage" and therefore not subject to American's baggage liability limitation. That ruling was not appealed. Second, the court held as a matter of law that, under

---

enue grew 12.9% YOY § Shipments from Asia Pacific decreased 7.8% / revenue fell 13.5% YOY § Revenue from all other regions was plus or minus 1–3%.

[33] Safe Transport of Live Animal Cargo, Aero: Qtr. 02:12. http://www.boeing.com/commercial/aeromagazine/articles/2012_q2/4/.

[34] 844 F.Supp. (151 S.D.N.Y., 1994).

[35] See also, *Cucchi* v. *New York City Off-Track Betting Corp*., 818 F.Supp. 647, 656 (S.D.N.Y.1993).

[36] 816 F.2d 1360.

Oregon law, Deiro was not entitled to punitive damages. Although this second ruling was appealed, we do not reach it because our decision upholding the $750 liability limitation makes the punitive damages issue moot.

The Court of Appeal affirmed the district court's order and said "we find it difficult to imagine how any passenger with Deiro's experience, planning to check a quarter of a million dollars worth of baggage, could have had more opportunity or incentive to familiarize himself with the baggage liability provisions. We conclude that under the two-pronged reasonable communicativeness test, Deiro is contractually bound by the limitation of liability. We next consider whether American gave Deiro reasonable notice and a full and fair opportunity under the released valuation doctrine to declare a higher value for his baggage and obtain protection in an amount greater than $750".[37]

References

Bomkamp S (2009) All-pet airline hits skies. http://www.heavenlycreatures.ca/blog/?p=470

Krems J (2017) Live animal transport flying high – safeguarding animal safety and welfare. https://www.iata.org/events/wcs/Documents/WCS_2017/Live-Animals-Final.pdf

[37] https://www.casemine.com/judgement/us/59148ca2add7b04934535980.

Chapter 5
Price Fixing and Anti Competitive Conduct in Air Cargo Operations

The International Air Transport Association (IATA) records that 35% of global trade by value can be ascribed to air cargo, and that, in the context of combined passenger and cargo airlines, the cargo business generates 9% of airline revenues on average.[1] According to IATA, the value of international trade shipped by air in 2017 was forecast as amounting to USD 5.5 trillion, representing less than 1% of world trade by volume, but over 35% by value. This turns out to be the equivalent of USD18.6 billion worth of goods every day.[2] Totally dependent on air carriers for the carriage of their goods with speed and efficiency that other modes of trade transport cannot provide are pharmaceutical industries (for the carriage of vaccines and essentially needed pharmaceutical products), producers of perishable goods, live animals, goods needing express delivery, electronic devices and products contracted through e-commerce that necessitate speedy delivery.

Early trends in commercial practice indicate that price fixing was a stabilizer of the market. During the first half of the last century, price fixing was found acceptable in the United Kingdom on the basis that such a practice would balance the cyclical recessions afflicting trade and competition from foreign countries. This was despite restrictions on price fixing brought to bear by such legislation as Monopolies and Restrictive Practices Act of 1948. However, with the advent of free trade, internationalization of trade and globalization emerged a cautious legislative approach not only in Europe but elsewhere as well. Restrictions against cartelization as well as collusion by traders with a view to establishing predatory practices and price fixing has been common since. For example, The Australian *Trade Practices Act* of 1974, which is administered through the Australian Competition and Consumer Commission, provides in Section 46 that, when a firm takes control of dominant market power, particularly with intent to lessen or eliminate competition, the onus is on the person holding the position of dominance to prove his actions are not

[1] IATA Cargo Strategy July 2017, at 3. See http://www.iata.org/whatwedo/cargo/Documents/cargo-strategy.pdf.

[2] *Id.* 5.

R. Abeyratne, *Law and Regulation of Air Cargo*,
https://doi.org/10.1007/978-3-319-92489-2_5

tantamount to predatory practices. The criterion used is that recoupment through pricing at supra competitive levels was a *sine qua non* to prove predatory pricing.

The advantage of speed inherent to air transport has regrettably led, in certain quarters to price fixing cartels among air carriers. European Commissioner Margrethe Vestager said in March 2017 that millions of businesses depended on air cargo services, which carry more than 20% of all E.U. imports and nearly 30% of E.U. exports,[3] and that cartelizing the air cargo industry was anti-competitive. This statement was made in the wake of the EU's imposition of fines of €776 million on ten carriers operating cargo air services to Europe.[4] The EU alleged that the said carriers participated in a price fixing cartel that unjustly enriched them at the expense of their customers. Elsewhere, in the United States, a class certification hearing at the end of 2013 in the federal U.S. Eastern District of New York brought to bear a global conspiracy to inflate prices of airfreight shipping services by several carriers.[5]

5.1 Price Fixing in the European Union

The *Competition Act* of 1998 of the United Kingdom links predatory pricing with dominant position and uses a process similar to that of the European Union[6] in assessing price-cost relationships. Germany has similar legislation in the *Gesetz gegen Wettbewerbsbeschränkungen* (GWB) which is the Act Against the Restraint of Competition, which identifies predatory practices as an abuse of dominant position if the predator is dominant in the market; the conduct of predatory pricing is sustained and continuous and pricing is below average costs without objective justification.[7]

In 2007 British Airways was fined approximately £270m after the airline admitted to collusion in fixing the prices of fuel surcharges. The US Department of

[3] Randy Woods, European Commission re-imposes cartel fine against ten carriers, *Air Cargo World*, 17 March 2017. See https://aircargoworld.com/allposts/european-commission-re-imposes-cartel-fine-against-10-carriers/.

[4] Air Canada, Air France-KLM, British Airways, Cargolux, Cathay Pacific Airways, Japan Airlines, LAN Chile, Martinair, SAS and Singapore Airlines. An 11th carrier involved in the case, Qantas, had accepted the verdict and was not part of the challenge to the 2010 ruling. *Ibid.*

[5] China Airlines Price Fixing Law Suit Continues, Air Cargo World, May 9 2014. https://aircargo-world.com/allposts/china-airlines-price-fixing-lawsuit-continues-9777/. In separate criminal probes, 21 air cargo carriers have pleaded guilty to participation in the conspiracy and agreed to criminal fines in excess of US$1.8 billion (1.2 billion euros). *Ibid.*

[6] Both the EU and the United Kingdom uses the *AKSO NV* case as a benchmark where a Dutch chemical company, with a 65% market share of its flour bleach product was found to be abusing its dominant position. The European Court of Justice found that price below average variable cost by means of which dominant competitor seeks to eliminate its competition is regarded as an abusive practice. *See AKZO Chemie BV* v. *EC* (1991) ECR 1-3359 at paras. 71–72.

[7] *Gesetz gegen Wettbewerbsbeschränkungen* (GWB) Section 20(4).

Justice, following a decision by the UK's Office of Fair Trading to fine BA £121.5m, as a punitive measure for holding illegal discussions with rival Virgin Atlantic. The colluding airlines had added surcharges to ruling added surcharges to passenger fares in response to rising oil prices.

Legislatively, two important jurisdictions on price fixing are the European Union and the United States. In the European Union, the Treaty on the Functioning of the European Union (TFEU) is of direct relevance, Article 101 prohibits collisional agreements between companies which prevent, restrict or distort competition in the EU and which may adversely affect trade between Member States (anti-competitive agreements). This prohibition extends to price-fixing. Anti-competitive agreements in the EU entail punitive measures in the nature of fines irrespective of whether they are concluded between companies that operate at the same level of the supply chain (horizontal agreements) or at different levels (vertical agreements). The Treaty Establishing the European Community (EC Treaty)[8] has two distinct provisions against price fixing. Article 81 lists several categories of conduct in trade that are prohibited which inter alia makes price fixing void *ab initio*. Article 82 stipulates that any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it is prohibited as incompatible with the common market in so far as it may affect trade between Member States, including but not limited to directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions. Article 85.1 of the Treaty bestows authority on the European Commission to investigate cases of suspected infringement of these principles. If it finds that there has been an infringement, it is required to propose appropriate measures to bring it to an end.

Regulation 1/2003 sets out the manner in which Articles 81 and 82 can be implemented, and inter alia gives the European Commission authority where the Commission, acting on a complaint or on its own initiative, finds that there is an infringement of Article 81 or of Article 82 of the Treaty, to require by decision the undertakings and associations of undertakings concerned to bring such infringement to an end. For this purpose, it may impose on them any behavioural or structural remedies which are proportionate to the infringement committed and necessary to bring the infringement effectively to an end. Structural remedies can only be imposed either where there is no equally effective behavioural remedy or where any equally effective behavioural remedy would be more burdensome for the undertaking concerned than the structural remedy. Article 85.1 of the Treaty states that, if the Commission has a legitimate interest in doing so, it may also find that an infringement has been committed in the past.[9] The punitive measures imposed under the regulation are not obviated by antitrust compliance programmes that are undertaken and implemented by the offending parties.[10]

[8] http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A12002E%2FTXT.

[9] Council Regulation *(EC) No. 1/2003* of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, Article 7.1.

[10] See generally, Wils (2013), pp. 52–81.

Article 11 of Regulation 1/2003 provides for cooperation between the Commission and the competition authorities of the Member States, primarily through exchange of information.[11] There is an exception to the absolute rules of price fixing as described above. In the *Synthetic Fibres Commission* decision[12] addressed the issue that capacity reduction agreement may lead to a short-term increase in prices to the user and the Commission held that pursuant to article 85 (3) of the treaty establishing the European Economic Community, the provisions of article 85 (1) of the Treaty were inapplicable, with effect from 10 November 1982 for the period to 31 December 1985.

In November 2017, The European Commission fined five car seat belts, airbags and steering wheel manufacturers a total of € 34 million for breaching EU antitrust rules. The companies took part in one or more of four cartels for the supply of car seatbelts, airbags and steering wheels to Japanese car manufacturers in the European Economic Area (EEA). The EC held that the five car component suppliers were guilty of coordinated prices or markets, and exchanging sensitive information for the supply of seatbelts, airbags and steering wheels to Japanese car manufacturers Toyota, Suzuki and Honda. The anti competitive collusion to form the price fixing cartel took place within the EEA. Earlier, in June of the same year, The European Commission readopted a cartel settlement decision against the envelopes manufacturer Printeos (formerly known as Tompla) and imposed a fine of €4,729,000 for its participation in a price fixing cartel.

5.2 Price Fixing in The United States

The United States competition law has as its genesis the *Sherman Act* of 1890 followed by the *Clayton Act* of 1914 (which was later amended in 1936). Such established legislation has been interpreted judicially to require two criteria: pricing must be below average variable costs and there has to be proof of recoupment of losses incurred during the alleged period of predatory pricing. In the 2001 case of *US* v. *AMR* Corp[13] the court held that an air carrier, which matches prices and increases output when faced with competition from low cost carriers, is not guilty of monopolization of the market.

Price fixing is a form of collusion between parties that sometimes gives the illusion of a monopoly. The Sherman Antitrust Act of 1890 in Section 2 provides that Every person who is guilty of monopolizing, or attempting to monopolize, or combining or conspiring with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, is guilty of a felony, and, on conviction, is liable to be punished by fine not exceeding $10,000,000 if a corporation, or, if any other person, $350,000, or by imprisonment not exceeding

[11] *Id*. Article 12.

[12] 84/380/EEC [1984] OJ L 207/17.

[13] U.S. District Court, District of Kansas, 27 April 2001, 28 Avi 15, 204.

3 years, or by both at the discretion of the court to which matter will be remanded. Section 1 set the stage by providing that every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal. In *United States* v. *Trans-Missouri Freight Association*[14] the court held that the provisions respecting contracts, combinations, and conspiracies in restraint of trade or commerce among the several States or with foreign countries, contained in the Sherman Antitrust Act "to protect trade and commerce against unlawful restraints and monopolies," apply to common railroad carriers, and "a contract between them in restraint of such trade or commerce is prohibited even though the contract is entered into between competing railroads only for the purpose of thereby affecting traffic rates for the transportation of persons and property".[15] In this case the defendants had formed themselves into a company called "Trans-Missouri Freight Association" and by agreement decided to raise railroad transportation prices. Peckham J. held that:"[T]he claim that the company has the right to charge reasonable rates, and that, therefore, it has the right to enter into a combination with competing roads to maintain such rates, cannot be admitted. The conclusion does not follow from an admission of the premise. What one company may do in the way of charging reasonable rates is radically different from entering into an agreement with other and competing roads to keep up the rates to that point. If there be any competition, the extent of the charge for the service will be seriously affected by that fact. Competition will itself bring charges down to what may be reasonable, while, in the case of an agreement to keep prices up, competition is allowed no play. It is shut out, and the rate is practically fixed by the companies themselves by virtue of the agreement, so long as they abide by it".[16] However, the court was of the view that price fixing arrangements were not unlawful generally under common law and would be unlawful only they were to act in restraint of trade and fair competition. In the 1911 *Standard Oil Case,*[17] the Court held that The Sherman Act should be construed in the light of reason; in that it prohibits all contracts and combination which amount to an unreasonable or undue restraint of trade in interstate commerce. The court inquired into the common law concept of "restraint of trade" (action that interferes with free competition in a market) and Harland J affirmed that the formation of the Standard Oil Company of New Jersey and its subsidiary companies constitute a combination in restraint of interstate commerce.[18] Interpreting the judgment in the Trans-Missouri case Justice Harland said: "the *Trans-Missouri Freight Case,* show so clearly and affirmatively as to admit of no doubt that this court, many years ago, upon the fullest consideration, interpreted the Anti-Trust Act as prohibiting and making illegal not only *every* contract or combination, in whatever form, which was in restraint of interstate commerce, without regard to its reasonableness or unreasonableness, but all monopolies

[14] 166 U.S. 290 (1897).

[15] *Id*. 291.

[16] *Id.* 339.

[17] 221 U.S. 1 (1911).

[18] *Id*. 83.

or attempts to monopolize "any part" of such trade or commerce[19]… The Anti-Trust Act makes it a criminal offense to violate the law, and provides a punishment both by fine and imprisonment. To inject into the act the question of whether an agreement or combination is *reasonable* or *unreasonable* would render the act as a criminal or penal statute indefinite and uncertain, and hence, to that extent, utterly nugatory and void, and would practically amount to a repeal of that part of the act… [A]nd while the same technical objection does not apply to civil prosecutions, *the injection of the rule of reasonableness or unreasonableness would lead to the greatest variableness and uncertainty in the enforcement of the law. The defense of reasonable restraint would be made in every case, and there would be as many different rules of reasonableness as cases, courts and juries.* What one court or jury might deem unreasonable, another court or jury might deem reasonable."[20]

Judicially, there could be no room for doubt that The Sherman Act equivocates in the context of rule of reason as stated by the court in 1913. The Court's reasoning was the Act was grounded on common law precedents which ascribe to the Act a well define, clear and objective standard.[21] In *United States* v. *Trenton Potteries Co.*,[22] the Court held that under the Sherman Act, the offensive agreement or conspiracy is criminal whether or not followed by efforts to carry it into effect. In this case it was argued that on behalf of the respondents, in support of their price-fixing agreement not to sell second grade or class B pottery in the domestic market, and evidence was submitted including the testimony of the secretary of the respondents' association, that brought to bear the fact that that a distinct association of jobbers of pottery was cooperating in this effort, and that its secretary had tendered his active assistance to confine the sale of this class of pottery to the export trade. In the context of reasonableness of the restraint of trade, Stone J held with the original court's decision that the intent of the Sherman Act was give effect to the legality of the preposition that criminality was determinant on the agreement and not the implementation of the agreement itself. In The 1939 case of *United States* v. *Socony Vacuum Oil Co.*,[23] involved the indictment of numerous oil companies and individuals who were charged under Article 1 of the Sherman Act—that they conspired to raise and maintain spot market prices of gasoline, and prices to jobbers and consumers in the "Midwestern Area," embracing many States, by buying up "distress" gasoline on the spot markets and eliminating it as a market factor. The allegations were supported by evidence that went on to prove that the defendants devised and carried out an organized program of regularly ascertaining the amounts of surplus spot market gasoline with intent to raise and maintain prices, and by assigning its sellers to buyers who were in the combination, and purchasing the oil at fair going market prices, and that this process, by removing part of the spot market supply, was at least

[19] *Id.* 94.

[20] *Id.* 97.

[21] See Nash v. United States, (1913) 229 U.S. 373.

[22] 273 U.S. 392 (1927). See also, *Connally* v. *General Construction Co*. (1926) 269 U.S. 385 at 391.

[23] 310 U.S. 150 (1940).

a contributing factor in stabilizing the spot market and thereby caused an increase of prices, so that jobbers and consumers in the midwestern area paid more for their gasoline than they would have paid but for the conspiracy, their prices being geared to spot market prices. The Court again held that under the Sherman Act the basic principle remained that it was *prima facie* prohibited from fixing prices.[24]

The Court instructed the Jury in the *Socony Vacuum Oil Co case*. The court charged the jury that "it was a violation of the Sherman Act for a group of individuals or corporations to act together to raise the prices to be charged for the commodity which they manufactured where they controlled a substantial part of the interstate trade and commerce in that commodity". The court stated that, where the members of a combination had the power to raise prices and acted together for that purpose, the combination was illegal, and that it was immaterial how reasonable or unreasonable those prices were or to what extent they had been affected by the combination. It further charged that, if such illegal combination existed.[25] One of the basic principles established in this case was the distinction between "raising prices" and "price fixing" where the former could be justified if accomplished for reasons beneficial to free and fair trade where the latter would be prima facie unacceptable at law unless some compelling reason was adduced as to their necessity. Douglas J. delivering the judgment held: "The reasonableness of prices has no constancy due to the dynamic quality of the business facts underlying price structures. Those who fixed reasonable prices today would perpetuate unreasonable prices tomorrow, since those prices would not be subject to continuous administrative supervision and readjustment in light of changed conditions. Those who controlled the prices would control or effectively dominate the market. And those who were in that strategic position would have it in their power to destroy or drastically impair the competitive system. But the thrust of the rule is deeper and reaches more than monopoly power. Any combination which tampers with price structures is engaged in an unlawful activity. Even though the members of the price-fixing group were in no position to control the market, to the extent that they raised, lowered, or stabilized prices, they would be directly interfering with the free play of market forces. The Act places all such schemes beyond the pale and protects that vital part of our economy against any degree of interference. Congress has not left with us the determination of whether or not particular price-fixing schemes are wise or unwise, healthy or destructive. It has not permitted the age-old cry of ruinous competition and competitive evils to be a defense to price-fixing conspiracies. It has no more allowed genuine or fancied."[26]

Horizontal price fixing, or parallel price fixing is *ipso facto* a violation of Article 1 of the Sherman Act which provides that every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal. However, the plaintiff must prove the existence of an agreement, combination or conspiracy among

[24] See also, *United States* v. *Addyston Pipe and Steel Co.* 85 Fed. 271 at 291.

[25] *Id.* 211.

[26] *Id*. 220.

actual competitors where such conduct had the purpose of adversely affecting pricing that would create a distortion of the market for competitors. In a case[27] decided on 2009 involving allegations that the defendants conspired to fix, raise, maintain, and stabilize the price of ethylene propylene diene monomer ("EPDM") synthetic rubber at artificially high, non-competitive levels in violation of federal antitrust law, the plaintiffs filed suit under section 1 of the Sherman Act, alleging, inter alia, that the defendants conspired "to fix, raise, maintain and/or stabilize the price of EPDM sold in the United States, including limiting supply and/or allocating markets and customers for the sale of EPDM in the United States". The court endorsed the principle enunciated in an earlier case: "to prevail in their motion for class certification, the plaintiffs must demonstrate that common questions of law or fact predominate over individual ones on the issues relevant to the three elements of an antitrust claim". "The predominance requirement is met if the plaintiff can establish that the issues in the class action that are subject to generalized proof, and thus applicable to the class as a whole, … predominate over those issues that are subject only to individualized proof."[28]

The Sherman Act is driven and determined in terms of a violation of its Section 1 more by conspiracy and collusion rather than the identification of a specific overt act. In *Summit Health Limited* v. *Pinhas*[29] where an ophthalmologist on the staff of the petitioner Medical Center, filed a suit, asserting a violation, *inter alia*, of Article 1 of the Sherman Act by the Center and other petitioners, including several doctors, the complainant alleged further that the petitioners had conspired to exclude the complainant Pinhas from the Los Angeles ophthalmological services market when he refused to follow an unnecessarily costly surgical procedure used at the Medical Center. Court held: "to be successful, Pinhas need not allege an actual effect on interstate commerce. Because the essence of any one violation is the illegal agreement itself, the proper analysis focuses upon the potential harm that would ensue if the conspiracy were successful, not upon actual consequences. And if the conspiracy alleged in the complaint is successful, as a matter of practical economics there will be a reduction in the provision of ophthalmological services in the Los Angeles market. Thus, petitioners erroneously contend that a boycott of a single surgeon, unlike a conspiracy to destroy a hospital department or a hospital, has no effect on interstate commerce because there remains an adequate supply of others to perform services for his patients."[30]

On the subject of conspiracy and parallel pricing, the case of *Bell Atlantique Corporation* v. *Twombly*[31] gives an interesting perspective. The complaint in the case was from two respondents—Twombly and Marcus—telephone subscribers who alleged that the providers of telecommunication services conspired to restrain

---

[27] *Ethylene Propylene Diene Monomer (EPDM) Antitrust Litigation*, 681 F Supp (2d) 141.

[28] *In re Visa Check*, 280 F.3d at 136.

[29] 500 US 322 (1991).

[30] *Cornell University Law School, Legal Information Institute,* at https://www.law.cornell.edu/supct/html/89-1679.ZS.html.

[31] 550 US 544 (2007).

trade in two ways, by inflating charges for local telephone and high-speed Internet services. They claimed that the providers had "engaged in parallel conduct"[32] in their respective service areas to inhibit the growth of upstart companies. Justice Souter, in his judgment stated: "Liability under §1 of the Sherman Act … requires a "contract, combination …, or conspiracy, in restraint of trade or commerce." The question in this putative class action is whether a §1 complaint can survive a motion to dismiss when it alleges that major telecommunications providers engaged in certain parallel conduct unfavorable to competition, absent some factual context suggesting agreement, as distinct from identical, independent action. We hold that such a complaint should be dismissed". In this case it was held that there was nothing to uphold plausibility by real evidence of conspiracy by the providers. Justice Souter concluded: "In a traditionally unregulated industry with low barriers to entry, sparse competition among large firms dominating separate geographical segments of the market could very well signify illegal agreement, but here we have an obvious alternative explanation".

The award for injury or damage caused by collusion is based on a just and reasonable inference of the damage arrived at after a rigorous analysis.[33] It is important to note that there are more chances of succeeding in a case involving collusion if the case is instituted as a class action where it is likely that it is the only way compensation for anti trust violations could be dispensed. Second, if the plaintiff could prove that the antitrust resulted in anti competitive conduct the case becomes more compelling in his favour. It would also help if the damages sought is not excessive.

5.3 Other Anti Competitive Conduct

It would not be incorrect to say that the genesis of competition law is consumer welfare and protection. At the 38th Session of the ICAO Assembly in 2013 the Assembly adopted a Resolution which called upon the Council of ICAO to Requests the Council to develop, in the short term, a set of high-level, non-binding, non-prescriptive core principles on consumer protection, for use as policy guidance, which strike an appropriate balance between protection of consumers and industry competitiveness and which take into account the needs of States for flexibility, given different State social, political and economic characteristics. These non-binding, non-prescriptive consumer protection principles would be as impotent as any other

[32] OECD defines "parallel conduct" in price fixing as: "Under conditions of oligopoly, the pricing and output actions of one firm have a significant impact upon that of its rivals. Firms may after some period of repeated actions become conscious or aware of this fact and without an explicit agreement coordinate their behaviour as if they were engaged in collusive behaviour or a cartel to fix prices and restrict output. The fear that departure from such behaviour may lead to costly price cutting, lower profits and market share instability may further create incentives for firms to maintain such an implicit arrangement amongst themselves". See *OECD Glossary of Statistical Terms* at https://stats.oecd.org/glossary/detail.asp?ID=3172.

[33] *Comcast Corporation* v. *Behrend*, 655 F (3d) 182.

ICAO documents offering States "guidance". Presumably, the Assembly was not aware, or did not care that there are established laws under common law, particularly applicable in the European Union States and the United Sates that prohibit anti competitive conduct, which have been established through a *cursus curiae* that clearly spells out how an economic entity should conduct business.

The European Commission (EC), in a clear statement made in 2005 drew the intrinsic link between competition and consumer protection and that consumers can be harmed by distortions in the competitive structure of the market. The Statement of the EC said that consumer welfare, being an established principle in the Commission and that competition must be protected so that consumer interests are protected and resources are properly allocated.[34] This means that economic entities must compete at the same level, offering the consumer a choice of different product at a reasonable price.

At competition law, airlines are undertakings which engage in an economic activity irrespective of their constructs and financial establishment. Any activity offering goods and services in a given market is an economic activity[35]. Under European law,[36] the basic instrument that governs competition is the Treaty on the Functioning of the European Union (TFEU) 2012/C 326/0, Article 107 to 109 addresses the question of State aids. Article 107 (1) provides that any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market. Article 108 prescribes that The Commission shall, in cooperation with Member States, keep under constant review all systems of aid existing in those States. It shall propose to the latter any appropriate measures required by the progressive development or by the functioning of the internal market. If, after giving notice to the parties concerned to submit their comments, the Commission finds that aid granted by a State or through State resources is not compatible with the internal market having regard to Article 107, or that such aid is being misused, it shall decide that the State concerned shall abolish or alter such aid within a period of time to be determined by the Commission.

If the State concerned does not comply with this decision within the prescribed time, the Commission or any other interested State may refer the matter to the Court of Justice of the European Union direct. On application by a Member State, the Council may, acting unanimously, decide that aid which that State is granting or

[34] Speech of 15 September 2005 at www.ec/europa/eu/competition.

[35] *In re. Pavlov*, Cases C-180/98 etc. [2000] 4 CMLR 306.

[36] The European Community was established in 1957 by the Treaty of Rome and initially comprised six Member States. Following the entry into force of the Treaty of Lisbon on 1 December 2009, the EC Treaty is called the Treaty on the Functioning of the European Union (TFEU). The European Union comprises 27 Member States: Austria, Belgium, Bulgaria, Cyprus (Greek), the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, the Slovak Republic, Slovenia, Spain, Sweden, and the United Kingdom.

intends to grant shall be considered to be compatible with the internal market, in derogation from the provisions of Article 107 or from the regulations provided for in Article 109, if such a decision is justified by exceptional circumstances. If, as regards the aid in question, the Commission has already initiated the procedure provided for in the first subparagraph of this paragraph, the fact that the State concerned has made its application to the Council shall have the effect of suspending that procedure until the Council has made its attitude known. If, however, the Council has not made its attitude known within 3 months of the said application being made, the Commission shall give its decision on the case.

Article 108 further provides that the Commission needs to be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid. If it considers that any such plan is not compatible with the internal market having regard to Article 107, it shall without delay initiate the procedure provided for in paragraph 2. The Member State concerned shall not put its proposed measures into effect until this procedure has resulted in a final decision. The Commission may adopt regulations relating to the categories of State aid that the Council has, pursuant to Article 109, determined may be exempted from the procedure provided for by paragraph 3 of Article 108.

Article 109 stipulates that The Council of Europe, on a proposal from the Commission and after consulting the European Parliament, may make any appropriate regulations for the application of Articles 107 and 108 and may in particular determine the conditions in which Article 108(3) shall apply and the categories of aid exempted from this procedure.

Where the external market is concerned, as would apply to the operations of the Gulf carriers into and out of Europe, Regulation (EC) No 868/2004 of the European Parliament and of the Council of 21 April 2004 concerning protection against subsidization and unfair pricing practices causing injury to Community air carriers in the supply of air services from countries not members of the European Community applies. According to the regulation, a subsidy exists when a government, regional body or other public organisation makes a financial contribution that confers a benefit. It may take the form of: grants, loans or equity infusion, potential direct transfer of funds or the assumption of liabilities; revenue that is otherwise due but which is foregone or not collected; the supply of goods or services other than general infrastructure, or their purchase by a public body; payments by a public body to a funding mechanism or the entrusting to a private body of one of the functions described above.

If there is a breach of Regulation 868/2004 a complaint can be initiated and an investigation is initiated when a written complaint is lodged by the EU industry or on the Commission's own initiative. Where sufficient evidence exists, the proceeding is initiated within 45 days of the lodging of the complaint, but this period may be extended by up to 30 days if there is a bilateral agreement. Notice of the initiation of the procedure must be published in the Official Journal and include the details specified in the regulation. The Commission must notify interested parties. The Commission has 45 days within which to inform the complainant if insufficient evidence is presented.

This investigation is required to be concluded within 9 months of proceedings being initiated. An extension may be allowed if a satisfactory resolution of the complaint appears imminent or if additional time is needed in order to achieve a resolution that is in the EU interest. Interested parties may be granted a hearing. However, if they refuse access to or fail to provide necessary information within the appropriate time limits, the final findings may be made on the basis of facts available.

Four possible scenarios may be the result of an investigation: provisional measures—these may be imposed for a maximum period of 6 months if it is determined that injury is being caused and that the EU interest calls for intervention to prevent further such injury; termination of the proceedings without measures being imposed—this happens when the complaint is withdrawn or a satisfactory remedy is obtained; definitive measures—these are imposed when it is established that unfair pricing practices or subsidies which cause injury exist. The level of measures imposed must not exceed the level of the subsidies or the difference between the fares charged by the two air carriers concerned (EU and non-EU)—and undertakings: an investigation may be terminated without measures being imposed if the public authorities or non-EU air carrier concerned undertake to eliminate the subsidies and revise its prices in order to prevent further injury. In the event of an undertaking being breached, a definitive measure will be imposed. Should the circumstances warrant, the Commission may review the imposition of the measures in their initial form with a view to repealing, modifying or maintaining them.

Article 82 of The Treaty Establishing The European Community (Treaty of Rome of 27 March 1957) prohibits abuses of a dominant position. In accordance with the case-law, it is not in itself illegal for an undertaking to be in a dominant position and such a dominant undertaking is entitled to compete on the merits. However, the undertaking concerned has a special responsibility not to allow its conduct to impair genuine undistorted competition on the common market. Article 82 is the legal basis for a crucial component of competition policy and its effective enforcement helps markets to work better for the benefit of businesses and consumers. This is particularly important in the context of the wider objective of achieving an integrated internal market.

The Treaty, in Article 86 provides that any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in: directly or indirectly imposing unfair purchase or selling prices or unfair trading conditions; limiting production, markets or technical development to the prejudice of consumers; applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; or making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty adopted by the Council on 16 December 2002 and implementing the rules on competition

laid down by Articles 101 and 102 of the Treaty on the Functioning of the European Union (TFEU) (formerly Articles 81 and 82 of the Treaty establishing the European Community (EC Treaty)), replaced Regulation EEC No 17/62 from 1 May 2004.

Regulation No 17/62 established a centralised monitoring system under which agreements liable to restrict and affect trade between EU countries must, in order to qualify for an exemption, be notified to the Commission. The Commission's exclusive power to authorise agreements which restrict competition, but which meet the conditions of Article 81(3) of the EC Treaty has led to a large number of agreements being notified by companies, a fact which has undermined efforts to promote a rigorous and decentralised application of the EU competition rules.

The TFEU which came later, prescribed in Articles 101 and 102 the principles of dominant position as applicable in the EU. Article 101 provides that prohibits as incompatible with EU principles, all agreements between undertakings, decisions by associations of undertakings, and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction, or distortion of competition within the EU. The following must be established for an infringement of Article 101(1): an agreement or concerted practice between two or more undertakings, or a decision by an association of undertakings; which has as its object or effect the prevention; restriction or distortion of competition; and an appreciable effect on competition; and an appreciable effect on trade between Member States.

Article 102 in particular has been adopted with a view preventing undertakings who hold a dominant position in a market from abusing that position. Its fundamental purpose and role is to regulate monopolies, which works to restrain and limit competition in private industry and produce worse outcomes for consumers and society. Article 102 provides that any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in: directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions; limiting production, markets or technical development to the prejudice of consumers; applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts. One commentator says that Article 3(1)g of the Treaty of European Communities recognized the vital importance of establishing a system ensuring that competition in the internal market is not distorted.[37]

[37] Ioannis Leanos, *Competition law in the European Union after the Treaty of Lisbon*, Academia.edu at https://www.academia.edu/1294134/Competition_Law_in_the_European_Union_After_the_Treaty_of_Lisbon. Article 3.1 (g) provides that For the purposes set out in the preceding Article, the activities of the Community shall include, under the conditions and with the timing provided for in the Treaty the application of procedures which shall make it possible to co-ordinate the economic policies of Member States and to remedy disequilibria in their balances of payments.

The European Court of Justice, in a 1978 decision pronounced that the dominant position principle as enunciated by Article 102 should be interpreted as a position of economic strength created by an undertaking which enables it to effectively preclude competition so as to give that undertaking economic independence over its competitors, customers and consumers.[38] The term "dominant position" is not explicitly defined anywhere and is deemed to mean substantial market power.

It must be noted that competition is a dynamic process and an evaluation of the competitive constraints on an undertaking cannot be based solely on the existing market situation. Also, to be taken into account are the potential impact of expansion by actual competitors or entry by potential competitors, including the threat of such expansion or entry. Guidance material on Article 102 states that an undertaking can be discouraged from increasing its prices if expansion or entry is likely, timely and sufficient. Profitability is a key factor in this equation since if the Commission were to consider that expansion or entry is likely it must be sufficiently profitable for the competitor or entrant, taking into account factors such as the barriers to expansion or entry, the likely reactions of the allegedly dominant undertaking and other competitors, and the risks and costs of failure. The Guidance material states:

> For expansion or entry to be considered timely, it must be sufficiently swift to deter or defeat the exercise of substantial market power. For expansion or entry to be considered sufficient, it cannot be simply small-scale entry, for example into some market niche, but must be of such a magnitude as to be able to deter any attempt to increase prices by the putatively dominant undertaking in the relevant market.[39]

An interesting feature in the criteria used by the European court of justice in determining dominant position is there narrow interpretations.

5.4 International Implications

5.4.1 Issues of Territoriality

The issue whether rules established by one country or one region on collusion and primary price fixing can apply internationally is relevant to this discussion. In the famous *Woodpulp* case[40] the Court of Justice of the European Communities decided that the EC competition rules apply to agreements of foreign enterprises which are entered into outside the European Community as long as they are implemented within the common market.

One cannot deny that in this era of global economy, some degree of extraterritoriality in the enforcement of national competition rules is inevitable. A State would therefore be seen as being justified in applying its competition rules to the conduct

[38] *United Brands* v. *Commission,* Case 27/76 [1978] ECR 207 [1978]1 CMLR 429.

[39] http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52009XC0224(01).

[40] *AhalstromOsakeyhtio* v. *Commission* (1988) ECR 5193.

of foreign enterprises abroad when conduct which occurs in a foreign country affects its economy adversely, particularly where the State in which such conduct occurs has no competition rules or has no intention to prohibit such conduct. This phenomenon is easily reflected by transnational business entities who may engage in restrictive business practices in a "twilight zone" where no State can fully exercise jurisdiction and yet harmful effects of such restrictive business practices may be felt in one or more States. To say that there should be no extraterritoriality of any kind in the application of competition rules would mean that such transnational entities can engage in anti-competitive conducts with impunity.

There is of course the consideration that an extraterritorial application of competition rules is a costly business both for the enforcement agency and for the foreign defendants and is often a second-best solution to a problem which essentially inquires as to how to cope with transnational anti-competitive conduct. An extraterritorial application of competition rules is often not as effective as it would be if applied domestically. A State which attempts to apply its anti-competitive laws extraterritorially to a defendant enterprise located abroad could always face difficulties of enforcement and considerations of forum and jurisdiction. There could also be disabling legislation in a foreign State which may effectively preclude extraterritoriality.

The *Watchmakers of Switzerland* case[41] of 1955 exemplifies the essential commercial law principle of the United States, that applicability of anti- trust laws on foreign enterprises may often entail conflict with legislation of other States. The court in this case held that a watch repair enterprise, conducted in the United States by two Swiss corporations, could be subjected to the domestic laws of the United States. The court further held that in order for a foreign corporation to be present within the jurisdiction of a court for purpose of service of process, there must be proof of continuous local activities and a showing that under all circumstances of the case the forum is not unfairly inconvenient. Even though the two Swiss entities had no property in the United States and did not carry out their activities directly (the business activities of the Swiss corporations were carried out by an American corporation in the United States), since the Swiss corporations determined the prices and terms of the business enterprise, the court further held that the Swiss corporations could be subjected to anti-trust statutes and tariff laws of the United States.[42]

In the watershed case of *Laker Airways Limited* v. *SABENA Belgian World Airlines*[43] it was held that territoriality-based jurisdiction allows states in the United States to regulate conduct or status of individuals or property physically situated within a territory even if effects of conduct are felt outside that territory, and conversely, conduct outside a territory, which is calculated to have a substantial effect on that territory, may also be similarly regulated. It was also held that a state has jurisdiction to prescribe law governing conduct of its nationals whether such

[41] *United States* v. *The Watchmakers of Switzerland Information Center Inc. et al*. 133 F. Supp. 40.

[42] *Id*. at 41.

[43] 731 F.2d 909 (1984).

conduct takes place inside or outside the territory of that state. Accordingly, the plaintiff Laker Airways Limited, a British corporation seeking remedy in the United States whose activities in question took place in countries other than the United States, was deemed to be subject to United States antitrust legislation on the basis that such activities gravely impaired United States' interests.[44] In deciding upon the contentious question whether the law of the United Kingdom should apply to the plaintiff, the court compared the diametrically opposed antitrust legislation of the United Kingdom and the United States and held:

> We find no indication in either the statutory scheme or prior judicial precedent that jurisdiction (by the United States) should not be exercised. Legitimate United States interests in protecting consumers, providing for vindicating creditors' rights, and regulating economic consequences of those doing substantial business in our country are all advanced under the congressionally prescribed scheme. These are more than sufficient jurisdictional contacts under *United States* v. *Aluminium Co. of America*[45] and subsequent case law to support the exercise of prescriptive jurisdiction in this case.[46]

In the United States, the scope of antitrust legislation and protection thereby extends to those persons who are either directly or indirectly affected adversely by antitrust violations by third parties. The adverse effect on the plaintiff must be one that the laws were written to guard against. An example of this principle can be seen in the *Uranium antitrust litigation* of 1979[47] where a business entity which indulged in a "tying arrangement[48]" to sell its product was considered a violation of antitrust legislation. The tie-in resulted in a drop in demand for the product concerned, giving way to a drop in prices and adversely affecting other competitors of the product in the market.

The role of WTO in extraterritoriality becomes significant when one considers the eventuality where the extraterritorial application of competition rules becomes too costly or burdensome on States concerned. WTO offers the alternative of its own dispute settlement process and a framework within which Members may seek positive comity and a certain convergence or harmonization of competition rules. There have been several proposals for convergence, the most practical and well thought out of which is the Draft International Antitrust Code (which is referred to as (DIAC) proposed by a group of competition law scholars, called the Munich Group. The DIAC proposes that there should be a comprehensive international antitrust code covering the major areas of competition law such as horizontal agreements, vertical

---

[44] *Id*. 910.

[45] 148 F. 2d 416 (2d Cir. 1945), cited at n. 136 of this article.

[46] 731 F.2d 909 (1984) at 945-946.

[47] *In re Uranium Antitrust Litigation, Westinghouse Electric Corporation* v. *Rio Algom Limited et al*. 473 F.Supp.393 (1979).

[48] A tying arrangement is the sale of one item (the tying product) only on condition that the buyer would take the second item (the tied product) from the same source. Such arrangements are *per se* unreasonable and violative of antitrust laws if the tie-in involves two distinct products, and the party has sufficient economic power in the tying market to impose significant restraints in the tied product market.

agreements, mergers and acquisitions, the relationship between competition law and industrial policies and others. It also recommends the establishment of an international antitrust agency which shares the responsibility of enforcement of international competition rules with the national governments.

States of Europe must reconcile with the fact that, unlike large nations such as the United States, Canada and Russia, individual European States are relatively small in size. Geographic magnitude of a country becomes a relevant consideration in air transport both in terms of the volume of traffic generated by a particular country and the negotiating leverage it has in bartering air traffic rights and points of departure and landing. If a country is small, it is usual for that country to have lesser airports than a larger country and the latter would consequently have more opportunity at bargaining. Therefore, incontrovertibly, European States must band together in order to optimize their collective potential.

Strict European Union legislation should continue in product performance, product safety and environmental impact to promote a competitive advantage and stimulate and upgrade domestic demand. The last element—environmental impact—should be particularly addressed in harmony with global regulations as promulgated through the International Civil Aviation Organization. As a future measure, European States should also continue limiting direct co-operation in the air transport field among industry rivals in order to obviate anti-competitive conduct. As a supplemental measure, competition should be deregulated and State monopolies—which are already discouraged in the Union—should be eschewed. Finally, governments should pursue vigorously an open market policy which veers from managed trade that has a tendency to deal with the fallout of national competitiveness.

As for European airlines, they should continue to seek out pressure and challenge in order to innovate commercially toward more achievements while seeking out their most capable competitors as motivators. More importantly, and as prudent airlines must, airlines of European nations should establish early warning systems which would indicate any hint of change in the air transport market both within and without Europe. Airlines could find and serve passengers and consignors who have the most anticipating needs; find places whose regulations foreshadow emerging regulations elsewhere; bring outside expertise into their management teams if needed and constantly conduct research on market access.

In the quest for globalization of European air transport activity, airlines should tap selectively into sources of advantage in other nations' airlines. However, airline alliances must be used only selectively in order to minimize cost bases and obviate relinquishing profits that would accrue to an airline without the alliance concerned. Inevitably, an airline alliance shows the partners mediocrity to an extent, particularly if profits are not optimized and alliances are formed on core activities. The central theme for European nations and their airlines for the future is "leadership" which they currently hold in air transport regulation by being second to none and equal to the best.

5.4.2 *Local Legislation and Air Services Agreements*

An important issue about pricing is whether an agreement between States which allows them to determine pricing, would overrule local legislation. For example, could an air service agreement between State A and The United States, which allowed designated airlines of both parties to establish prices, effectively preclude the application of the Sherman Act unless such pricing would be unreasonably discriminatory? In *Blanco* v. *United States,*[49] where the issue of contention was whether provisions of The Treaty of Friendship, Commerce and Consular Rights between the United States and Honduras (the "Honduras Treaty"), proclaimed on July 23, 1928, superseded Sec. 785 of the Public Vessels Act with respect to wrongful death actions on behalf of Honduran nationals. It was held in this case that there should be explicit text in the treaty that repealed the statute for the treaty to prevail over the law concerned.[50] In the *Benchmark Complaint*[51] involving air services agreements between The Government of the United States of America on the one hand and the Governments of Malaysia and India respectively, the issue was whether Article 12 of the Agreements which permitted establishment of prices by and between the respective carriers would erode the legal legitimacy of the Sherman Act. The court arrived at a compromise of harmonization between the two instruments—the ASAs between and countries and the Sherman Act by pronouncing that "adjudication in federal courts of pricing disputes between private parties is not akin to the US governmental intervention to regulate prices, since it is private parties who are taking action, and not government as a party to the agreements."[52]

It is interesting to note that Section 6 (a) of the Sherman Act makes it apply to such conduct has a direct, substantial, and reasonably foreseeable effect on trade or commerce which is not trade or commerce with foreign nations, or on import trade or import commerce with foreign nations; or on export trade or export commerce with foreign nations, of a person engaged in such trade or commerce in the United States; and such effect gives rise to a claim under the provisions of sections 1–7 of the Act. In *Compagnie Noga D'importation et D'exportation S.A*. v. *The Russian Federation,*[53] the issue was whether a foreign arbitration award can be confirmed and enforced against a sovereign nation where the arbitration agreement was signed by an organ of that nation's central government and where that organ-and not the nation itself-participated in the underlying arbitration proceedings. The court held that there was no distinction between the organ, which was an instrumentality of the State, and the State itself.

---

[49] 775 F (2d) 53.

[50] *Id*. 61.

[51] Air Transport Agreement between the Government of the United States of America and the Government of Malaysia 21 June 1997, TIAS No. 12871 and Air Transport Agreement between the Government of the United States of America and the Government of India 14 April 2005 TIAS No. 12871.

[52] Baruah (2016), p. 409.

[53] 361 F (2d) 676.

In the case of *First National City Bank* v. *Banco Para El Comercio Exterior de Cuba,*[54] the issue was that the Republic of Cuba had established a state-owned trade bank to which the State gave full juridical capacity. In the course of its business, the bank sued to collect on a letter of credit issued by an American bank. The American bank counterclaimed, asserting a right to set off the value of its assets in Cuba that had been nationalized by the Cuban government. The Cuban trade bank claimed immunity from this counterclaim under the Foreign Sovereign Immunities Act ("FSIA").

The Supreme Court held that the legislation i.e. FSIA had neither the jurisdiction nor capacity to determine whether the seized Cuban assets could be set off against the claim of the Cuban trade bank. It was the court's ruling that that principles of public international law and federal common law-rather than Cuban domestic law-should be applied to determine the "juridical status of the Cuban bank". It is noteworthy that the court also observed that to ignore the jurisdiction of a sovereign State and its legislation would jeopardize the credibility of the State as well as deter trading partners from entering into agreements without explicit or implicit government guarantees.

An air services agreement is a treaty signed by and between two or more States. Aeronautical treaties and other agreements pertaining to civil aeronautics are subject to the law and practice applicable to treaties in general and come under the purview of ICAO[55] particularly with regard to the registration of such documents. A treaty is an international agreement concluded between States[56] in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation.[57] The above notwithstanding, a treaty can be concluded between a State and another subject of international law such as an international Organization. An example is the Headquarters Agreement between ICAO and the Government of Canada.[58] When a State places its signature on a treaty it merely means that the State has agreed to the

[54] 462 U.S. 611, 103 S.Ct. 2591, 77 L.Ed.2d 46 (1983).

[55] *Supra*, note 1.

[56] A State has been defined in Article 1 of the Montevideo Convention of 1933 as having the following characteristics: a permanent population; a defined geographic territory; a government; and the legal capacity to enter into relations with other States. See Montevideo Convention on the Rights and Duties of States, Signed at Montevideo, 26 December 1933. The Convention entered into Force, 26 December 1934. At http://www.taiwandocuments.org/montevideo01.htm.

[57] Vienna Convention on the Law of Treaties, 1969, Done at Vienna on 23c May 1969, United Nations General Assembly Document *A/CONF.39/27*, 23 May 1969, Article 2(a). The Convention entered into force on 27 January 1980. UNTS Vol. 1155, p. 331.

[58] Headquarters Agreement between Canada and ICAO of 14 April 1951, which paraphrased the 1947 Convention on the Privileges and Immunities of the Specialized Agencies. On 20 February 1992, the 1951 Agreement was terminated and superseded by a new Agreement that entered into force the same day. A new Supplementary Agreement was signed on 28 May 1999 superseding the Supplementary Agreement signed in 1980 in order to reflect the relocation of the Organization's Headquarters to a new location on 999 University Street on November 1, 1996. See Supplementary Agreement Between the International Civil Aviation Organization and the Government of Canada Regarding the Headquarters of the International Civil Aviation Organization, Doc 9591.

text in the instrument. It comes into effect for that State when it is ratified[59] by the State. At the time of ratification a State can record a reservation to a part of the treaty.[60] These generic principles and those discussed below also apply to aeronautical treaties and agreements.

It must be noted that a State can sign a treaty in two ways. The first is called attestation by "simple signature" which corresponds to the above statement—that such a signature merely denotes that a State agrees with the text of an instrument and a simple signature is subject to ratification, acceptance or approval. However, if a State attaches to the instrument what is called a "definitive signature" it means that the State has agreed to be bound by the treaty. Therefore, a definitive signature obviates the need for that State to later ratify the treaty, as it has the same force as ratification. Great reliance is placed on treaties as a source of international law. The international Court of Justice, whose function it is to adjudicate upon disputes of an international character between States, applies as a source of law, international conventions which establish rules that are expressly recognized by the States involved in a dispute.[61] The Court also has jurisdiction to interpret a treaty at the request of a State.[62]

The Vienna Convention[63] while recognizing treaties as a source of law, accepts free consent, good faith and the *pacta sunt servanda* as universally recognized elements of a treaty.[64] Article 11 of the Vienna Convention provides that the consent of a State to be bound by a treaty may be expressed by signature, exchange of instruments constituting a treaty, ratification, acceptance, approval or accession, or by any other means agreed upon. "Ratification", "acceptance", "approval", and "accession" generally mean the same thing, *i.e*. that in each case the international act so named indicates that the State performing such act is establishing on the international plane its consent to be bound by a treaty. A State demonstrates its adherence to a treaty by means of the *pacta sunt servanda*, whereby Article 26 of the Vienna Convention reflects the fact that every treaty in force is binding upon the parties and must be performed by them in good faith. The validity of a treaty or of the consent of a State to be bound by a treaty may be impeached only through the application of the Vienna Convention[65] which generally requires that a treaty could be derogated upon only in

[59] "Ratification", "acceptance", "approval" and "accession" mean in each case the international act so named whereby a State establishes on the international plane its consent to be bound by a treaty. See Vienna Convention, *supra*, note 6 at Article 2(b).

[60] "Reservation" means a unilateral statement, however phrased or named, made by a State, when signing, ratifying, accepting, approving or acceding to a treaty, whereby it purports to exclude or to modify the legal effect of certain provisions of the treaty in their application to that State. Id. 2(d).

[61] *Statute of the International Court of Justice*, *Charter of the United Nations and Statute of the International Court of Justice*, United Nations: New York, Article 38. 1.(a).

[62] *Id*. Article 36.2 (a).

[63] *Supra*. note 6.

[64] *Vienna Convention*, Preamble and Article 275.

[65] *Id*. Article 42. 1.

circumstances the treaty in question so specifies[66]; a later treaty abrogates the treaty in question[67]; there is a breach of the treaty[68]; a *novus actus interveniens* or supervening act which makes the performance of the treaty impossible[69]; and the invocation by a State of the *Clausula Rebus Sic Stantibus*[70] wherein a fundamental change of circumstances (when such circumstances constituted an essential basis of the consent of the parties to be bound by the treaty) which has occurred with regard to those existing at the time of the conclusion of the treaty, and which was not foreseen by the parties, radically changes or transforms the extent of obligations of a State. A State may not invoke the fact that its consent to be bound by a treaty has been expressed in violation of a provision of its internal law regarding competence to conclude treaties and seek to invalidate its consent unless such violation was manifest and concerned a rule of its internal law of fundamental importance.[71]

States or international organizations which are parties to such treaties must apply the treaties they have signed and therefore must interpret them. Although the conclusion of a treaty is generally governed by international customary law to accord with accepted rules and practices of national constitutional law of the signatory States, the application of treaties is governed by principles of international law. If however, the application or performance of a requirement in an international treaty poses problems to a State, the constitutional law of that State would be applied by courts of that State to settle the problem. Although Article 27 of the Vienna Convention requires States not to invoke provisions of their internal laws as justification for failure to comply with the provisions of a treaty, States are free to choose the means of implementation they see fit according to their traditions and political organization.[72] The overriding rule is that treaties are juristic acts and must be performed.

Every international treaty is affected by the fundamental dichotomy where on the one hand, the question arises whether provisions of a treaty are enforceable at law, and on the other, whether the principles of State sovereignty, which is *jus cogens* or mandatory law, would pre-emt the provisions of a treaty from being considered by States as enforceable. Article 53 of the Vienna Convention addresses this question and provides that where treaties, which at the time of their conclusion conflict with a peremptory norm of general international law or *jus cogens* are void. A peremptory norm of general international law is a norm accepted and recognized by the international community of States as a whole as a norm from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character. The use of the words "as a whole" Article 53 effectively precludes individual States from considering on a subjective basis,

[66] *Id*. Article 57.

[67] *Id*. Article 59.

[68] *Id*. Article 60.

[69] *Id*. Article 61.

[70] *Id*. Article 62.

[71] *Id*. Article 46.

[72] Reuter (1989), p. 16.

particular norms as acceptable to the international community.[73] According to this provision therefore, a treaty such as the Chicago Convention could not have derogated from principles of accepted international legal norms when it was being concluded. The Vienna Convention has, by this provision, implicitly ensured the legal legitimacy of international treaties, and established the principle that treaties are in fact *jus cogens* and therefore are instruments containing provisions, the compliance with which is mandatory.

5.5 ICAO'S Involvement in Air Services Agreements

It is well established that air services agreements are treaties between States and that they are registered with ICAO. Therefore, ICAO is incontrovertibly linked to the issuance of air traffic rights by one State to another and is obligated to hearing any dispute between States relating to overflight and the operations of air services between States. If there were to be a dispute with regard to an internal decision or law of a State that would adversely affect a treaty provision in an air services agreement ICAO has to hear that dispute. In June 2017 numerous flights of Qatar Airways had to be cancelled after Saudi Arabia and the United Arab Emirates (UAE) closed their airspace to Qatari planes, seemingly in response to alleged support of Islamic militants and Iran by Qatar. Furthermore, it was reported that consequent upon an initiative led by Saudi Arabia, the UAE and regional allies Egypt and Bahrain announced that they would each be closing their airspace to Qatari planes indefinitely. This blockade caused the national carrier of Qatar considerable inconvenience and costs, having to reroute their flights. For example, a flight between Doha to Muscat in Oman had to fly into Iranian airspace to avoid The UAE which intrudes into the Persian Gulf, adding an extra hour onto a normal 1 h and 40-min flight time.[74] Another implication this measure brought to bear was the added expense for Qatar Airways to circumvent the airspace of some of the States to reach Africa and North America.

Nine countries imposed restrictions of a diplomatic nature on Qatar, one of which was to close their airspace to aircraft with Qatari nationality, which inevitably included landing rights in their territories. Some of the countries which imposed the measures were led by Saudi Arabia and the United Arab Emirates, supported by Egypt, Bahrain and Yemen, all of whom proceeded to sever diplomatic relations with Qatar, including blocking access of Qatar to all modes of transport including land, air and sea travel together with the expulsion of citizens of Qatar who were given 48 h to leave the countries.

---

[73] See von der Dunk (1992), pp. 223–224.

[74] Callum Paton, Saudi Arabia and UAE Close Airspace to Qatari Flights as Gulf Diplomatic Standoff Deepens, NEWSWEEK, 6/6/17, http://www.newsweek.com/saudi-arabia-and-ue-close-airspace-qatari-flights-gulf-diplomatic-standoff-621522. Accessed on 5 February 2018.

The spat concerns an initiative of Saudi Arabia supported by their allies who demanded that Qatar abandon its foreign policy which allegedly bears some responsibility for supporting terrorism including its financing, and the closure of its television station, Al Jazeera. An additional accusation against Qatar was that it was complicit with Iran in supporting terrorism, in spite of Qatar being one of the Sunni States which support Saudi Arabia and other states hostile to Iran in Syria and Yemen.

Clearly, the economic impacts on Qatar brought to bear by the blockade as well as the adverse effects on its national carrier are significant. Eurasia Group said: "The crisis will undermine the Qatari economy, increase inflation, raise the risk of a credit ratings downgrade, curtail regional banking activity, and damage Qatar Airways' commercial prospects."[75]

Qatar—a member of ICAO—sent a letter of complaint to the Secretary General of the United Nations saying the blockade was unlawful and inhumane,[76] simultaneously applying to ICAO under Article 84 of the Convention on International Civil Aviation (Chicago Convention)[77] which provides for dispute settlement by the ICAO Council. This provision will be discussed later in some detail. Saudi Arabia somewhat equivocally countered that the Gulf rift was bigger than ICAO,[78] perhaps meaning that ICAO was circumscribed by technical issues pertaining to air transport and not permitted to visit broader issues.

In August 2017, at an extraordinary hearing, the Council of ICAO refused to discuss Qatar's complaint, claiming ICAO does not involve itself with "political" issues.[79] A media report quotes ICAO's response as requesting "all member states to abide by and comply with the Chicago Convention, and continue cooperation regarding aviation's safety and security and international civil aviation's efficiency and sustainability".[80] This is seemingly inconsistent with another media report

[75] Colin Nagy, Understanding the Qatar Ban and Its Implications for Qatar Airways—Jun 05, 2017 2:00 pm, SKIFT at https://skift.com/2017/06/05/understanding-the-qatar-ban-and-its-implications-for-qatar-airways/. The report quotes Ayham Kamel, Middle East and North Africa Director of Eurasia Group: "Qatar Airways will need to adjust its business strategy to face the fact that its routes to Europe can no longer fly over Saudi Arabia and Egypt. The airline's profitability will take a direct hit as new routes through Iran and Turkey will include longer journeys and lower demand. The blockade entailed for Qatar Airways longer trip times, more inefficient routings, increased fuel costs and compromised ticket sales. Also, the lack of connecting flights into Doha will be suffocating for a nation that is trying to position itself as a business hub, as well as bolster tourism in advance of its World Cup in 2022". *Ibid.*

[76] Qatar contacts UN chief to brief him on blockade, files ICAO complaint over aviation threats, *The New Arab*, 20 August 2017, https://www.alaraby.co.uk/english/news/2017/8/20/qatar-contacts-un-files-icao-complaint-over-aviation-threats. Accessed on 5 February 2018.

[77] *Id.* ICAO Doc 7300/9: 2008.

[78] Allison Lampert, Saudi: Gulf rift bigger than air rights, can't be resolved at ICAO, *Reuters,* June 15, 2017, at https://www.reuters.com/article/us-gulf-qatar-icao/saudi-gulf-rift-bigger-than-air-rights-cant-be-resolved-at-icao-idUSKBN196243. Accessed on 5 February 2018.

[79] ICAO distances itself from Gulf rift, *Egypt Today*, Fri, Aug. 11, 2017 at https://www.egypttoday.com/Article/2/16697/ICAO-distances-itself-from-Gulf-rift. Accessed on 5 February 2018.

[80] ICAO directive a big victory for Qatar, *Gulf Times*, August 01, 2017 at http://www.gulf-times.com/story/558593/ICAO-directive-a-big-victory-for-Qatar. Accessed on 5 February 2018.

which states: "The Chairman of the Council opened the meeting by emphasizing avoidance of political matters and focus on the technical issues that were the responsibility of ICAO."[81]

If this reportage is accurate, the statement—that ICAO's responsibility vests in technical issues to the exclusion of other aspects of air transport—is incorrect on a basic reading of the Chicago Convention. To make confusion worse confounded, the report continues to quote the Saudi delegation as having stated that the Qatari complaint: "did not comply with the reasons for convening the extraordinary session under Article 54 (N), which was devoted to technical matters only".[82] Article 57 (n) of the Chicago Convention identifies as a mandatory function of the ICAO Council to: "consider any matter relating to the Convention which any contracting State refers to it". Nowhere is it stated in this provision that the matter referred to the Council should be exclusively "technical". Another equivocation on behalf of the States which imposed the no-fly ban on Qatar Airways is the claim that Qatar was in breach of Article 4 of the Chicago Convention which requires that civil aviation should not be used for any purpose that is in contravention of any provisions in the Convention. There was no explanation for invocation of this provision, which just does not make sense in the context of the issue at hand.

Throughout its history of over 70 years, ICAO's leaders have laboured under the misapprehension that ICAO is an exclusively "technical" organization, totally ignoring, (by design or feckless insouciance) the economic aspect of civil aviation in which lies a definite role for ICAO under the Chicago Convention. This ineptitude has done air transport a grave disservice.[83] This article, while distancing itself from the pros and cons of the Gulf rift, will examine the meaning and purpose of ICAO in this context.

Prior to a discussion on the nature of ICAO, it would be relevant to resolve the "political" versus "technical" issue. It is interesting to note that ICAO has indeed dabbled in the past in political issues. Resolution A15-7 (Condemnation of the Policies of Apartheid and Racial Discrimination of South Africa) adopted at the 15th session of the ICAO Assembly in 1968 went on to say *inter alia* that the Assembly bore in mind that the apartheid policies constituted a permanent source of conflict between the nations and peoples of the world; and recognized, furthermore, that the policies of apartheid and racial discrimination were a flagrant violation of the principles enshrined in the Preamble to the Chicago Convention. This was followed by a follow-up ICAO Resolution at its 18th Assembly in 1971 which stated that The Assembly, while recalling its condemnation of the apartheid policies in South Africa in Resolution A15-7, was resolute that as long as the Government of South Africa continued to violate the United Nations General Assembly Resolutions on apartheid and on the Declaration on the Granting of Independence to Colonial

[81] ICAO rejects Qatar's request to condemn boycotting countries, *Al Arabiya English*, 1 August 2017, at http://english.alarabiya.net/en/business/economy/2017/08/01/ICAO-rejects-Qatar-s-request-to-condemn-boycotting-countries.html. Accessed on 5 February 2018.

[82] *Ibid.*

[83] See Abeyratne (2013), pp. 9–29.

Countries and Peoples, South Africa would not be invited to attend any meetings convened by ICAO. How this Resolution, which pertains to internal politics of a State is a "technical" issue, one may never fathom.

At the very basic level, ICAO is a specialized agency of the United Nations for civil aviation issues. This recognition comes from the United Nations Charter which in Article 57 states that the various specialized agencies, established by intergovernmental agreement and having wide international responsibilities, as defined in their basic instruments, in economic, social, cultural, educational, health, and related fields, shall be brought into relationship with the United Nations in accordance with the provisions of Article 63.[84] This establishes an intrinsic and integral relationship between ICAO and the United Nations, making ICAO implicitly obligated to function in consonance with the objectives of the United Nations, Article 1 of which states *inter alia* that it is an objective of the United Nations to develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate measures to strengthen universal peace; and to achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character.

This having been said, ICAO was created by the Chicago Convention, which in Article 43 states that the Convention establishes an organization to be named the International Civil Aviation Organization which will be composed of an Assembly, a Council and such other bodies that are deemed necessary. This is followed by Article 44 which lays out ICAO's aims and objectives, four of which are 44 (a): insure the safe and orderly growth of international civil aviation throughout the world; 44 (d)—that ICAO will "meet the needs of the peoples of the world for safe, regular, efficient and economical air transport"; Article 44 (e)—that ICAO will "prevent economic waste caused by unreasonable competition"; and Article 44 (f): insure that the rights of contracting States are fully respected and that every contracting State has a fair opportunity to operate international airlines. Whatever the origin of the Qatar issue was, it essentially presented a grave economic issue through air transport to a member of ICAO, falling clearly within the provisions of Article 44 mentioned above, and for ICAO to dismiss the issue *in limine* was a cop out and a dereliction of duty.

ICAO may not necessarily be a political organization, although politics inevitably plays a role in the day to day functions of ICAO, as it is an organization of States. As Assad Kotaite, a former President of the ICAO Council said: "As an intergovernmental body…ICAO is naturally subject to the differing philosophies and attitudes of States who determine what it does and this political factor cannot be overlooked…We have seen, for example, the evolving interest of ICAO in the

[84] Article 63 provides: "The Economic and Social Council may enter into agreements with any of the agencies referred to in Article 57, defining the terms on which the agency concerned shall be brought into relationship with the United Nations. Such agreements shall be subject to approval by the General Assembly. It may co-ordinate the activities of the specialized agencies through consultation with and recommendations to such agencies and through recommendations to the General Assembly and to the Members of the United Nations".

economic sphere and this is a reflection of the desire of States to come together and seek a multilateral approach to the economic problems faced by international civil aviation."[85]

It is incontrovertible that ICAO is not an exclusively technical organization. *A fortiori*, one of its Strategic Objectives is the development of air transport—an essentially economic area—which goes on to say that ICAO aims at fostering the development of a sound and economically-viable civil aviation system and that the Strategic Objective reflects the need for ICAO's leadership in harmonizing the air transport framework focused on economic policies and supporting activities.

The problem with the reasoning of the ICAO Council—in lumping the entire issue as exclusively a political matter and washing its hands off completely– was that no one seems to have considered the economic aspect and fallout of the decision of States blocking Qatar Airways from their airspace, from an air transport point of view. It is by no means contended that ICAO should have disregarded the fact that the States were exercising their rights of sovereignty under Article 1 of the Chicago Convention, which is an inalienable right and issued strictures. However, as the following discussion will show, there are indisputable economic aspects of air transport embodied in the Convention and explicit aims and objectives of ICAO that should have impelled ICAO to evaluate the economic fallout on air transport.

It is for this reason that the Interim Council of the Provisional International Civil Aviation Organization (PICAO)—the predecessor of ICAO—established in 1945 the Air Transport Committee which remains the prominent body of the ICAO Council in relation to air transport, by virtue of Article 54 (d) which requires, as a mandatory function of the Council to appoint an Air Transport Committee. The Committee's draft multilateral agreement, produced in April 1946 still carries some relevance in the philosophy it offered: that there should be "the widest possible distribution of the benefits of air transport for the general good of mankind at the cheapest rates consistent with sound economic principles."[86]

This basic philosophy permeates the Preamble to the Chicago Convention which has the overall theme that the future development of international civil aviation will help create friendship and understanding among the people of the world, calling for air transport to be operated with equality of opportunity, soundly and economically. The start of equality of opportunity is overflight of States' territories by commercial aircraft, which was denied by the Saudi led States to Qatar Airways. In ICAO's perspective it would have mattered not whether such a prohibition was motivated by political reasons as ICAO does not have the power or authority, nor does it have justification in ordering the blockade to be lifted. Instead, ICAO has a legal obligation under the Convention to advise the States concerned that such a measure has deleterious effects on the meaning and purpose of the Chicago Convention and indeed it thwarts ICAO's attempts at carrying out its aims and objectives under Article 44 of the Chicago Convention.

[85] Kotaite (2013), pp. 120–121.

[86] Mackenzie (2010), p. 108.

Another basic provision of the Chicago Convention is Article 15, which provides that every airport in a contracting State which is open to public use by its national aircraft is required to, subject to the provisions of Article 68, be open under uniform conditions to the aircraft of all the other contracting States. These conditions include the use, by aircraft of every contracting State, of all air navigation facilities, including radio and meteorological services, which may be provided for public use for the safety and expedition of air navigation.

The International Air Services Transit Agreement (IASTA) which entered into force on 30 January 1945, and which all parties to the Gulf dispute are parties to, guarantees in Article 1 that each contracting State grant to the other contracting States *inter alia* the privilege to fly across its territory without landing following freedoms of the air in respect of scheduled international air services: and the privilege to land for non-traffic purposes. The exercise of these privileges is required to be in accordance with the provisions of the Interim Agreement on International Civil Aviation and, when it came into force, with the provisions of the Chicago Convention, both drawn up at Chicago on December 7, 1944. Article II of IASTA provides that if any contracting State deems that an action of another contracting State is causing injustice or hardship to the operations of air services by the former's carrier, it has the right to call upon the ICAO Council to hear the dispute and the Council is obligated to hear the dispute. The Council is further obligated to call the States into consultation and make appropriate findings and recommendations. If such findings and recommendations are disregarded, the Council may refer the matter to the ICAO Assembly which may suspend the rights and privileges of the offending States under the Convention.

In dealing with the complaint of Qatar, the Council ought to have considered a complaint it received from British India in April 1952 against an act of Pakistan which allegedly established a zone as "prohibited" to Indian carriers along the border between Pakistan and Afghanistan. This seriously inconvenienced Indian carriers, it was alleged, which were effectively precluded from operating directly between New Delhi and the Afghan capital Kabul. The carriers were forced to go around Pakistan through Iran to get to Kabul involving 1300 miles more than the direct route. There was insufficient fuel in Kabul to accommodate the surplus required compelling Indian aircraft to carry a heavy load of fuel, causing significant economic burden to the carrier. Pakistan claimed military necessity and India claimed discrimination by the Pakistanis. ICAO established an investigative working group of disinterested Council representatives who conferred with the authorities of India and Pakistan and encouraged them to negotiate with a view to reaching a solution.

It cannot be denied that under the circumstances, there was some "politics" involved in the investigative process and that the ICAO Council took the trouble to hear the dispute, without dismissing it *in limine* as a political issue.

The dispute resolution provisions of the ICAO Council are contained in Chapter XVIII of the Chicago Convention. Article 84 provides that should any disagreement between two or more contracting States relating to the interpretation or application of the Convention and its Annexes not be settled by negotiation, the State concerned

in the disagreement can apply to the Council of ICAO for decision. Any contracting State may, subject to Article 85,[87] appeal from the decision of the Council to an ad hoc arbitral tribunal agreed upon with the other parties to the dispute or to the Permanent Court of International Justice. Any such appeal is required to be notified to the Council within 60 days of receipt of notification of the decision of the Council. The appeal procedure is given in Article 86.

What happened between India and Pakistan before the Council in 1952 appeared in reverse form before the Council years later. This time, it was Pakistan that complained in 1971 that India had refused Pakistani carriers transit rights over Indian territory. Pakistan claimed this a breach of both IASTA and the Chicago Convention. The Council gave both States 8 weeks to negotiate and resolve the issue and get back to the Council. India subsequently claimed that the Council had no jurisdiction to examine the issue under Chapter XVIII as the relevant agreement between India and Pakistan had been breached. The Council disagreed, claiming it retained jurisdiction. India applied to the International Court of Justice which eventually ruled that the ICAO Council had jurisdiction under the Convention to hear the complaint of Pakistan. The matter was dropped by the Parties concerned which prevented any further necessity on the part of the Council to proceed with hearing.

Another instance of ICAO intervention on a political decision taken by a member State occurred in 1999 when India closed its airspace to Pakistani carriers in response to a hijacking of an Indian Airlines aircraft with passengers by Pakistani gunmen. Pakistan reciprocated the blockade by shutting its own airspace to Indian carriers. ICAO Council President Kotaite visited Islamabad in 2001 and intervened successfully in getting the consent of the President of Pakistan to open its airspace. The issue was settled.[88] The opening of the air space may have been a navigation issue but ICAO did not wash its hand, saying it was a political decision and therefore ICAO had no right to intervene.

As for involvement of the ICAO Council in the economics of air transport, the oil embargo on the United States enforced by The Organization of Petroleum Exporting Countries (OPEC) from 1973 to 1974 as a result of military support given by the US

[87] Article 85 provides: "If any contracting State party to a dispute in which the decision of the Council is under appeal has not accepted the Statute of the Permanent Court of International Justice and the contracting States parties to the dispute cannot agree on the choice of the arbitral tribunal, each of the contracting States parties to the dispute shall name a single arbitrator who shall name an umpire. If either contracting State party to the dispute fails to name an arbitrator within a period of 3 months from the date of the appeal, an arbitrator shall be named on behalf of that State by the President of the Council from a list of qualified and available persons maintained by the Council. If, within 30 days, the arbitrators cannot agree on an umpire, the President of the Council shall designate an umpire from the list previously referred to. The arbitrators and the umpire shall then jointly constitute an arbitral tribunal. Any arbitral tribunal established under this or the preceding Article shall settle its own procedure and give its decisions by majority vote, provided that the Council may determine procedural questions in the event of any delay which in the opinion of the Council is excessive".

[88] Kotaite (2013), pp. 174–175.

to Israel during the Yom Kippur War, prompted a strong report in the Annual Report of the Council on the devastating effect the rise in oil prices had on air transport.[89]

One must also not disregard certain permissive functions ascribed to the ICAO Council by the Chicago Convention which may have a bearing on the Gulf rift. Article 55 (c) permits the Council to conduct research into all aspects of air transport and air navigation which are of international importance, communicate the results of its research to the contracting States, and facilitate the exchange of information between contracting States on air transport and air navigation matters. Contracting States would have benefitted by a study that reflected potential adverse effect on air transport in Qatar, that may prove to be a future source of reference. The involved States themselves could fund such studies, so that there is no burden on ICAO's resources.

There are two basic provisions in the Chicago Convention that may warrant discussion in the context of the Gulf issue. Firstly, The Saudi led group could say that a mere invocation of Article 1, which seemingly ascribes legal legitimacy to any action of a State concerning the airspace above its territory as an unquestionable exercise of its sovereignty. However, this is fundamentally flawed at international law as sovereignty is no longer considered an absolute right of a State. While in theory, one could invoke Sovereignty in its pristine form—as introduced by the Peace of Westphalia of 1648—as an unquestionable and inalienable right enjoyed by States to the exclusion of others and immune from interference from other States or persons it no longer holds water as the concept has been overtaken by globalization, communications and information technology that blur physical boundaries. As United Nations Secretary General Kofi Annan said in his Annual Report in 1999: "State sovereignty, in its most basic sense, is being redefined by the forces of globalization and international cooperation. The State is now widely understood to be the servant of its people, and not *vice versa*. At the same time, individual sovereignty—and by this I mean the human rights and fundamental freedoms of each and every individual as enshrined in our Charter—has been enhanced by a renewed consciousness of the right of every individual to control his or her own destiny."[90]

Secondly, in similar circumstances, States have invoked Article 89 which suspends the application of the Chicago Convention and hence the Council's rights under Chapter XVIII. The article says that in case of war, the provisions of the Convention will not affect the freedom of action of any of the contracting States affected, whether as belligerents or as neutrals. The same principle applies in the case of any contracting State which declares a state of national emergency and notifies the fact to the Council.

When Israel became a member of ICAO, Egypt notified ICAO that in view of the special position between Israel and Egypt, it was invoking Article 89 and was banning Israeli aircraft from overflying the territory of Egypt. On the adherence of

[89] *Id*. 100.

[90] Secretary-General Presents His Annual Report To General Assembly, Press Release SG/SM/7136, GA/9596. See https://www.un.org/press/en/1999/19990920.sgsm7136.html. Accessed on 6 February 2018.

Israel to the Chicago Convention, The Government of Egypt advised that in view of the considerations of fact and of law which still affect Egypt's special position about Israel, and in pursuance of Article 89 of the Chicago Convention, Israeli aircraft may not claim the privilege of flying over the territory of Egypt.[91] Iraq invoked the same provision by banning Israeli aircraft from overflying its territory. Although there is no indication that the Saudi led coalition invoked Article 89, the allegation aimed at Qatar was that it was supporting Islamist insurgents and Iran, which is tantamount to circumstances implying a threat to national safety from attack. However, unlike Egypt, there was no such claim in this instance: only a peremptory decision which reeked of the original concept of State sovereignty of unquestionable and untrammelled State authority.

It is incontrovertible that ICAO is an intergovernmental organization where key decision are made by the governments representing ICAO States. However, if one were to stop at that one does not need an ICAO Council of 36-member States that represents all 192-member States of ICAO. Furthermore, ICAO is a broad and complex organization where decisions must be taken based on informed and well reasoned analysis. For this, ICAO is seemingly well equipped with a Secretariat of experts in various fields—both in the technical and economic fields—to advise the Council on key issues. More importantly, it is a compelling necessity to finally convince ourselves that ICAO is not solely a "technical" organization but a specialized agency of the parent United Nations which does not restrict itself to technical issues. A serious ICAO study is needed that would clearly identify the true function of ICAO under the Chicago Convention in both technical and economic areas.

ICAO has also to be mindful of geo politics as an emerging megatrend that increasingly affects global economic activity including air transport. The world is morphing from what was called the New World order to what can be called the New World Disorder. The New World Order is a term concocted 25 years ago by both Presidents Bush and Gorbachev to reflect a new trend in US diplomacy bringing with it a new discipline to the world. The term was conceived during the Persian Gulf crisis when Iraq invaded Kuwait and was calculated to usher in a more harmonious cooperation among states in matters of international interest. Based on the principle of collective security, the New World Order Coalesced States into the collective authority of the UN Security Council which adopted and enforced measures against what it perceived as belligerent States. Under the New World Order came the notion of US exceptionalism where the US acted as *de facto* policeman of the world, ensuring a balance between the regions of the world and intervening when necessary, particularly when that balance was threatened.

The New World Disorder is the current state of affairs in the world where the prevailing balance has been fragmented and eroded. Examples are the Saudi Arabian coalition's air strikes in Yemen, the Russian Annexation of Crimea, the shooting down of Flight MH 17 over Donetsk, the Chinese-Japanese spat over the Senkaku Islands and unilateral belligerence by non-States such as Al Qaeda, ISIS and Al Shabab which have crossed borders, particularly in the case of ISIS where it

[91] Letter dated 16 October 1949, reproduced I Annex A to Doc 6922-C/803 at 125.

proclaimed a caliphate. There is seemingly no global policeman to sustain harmony anymore and disorder is widespread and fragmented. The Economist calls this phenomenon "*Guerrilla Geopolitics*"[92] where isolated decisions and sporadic incidents are taken by a State or group of States that fragment established principles of international law.

As for the diplomatic row over overflights and landing rights, some clarification of the principles of aviation law would prove to be helpful in the context of the meaning and purpose of the provisions mentioned in this article, against the overall backdrop of a part of the Chicago Convention's Preamble—that international civil aviation should be conducted in a sound and economic manner with equality opportunity (to compete) for every player, as well as provisions of the Vienna Convention on the primacy of international treaties over local legislation. In other words, there must be a rule of law in air transport that is kept together by the unquestioned principles of the Chicago Convention insulated from sporadic and arbitrary decisions.

5.6 Annex 17: Security of Air Cargo

5.6.1 Screening

Annex 17 to the Chicago Convention contains, *inter alia*, provisions pertaining to the security of the carriage by air of cargo and screening of air cargo is a critical area addressed in the Annex. In the areas of screening, access control and physical security, it is important to note that ICAO recognizes that the ultimate accountability for these services devolve upon the State in which the airport is situated. The relevant provisions are contained in Annex 17 as Standards and Recommended Practices (SARPS), along with some provisions in Annex 9 and Annex 18 which are detailed above.

The relevant Standards of the Annex (as with Annex 9 and Annex 18) use such words as "Contracting States shall ensure" or "shall establish" leaving room for the State concerned to delegate the security functions and responsibility thereof to an entity, which in turn would be the provider of security. Implementation of ICAO SARPs are exclusively the responsibility of the States. However, as States delegate functions of security to an entity, the SARPs, by implication, become the purview of that entity which is bound to implement them on behalf of the State.

Provisions relating to the security services provider are contained in the *Security Manual for Safeguarding Civil Aviation Against Acts of Unlawful Interference* (Doc 8973 Restricted),[93] which is made available by ICAO only to the aeronautical authorities of its member States. These provisions are particularly relevant to the provider of the security services at the airport. The areas of screening, access control

[92] Hybrid Warfare: Shades of Grey, The New Battlegrounds, Special Report—The Future of War, *The Economist*, January 27th—February 2nd, 2018, at 8.

[93] 9th Edition:2014.

and physical safety are intrinsically linked to, and serve in preventing acts of unlawful interference and goes to the core of aviation security.

Firstly, the Annex provides that Each Contracting State must establish an organization and develop and implement regulations, practices and procedures to safeguard civil aviation against acts of unlawful interference taking into account the safety, regularity and efficiency of flights. It is worthy of note that this "organization" has not been specifically defined in the Annex and is usually attributed to an authority within the State machinery. However, it could mean any instrumentality such as the Directorate General of Civil Aviation under which the airport operator or any other provider of security services would derive its functions.

The Annex requires that each Contracting State ensures that each airport serving civil aviation establish, implement and maintain a written airport security programme appropriate to meet the requirements of the national civil aviation security programme. This is an extremely important provision for the airport operator, particularly if the operator is the provider of security services as well. It requires the airport security programme to be established, implemented and maintained by the airport operator, in keeping with the principles of the national aviation security programme. The importance of this provision lies in the fact that the national aviation security programme, which is couched in general terms, has to be elaborated in greater detailed and practiced by the airport operator. Ideally, this means that for optimal efficiency, the airport operator and security provider must be one and the same.

The Annex follows this requirement by providing that each Contracting State must ensure that an authority at each airport serving civil aviation is responsible for coordinating the implementation of security controls. Again, this provision adds credence to the premise that if the airport operator were to provide security services at the airport, it would be efficient to let the operator coordinate the provision of the security services. If a third party were to provide the services, there could be a danger of a disconnect between the operator and the provider leading to lapses in the ensuring of efficient security services. There does not seem to be any logic in the airport operator implementing a security programme that it has developed, only to be coordinated by another and services provided by yet another. Each Contracting State is required to ensure that such an organization and such regulations, practices and procedures: (a) protect the safety of passengers, crew, ground personnel and the general public in all matters related to safeguarding against acts of unlawful interference with civil aviation; and (b) are capable of responding rapidly to meet any increased security threat. Screening, access control and physical safety of persons and property, through the "organization" percolate to the provider of security services and as such demand of the latter the capacity and preparedness for rapid response.

The Security Manual of ICAO contains several provisions on screening of cargo. Screening of cargo and mail for transport by air may be conducted using threat detection techniques and threat activation techniques through the use of approved technologies or physical search procedures. The Manual recognizes that cargo and mail transported by air include a wide range of products of different sizes, weights

and densities. Therefore, the screening process should take into account the nature of the cargo or mail and should ensure that IEDs are not concealed in consignments. The Manual goes on to say that a screening method may be ineffective or inefficient when it is not suited to the type of consignment being inspected. Therefore, cargo and mail should be screened using an appropriate method for the type of consignment. In some cases, a single screening method may not be sufficient to inspect all types of cargo and mail. Consequently, more than one screening method should be readily available.

If an item cannot be screened effectively because of its characteristics (e.g. an item that is too dense to be screened by X-ray, or too cluttered to make a determination), other appropriate techniques should be employed, otherwise it should not be transported by air. Screening should apply to cargo and mail: received by a regulated agent or aircraft operator from an entity which is not registered as a regulated agent, known consignor or account consignor; received by a regulated agent or aircraft operator and originating from a known consignor or account consignor but which was thereafter handled by an entity not registered as a regulated agent or known consignor; or that passed out of the custody of a regulated agent, known consignor, account consignor or its authorized agent, or an aircraft operator. Screening should also be required for: consignments of secure cargo or mail which show signs of tampering, or that were not protected from unauthorized access, or for which there is a reasonable suspicion of unauthorized access; high-risk cargo; consignments on specific flights upon request by the aircraft operator; random shipments, if a State requires that a certain percentage of secure cargo or mail undergo inspection; and cargo transferring from an all-cargo aircraft onto a passenger aircraft where the cargo was originally secured for transport on all-cargo aircraft only or where the consignment originated from an account consignor.

The Security Manual recommends that screening may be performed either before or after the consolidation of consignments. Generally, if screening takes place beforehand, more screening options will exist, as packages will not yet have been placed in containers or on pallets. The screening process at a "piece" level prior to consolidation and build-up is most likely to detect IEDs concealed in cargo or mail. Screening after consolidation may be operationally impractical as it may require screeners to break up shipments and reconsolidate them following screening. Threat detection techniques are the most commonly used and recommended screening methods for air cargo and mail. They are designed to detect one or more of the components of an IED, such as a detonator, a power source, or the explosive itself. Such screening methods may include: manual searches; conventional X-ray. The methodology accepted by the Manual for X-ray is: single view; and multi view. There is also algorithm-based X-ray: single view; multi view; computed tomography; and diffraction; neutron scanners; metal detection; explosives trace detection: particles; and vapour; Explosives detection dogs are also mentioned in the Manual as an effective screening tool.

It is recommended that two or more measures listed above should be applied, ideally including explosives trace detection, algorithm-based cargo X-ray scanners, or explosives detection dogs for cargo deemed high risk. Threat detection techniques

may be an appropriate screening solution prior to shipment consolidation. It may be difficult, however, to use screening equipment effectively on certain consignments, depending on their contents or size. Large individual cargo items may also pose difficulties. Threat activation techniques, such as decompression chambers, full-flight simulation systems and cooling periods (e.g. holding cargo for 24–48 h), are designed to activate an IED before the consignment is loaded onto an aircraft. Such techniques are not screening methods for cargo and mail and should not be used as an alternative to screening. Although threat activation techniques are immune to Human Factors and, in most cases, to problems arising from the size of a consignment, the process may be time consuming and will trigger only certain types of IEDs. Such techniques are limited to IEDs that are designed to be triggered by pressure, vibration, etc.

The key is to constantly apply an appropriate and effective screening method for each consignment and to ensure that all screeners are properly trained and supervised. Screening equipment must be maintained, tested and operated in accordance with the manufacturer's instructions. Screening of cargo and mail should be carried out using an appropriate method or methods, taking into account the nature of the consignment. Alternative means of screening may be required for certain types of commodities.

5.6.2 Weapons

Chapter 4 addresses the carriage of weapons and the text is somewhat ambivalent when it says that each Contracting State must establish measures to prevent weapons, explosives or any other dangerous devices, articles or substances, which may be used to commit an act of unlawful interference, the carriage or bearing of which is not authorized, from being introduced, by any means whatsoever, on board an aircraft engaged in civil aviation. This provision goes to the heart of the screening process, its credibility and effectiveness. The Security Manual provides details of how security personnel must undergo training so that this provision is effectively implemented. There is a gray area between the carriage of baggage and the carriage of cargo in the context of this provision. Although these two are different services, the safety of the flight could be seriously jeopardized if weapons are allowed to be carried in the cargo hold inside checked baggage. Security of passengers and other persons travelling is not restricted to the aircraft and what is carried in the cargo hold could affect persons even after disembarkation, as was seen in an in an attack at the airport after the passengers had disembarked.

5.6.3 The Fort Lauderdale Case

The Annex in Chap. 4 requires each Contracting State to establish measures to ensure that originating hold baggage is screened prior to being loaded onto an aircraft engaged in commercial air transport operations departing from a security

restricted area, and ensure that all hold baggage to be carried on a commercial aircraft is protected from unauthorized interference from the point it is screened or accepted into the care of the carrier, whichever is earlier, until departure of the aircraft on which it is to be carried. If the integrity of hold baggage is jeopardized, the hold baggage shall be re-screened before being placed on board an aircraft.

Each Contracting State must ensure that commercial air transport operators do not transport the baggage of persons who are not on board the aircraft unless that baggage is identified as unaccompanied and subjected to appropriate screening and ensure that transfer hold baggage is screened prior to being loaded onto an aircraft engaged in commercial air transport operations, unless it has established a validation process and continuously implements procedures, in collaboration with the other Contracting State where appropriate, to ensure that such hold baggage has been screened at the point of origin and subsequently protected from unauthorized interference from the originating airport to the departing aircraft at the transfer airport. Guidance material on this issue can be found in the Aviation Security Manual (Doc 8973—Restricted).

Each Contracting State must ensure that commercial air transport operators transport only items of hold baggage which have been individually identified as accompanied or unaccompanied, screened to the appropriate standard and accepted for carriage on that flight by the air carrier. All such baggage should be recorded as meeting these criteria and authorized for carriage on that flight. Furthermore, each Contracting State should establish procedures to deal with unidentified baggage in accordance with a security risk assessment carried out by the relevant national authorities.

On 6 January 2017 the area proximate to the baggage terminal in Terminal 2 of Fort-Lauderdale Hollywood International Airport was the scene of a mass shooting perpetrated by a mentally deranged passenger who had arrived from Alaska. Five people were killed while six others were injured in the shooting. About 36 people sustained injuries in the ensuing panic. Reportedly the suspect was taken into custody after surrendering to responding police officers. The Federal Aviation Administration issued what is called a “ground stop” notice stopping all but emergency flights. 20, 000 pieces of baggage and several hundred passengers were stranded, some of whom (perhaps with employees of the airport) were seen loitering on the tarmac for several hours—a rare sight in commercial aviation.

The killer clearly had a known history of mental disability of a grave nature. In November 2016 he had visited the field office of the Federal Bureau of Investigation (FBI) in Anchorage and informed of hearing voices in his head directing him to commit acts of violence. He had also reported that his mind was being controlled by the US Government which was making him watch videos by the Islamic State (ISIS) stating that the CIA was forcing him to join ISIS. The authorities had merely advised him to seek medical attention and notified the local police. The matter seemingly was dropped at that.

It is reported that the killer may have had the gun he used to kill during his rampage at Terminal 2 in his checked bag. This was apparently legal, where the regulations of the Transportation Security Administration allows a person within the

United States to transport unloaded firearms in a locked hard-sided container as checked baggage only. He must declare the firearm and/or ammunition to the airline when checking his bag at the ticket counter. The container must completely secure the firearm from being accessed. Locked cases that can be easily opened are not permitted. Be aware that the container the firearm was in when purchased may not adequately secure the firearm when it is transported in checked baggage. This is all well and good as this right is protected by the second Amendment to the United States Constitution which allows a person to bear arms.

The problem arises with the special circumstances of the case, where a known nut case, who certainly had a right to carry arms in his checked baggage, was not treated with caution, as a possible threat when he got off the aircraft and claimed his bag amidst the hundreds of passengers at the baggage carousel (this is of course assuming the gun used in the mass killings was the same as the weapon in the luggage). The essential ingredient in aviation security—anticipatory intelligence—seemed not to have worked. If there were a red flag—conveyed to the airport authorities in Fort Lauderdale—directed the authorities not to convey the bag to the assailant in the airport premises.

The fundamental premise of democratic government is that one must allow the government to control the governed, particularly to ensure the protection of the people. John Jay wrote that "[A]mong the many objects to which a wise and free people find it necessary to direct their attention, that of providing for their safety seems to be first".[94] The US Supreme Court handed down in 2008 its decision in the case of *District of Columbia v. Heller*,[95] in which the Supreme Court held that the Second Amendment applied to protect an individual's right to possess firearm for traditionally lawful purposes, such as self-defense within the home. The Patriot Act of 2001 (the full title of which is Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism)[96] adopted as a response to the attacks of 11 September of that year which covers all aspects of the surveillance of suspected terrorists, those suspected of engaging in computer fraud or abuse, and agents of a foreign power who are engaged in clandestine activities. President Bush in a 2005 speech explained that it is to protect the people and explained that The Patriot Act was essential to ensuring the protection of the American people against terrorists. The Act obviated the wall between law enforcement and intelligence officials so that they could share information and work together to help prevent attacks.

Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule and the National Instant Criminal Background Check System (NICS) was enacted under the administration of the Clinton Presidency in 1996 which regulates the use and disclosure of protected health information held by "covered entities"(generally, health care clearinghouses, employer sponsored health plans, health insurers, and

[94] Pestritto and West (2007), p. 253.

[95] 554 U.S. 570 (2008).

[96] H.R. 3162, United States Government Publishing Office, https://www.gpo.gov/fdsys/pkg/BILLS-107hr3162enr/pdf/BILLS-107hr3162enr.pdf.

medical service providers that engage in certain transactions.[97] In 2016 under the Obama Administration was enacted Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule and the National Instant Criminal Background Check System (NICS) which identities of individuals who are subject to a Federal "mental health *prohibitor* that disqualifies them from shipping, transporting, possessing, or receiving a firearm".[98] All these seemingly bring to bear a certain lack of coordination and collaboration between all concerned—The FBI, medical authority who conducted (or ought to have conducted) an assessment of the mental state of the assailant.

The other mystery is why there were a couple of hundred people hanging around the tarmac. Who directed them there or ordered them there? Was this because of a particular threat? It has been reported that at least some passengers ran out the skyway and down stairs onto the tarmac, where they were told to drop their carry-on bags and dash out to the runway. They eventually were taken to a hangar and bused to Port Everglades. That's where they spent most of the night. Obviously, these steps were taken out of necessity. It is noteworthy that there are specific measures recommended by the International Civil Aviation Organization: Annex 14 to the Chicago Convention in Chapter 9 carries provisions regarding emergency procedures. Also The Airport Services Manual, Part 7 as well as The Airport Emergency Planning have useful measures contained therein. Other documents are The Safety Management Manual on Emergency Response Planning. There is no doubt that Fort Lauderdale Airport was aware of these provisions and used them well.

To sum up, it seems advisable for those charged with ensuring security at airports are provided with full information of potential offenders whether it concerns outgoing or incoming passengers or staff. It must be remembered that airports and airlines are intertwined and should improve their coordination and cooperation. With regard to damage caused to passengers, under international treaty (Warsaw Convention of 1929 and Montreal Convention of 1999) the airline with whom the passenger has concluded the contract of carriage is liable for death or injury caused. However, in instances where airport services are involved the airport may be jointly or severally liable by the adjudicating court if the court finds that the airport was in the position of an agent of the airline. This article discusses law as an airport management tool against the circumstances of the Fort Lauderdale shootings.

5.6.3.1 Interaction Between the Airport and Airline

The relationship between the airport and airline is integral to the air transport product and both are inextricable and intertwined. At the final stages of the air transport contract the airline delivers to the airport the passengers, baggage and cargo it carries and, during the period the three are in the airport premises there is joint

[97] See Terry (2009), access date July 2, 2009.

[98] Burrows and Geetter (2016), https://www.mwe.com/en/thought-leadership/publications/2016/01/new.

accountability of both airline and airport in case something were to go wrong, whether it is injury or death caused to the passenger or damage to baggage or cargo. It is a generally accepted principle that in certain circumstances the airport can be considered an agent of the airline and can invoke principles of liability and limitations of liability accruing to the airline in support of the airport in case of liability.

A case in point is what happened at John F. Kennedy International Airport in late December 2010 when a severe snowfall effectively crippled equipment at Terminal One, which necessitated passengers on an Alitalia flight coming in from Rome to stay in the aircraft for 7 h with no food or drink as the aerobridge could not be connected to the aircraft. In the case of *Vumbaca* v. *Terminal One Group Association L.P*[99] decided in April 2012 by the United States District Court, E.D. New York. Vivian Vumbaca—the Plaintiff—an Italian citizen who was a permanent resident of the United States who arrived in New York during the snow storm of 26–27 December 2010 from Rome on the said Alitalia flight, alleged that she was kept locked in an aircraft on the ground without food, water, or adequate sanitary facilities for 7 h, suffering mental distress. She sued Terminal One Group Association, L.P. (TOGA), which operates Terminal One, and sought to represent similarly situated passengers claiming emotional harms resulting from negligence, false imprisonment, and intentional infliction of emotional distress under her contract of carriage on the ground that Terminal One Group Association did not afford her the facility of disembarking at her destination and kept her on board the aircraft for 7 h causing her mental distress.

Although the main cause of action of the plaintiff, for delay in her carriage by air would have been against the carrier Alitalia, under the Montreal Convention of 1999,[100] the court held that Terminal One was an agent of the air carriers it serves[101] and thus covered by the Convention. The rationale for this reasoning was that, although Terminal One is not an international carrier but just a terminal operator, its operations are vital parts of carriage performed by the carrier—particularly those services that are necessary to get planes to and from the gates.

The plaintiff averred that her claim was based on Article 30 of the Montreal Convention which stipulates that if an action is brought against a servant or agent of the carrier arising out of damage to which the Convention relates, such servant or agent, if they prove that they acted within the scope of their employment, shall be entitled to avail themselves of the conditions and limits of liability which the carrier itself is entitled to invoke under this Convention. It was the contention of the plaintiff

[99] 859 F. Supp. 2d 343.

[100] Article 19 of the Montreal Convention of 1999 provides that the carrier is liable for *damage occasioned by delay in the carriage by air of passengers, baggage* or cargo. Nevertheless, the carrier is not liable for damage occasioned by delay if it proves that it and its servants and agents took all measures that could reasonably be required to avoid the damage or that it was impossible for it or them to take such measures.

[101] Article 30 of the Montreal Convention stipulates that if an action is brought against a servant or agent of the carrier arising out of damage to which the Convention relates, such servant or agent, if they prove that they acted within the scope of their employment, shall be entitled to avail themselves of the conditions and limits of liability which the carrier itself is entitled to invoke.

that Terminal One Group Association, L.P. (TOGA) was an agent of the carrier and therefore could be held liable under the Montreal Convention.

The Court found that the defendant TOGA had acted as an agent of the carrier. Despite the fact that TOGA was a terminal operator, its services were vital to the performance by the carrier of the contract of carriage with the plaintiff and therefore formed an integral part thereof and that TOGA had a common law duty to ensure that passengers on arriving flights had safe and prompt access to Terminal One. It provided a necessary link in the chain of transportation, facilitating the common carrier airline's service of its passengers. The defendant's duty to passengers extended beyond merely ensuring that stairs are not slippery, or that gates are properly maintained. It must ensure that those stairs and gates are made available in a timely manner when needed for use by the passengers, and that adequate ground handling staff is present to facilitate access. The Court further observed that TOGA should have foreseen that a breach of this duty would cause passengers to remain trapped on their aircraft in cramped and increasingly unpleasant or dangerous conditions. Imposing on defendant this duty was neither novel nor undesirable as a matter of public policy.

In the context of negligence of the airport, which could have been vitiated by adequate preventive intelligence exercised by the airport The court used a dictum in *Havas v. Victory Paper Stock Co.,*[102]: "[w]henever one person is by circumstances placed in such a position with regard to another that every one of ordinary sense who did think would at once recognize that if he did not use ordinary care and skill in his own conduct with regard to the circumstances he would cause danger of injury to the person or property of the other, a duty arises to use ordinary care and skill to avoid such danger".[103] Accordingly, the court held that the airport had a common law duty to ensure that passengers on arriving flights had safe and prompt access to the terminal on the basis that the airport is a necessary link in the chain of transportation, facilitating the conclusion of the contract of carriage that the carrier has with the passenger.

In the Fort Lauderdale incident, as already discussed, some of the persons killed by the assailant were in the process of collecting their bags from the carousel in the airport. Legally, the contract of carriage between the airline and the passenger ends only after the passenger collects his baggage. However, the liability of the airline is established only if the airline had, at the time of the damage, adequate control of the passenger, particularly at the airport. Therefore, current law on the subject seems to favour the test known as the *Day-Evangelinos* test which was developed as a consequence of a series of terrorist acts on passengers in airport departure lounges. This is a tripartite test which has the three elements of consideration—the location of the passenger, the nature of his activity at the time of the accident and the degree of control exercised by the airline at the relevant time. A number of United States

[102] 402 N.E.2d 1136 (1980).

[103] *Id*. 1138.

cases have accepted this test.[104] This test clearly establishes the fact that unless the passenger is under the control or direction of the airline at the terminal there is no liability for injury or death caused to the passenger under the provisions of the Warsaw Convention. A case which brings out the significance of this test is *Adler v. Austrian Airlines* where a passenger slipped on some ice and fell between the terminal building and the aircraft by bus. The bus was operated by the airport staff and not by the airline. A Brussels court, applying a test similar to the *Day-Evangelinos* test held that the passenger was not under the control of the airline and was thereby precluded from invoking the provisions of Article 17 of the Convention which details the circumstances under which a plaintiff can sue i.e., if the damage which caused the death or injury occurs on board or in the process of embarkation or disembarkation.

The test itself obviates the need to painstakingly go through every possible exigency in the light of the requirement that the accident should occur during the process of embarkation or disembarkation. Prior to the adoption of this test there was no uniformity in the judicial reasoning behind the definition of embarkation and disembarkation. It was left to each individual court to determine whether a given situation would fall within the scope of chronology of these two extremities. Now, the tripartite test has made the task of the Courts much easier.

5.6.3.2 Regulatory Principles of Airport Management

At the 38th session of the Assembly of the International Civil Aviation Organization (ICAO) held in 2013, it was recognized that as a result of the exponential increase in the volume of air transport, a compelling need arose for a well-organized and comprehensive aviation system in each member State for the safe and orderly development of international aviation. In this context the Assembly noted that the efficient management of emergencies that should be conducted in a comprehensive manner integrating the entire aviation system was an absolute necessity.

Annex 14 (Aerodromes) to the Convention on International Civil Aviation (Chicago Convention) provides that an aerodrome emergency plan is an imperative establishment at an aerodrome, commensurate with the aircraft operations and other activities conducted at the aerodrome. This emergency plan should provide for the coordination of the actions to be taken in an emergency occurring at an aerodrome or in its vicinity while, coordinating the response or participation of all existing agencies which, in the opinion of the appropriate authority, could be of assistance in responding to an emergency. Integrally linked to this provision is another provision in Annex 17 to the Convention on security which requires each Contracting State to ensure that contingency plans are developed and resources made available to safeguard civil aviation against acts of unlawful interference. Furthermore, Annex 3;

[104] *Day v. Trans World Airlines Inc.* 528 F 2d. 31 (2nd Circ. 1975); *Evangelinos v. Trans World Airlines Inc.* 550 F2d 152 (2d. Circ. 1977); *Leppo v. Trans World Airlines Inc.*392 NYS 2d 660 (AD 1977); Rolnick v. *El Al Israel Airlines Ltd.551 Supp. 261 (EDNY 1982).*

Annex 4; Annex 6; Annex 12; and Annex 18 also require cooperation with related facilities in emergency or to prepare for such situations.

These Annexes are focusing only on their own part, for example air traffic services, aerodromes operation and security, but coordination amongst related plans is needed. Most emergencies go beyond disruption of a single part. An event can affect not only safety but also security, environment, personnel and other matters, and the lack of available personnel to assist during crisis may contribute to creating further difficulties.

Annex 19 to the Convention (on safety management systems) calls for a Framework for a Safety Management System (SMS), requiring service providers to ensure that an emergency response plan (ERP) is properly coordinated with the ERPs of those organizations that they must interface with during the provision of their products and services. The ICAO Safety Management Manual (Doc 9859) explains that ERP is a documented plan with actions to be taken by all responsible personnel during related emergencies focused on service providers. ERP is known by different terms to different service providers, such as contingency plan, crisis management plan and continuing airworthiness support plan. ERP is a plan to recover the failure of the SMS process. And as a follow-up action of the emergency, the responsible executives should reassess the risk and reflect the result to its SMS.

Regulatory management of airports also involves robust involvement of States. Annex 9 (Facilitation) to the Chicago Convention recommends that States establish measures for authorizing temporary entry for a passenger or crew member who does not possess the required entry visa prior to arrival, due to diversion or delay of a flight for reasons of force majeure. There is also a requirement in the Annex to establish measures whereby in-transit passengers who are unexpectedly delayed due to a flight cancellation or delay may be allowed to leave the airport for the purpose of taking accommodations. It is recommended that in emergency situations resulting from force majeure, States, aircraft operators and airport operators should give priority assistance to those passengers with medical needs, unaccompanied minors and persons with disabilities who have already commenced their journeys.

In 1991 The Supreme Court of Canada stringently applied the tortious concept of "occupier's liability" to a case where the appellants—occupiers of a farmhouse and driveway which they had neglected to clean the accumulated snow and ice which caused the respondent to slip, fall and grievously injure himself, appealed from a Court of Appeal decision[105] where they were found liable as occupiers of the premises. It is arguable whether this principle would apply to Fort Lauderdale airport as there was seemingly no negligence on the part of the airport as an occupier. The airport had not received a warning from the passenger's departure point (Alaska) nor from the airline that the passenger was carrying a deadly weapon.

On the issue of prudent airport management any determination of the conduct of Fort Lauderdale airport would be *post facto* as to what measures the airport took to cope with the emergency situation. As already discussed, did the airport have an emergency plan as prescribed by Annex 14 to the Chicago Convention and a

[105] *Waldick v. Malcolm*, [1991] 2 S.C.R. 456, File No.: 21781, 1991: February 26; 1991: June 27.

contingency plan as required by Annex 17 against unlawful interference? Was there an Emergency Response Plan as required by Annex 19 and was that put into action? Since the airport is an agent of the airline in the context of the contract of carriage, was there adequate communication between the airport and the airline with regard to the baggage and goods unloaded in the premises of the airport? Above all, did the airport ex Above all, did the airport excise a predictive management approach?

Prudent management starts with compliance of applicable laws and regulations but it does not end there. The ICAO Safety Management Manual calls for reactive, proactive and predictive (anticipatory) management in the context of safety but this principle is common to security as well. While the reactive method responds to events that have already happened, proactive management would look actively for the identification of safety risks through the analysis of the airport's activities. Arguably the most important of the three is predictive management which captures system performance as it happens in real-time normal operations to identify potential future problems.

The operative words here are "real time normal operations to identify future problems". Armed attacks inside terminal buildings have occurred with some regularity. The application of trends to possible scenarios would therefore logically lead one to address the situation with a whole plane load of passengers who have just cleared their bags from the baggage carousel. What could be inside them? Should they be screened once again after arrival? The greatest danger in this scenario would be to let predictive, management be allowed to flow into reactive management. To avoid this catastrophic possibility airport should use certain management tools among which are compliance with regulations and laws; threat intelligence; threat modelling; event coding; and event detection. The application of these tools would involve logical and critical thinking against forecasting and trend analysis as well as human judgment. What goes in the belly of the aircraft is indeed crucial to this equation.

In this context, an important recommendation in the Annex is that each Contracting State should promote the use of random and unpredictable security measures. Unpredictability could contribute to the deterrent effect of security measures. This is a recommendation that involves appropriate training of security personnel. Furthermore, it is recommended that each Contracting State should consider integrating behaviour detection into its aviation security practices and procedures. In the context of access to both the airport terminal building and cargo storage premises, the Annex requires that each Contracting State must ensure that the access to airside areas at airports serving civil aviation is controlled in order to prevent unauthorized entry. Also, States must ensure that security restricted areas are established at each airport serving civil aviation designated by the State based upon a security risk assessment carried out by the relevant national authorities. Each Contracting State is also required to ensure that identification systems are established in respect of persons and vehicles so as to prevent unauthorized access to airside areas and security restricted areas. Identity must be verified at designated checkpoints before access is allowed to airside areas and security restricted areas. Each Contracting State must also ensure that background checks are conducted on

persons other than passengers granted unescorted access to security restricted areas of the airport prior to granting access to security restricted areas. States are also required to ensure that the movement of persons and vehicles to and from the aircraft is supervised in security restricted areas in order to prevent unauthorized access to aircraft.

Each Contracting State is required to ensure that vehicles being granted access to security restricted areas, together with items contained within them, are subject to screening or other appropriate security controls in accordance with a risk assessment carried out by the relevant national authorities. Additionally, States are required ensure that an aircraft is protected from unauthorized interference from the time the aircraft search or check has commenced until the aircraft departs and that security controls are established to prevent acts of unlawful interference with aircraft when they are not in security restricted areas.

5.6.4 Specific Measures Relating to Cargo, Mail and Other Goods

Annex 17 contains specific provisions relating to cargo, mail and other goods. Under these provisions, each Contracting State must ensure that appropriate security controls, including screening where practicable, are applied to cargo and mail, prior to their being loaded onto an aircraft engaged in commercial air transport operations. States must also establish a supply chain security process, which includes the approval of regulated agents and/or known consignors, if such entities are involved in implementing screening or other security controls of cargo and mail.

Cargo, mail and other goods should not be vulnerable to unauthorized interference and in this context, each Contracting State is required to ensure that cargo and mail to be carried on a commercial aircraft are protected from unauthorized interference from the point screening or other security controls are applied until departure of the aircraft. Furthermore, each Contracting State is obligated to ensure that enhanced security measures apply to high-risk cargo and mail to appropriately mitigate the threats associated with it and that operators do not accept cargo or mail for carriage on an aircraft engaged in commercial air transport operations unless the application of screening or other security controls is confirmed and accounted for by a regulated agent, or an entity that is approved by an appropriate authority. Cargo and mail which cannot be confirmed and accounted for by a regulated agent or an entity that is approved by an appropriate authority must be subjected to screening.

There are also provisions with regard to material taken on board aircraft other than cargo. Each Contracting State must ensure that catering, stores and supplies intended for carriage on passenger commercial flights are subjected to appropriate security controls and thereafter protected until loaded onto the aircraft and ensure that merchandise and supplies introduced into security restricted areas are subject to appropriate security controls, which may include screening. States are also obligated to *ensure* that cargo and mail that has been confirmed and accounted for shall

then be issued with a security status which shall accompany, either in an electronic format or in writing, the cargo and mail throughout the secure supply chain.

Each Contracting State shall ensure that transfer cargo and mail has been subjected to appropriate security controls prior to being loaded on an aircraft engaged in commercial air transport operations departing from its territory and ensure that, where screening of cargo and mail is conducted, screening is carried out using an appropriate method or methods, taking into account the nature of the consignment. Furthermore, each Contracting State should establish appropriate mechanisms to confirm that transfer cargo and mail entering its territory has been subjected to appropriate security controls. Guidance material on this issue can be found in the Aviation Security Manual.

Particularly in the area of cargo, the landside of the aerodrome premises is important. In this regard each Contracting State is obligated to ensure that landside areas are identified while also ensuring that security measures are established for landside areas to mitigate the risk of and to prevent possible acts of unlawful interference in accordance with risk assessments carried out by the relevant authorities or entities. Coordination in this regard is crucial, between relevant departments, agencies, other organizations of the State, and other entities, so that appropriate responsibilities for landside security in its national civil aviation security programme are identified.

5.6.5 Security Manual (Doc 8973 Restricted)

Annexes 17 and 9 prescribe requirements contained in Standards, and recommendations in the nature of Recommended Practices that States are required to follow. By implication, these requirements, once met, are passed on to the implementer—the security provider—who is responsible to the State for maintaining such Standards. At another level, the Security Manual provides guidance as to the manner and scope of implementation in the following areas: airport security personnel training in such areas as clearance, inspection, behavioural patterns of possible offenders *inter alia;* briefing of airport security officers in the prevention of unauthorized access to restricted areas, equipment, personnel or property. These briefings include techniques of guarding; search of persons; apprehension of violators/suspects; self defence techniques; suspect explosive devices; response to occurrences and crowd control techniques; training of personnel assigned to conduct passenger, cargo and baggage screening and prescribes training on screening regulations and pertinent legislation, identification of firearms weapons, incendiary or explosive devices, and other dangerous devices or parts thereof, manual search of persons, manual search of baggage and cargo, mail and stores and emergency procedures; Airport Security Programme and how the Airport Security programme should be developed. The effectiveness of security measures and vulnerable points in the airport that need security; how the airport security officer should report directly to the airport manager and 3.11.2 specifies that the security officer must have technical knowledge of

security and airport operations; the duties and functions of the airport security officer; the principles and techniques of screening of passengers and cabin baggage and the equipment to be used; how powers to operators to deny boarding to persons posing a threat to the security of the aircraft and persons and property therein are ascribed; thorough screening of passengers and baggage requires by well trained security staff, sufficient security equipment and the allocation of sufficient time for the security process to be implemented; and the link between dangerous goods in the cabin and security and provides that screeners must be aware that there are restrictions that apply to certain "prohibited items" as well as articles or substances classified as "dangerous goods" that may pose a danger or threat to health and safety of passengers and the safety of property on board. In terms of the cargo hold, as already discussed, Annex 18 (Dangerous Goods) has provisions on the acceptance of dangerous goods.

References

Abeyratne R (2013) Reinventing ICAO's role in air transport - a compelling need? Issues Aviat Law Policy 13(1):9–29

Baruah R (2016) Analyzing legal concepts of the air cargo cartel litigations. Ann Air Space Law XLI:397–423

Burrows VK, Geetter JS (2016) New HIPAA privacy rule permits disclosures to background check system. McDermott, Will and Emory, Chicago

Kotaite A (2013) My memoires. ICAO, Montreal, pp 120–121

Mackenzie D (2010) ICAO: a history of the international civil aviation organization. University of Toronto Press, Toronto, p 108

Pestritto RJ, West TG (eds) (2007) Modern America and the legacy of founding. Lexington Books, New York, p 253

Reuter P (1989) Introduction to the law of treaties. Pinter Publishers, London, p 16

Terry K (2009) Patent privacy – the new threats. Physicians Pract J 19(3)

von der Dunk FG (1992) Jus Cogens Sive Lex Ferenda: Jus Cogendum. In: Masson-Zwaan TL, Mendes De Leon PMJ (eds) Air and space law: De Lege Ferenda, essays in honour of Henri a Wassenbergh. Martinus Nijhoff, Dordrecht, p 219

Wils WPJ (2013) Antitrust compliance programmes and optimal antitrust enforcement. J Antitrust Enforcement 1(1):52–81

Chapter 6
Liability Issues Under Treaty Law

The overriding aim of private international air law has been to unify laws relating to the carriage of persons and cargo. This unification started with the Warsaw Convention of 1929 and culminated in the Montreal Convention of 1999 which finally replaced the Warsaw Convention.[1] The Warsaw Convention was supplemented by The Hague Protocol of 1955 which doubled the liability limits for passenger injury and death and increased the limits for damage to cargo. There were later treaties and protocols along the way and these instruments were collectively called "the Warsaw Regime", meaning that the parent treaty was the Warsaw Convention. During the time between 1955 and 2000, an interesting turn of events took place in the liability regime. If for instance a consignment was lost by the carrier which carried it from country A to country B, the courts had to decide which treaty of the Warsaw Regime to apply. If country A had ratified the Warsaw Convention, and country B had ratified The Hague Protocol and not the Warsaw Convention, courts applied the principles of the lower common denominator (the first legal instrument) which in this case was the Warsaw Convention.

In 2000 this changed when the US Court of Appeals held that if there was no commonality between the two countries involved in the carriage of cargo, no instrument applied, and the applicable law would be as existing in the domestic jurisdiction concerned be it common law or civil law. This situation led to considerable chaos, which is counter-intuitive to the whole purpose of unification of laws. With an abundance of caution therefore, the United States has now ratified The Hague Protocol, the Montreal Protocol No 4 and the Montreal Convention, just to make sure that in an instance of adjudication, the United States will fall into at least one instrument.

To make confusion worse confounded, the basic principle applicable to treaties, as stipulated in the Vienna Convention on the Law of Treaties, is that a State can

[1] In between these two, the Warsaw Convention was amended by the Hague Protocol of 1955, a Protocol at Guatemala City in 1971 and four Protocols adopted in Montreal in 1975.

R. Abeyratne, *Law and Regulation of Air Cargo*,
https://doi.org/10.1007/978-3-319-92489-2_6

adhere to an amendment to a Convention (as in this case the United States did by adhering to or ratifying only The Hague Protocol which merely amended the Warsaw Convention) only if the parent convention or treaty allowed such partial adherence. There is no such mention in the Warsaw Convention. Therefore, the United States is deemed not to have ratified any instrument in this context. Although the Court did not focus on this fact, the ultimate conclusion of the Court was valid, in that both parties had not ratified the same instrument and therefore it was left to the common law applicable to the United States to take over.

The Montreal Convention of 1999 which has entered into force, replaced the Warsaw Convention and its several protocols. At least we now have a clean slate and States should take the opportunity they have once again to unify the laws applicable to the carriage of persons and cargo by air by signing on to the Montreal Convention. This would eliminate all doubt, particularly for the courts.

By any standards, this makes one sanguine about the future of air cargo carriage. The least the industry could ask for is a clear system of laws that would help both the carrier and the shipper.

6.1 The Montreal Convention of 1999

At the time of writing, the Montreal Convention, which entered into force on 4 November 2003, had been ratified by 131 States Parties. The Convention is applicable to all international carriage of persons, baggage or cargo performed by aircraft for reward. It applies equally to gratuitous carriage by aircraft performed by an air transport undertaking. The term "international carriage" is deemed to mean, for purposes of the Convention any carriage in which, according to the agreement between the parties, the place of departure and the place of destination, whether or not there be a break in the carriage or a transhipment, are situated either within the territories of two States Parties, or within the territory of a single State Party if there is an agreed stopping place within the territory of another State, even if that State is not a State Party. Carriage between two points within the territory of a single State Party without an agreed stopping place within the territory of another State is not international carriage for the purposes of the Convention.

The Montreal further provides that carriage to be performed by several successive carriers is deemed to be one undivided carriage if it has been regarded by the parties as a single operation, whether it had been agreed upon under the form of a single contract or of a series of contracts, and it does not lose its international character merely because one contract or a series of contracts is to be performed entirely within the territory of the same State.

In respect of the carriage of cargo, the Convention requires an air waybill to be delivered. Any other means which preserves a record of the carriage to be performed may be substituted for the delivery of an air waybill. If such other means are used, the carrier shall, if so requested by the consignor, deliver to the consignor a

cargo receipt permitting identification of the consignment and access to the information contained in the record preserved by such other means.

The air waybill or the cargo receipt shall include: (a) an indication of the places of departure and destination; (b) if the places of departure and destination are within the territory of a single State Party, one or more agreed stopping places being within the territory of another State, an indication of at least one such stopping place; and (c) an indication of the weight of the consignment. The consignor may be required, if necessary to meet the formalities of customs, police and similar public authorities, to deliver a document indicating the nature of the cargo. This provision creates for the carrier no duty, obligation or liability resulting therefrom.

It is a requirement under the Montreal Convention that the air waybill be made out by the consignor in three original parts: the first part to be marked "for the carrier" and signed by the consignor. The second part is required to be marked for the consignee and signed by the consignor and by the carrier. The third part is to be signed by the carrier who is required to hand it to the consignor after the cargo has been accepted. The signature of the carrier and that of the consignor may be printed or stamped. If, at the request of the consignor, the carrier makes out the air waybill, the carrier is deemed, subject to proof to the contrary, to have done so on behalf of the consignor.

When there is more than one package: (a) the carrier of cargo has the right to require the consignor to make out separate air waybills; (b) the consignor has the right to require the carrier to deliver separate cargo receipts when the other means referred to in earlier provisions already cited are used. Non-compliance with the above requirements do not necessarily affect the existence or the validity of the contract of carriage, which nonetheless will be subject to the rules of this Convention including those relating to limitation of liability.

The consignor is responsible for the correctness of the particulars and statements relating to the cargo inserted by it or on its behalf in the air waybill or furnished by it or on its behalf to the carrier for insertion in the cargo receipt or for insertion in the record preserved by the other means already referred to. The foregoing shall also apply where the person acting on behalf of the consignor is also the agent of the carrier. The consignor shall indemnify the carrier against all damage suffered by it, or by any other person to whom the carrier is liable, by reason of the irregularity, incorrectness or incompleteness of the particulars and statements furnished by the consignor or on its behalf. Subject to the provisions of paragraphs 1 and 2 of this Article, the carrier shall indemnify the consignor against all damage suffered by it, or by any other person to whom the consignor is liable, by reason of the irregularity, incorrectness or incompleteness of the particulars and statements inserted by the carrier or on its behalf in the cargo receipt or in the record preserved by the other means referred to in paragraph 2 of Article 4.

The air waybill or the cargo receipt remains prima facie evidence of the conclusion of the contract, of the acceptance of the cargo and of the conditions of carriage mentioned therein. Any statements in the air waybill or the cargo receipt relating to the weight, dimensions and packing of the cargo, as well as those relating to the

number of packages, are prima facie evidence of the facts stated; those relating to the quantity, volume and condition of the cargo do not constitute evidence against the carrier except so far as they both have been, and are stated in the air waybill or the cargo receipt to have been, checked by it in the presence of the consignor, or relate to the apparent condition of the cargo.

Subject to its liability to carry out all its obligations under the contract of carriage, the consignor has the right to dispose of the cargo by withdrawing it at the airport of departure or destination, or by stopping it in the course of the journey on any landing, or by calling for it to be delivered at the place of destination or in the course of the journey to a person other than the consignee originally designated, or by requiring it to be returned to the airport of departure. The consignor must not exercise this right of disposition in such a way as to prejudice the carrier or other consignors and must reimburse any expenses occasioned by the exercise of this right. If it is impossible to carry out the instructions of the consignor, the carrier must so inform the consignor forthwith. If the carrier carries out the instructions of the consignor for the disposition of the cargo without requiring the production of the part of the air waybill or the cargo receipt delivered to the latter, the carrier will be liable, without prejudice to its right of recovery from the consignor, for any damage which may be caused thereby to any person who is lawfully in possession of that part of the air waybill or the cargo receipt. The right conferred on the consignor ceases at the moment when that of the consignee begins in. Nevertheless, if the consignee declines to accept the cargo, or cannot be communicated with, the consignor resumes its right of disposition.

Except when the consignor has exercised its right under the conditions mentioned above, the consignee is entitled, on arrival of the cargo at the place of destination, to require the carrier to deliver the cargo to it, on payment of the charges due and on complying with the conditions of carriage. Unless it is otherwise agreed, it is the duty of the carrier to give notice to the consignee as soon as the cargo arrives. If the carrier admits the loss of the cargo, or if the cargo has not arrived at the expiration of 7 days after the date on which it ought to have arrived, the consignee is entitled to enforce against the carrier the rights which flow from the contract of carriage.

The consignor and the consignee can respectively enforce all the rights given to them by the conditions in the Convention as described above, each in its own name, whether it is acting in its own interest or in the interest of another, provided that it carries out the obligations imposed by the contract of carriage. The consignor must furnish such information and such documents as are necessary to meet the formalities of customs, police and any other public authorities before the cargo can be delivered to the consignee. The consignor is liable to the carrier for any damage occasioned by the absence, insufficiency or irregularity of any such information or documents, unless the damage is due to the fault of the carrier, its servants or agents. The carrier is under no obligation to enquire into the correctness or sufficiency of such information or documents.

6.2 Liability of the Carrier

The carrier is liable for damage sustained in the event of the destruction or loss of, or damage to, cargo if the event which caused the damage so sustained took place during the carriage by air. However, the carrier is not liable if and to the extent it proves that the destruction, or loss of, or damage to, the cargo resulted from one or more of the following: inherent defect, quality or vice of that cargo; defective packing of that cargo performed by a person other than the carrier or its servants or agents; (c) an act of war or an armed conflict; an act of public authority carried out in connection with the entry, exit or transit of the cargo. The carriage by air within the meaning of the above comprises the period during which the cargo is in the charge of the carrier. The period of the carriage by air does not extend to any carriage by land, by sea or by inland waterway performed outside an airport. If, however, such carriage takes place in the performance of a contract for carriage by air, for loading, delivery or transhipment, any damage is presumed, subject to proof to the contrary, to have been the result of an event which took place during the carriage by air. If a carrier, without the consent of the consignor, substitutes carriage by another mode of transport for the whole or part of a carriage intended by the agreement between the parties to be carriage by air, such carriage by another mode of transport is deemed to be within the period of carriage by air.

In the event of delay, the carrier is liable for damage caused by delay in the carriage by air of passengers, baggage or cargo. Nevertheless, the carrier is not liable for damage occasioned by delay if it proves that it and its servants and agents took all measures that could reasonably be required to avoid the damage or that it was impossible for it or them to take such measures. If the carrier proves that the damage was caused or contributed to by the negligence or other wrongful act or omission of the person claiming compensation, or the person from whom he or she derives his or her rights, the carrier is wholly or partly exonerated from its liability to the claimant to the extent that such negligence or wrongful act or omission caused or contributed to the damage. This provision applies to all the liability provisions in the Convention.

In the carriage of cargo, the liability of the carrier in the case of destruction, loss, damage or delay is limited to a sum of 17 Special Drawing Rights per kilogramme, unless the consignor has made, at the time when the package was handed over to the carrier, a special declaration of interest in delivery at destination and has paid a supplementary sum if the case so requires. In that case the carrier will be liable to pay a sum not exceeding the declared sum, unless it proves that the sum is greater than the consignor's actual interest in delivery at destination.

In the case of destruction, loss, damage or delay of part of the cargo, or of any object contained therein, the weight to be taken into consideration in determining the amount to which the carrier's liability is limited shall be only the total weight of the package or packages concerned. Nevertheless, when the destruction, loss, damage or delay of a part of the cargo, or of an object contained therein, affects the value of other packages covered by the same air waybill, or the same receipt or, if they

were not issued, by the same record preserved by the other means already referred to, the total weight of such package or packages will also be taken into consideration in determining the limit of liability. The foregoing provisions do not apply if it is proved that the damage resulted from an act or omission of the carrier, its servants or agents, done with intent to cause damage or recklessly and with knowledge that damage would probably result; provided that, in the case of such act or omission of a servant or agent, it is also proved that such servant or agent was acting within the scope of its employment. The limits do not prevent the court from awarding, in accordance with its own law, in addition, the whole or part of the court costs and of the other expenses of the litigation incurred by the plaintiff, including interest. The foregoing provision does not apply if the amount of the damages awarded, excluding court costs and other expenses of the litigation, does not exceed the sum which the carrier has offered in writing to the plaintiff within a period of 6 months from the date of the occurrence causing the damage, or before the commencement of the action, if that is later.

A carrier may stipulate that the contract of carriage shall be subject to higher limits of liability than those provided for in this Convention or to no limits of liability whatsoever. Nothing contained in the Convention prevents the carrier from refusing to enter into any contract of carriage, from waiving any defences available under the Convention, or from laying down conditions which do not conflict with the provisions of the Convention. In the case of carriage to be performed by various successive carriers and falling within the definition of "international carriage", each carrier which accepts passengers, baggage or cargo is subject to the rules set out in the Convention and is deemed to be one of the parties to the contract of carriage in so far as the contract deals with that part of the carriage which is performed under its supervision. With regard to cargo, the consignor will have a right of action against the first carrier, and the consignee who is entitled to delivery will have a right of action against the last carrier, and further, each may take action against the carrier which performed the carriage during which the destruction, loss, damage or delay took place. These carriers are jointly and severally liable to the passenger or to the consignor or consignee.

In the case of combined carriage performed partly by air and partly by any other mode of carriage, the provisions of the Convention apply only to the carriage by air, provided that the carriage by air falls ins international. Nothing in the Convention prevents the parties in the case of combined carriage from inserting in the document of air carriage conditions relating to other modes of carriage, provided that the provisions of the Convention are observed as regards the carriage by air. When carriage is performed by a carrier other than the contracting carrier, The Convention applies when a person, as a principal makes a contract of carriage governed by the provisions of the Convention with a passenger or consignor or with a person acting on behalf of the passenger or consignor, and another person—who is called the "actual carrier"—performs, by virtue of authority from the contracting carrier, the whole or part of the carriage, but is not with respect to such part a successive carrier within the meaning of the Convention. Such authority is presumed in the absence of proof to the contrary.

If an actual carrier performs the whole or part of carriage which, according to the contract is governed by the Convention, both the contracting carrier and the actual carrier shall, except as otherwise provided in the Convention, be subject to the rules of the Convention, the former for the whole of the carriage contemplated in the contract, the latter solely for the carriage which it performs.

The acts and omissions of the actual carrier and of its servants and agents acting within the scope of their employment, in relation to the carriage performed by the actual carrier, is deemed to be also those of the contracting carrier. The acts and omissions of the contracting carrier and of its servants and agents acting within the scope of their employment, in relation to the carriage performed by the actual carrier, is deemed to be also those of the actual carrier. Nevertheless, no such act or omission subject the actual carrier to liability exceeding the amounts referred to above. Any special agreement under which the contracting carrier assumes obligations not imposed by the Convention or any waiver of rights or defences conferred by the Convention or any special declaration of interest in delivery at destination does not affect the actual carrier unless agreed to by it.

In relation to the carriage performed by the actual carrier, any servant or agent of that carrier or of the contracting carrier is entitled to, if they prove that they acted within the scope of their employment, avail themselves of the conditions and limits of liability which are applicable under the Convention to the carrier whose servant or agent they are, unless it is proved that they acted in a manner that prevents the limits of liability from being invoked in accordance with the Convention. In relation to the carriage performed by the actual carrier, the aggregate of the amounts recoverable from that carrier and the contracting carrier, and from their servants and agents acting within the scope of their employment, will not exceed the highest amount which could be awarded against either the contracting carrier or the actual carrier under the Convention, but none of the persons mentioned is liable for a sum in excess of the limit applicable to that person.

States Parties are obligated to require their carriers to maintain adequate insurance covering their liability under the Convention. A carrier may be required by the State Party into which it operates to furnish evidence that it maintains adequate insurance covering its liability under the Convention.

6.3 Case Law

The fact that the Montreal Convention provides that the carrier is liable for loss or damage to cargo only if such cargo was lost or damaged during the carriage by air, brings to bear the need to interpret “during the carriage by air”. Would this mean that cargo lost in a warehouse pending carriage can be included under this condition? In *Victoria Sales Corporation* v. *Emery Air freight Inc*.,[2] decided in 1990 under

[2] 917 F.2d 705.

the Warsaw Convention of 1929 (which used the words "transportation by air") where a cargo was carried from Frankfurt to New York where it was held in the defendant's warehouse and consequently could not be located, the court held that the term "transportation by air" should not be strictly and literally applied and that the storage in the warehouse could be taken as part of transportation by air. The case is even more significant as the defendant's warehouse was located outside the airport premises. The operative rationale of the court's decision was a clarifier in the Warsaw Convention that the liability of the carrier extended to wherever and whenever the goods were "in the carrier's charge" and that the carrier's liability ended only when the goods were taken over by the consignee.[3]

The *Emery Air freight* case, apart from the territorial issue, brings forth another issue pertaining to the applicability of treaty provisions in the face of the earlier Warsaw Convention (of 1929) and the later Montreal Convention (of 1999) which replaced the former. In *Chubb* v. *Asiana Airlines*[4] Courts addressed the issue of whether one party has ratified a treaty which the other party to the action had not, but ratified a subsequent treaty, what treaty would apply. In 1995, Samsung Electronics Co., Ltd., entered into a contract with respondent Asiana Airlines to ship 17 parcels of computer chips from Seoul, South Korea, to San Francisco, California. The air waybill for the 17 parcels of this expensive consignment provided for shipment on August 10, 1995, on Asiana Flight 214 from Seoul to San Francisco, with no intermediate stops. However, Asiana instead transported the parcels on Asiana Flight 202 from Seoul to Los Angeles, California, and thereafter trucked the parcels to San Francisco. It was discovered upon delivery in San Francisco, that two parcels, which contained $583,000 worth of chips and together weighed 35.3 kg, could not be found and were presumed stolen. Chubb, who was the subrogee of the petitioner Samsung Electronics, averred that a claim could lie to recover the total value of goods lost under the insurance policy. Asian Airlines, the carrier and respondent averred that the carriage of the goods came under the Warsaw Convention's provision that limited the liability of the carrier to a maximum of $20 per kg of cargo lost or damaged.

in 1995 when this dispute arose, the United States had ratified the Original Warsaw Convention but not The Hague Protocol, while South Korea had adhered to The Hague Protocol but not the Original Warsaw Convention. The Court of Appeal was of the view that the two countries were not in a treaty relationship with each other as there was a disparity between the treaties that each States Party had ratified. This was despite the South Korean Supreme Court holding in 1986, that the United States and South Korea were in a treaty relationship under The Hague Protocol (rather than the Original Warsaw Convention).[5] There was nothing in The Hague Protocol to suggest that adherence to the protocol meant automatically that

[3] See *Royal Ins*. V. *Amerford Air Cargo*, 654 F. Supp. 679 at 681–683. Also, *Magnus Electronics Inc*., v. *Royal Bank of Canada*, 611 F. Supp. 436 at 439–440.

[4] 214 F 3d 301 (2d Cir), 8th June 2000.

[5] *Hyundai Marine & Fire Ins*. v. *Korean Air Lines* (Korea S. Ct. July 22, 1986).

adherence to the Warsaw Convention could be imputed to the State. The Court, following the principle established by an earlier case, held that carriage from the territory of a state which is a party only to one Convention to the territory of a state which is a party only to the other is not covered by the rules of either Convention.[6] It can therefore be concluded that two States could be in a treaty relationship only if they had ratified the same treaty.

The case of *Insurance Co. of North America* v. *Federal Express Corp*[7] is an interesting one where the facts were that a California company bought computer chips valued at $638,500 from a Canadian supplier, which were stolen or presumed lost at a storage warehouse of FedEx in Memphis. The plaintiff argued that the defendant carrier could not avail itself of the limitation of liability provisions of the Warsaw Convention as the goods had been taken to Memphis which had not been disclosed in the Airwaybill as an "agreed stopping place" by the defendant as per the requirement in the Convention. The Court thought otherwise and decided that it was the prerogative of the defendant to carry the goods from the point of departure to the destination as it saw fit and awarded the limitation of liability protection to the defendant carrier. In comparison is an interesting decision which was handed down in a case decided in 2000[8] which involved the carriage of cargo from Los Angeles to Hong Kong with a stop in Taipei. Here, the carrier failed to stipulate in the air waybill that the goods in Taipei would be transferred to another flight and then carried to Hong Kong. The court was of the view that this was a crucial deviation from what was stipulated in the air waybill which did not record the transfer of the goods to another flight at the stopping place, although the stopping place was specified in the air waybill. The carrier in this case lost the protection of the limitation of liability provided in the Convention.

In *Siemens Ltd.* V. *Schenker International (Aust) Pty. Ltd*[9]—a case involving a shipment of telecommunications equipment was carried from Germany to Australia and the shipment was damaged due to falling off the truck during transportation by truck between the airport in Melbourne and a warehouse 4 km away, The High Court of Australia held that the Warsaw Convention required any liability to accrue to the carrier "during transportation by air" and as such the requirement in the Convention was not satisfied. This is anomalous as the operative issue would have been what constituted "transportation by air" and whether the term included the time before delivery where the carrier was presumed to hold custody of the consignment until it was delivered.

Transportation by air has been viewed in a different context with regard to the issuance of the air waybill, where courts have tried to reconcile multiple modes of transportation of a consignment under a single air waybill. In *Patou* v. *Pier Air*

[6] *Holmes* v. *Bangladesh Biman Corp*., 87 I.L.R. 365, 387 (Eng. H.L. 1989).

[7] 189 F.3d 914 (9th Cir. 1999).

[8] *Intercargo Insurance Co*. v. *China Airlines Ltd*., 208 F. 2d 64 (2d Cir 2000).

[9] 205 ALR 232 (High Court of Australia).

International[10] where a consignment of women's apparel was cut under a single air waybill but was subject to carriage by air and surface transport resulting in part of the consignment being lost, the court held that since the consignment was drawn on a single air waybill the requirement of "transportation by air" under the Warsaw Convention was satisfied. In another case, the courts held that as long as the cargo remained in the actual or constructive possession of the carrier the requirement of "transportation by air" was satisfied irrespective of the modes of carriage.[11] Yet another decision held otherwise in the case of a shipment of cordless telephones which was handed over to a trucking company after it was carried by air to its destination, where the goods disappeared during the trucking journey. The court held that "transportation by air" ended with release of the goods to the trucking company.[12] In *Commercial Union Insurance Co*. v. *Alitalia Airlines*[13] a consignment of machinery was carried on two sectors by air—from Florence to New York and thereafter from New York to Pennsylvania. The court held that the Warsaw Convention allowed transportation by several successive carriers to be considered one undivided carriage and this case came within that scenario.

The 2005 case of *Connaught Laboratories Limited* v. *British Airways*,[14] involved the carriage of four cartons of vaccines carried by air from Toronto to Sydney, Australia via London which were damaged in the course of the journey. The cartons had labels to the effect that they had to be continuously kept refrigerated at between 2 °C and 8 °C. In transit in London the cartons were not kept refrigerated as a result of which they were found damaged on arrival at the destination in Sydney. The issue at stake was whether the carrier could limit its liability under the Warsaw Convention but the claimant (plaintiff) argued that the carrier was disentitled by the Convention's provision that the limits cannot apply if it is proved that the damage resulted from an act or omission of the carrier, his servants or agents, done with intent to cause damage or recklessly and with knowledge that damage would probably result. The trial judge applied the Convention's provision subjectively and concluded that plaintiff had to prove not only that the carrier was reckless but also that the carrier knew damage would probably result from its recklessness. However, the judge drew an adverse inference against the carrier who could not explain what happened to the cargo and therefore held with the plaintiff which the Ontario Court of Appeal upheld at the appeal stage.

In *Green Computer AB* v. *Federal Express Corp. et al.*,[15] The courts had to examine the loss of a carton of integrated circuits valued at $50,000 which composed a whole consignment. The defendant carrier's argument that the plaintiff had not

[10] 714 F. Supp 81 (S.D.N.Y 1989).

[11] *Magnus Electronics Inc*. v. *Royal Bank of Canada* 611 F. Supp 436 a 438.

[12] *Railroad Salvage of Connecticut* v. *Japan Freight Consolidators*, 556 F. Supp 124 (E.D.N.Y 1983).

[13] 347F.3d 448(2003).

[14] 2005 CanLII 16576.

[15] 2004 FCA 111.

given notice of the loss which, under the Warsaw Convention had to be given within 7 days of receipt in the case of damage to cargo and within 21 days in the case of delay. The plaintiff counter argued that the defendant was not entitled to the limitation of liability provisions as the defendant had been guilty of wilful misconduct—a factor that removed the limitation of liability under the Convention. Finally, the Plaintiff argued that the Defendant was not entitled to limit liability as it had not proved the cargo was lost during the carriage by air as opposed to carriage by land. The court, while noting the absence of proof as to where the damage occurred, went along with the condition in the Convention which provides that "any damage is presumed, subject to proof to the contrary, to have been the result of an event which took place during the carriage by air" and allowed the defendant's claims to the limitation of liability which limited the damage to the amount of $851. The plaintiff appealed and lost.

In *MDSI Mobile Data Solutions Inc*. v. *Federal Express*[16] *the courts looked at* damage to computer equipment which had occurred during carriage by air from Vancouver, British Columbia to Atlanta, Georgia. The plaintiff sought to claim the actual value of the damaged consignment which was $240,000 or alternatively $214,000. Although the defendant airline did not dispute liability it sought to limit its liability under the Warsaw Convention on the ground that the employee of the plaintiff who had filled in the air waybill had made a statement that compensation for any damage could ultimately be recovered from the Plaintiff's insurer. The court found the argument of the defendant tenuous. The defendant next claimed the limitation of liability under the Convention to which the plaintiff countered that the limitation of liability provision did not apply in this case because of the declaration of value and that the conditions of carriage were ambivalent. The trial judge was of the view that the declared value was applicable. On appeal the court held *inter alia* that the Convention would not prohibit the parties to a contract of carriage by air from agreeing on a limit of liability that was in excess of the limitation of liability provided by the Convention but less than the actual value of the goods carried. In the result, therefore, the appeal was dismissed, and the Plaintiff obtained judgment for the declared value amount of $214,000.

In *World of Art nc*. v. *Koninklijke Luchtraart Maatschappij N.V*.,[17] a consignment that was carried from Iran was rerouted via the United States where it was seized by the U.S. Customs. A similar circumstance had been experienced by the carrier and the carrier therefore knew or ought to have known of the risk involved in routing cargo originating from Iran through the United States. The consignment had been erroneously labeled by the carrier as originating from Amsterdam thus effectively precluding an internal warning system installed by the carrier that would have fore warned the carrier of the impending seizure. The court did not have any problem in identifying that the damage was caused to the consignee through the fault and wilful misconduct of the carrier where the court pronounced that the act of the carrier or

[16] 2003 BCCA 9.

[17] 2000 CanLII 16982.

omission was "done with intent to cause damage or recklessly and with knowledge that damage would probably result" and drew an adverse inference therefrom, concluding that the defendant carrier was not entitled to the limitation of liability prescribed by the Warsaw Convention.

In the 2000 case of *Nuvo Electronics Inc*. v. *London Assurance et al.*,[18] 15 cartons of integrated circuits valued at US$1,403,000 were lost from an Air Canada cargo warehouse after being carried by air from San Francisco to Toronto. Upon arrival, the shipment had been placed in the Air Canada cargo warehouse where it disappeared. The plaintiff consignee instituted action against the air carrier and its underwriter. The defendant carrier averred that the plaintiff had not proved the value of the cargo and that it was seeking the protection of the limitation of liability provision in the Warsaw Convention. The court found that certain crucial information that should have been contained in the air waybill had not been inserted by the carrier and therefore the carrier was not entitled to avail itself of the protection of the Convention. Accordingly, the Court held that there was "wilful misconduct" and that the carrier was not entitled to limit its liability.

In *Impala Platinum Limited v Koninklijke Luchtvaart Maatschappij NV and Another*,[19] the claim was by the consignor against the carrier. He claimed that the cargo concerned was lost during air carriage between South Africa and the United States of America (USA). The respondent's argument was that the plaintiff had no *locus standi* in the action at international treaty law, which the High Court of South Africa upheld.

Under the Montreal Convention of 1999 liability accrues to the carrier if damage occurs any time during which the cargo was I the carrier's charge. Therefore, damage at a warehouse before the goods are ultimately delivered would incur liability for the carrier. This is analogous to the instance of the carriage of a passenger where liability of the carrier is recognized if the accident which caused the death or injury of a passenger occurs while the passenger was under the control of the carrier.[20]

In *Durunna* v. *Air Canada*[21] the plaintiff under contract with Air Canada handed over to the carrier 10 laptop computers to be carried to Nigeria. The laptops disappeared en route, and the plaintiff sued Air Canada for compensation for the loss. Air Canada claimed that in accordance with the provisions of the waybill and the Montreal Convention of 1999 applied to limit its liability. Dr. Durunna (plaintiff) disputed the provisions of the air waybill as being nonsensical for the reason that he had explicitly and clearly advised Air Canada at the point of contract that the shipment had a value of $4000. The plaintiff further averred that Air Canada did not apprise him of the possibility of obtaining separate insurance coverage. In response to the court's question as to why the air waybill's entries did not match the actual value of the goods, the plaintiff responded that he did get an opportunity to "read the

[18] 2000 CanLII 22388.

[19] 2008 (6) SA 606.

[20] See Abeyratne (2017), p. 212.

[21] (2013), 555 A.R. 367 (PC).

contract". Rather, it was presented to him in a nearly completed form when he returned to the Freight Office on the second attendance. He testified that consequently he did not have the opportunity to review the face of the document and, much less, the terms and conditions on the reverse (which include the limitation of liability provisions discussed below). Also, the plaintiff did not sign the document of carriage which formed the contract.

The court noted that Article 7 of the Montreal Convention requires that the air waybill "shall be signed by the consignor", a condition which was not satisfied in this case. The court accepted that the plaintiff's advice to the carrier of the enhanced value of the shipment formed a "special declaration" albeit oral recognizing the provision in the Montreal Convention that: "In the carriage of cargo, the liability of the carrier in the case of destruction, loss, damage or delay is limited to a sum of 17 Special Drawing Rights per kilogramme, unless the consignor has made, at the time when the package was handed over to the carrier a special declaration of interest in delivery at destination and has paid a supplementary sum if the case so requires. In that case the carrier will be liable to pay a sum not exceeding the declared sum, unless it proves that the sum is greater than the consignor's actual interest in delivery at destination". The Court thereupon held with the plaintiff, awarding him the claimed $4000.

Reference

Abeyratne R (2017) Carrier liability for death or injury to passengers: a comparison between maritime law and air law. J Int Comp Law 4(2):190–215

Chapter 7
The Air Cargo Supply Chain and Contract of Carriage

7.1 Trucking Air Cargo

Air cargo carriage often results in the cargo being trucked to its ultimate destination. This creates a complex supply chain across customs borders that call for multiple parties to be involved. In addition, various documents of carriage are used in the composite carriage and liabilities of various parties may ensued for loss or damage to cargo.[1] The process involves (in that order) the consignor, origin freight forwarder, ground handler, carrier, ground handler, destination freight forwarder, and finally the consignee. The processes these players in the multimodal carriage go through (in that order) are, pick up, consolidation, acceptance of cargo and documentation, departure, arrival and delivery, deconsolidation, and final delivery.

The documents involved in the processes are: The *Air Cargo manifest* which is a hard copy or electronic document issued by an aircraft operator, containing the details of consignments loaded on to a specified flight and providing a list of all the air waybill and master air waybill numbers referring to the goods loaded on to an aircraft. The nature of the goods, weight, and number of pieces composing each consignment on a specified flight, and the unit of loading used, are also identified in this document; the *Air waybill, House air waybill,* and Master *air waybill* which are documents that evidences the contract between the shipper and aircraft operator(s) for the carriage of goods over routes of the operator(s). It is prepared by or on behalf of a shipper and these types of air waybills serve several purposes, but their two main functions are as a contract of carriage (behind every original air waybill are the

[1] In June 2011 ICAO and the World Customs Organization signed a memorandum of understanding on security in multimodal transportation focusing on aligning the regulatory framework of both Organizations relative to air cargo that will involve electronic advance data, the sharing of information at various levels (government-to-government, Customs-to-Customs and Customs-to-industry), training and education, and risk management. See ICAO and WCO join forces to strengthen air cargo security, Brussels, 27 June 2011, Press Release, http://www.wcoomd.org/en/media/newsroom/2011/june/icao-and-wco-join-forces-to-strengthen-air-cargo-security.aspx.

R. Abeyratne, *Law and Regulation of Air Cargo*,
https://doi.org/10.1007/978-3-319-92489-2_7

conditions of contract for carriage), and as evidence of the receipt of goods. An air waybill is the most important document issued by an aircraft operator either directly or through its authorized agent (freight forwarder) and covers the transport of cargo from airport to airport.

Air waybills contain eleven-digit numbers used to make bookings and to check the status of a delivery and the current position of the shipment. The first three digits reflect the aircraft operator prefix. A freight forwarder offering a consolidation service will issue its own air waybill to the shipper, called a house air waybill, which may act as a multimodal transport document. The house air waybill and the forwarder's general conditions may comprise a part of the contract between the freight forwarder and each shipper whose goods have been consolidated. There are two reference numbers on a house air waybill, the number of the master air waybill to which it is linked and the house air waybill number itself, which is always different from one freight forwarder to another, without limitations or standard digits, and which may be used to trace a shipment through the freight forwarder.

The purpose of Master air waybills is to offer a consolidation service. This document specifies the contract between a freight forwarder (or consolidator) and aircraft operator(s) for the transportation of goods originated by more than one shipper but destined for the same final State, airport or other destination are issued by or on behalf of freight forwarders. Master air waybills have linkages to several house air waybills, and the master number can be used to trace a shipment with an aircraft operator. Certificate of Origin A specific form identifying the goods, in which the authority or body empowered to issue it certifies expressly that the goods to which the certificate relates originate in a specific State. This certificate may also include a declaration by the manufacturer, producer, supplier, exporter, or other competent person.

The Montreal Convention of 1999 has several provisions for the international carriage of cargo by air. Firstly, an air waybill must be delivered as the constituent document of carriage that forms the contract of carriage. Any other means which preserves a record of the carriage to be performed may be substituted for the delivery of an air waybill. If such other means are used, the carrier is required, if so requested by the consignor, deliver to the consignor a cargo receipt permitting identification of the consignment and access to the information contained in the record preserved by such other means.

The air waybill or the cargo receipt must include: an indication of the places of departure and destination; if the places of departure and destination are within the territory of a single State Party, one or more agreed stopping places being within the territory of another State, an indication of at least one such stopping place; and an indication of the weight of the consignment. The consignor may be required, if necessary to meet the formalities of customs, police and similar public authorities, to deliver a document indicating the nature of the cargo. This provision creates for the carrier no duty, obligation or liability resulting therefrom.

The air waybill must be made out by the consignor in three original parts: the first part must be marked "for the carrier"; it is required to be signed by the consignor. The second part, to be marked "for the consignee" must be signed by the

consignor and by the carrier. The third part is to be signed by the carrier who shall hand it to the consignor after the cargo has been accepted. The signature of the carrier and that of the consignor may be printed or stamped. If, at the request of the consignor, the carrier makes out the air waybill, the carrier shall be deemed, subject to proof to the contrary, to have done so on behalf of the consignor.

When there is more than one package the carrier of cargo has the right to require the consignor to make out separate air waybills and the consignor has the right to require the carrier to deliver separate cargo receipts when the other means referred to above are used. Non-compliance with the provisions of the Convention does not affect the existence or the validity of the contract of carriage, which shall, nonetheless, be subject to the rules of this Convention including those relating to limitation of liability. The consignor is responsible for the correctness of the particulars and statements relating to the cargo inserted by it or on its behalf in the air waybill or furnished by it or on its behalf to the carrier for insertion in the cargo receipt or for insertion in the record preserved by the other means referred to in earlier provisions cited. The foregoing also applies where the person acting on behalf of the consignor is also the agent of the carrier.

The consignor must indemnify the carrier against all damage suffered by it, or by any other person to whom the carrier is liable, by reason of the irregularity, incorrectness or incompleteness of the particulars and statements furnished by the consignor or on its behalf. The carrier is required to indemnify the consignor against all damage suffered by it, or by any other person to whom the consignor is liable, by reason of the irregularity, incorrectness or incompleteness of the particulars and statements inserted by the carrier or on its behalf in the cargo receipt or in the record preserved by the other means referred to above.

The air waybill or the cargo receipt is prima facie evidence of the conclusion of the contract, of the acceptance of the cargo and of the conditions of carriage mentioned therein. Any statements in the air waybill or the cargo receipt relating to the weight, dimensions and packing of the cargo, as well as those relating to the number of packages, are prima facie evidence of the facts stated; those relating to the quantity, volume and condition of the cargo do not constitute evidence against the carrier except so far as they both have been, and are stated in the air waybill or the cargo receipt to have been, checked by it in the presence of the consignor, or relate to the apparent condition of the cargo.

Subject to its liability to carry out all its obligations under the contract of carriage, the consignor has the right to dispose of the cargo by withdrawing it at the airport of departure or destination, or by stopping it in the course of the journey on any landing, or by calling for it to be delivered at the place of destination or in the course of the journey to a person other than the consignee originally designated, or by requiring it to be returned to the airport of departure. The consignor must not exercise this right of disposition in such a way as to prejudice the carrier or other consignors and must reimburse any expenses occasioned by the exercise of this right. If it is impossible to carry out the instructions of the consignor, the carrier must so inform the consignor forthwith. If the carrier carries out the instructions of the consignor for the disposition of the cargo without requiring the production of the

part of the air waybill or the cargo receipt delivered to the latter, the carrier will be liable, without prejudice to its right of recovery from the consignor, for any damage which may be caused thereby to any person who is lawfully in possession of that part of the air waybill or the cargo receipt. The right conferred on the consignor ceases when that of the consignee begins. Nevertheless, if the consignee declines to accept the cargo, or cannot be communicated with, the consignor resumes its right of disposition.

Except when the consignor has exercised its right the consignee is entitled, on arrival of the cargo at the place of destination, to require the carrier to deliver the cargo to it, on payment of the charges due and on complying with the conditions of carriage. Unless it is otherwise agreed, it is the duty of the carrier to give notice to the consignee as soon as the cargo arrives. If the carrier admits the loss of the cargo, or if the cargo has not arrived at the expiration of 7 days after the date on which it ought to have arrived, the consignee is entitled to enforce against the carrier the rights which flow from the contract of carriage.

The consignor and the consignee can respectively enforce all the rights given to them by the Convention, each in its own name, whether it is acting in its own interest or in the interest of another, provided that it carries out the obligations imposed by the contract of carriage.

The consignor must furnish such information and such documents as are necessary to meet the formalities of customs, police and any other public authorities before the cargo can be delivered to the consignee. The consignor is liable to the carrier for any damage occasioned by the absence, insufficiency or irregularity of any such information or documents, unless the damage is due to the fault of the carrier, its servants or agents. The carrier is under no obligation to enquire into the correctness or sufficiency of such information or documents.

The next document is the Consignment security declaration (CSD) which is a document used to establish the security status of cargo. It allows tracking of the security status of cargo and mail throughout its movement within the secure supply chain. This document helps to ensure that regulated agents, known consignors, and aircraft operators are held accountable regarding the security controls applied to cargo. A consignment security declaration, which may be in hard copy or electronic form, should be issued by the entity that renders and maintains the cargo secure. A CSD template can be found in the ICAO Aviation Security Manual (Doc 8973—Restricted). Customs release export A document whereby a Customs authority releases goods under its control to be placed at the disposal of the party concerned for export (also called a Customs delivery note). Customs release import Same as above but for import Dangerous Goods Declaration Document(s) issued by the consignor or shipper to certify that the dangerous goods being transported have been packaged, labelled, and declared in accordance with the provisions of international standards and conventions. Export cargo declaration (departure) A generic term applied to the document, also referred to as a freight declaration, providing the particulars required by Customs concerning outbound cargo carried by commercial means of transport. Export goods declaration A document whereby goods are declared for export Customs clearance. House cargo manifest A document

containing the same information as a cargo manifest as well as additional details on freight amounts, etc. Import cargo declaration (arrival) Same as above but for inbound cargo Import goods Declaration A document whereby goods are declared for import Customs clearance.

Customs authorities in an importing State require an *Invoice* originated by the exporter who states the invoice or other price (e.g. selling price or price of identical goods), and specifies costs for freight, insurance, and packing, as well as terms of delivery and payment, for the purpose of determining the Customs value of goods in the importing State. Packing list Documents specifying which goods are in each package.

One of the critical stages in the process of multimodal carriage of cargo is ground handling. Ground handling[2] is a multifaceted labour-intensive industry and increasingly suffers some monopolistic trends such as rising labour costs, increasing demands on service needs of airlines and costs hidden in airport charges. The ground handing function is usually separated into terminal handling (involving passenger check-in, baggage and freight handling) and ramp handling (aircraft handling, cleaning and servicing) and generally excludes maintenance and repair of aircraft although in certain instances so called line maintenance may be considered to be ground handling.[3] The European Union considers ground handling to be composed of Ground Administration—supervision and administration at the airport; Passenger Handling—assisting arriving, departing and transfer passengers; Baggage Handling—handling baggage in the sorting area; Freight and Mail Handling—physical handling of freight and mail, dealing with security and customs procedures (container handling services and other cargo handling services); Ramp Handling—marshalling and moving the aircraft, loading and unloading of aircraft, transport of passengers, freight, supplies, Aircraft Services—cleaning the aircraft, heating and cooling, removal of snow and ice; fuel and Oil Handling—organisation and provision of fuel and oil; Flight Operations and Crew Administration—preparation of the flight, in-flight and post-flight assistance, crew administration; surface Transport—organisation and execution of transport within airport—except to and from aircraft; and Catering Services—administration, storage, preparation and delivery of bar and food supplies.

Liberalization of air transport has brought with it many commercial implications, one of which is the liberalization of the ground handling agreement itself. In recent

[2] There is no formal definition of ground handling. However, ground handling is understood to broadly include services necessary for an aircraft's arrival at and departure from an airport but to exclude those provided by air traffic control. Although fuelling, catering, loading, security and maintenance are included in the list of services in the SGHA, it is quite common for these services to be provided by specialist companies, i.e. fuel companies providing fuelling, catering companies provide catering loading, etc. They are, therefore, not regarded as core ground handling services as they are not necessarily provided by a ground handling agent. See Annex 6 to the Convention on International Civil Aviation (Operation of Aircraft), Part 1, International Commercial Air Transport—Aeroplanes), Eighth Edition, July 2001, Definitions. See also *Manual on the Regulation of International Air Transport*, ICAO Doc 9626, Second Edition, 2004, Chapter 4.10 at 4.10-1.

[3] See *the Airports Economics Manual*, ICAO Doc 9562, Second Edition: 2006 at 2.91.

years, many States have incorporated liberal ground handling provisions in their bilateral air services agreements.[4] The ICAO model clause for bilateral air services agreement[5] stipulates that each Party shall authorize air carrier(s) of the other Party/Parties, at each carrier's choice to: perform its own ground handling services; handle another or other air carrier(s); join with others in forming a service-providing entity; and/or select among competing service providers. This clause was intended to assist regulatory authorities in removing restrictions and moving to a competitive environment.

The composition of an air waybill and the liability of a carrier for lost or damaged cargo has already been discussed. The liability that could arise in various instances has also to be discussed in relation to the law of contract. The basic principle involving the legal obligations of the carrier is to deliver the cargo in the same state in which it was accepted, undamaged on time and completely in the number of packages and contents. There could be numerous ways in which the carrier can be found culpable for a breach of any of these conditions of contract.

7.2 Noise

Noise has become a major issue in the carriage of cargo by air, particularly in Europe. A local government restriction on noise has resulted in a drop in 25% of cargo operations in Brussels. The crisis started in May 2016 when Brussels Environment Minister asked the Brussels Institute of Environmental Management (IBGE) to cease tolerance of overruns relating to noise restrictions, beginning January 1, 2017. Brussels airport had advised: "About 25% of the airport's global cargo traffic is transported by B747ERF (B747-400 extended-range freighter) aircraft and such is the noise volume of these aircraft that they would almost always get a fine when leaving Brussels at maximum take-off weight (without the 10% tolerance). In the event of the tolerance being removed, there is a risk that some airlines might leave Brussels in the longer term due to the extra operating cost of these flights and the legal uncertainty it creates".[6]

The European Union had released a statement saying: "Environmental noise pollution relates to noise caused by road, rail and airport traffic, industry, construction, as well as some other outdoor activities.

Prolonged exposure to noise can lead to serious health effects mediated by the human endocrine system and by the brain, such as sleep disturbance, cardiovascular diseases, annoyance (a feeling of discomfort affecting general well-being), cognitive

[4] The ICAO Air Transport Regulation Panel, in following up on the World-wide Air Transport Conference held in Montreal in 1994, developed a model clause on ground handling that States could use whenever appropriate in their bilateral and multilateral air service agreements.

[5] See S/C/W/59 Annex 2 pp. 53–54 for the text. Panel recommendations are found in the same Annex on pages: 51–53.

[6] Todd (2017).

impairment and mental health problems. It can also cause direct effects such as tinnitus. The effects of exposure to noise impact EU economies. They lead to a loss of productivity of workers whose health and well-being are affected by noise, put a burden on health care systems and cause a substantial depreciation of real-estate value".[7]

In the 1990 case of *Powell and Rayner* v. *The United Kingdom*[8] the plaintiff alleged that his right of enjoyment of his home had been eroded by aircraft noise overhead. His house was within range of Heathrow airport in terms of loud aircraft noise. The court held that he had no claim as his house had been already lived in when the airport came into being. In *Arrondelle v. UK*[9] the issue was the disturbance caused by aircraft noise caused by aircraft flying over the plaintiff's house which disturbed the plaintiff who claimed that his right to private life and home as well as the peaceful enjoyment of his property was eroded. The aircraft noise was emitted from increased flights and extension of flight paths at Heathrow Airport. European regulations provided the basis for a 'friendly settlement' between the parties in a complaint, alleging nuisance due to the development of an airport and construction of a motorway adjacent to the applicant's home.

In the United States, the case *Airports Auth.* v. *Citizens for Noise Abatement,*[10] had the Supreme Court of the United States inquiring into a complaint by individuals living along National flight paths and Citizens for the Abatement of Aircraft Noise, Inc. (CAAN), whose members include persons living along such paths, and whose purposes include the reduction of National operations and associated noise, safety, and air pollution problems—brought this action seeking declaratory and injunctive relief, alleging that the Board of Directors of the airport authority to create a Board of Review (Board) and its veto power to quell a complaint was unconstitutional. The complaint was against noise caused over Washington National and Dulles international airports by overflying and landing aircraft. Dulles is larger than Washington National, and lies in a rural area, miles from the Capitol. National is a much busier airport, due to the convenience of its location at the center of the metropolitan area, but its flight paths over densely populated areas had generated concern among residents about safety, noise, and pollution. The Supreme Court was faced with deciding whether the delegation of authority by the legislature to the Board was ultra vires the Constitution of the United States. The Court answered in the negative. The Court held: "At one point, Congress may have reigned as the preeminent Branch, much as the Framers predicted. ...It does so no longer. This century has witnessed a vast increase in the power that Congress has transferred to the Executive. … Given this shift in the constitutional balance, the Framers' fears of legislative tyranny ring hollow when invoked to portray a body like the Board as a serious encroachment on the powers of the Executive".[11]

---

[7] http://ec.europa.eu/environment/noise/index_en.htm.

[8] *Application no. 9310/81*. See https://hudoc.echr.coe.int/eng#{"itemid":["001-57622"]}.

[9] 26 DR 5 (1982).

[10] 501 U.S. 252 (1991).

[11] https://supreme.justia.com/cases/federal/us/501/252/case.html.

Although noise may not, unlike air pollution, directly affect human health and longevity, it is nonetheless a nuisance and profoundly affects the quality of life. As health is not only the absence of illness but is the overall wellbeing of the human, noise can be a health hazard. From a strictly scientific point of view noise could be defined as discordant sound resulting from non-periodic vibrations in air. In common parlance noise is defined simply as sound without value or excessive sound. One view is that noise is: a number of tonal components disagreeable to man and intolerable to him because of the discomfort, fatigue, agitation and in some cases pain it causes.

Noise can be termed a species of the genus sound, the latter being a variation of pressure resulting in vibrations occurring in water, air or any such medium related to human existence. These vibrations affect the sensitivity of the human ear which interprets them as sound to the brain. Although sound is an essential component of human communication, there are instances when its tonal components exceed the degree of human tolerance, causing acute mental and physical discomfort. Noise therefore, is unpleasant and undesired sound.

Although the ill effects of noise are not always visually manifest, to identify it as a health hazard is not difficult. The WHO has defined health as "...a state of complete physical, mental and social wellbeing, not merely an absence of disease and infirmity." Even the merest noise which disturbs rest, sleep or relaxation therefore, is a positive health hazard. Compared to the human eye which responds to light intensities from its threshold of response up to an intensity 105 times greater, the human ear can discern without pain only sounds varying from a threshold of detection to sounds ten times as intense.

Excessive noise is not merely a public nuisance but is also a polluter of the environment. Pollution has been defined by the Organization for Economic Cooperation and Development as: the introduction by man, directly or indirectly, of substances or energy into the environment resulting in deleterious effects of such nature as to endanger human health, harm living resources and ecosystems, and impair or interface with amenities and other legitimate uses of the environment.

The definition covers human health which has been a major concern of environmentalists for some time. It also accommodates the role played by the United Nations under its Charter. Article 1 of the United Nations Charter identifies as one of the purposes of the United Nations, the achievement of international cooperation in solving international problems *inter alia* of a human character and charges the General Assembly of the United Nations to promote international cooperation *inter alia* in the health fields Article 55 of the Charter requires the United Nations to promote higher standards of living and arrive at solutions concerning *inter alia* health problems. For this purpose of the Economic and Social Council of the United Nations (ECOSOC) may make or initiate studies and reports *inter alia* with respect to international health matters. The role of the United Nations in preserving the environment is thereby clearly entrenched in its Charter. International regulations, are but a corollary to this *status quo*.

The tort of nuisance is caused by an unprivileged interference by a person of another's enjoyment of his or her private property, causing discomfort to the latter,

and invariably causing the property to diminish in value. There are two instances, however, where recovery against the tort of nuisance is not possible, namely, where a State can invoke sovereignty; and where the defence of pre-emption can be successfully claimed. In all other instances, where nuisance is alleged to have been committed by aircraft noise, particularly where a State-run airport is held answerable, a successful legal approach for the plaintiff would lie in the theory of inverse condemnation. The principle of inverse condemnation has been identified as the popular description of a cause against a governmental defendant to recover the value of property which has been taken in fact by the governmental defendant en though no formal exercise of the power of eminent domain has been attempted by taking the agency. and was brought to light by the seminal decision in the case of *United States* v. *Causby,*[12] decided in 1946, which involved repeated flights over the plaintiff's property by military aircraft, held that there had been a compensable interference with property and consequent taking down of its value which was at variance with the Fifth Amendment of the United States' Constitution.

In the *Causby case*, Mr. Justice Douglas said: it is ancient doctrine that at common law ownership of the land extended to the periphery of the universe—*cujus est solum ejus est usque and coelum.* But that doctrine has no place in the modern world. The air is a public highway, as Congress has declared. Were that not true, every transcontinental flight would subject the operator to countless trespass suits. Common sense revolts at the idea. "To recognize such private claims to the airspace would clog these highways, seriously interfere with their control and development in the public interest, and transfer into private ownership that to which only the public has a just claim".[13]

A frequent factor that courts take into consideration in determining whether a particular activity is a nuisance is the locality of the alleged nuisance. For instance, in one case decided by the English courts, in determining whether the noises caused in the early morning by the movement and stamping of horses which disturbed the sleep of the plaintiff constituted an actionable nuisance and should be restrained by injunction, the court considered carefully the locality in which the alleged nuisance occurred. The court was of the opinion that although the defendant's business was situated in a very suitable place in the city, yet the noise complained of was not as reasonable as the law would require. In another case in coming to the conclusion that the noise amounted to an actionable nuisance, the court considered the type of locality in question. Although it was adduced in evidence that there were other sawmills in the district, the court held that there was no other industrial undertaking within reasonable distance of the particular locality, which had the character of a quiet countryside.

In yet another case the defendant was a haulage contractor and the noise, and the dust caused by his business constituted a substantial nuisance to the plaintiff. The court cited a great deal of judicial authority in this area of the law. After considering

[12] 328 U.S. 256 (1946).

[13] *Id.* 328.

the pecuniary loss resulting to the defendant if the court granted a permanent injunction, the fact that no one else living in the neighborhood supported the plaintiff and the fact that the plaintiff had a motive for complaining about the noise (there was ill-feeling between the two families) the court came to the conclusion that in a residential suburb a man is not at liberty habitually to start a noisy motor vehicle at very early hours of the morning when his neighbors are usually asleep. Upon the defendant undertaking to abate the nuisance, the action was dismissed. This case underscores the preoccupation of judges in considering the locality of the alleged nuisance important, even in circumstances where there is evidence in favor of the defendant.

The relevance of locality has been considered in situations where the defendant avers that the plaintiff came to the nuisance. However, "coming to the nuisance" is not a defense to an action in nuisance. Certain cases have discussed this non-defense. One of the earliest cases decided in 1865 in the English courts held that the plaintiff's having come to the nuisance did not dis-entitle him to equitable relief. In a particular case the offending noise came from the crowd at a theatre in the locality where the plaintiff lived. It was held that a person who deliberately goes next door to a theatre cannot expect to have precisely the same amenities that the lessee of a private house in a street occupied by private houses only in the West End would expect. However, the court held that such a lessee still has the right to expect that no nuisance shall be committed to the prejudice of such person. In the 1977 case of *Miller* v. *Jackson*[14] Geoffrey Lane L.J. posed the question: can the defendants take advantage of the fact that the plaintiffs have put themselves in such a position by coming to occupy a house on the edge of a small cricket field, with the result that what was not a nuisance in the past now becomes a nuisance?

His Lordship held that although he was inclined to find for the defendants he could not do so as he was bound by judicial precedent. An earlier case was cited as authority for the proposition that it is no answer to a claim in nuisance for a defendant to show that the plaintiff brought the trouble upon himself by building and coming to live in a house so close to the defendant's premises that he would inevitably be affected by the defendant's activities. Geoffrey Lane L.J. thought that this rule works injustice. He reluctantly held for the plaintiff. His Lordship seemed to have been much impressed by the fact that the locality was a country area in which cricket was an important activity. Therefore, courts throughout the ages have been influenced by the locality in question in considering whether the plaintiff came to the nuisance.

Certain cases have considered whether the benefit to the public by the defendant's activity would override the nuisance such activity would cause to the plaintiff. In the case of *Kennaway* v. *Thompson and another*[15] decided in 1980 the British Court of Appeal considered the jeopardy caused to the public interest in granting an injunction prohibiting the defendant, a boating club, from carrying on noisy

[14] [1977] Q.B. 966.

[15] [1981] Q.B. 88.

activities which prevented the plaintiff from using and enjoying her land. Lawton L.J. held that although the plaintiff was not entitled to an injunction restraining all of the club's activities because there had to be a reasonable amount of give and take, those activities which caused a serious nuisance to her should be restrained by injunction. His Lordship was of the opinion that the public benefit generated by the defendant's activities outweighed the inconvenience to the plaintiff who had to absent herself from her house for many days in order to avoid the noise.

The most obvious physiological damage that can be caused by noise is deafness. As a study of 1973 has reflected, in the United States of America alone 11 million adults and 3 million children suffered some form of hearing loss at the time. At that time the same study announced that an Australian noise researcher predicted that many teenagers who visit noisy discotheques would be deaf by the age of forty. Noise can cause temporary or permanent deafness. Temporary deafness occurs when a person is exposed to noise levels of 90 decibels or more in the middle to high frequency range for a relatively short time. Permanent deafness arises from continuous exposure to noise such as noise at a workplace. Therefore, although a person exposed to 120 decibels and above for a short time would not suffer hearing damage, he would succumb to deafness if he is exposed to that noise level for some time. Noise causes ill effects on the cardio—vascular system and the circulatory system. A tightening of the blood vessels cuts down the flow of blood to various parts of the body. As a result, adrenalin is released into the body, which leads to fatigue and headaches. Increases in chronic fatigue and neurotic complaints have been noted in workers chronically exposed to noise levels over 110 decibels. For example, European investigators have found that workers in foundries suffer circulatory difficulties and nervous disorders attributable to intense noise It has been found that changes in heart and circulatory functions occur simultaneously with the start-up of noise but return to normal very slowly after the noise has ceased. A constriction of the smaller arteries as a result of excessive noise can lead to a speeded-up pulse and respiration rate. It is the view of some medical authorities that continued exposure to loud noises could cause chronic effects such as hypertension or ulcers.

Noise, especially sudden and unexpected noise, produces ill effects on the digestive system causing chronic gastro—intestinal conditions. It is also now a well-known fact that the human foetus may be damaged either directly by such violent noise as sonic booms or indirectly by the mother's psycho—physiological reaction to excessive noise. The physiological ill effects caused by noise could be summed up in the words of Dr. Samuel Rosen, Clinical Professor of Otology, at Mount Sinai School of Medicine who said that at an unexpected or unwanted noise, the pupils dilate, skin pales, mucous membranes dry; there are intestinal spasms and the adrenals explode secretions. The biological organism, in a word, is disturbed.

Noise also interferes with sleep, which does not form a uniform pattern. There are four basic sleep stages starting with dozing followed by three progressively deeper sleep stages, the deepest sleep being of the greatest benefit. Although younger people experience mostly deep sleep during sleeping, the middle aged and the elderly spend more of their sleeping period, dozing. This probably accounts for the fact that the greater number of complaints about noise are made by the latter

group. The human ear continues to transmit messages to the brain even during sleep and a person's sleep pattern could be altered. Such an alteration in the sleep pattern could have the same detrimental effects as being deprived of sleep altogether.

Experiments have revealed that continuous noise above 90 decibels has a detrimental effect on working efficiency of the human being. People involved in intellectual tasks, who are exposed to intense noise above 90 decibels deteriorate in their working efficiency more than people exposed to the same conditions but are involved only in routine-type jobs. Noise is more likely to reduce the accuracy of work rather than the total quantity of work. The decrease in working efficiency results in great losses to production and industry.

Speech communication, which is an important aspect of human society, is disturbed by noise. This occurs in situations encountered at work, at home, in vehicles and in other settings. Interference with communications can arise either from actually not hearing what the other person said or from intrusions of sound so that the message is not understood by the listener. Scientists have found that a noise level of 75 decibels would prohibit telephone conversation and a noise level of 65–75 decibels would affect reliable communication over two feet distance even with a raised voice. A writer cites the instance of aircraft noise in an airport in the United States disrupting the operation of television, radio and phonograph, the conduct of religious services, conversation and classroom activities.

Although noise has always been a source of annoyance to man, it is now considered more than a mere annoyance. Psychiatrists have noted the disturbing link between noise and mental disorders. Scientists suggest that loss of hearing may in fact be the least serious of the effects of noise. A look at recorded instances reveal the possibility of noise affecting the mental stability of a person. For instance, a study made in Sweden as early as in 1965 revealed the fact that people generally exposed to high-noise residential areas were more of a neurotic disposition than others who lived in relatively noiseless areas. The former group were more annoyed, disturbed and impulsive than the latter. Studies in the United States have shown that workers in noisy jobs tend to be more quarrelsome at work and at home than workers doing the same type of job but who are free from noise. The former type of worker makes more mistakes and his thinking gets slow and fuzzy.

There is medical evidence to prove that exposure to aerial noise causes deleterious psychological effects. For instance, a study made in 1969 in relation to admissions to a psychiatric hospital in England drew a distinct relationship between the disturbed mental state of the admitted inmates of the hospital and high intermittent noise levels from London Heathrow Airport, to which the patients were exposed. One writer states that airport and industrial noise are the causes of mental stress and maladjustment, increases in chronic fatigue and neurotic complaints, although different personalities may underlie individual differences in noise effects.

The foregoing discussion brings to bear the dichotomy between individual interests and human health against the freedom to operate air services. There have been many discussions in the Council of ICAO on night curfews in Europe which effectively preclude carriers from Asia and Africa from having the flexibility of operating air services from their territories to European airports.

At the 37th Session of the ICAO Assembly in 2010 India submitted to the Assembly some facts reminding of the Assembly of issues involved: night curfews at some European airports are perceived to cause the transferring of their night-time noise burden to some developing countries where night-time noise is generated by aircraft scheduled to avoid departing or arriving during the curfew periods at European airports; the need for continuing noise curfews has been questioned, given that aircraft noise Standards have improved over the years and the current aircraft in service are much quieter than when the curfews were instituted; airports with night curfews that are capacity constrained during day time, restrict the ability to open up new slots for additional traffic which may result in opportunity costs to airlines and airports; night curfews restrict the capability of airlines to offer flights at the most convenient times (arrival or departure) to its customers, thereby reducing customer choice and adversely affecting airlines' level of service; in the case of airports in developing countries that have excess capacity during day time, there may be additional economic costs of keeping the airport open during night-time which include air and ground crew, airport operations personnel, and general support staff; and night curfews can cause inconvenience to passengers if they must arrive (or depart) at night-time from one airport due to restrictions on departure (or arrival) airport.[16]

India, in its working paper to the Assembly suggested that a Study conducted by ICAO revealed that night curfews are imposed as a local protest by citizens living around the airport. These persons all over the world were aware of the noise before they bought the property, but they did so with their own will and with possibly an eye to capital appreciation due to proximity to airport. Unilateral night curfews are an increasing phenomenon all over the world and as noise awareness grows, night curfews, if imposed by countries like India or South Africa, would limit the flight timing options between the countries. The present night curfew in Europe has effectively transferred the problem of night-time noise burden from the communities around their airports to communities around airports of Mumbai, Delhi, Johannesburg, etc.

The need for continuing noise curfews has also been questioned given the aircraft noise standard improvements over the years and that the current aircraft engines are quieter than earlier ones mainly due to ICAO specifications. The need for night curfews has therefore, diminished. In fact, ICAO should link the reduction of engine noise rules to reduction/removal of night curfews. Airports with night curfews are generally capacity constrained during the day and restrict ability to open up new slots for additional traffic which may result in opportunity cost to airlines and airports. Night curfews restrict the capacity of airlines to offer flights at most convenient times (arrival or departure) to their customers at destination airports thereby reducing customer choice and adversely affecting airlines' level of service.

[16] REVIEW OF NIGHT CURFEW RESTRICTIONS (Presented by India), A37-WP/270 EX/55 21/09/10.

India concluded that the principle of night curfews imposed unilaterally was in question and that ICAO must address the issue of night curfew to help the airline business to grow.[17]

7.3 Breach of Contract

7.3.1 Non-Performance

Breach of contract occurs when there is non-performance of the contract of carriage. The meaning of performance remains interpretive of individual contracts. The remedy for breach of contract is the award of damages or compensation, which the Montreal Convention of 1999 has stipulated, and which has already been discussed in an earlier chapter (see *ANNEX* to this book for text of the Convention). Arguably, one of the most common instances of a breach of contract arises from exclusion clauses in the contract which exculpate or relieve from one party of liability under a clause which excludes that party's liability if the other party to the contract does not comply with the conditions of contract. For example, if a carrier of cargo has an exclusion clause in the document of carriage that its liability is obviated if wrong information is given by the consignor the carrier could, *in limine,* preclude liability from being imposed on it. However, if the carrier is found guilty of what is called a "fundamental breach" such exclusion clauses would not apply. In the 1962 case *Hong Kong Fir Shipping Company Ltd* v. *Kawasaki Kisen Kaisha Ltd,*[18]—a case where the plaintiffs had acquired the ship the 'Hong Kong Fir' and contracted to charter it to the defendants and where the defendants repudiated the contract on the ground that the plaintiffs had delayed delivery of the ship, the plaintiffs claimed that the repudiation was wrongful as the ship could still be used for the charter contract intended.

It was held by the court that the delay per se was not a fundamental breach with Lord Upjohn stating: "the remedies open to the innocent party for breach of a stipulation which is not a condition strictly so called, depend entirely upon the nature of the breach and its foreseeable consequences. Breaches of stipulation fall, naturally, into two classes. First there is the case where the owner by his conduct indicates that he considers himself no longer bound to perform his part of the contract; in that case, of course, the charterer may accept the repudiation and treat the contract as at an end. The second class of case is, of course, the more usual one and that is where due to misfortune such as the perils of the sea, engine failures, incompetence of the crew and so on, the owner is unable to perform a particular stipulation precisely in accordance with the terms of the contract try he never so hard to remedy it. In that case the question to be answered is, does the breach of the stipulation go so much to

[17] *Id*. At 3.

[18] [1962] 2 Q.B. 26 (CA).

the root of the contract that it makes further commercial performance of the contract impossible, or in other words is the whole contract frustrated? If yea, the innocent party may treat the contract as at an end. If nay, his claim sounds in damages only. This is a question of fact fit for the determination of a jury".[19]

The operative issue which determines whether there has been a fundamental breach is, as enunciated by Lord Diplock in the same case was the action on the part of the performer of the contract or the person to whom the contract was to be performed fundamentally affect the performance so as to totally preclude the performance of the contract. In the analogous instance of the cargo carriage cited above, the carrier could not claim breach of a fundamental term of the contract by the consignee merely by invoking the discrepancy in information and claim an exemption clause unless such false information effectively precluded the carrier from performing the contract. A similar principle was pronounced in a Canadian case which held that what was important was the determination of the circumstances under which a contract was formed and whether they affected the root of the contract.[20] In other words, the language used by the parties to a contract would help discern the intention of the parties in the context of the essence of the contract.[21]

It is the action of the parties that is relevant and not the motive. The 1979 case of *Federal Commerce and Navigation Ltd.,* v. *Molena Alpha Inc.*[22] involved shipowners revoking a charter in response to the charters making unauthorized deductions in the hire payments. The shipowners claimed that the deductions were unjustified. The court held that the repudiation of the charter was unjustified as such repudiation deprived the charters of the benefit of carrying on their business. When applied to the carriage of cargo as well as to the instance of the extended process of trucking the cargo to the ultimate destination, the consignee could not repudiate the contract of carriage unless there was a breach of a term that went to the root of the contract. Conversely, a carrier could not indulge in non-performance of the contract of carriage if the action of the consignor did not affect the root of the contract. In the *Molena Alpha* case Lod Denning M.R. said: "This question must be asked in each case as it arises for decision: and then, from case to case, we shall build up a series of precedents to guide those who come after us. But one thing is clear: it is not every cross-claim which can be deducted. It is only cross-claims that arise out of the same transaction or are closely connected with it. And it is only cross-claims which go directly to impeach the plaintiff's demands, that is, so closely connected with his demands that it would be manifestly unjust to allow him to enforce payment without

[19] *Id*. 32.

[20] *Bank of British Columbia* v. *Turbo Resources Ltd*., (1983) 148 D.L.R. (3d) 598.

[21] See Some Recent Judicial and Legislative Developments of Interest to Commercial Litigation Practitioners in Alberta Prepared For: Legal Education Society of Alberta, Prepared By: James T. Eamon Q.C. Gowling Lafleur Henderson LLP Calgary, Alberta (Calgary Seminar) Presented By: Geoffrey D. Holub Gowling Lafleur Henderson LLP Calgary, Alberta, at p. 2. The paper appears at https://www.lesaonline.org/samples/07_43_05_p1.pdf.

[22] [1979] A.C. 757 (HL).

taking into account the cross-claim".[23] From the carrier's side, a contract of carriage can be terminated if the contract document evidenced a clear agreement that it could be terminated if such intention was unequivocally brought to bear in the document. In the analogous case of *Bunge Corp., New York* v. *Tradux Export S.A. Panama*[24] The contract document pertaining to the sale of goods required the buyers to give notice of the probable readiness of the ships on which the goods were to be carried. The notice was given 4 days too late. The sellers claimed that the buyers were in default and sought damages for default on the ground that the term as to notice was a condition. It was concluded by the House of Lords on appeal that a condition of notice in a contract is a matter of interpretation—as to whether a breach of such was a breach of a fundamental term that affected performance. Lord Wilberforce said: "As to such a clause there is only one kind of breach possible, namely to be late, and the questions to be asked are: first what importance have the parties expressly ascribed to this consequence? And, second, in the absence of expressed agreement, what consequence ought to be attached to it having regard to the contract as a whole?"[25]

Both the carrier and the consignor must give notice before terminating the contract of carriage. The operative term is "reasonable notice". In *Steel Co. of Canada Ltd.,* v. *Dominion Radiator Company Ltd.,*[26] it was held that in a contract of sale, the seller must give reasonable notice to the buyer to take delivery of the goods before terminating the contract. This ties in with the concept of "anticipatory repudiation" where a refusal to perform by a party to the contract who knowingly or mistakenly thinks he has a legal right to refuse performance, may be actionable. In *Clausen v. Canada Timber & Lands Ltd.,*[27] the court held that in an instance of anticipatory breach the aggrieved party need not bring an action immediately but could take time to persuade the party in breach to perform the contract. In an instance where the consignee terminates the contract of carriage for just cause but the carrier performs the carriage anyway, the carrier is not entitled to payment.

In *Finelli* v. *Dee,*[28] a case involving a contract to pave a driveway, the owner had repudiated the contract whereupon the contractor had walked into the property and performed the contract anyway. The court held that the contractor could not claim for performance. In *Heyman* v. *Darwins Ltd*.,[29] it was held that if one party to a contract repudiates it and that repudiation is accepted, then *ipso facto* he is discharged from further performance and may bring an action for damages, but the contract itself does not stand rescinded. The primary obligations under the contract may come to an end, but secondary obligations then arise, among them being the

[23] *Id.* 771.

[24] [1981] 1 W.L.R. 711 (H.L) 219.

[25] *Id.* 232.

[26] (1919) 48 D.L.R. 350 (P.C).

[27] [1923] 4 D.L.R. 751 (P.C).

[28] (1968) 67 D.L.R. (2d) 393 (Ont., C.A).

[29] [1942] AC 356, [1942] 1 All ER 337.

obligation to compensate the innocent party. Lord Porter opined: "The three sets of circumstances giving rise to a discharge of contract are tabulated by Anson as: (1) renunciation by a party of his liabilities under it; (2) impossibility created by his own act; and (3) total or partial failure of performance. In the case of the first two, the renunciation may occur, or impossibility be created either before or at the time for performance. In the case of the third, it can occur only at the time or during the course of performance."[30]

One finds a clear statement of liability for breach of contract in *Horsler* v. *Zorro*[31] where Megarry J said: "If a vendor repudiates the contract, the purchaser may accept the repudiation, treat the contract as at an end, and sue for damages for breach of contract. On the other hand, the purchaser may choose to rescind the contract, in which case the parties will be as far as possible restored to their positions before the contract was made. In the latter case, however, it is difficult to see how the purchaser can in the same breath seek to treat matters as if the contract had not been made and yet claim damages for the breach of it."[32]

Negligent performance of a contract by way of professional services carried out in in the performance of the contract may lead to an action in tort as well as in contract.[33]

7.3.2 Mistake

The contractual issue of mistake is valid in the context of the contract of carriage by air of cargo. The question is whether a mistake occurs in the mind of either party as to assumption or a mistake was in the mind of the parties in terms of the contractual terms. In *Smith* v. *Hughs*[34]—a case regarding the sale of oats he Plaintiff sold the Defendant a quantity of oats. The Defendant thought he was buying old oats that could be given to his cattle for consumption, but they were in fact new. The Plaintiff knew the oats were new, but it is unclear whether he knew that the Defendant thought they were old. Upon discovering that they are new, the Defendant refused to accept the oats, which resulted in the Plaintiff's suing for breach of contract. An analogy under the carriage by air of cargo would be when the consignee is of the view that the carrier would transport his good in a particular manner by air and the carrier believes the consignor knows the exact manner in which the goods are transported. Upon knowing the true facts, the consignor repudiates the contract. The court in the *Smith case* held that the seller, if he knew that the consignor was under a misapprehension of the terms of the contract, the seller could not sue for breach.

---

[30] *Id.* AC 367.

[31] [1975] Ch. 302.

[32] *Id.*, at 307.

[33] *Central Trust Co.,* v. *Rafuse* (1986) 31 D.L.R. (4th) 481.

[34] (1871) L.R. 6 Q.B. 597.

Once a contract of carriage has been concluded by the parties, an agent of the carrier cannot change the terms of that contract. Usually the principal (the carrier) includes a clause in the contract limiting the agent's authority to effect such changes. In such an instance, sufficient notice has to given to the consignee.[35]

If the transaction is hurried, and the consignor is not given sufficient time to completely understand the terms of the contract, it is voidable, even if the consignor has signed the contract. The signature by itself does not truly represent acquiescence on the part of the consignor. In *Tilden rent – A- Car Co.,* v. *Clendenning*[36] where the defendant rented a car from the plaintiff company, by signing a rental agreement which contained an exclusion clause denying coverage for accidents that occur if the driver was under the influence of liquor. After having consumed alcohol, the defendant drove the car and hit a pole. He pleaded guilty to impaired driving and tried to collect from the insurance policy to pay for the damages of his accident. The plaintiff company pointed to the exclusion clause as obviating the defendant's claim. Dubin J. observed that: "In modern commercial practice, many standard form printed documents are signed without being read or understood. In many cases the parties seeking to rely upon the terms of the contract know or ought to know that the signature of a party to the contract does not represent the true intention of the signer, and that the party signing is unaware of the stringent and onerous provisions which the standard form contains. Under such circumstances, I am of the opinion that the party seeking to rely on such terms should not be able to do so in the absence of first having taken reasonable measures to draw such terms to the attention of the other party, and, in the absence of such reasonable measures, it is not necessary for the party denying knowledge of such terms to prove either fraud, misrepresentation or *non est factum*".[37]

An interesting question arises as to mistaken assumption. For instance, if a consignee believes that the carriage will be performed by carrier A as stipulated in the contract document, but the carriage is actually performed by carrier B, the question arises as to whether the consignor can repudiate the contract. In *Frederick E. Rose (London Ltd.,* v. *William H. Pim Jnr. & Co. Ltd)*[38] Frederick E Rose (London) Ltd was asked to supply to a British firm conducting business in Egypt a certain quantity of feveroles. It was popularly thought that "feveroles" was a synonym for "horsebeans". The supplier company took advice from the defendant company which said that the two terms were synonymous. Therefore, both parties contracted for the supply of 'horsebeans'. It turned out that the commodities were not one and the same as one differed in size from the other depending on the type of the feveroles. The British firm instituted action for the wrong beans being delivered, and Rose in turn brought a claim against Pim. Rose sought to rectify the contract to replace

[35] *See Morgan v. Lifetime Building Supplies Ltd.,* (1967) 61 D.L.R. (2d) 178.

[36] (1978) 83 D.L.R. (3d) 400.

[37] *Id*. 412. See the earlier case of *Canadian Pacific Ry Co.* v. *Parent* ((1915) 21 D.L.R. 681, where the Court held there is no evidentiary value of a person's signature to a contract if he cannot read and understand the contents of the contract document.

[38] [1953] 2 Q.B. 450 (C.A.).

'horsebean' with 'feverole'. Lord Denning in his judgment opined that both companies had contracted for the same type of commodity and therefore there was no mistake, but the contract could be amended.

7.3.3 Damages

One of the issues that could arise from the loss or misplacement of a consignment of goods to be carried by air is the quantum of damages, whether the damage is remote and whether the act or omission on the part of the carrier resulted in loss of business for the consignee. In this regard the leading case is *Hadley* v. *Baxendale.*[39] In this 1854 case The English Court of Exchequer examined the claim of the plaintiff, a miller whose mill had stopped because of a breakage of the mill's crankshaft. The plaintiff had, under contract, handed over the broken crankshaft to a common carrier to take his broken equipment to a manufacturer to be used as a template to cast a new crankshaft. The defendant carrier had delayed in transporting the crankshaft, resulting in loss of business, and more importantly loss of profits for the plaintiff. The defendant pleaded the defence of remoteness of damage, claiming that at the time of entering the contract the lost profits could not have been contemplated by the parties. The court agreed, holding that the damages were too remote. The Court formulated two rules as the rationale for its judgment and as criteria for determining remoteness of damages in contract: (1) A defendant will be liable for damages that may reasonably be supposed to have been in the contemplation of the parties arising in the normal course of events. (2) Where special circumstances are communicated, a defendant will be liable for damages that may have been reasonably contemplated by the parties acquainted with that special knowledge.

One could apply both the facts and the rationale in *Hadley* v. *Baxendale* in an instance where the carrier is entrusted under contract with computer equipment that was time sensitive in terms of delivery and where a delay in delivery costs a consignee loss of profits in his business. In the *Hadley c*ase the court opined that a party injured by a breach of contract can recover only those damages that either should "reasonably be considered... [as] arising naturally, i.e., according to the usual course of things" from the breach, or might "reasonably be supposed to have been in the contemplation of both parties, at the time they made the contract, as the probable result of the breach of it".[40] The case of *Koufos* v. *C. Czarnikow Ltd*. [The Heron 11[41] decided in 1967, where the facts also pertained to delayed performance, Lord Reid said: "[In Hadley v. Baxendale] Alderson B. clearly did not and could not mean that it was not reasonably foreseeable that delay might stop the resumption of work in the mill. He merely said that in the great multitude-which I take to mean the

[39] 156 Eng. Rep. at 141.

[40] *Id.*, 151.

[41] [1969] 1 App. Cas. 350 (1967).

great majority-of cases this would not happen. He was not distinguishing between results which were foreseeable or unforeseeable, but between results which were likely because they would happen in the great majority of cases, and results which were unlikely because they would only happen in a small minority of cases.... He clearly meant that a result which will happen in the great majority of cases should fairly and reasonably be regarded as having been in the contemplation of the parties, but that a result which, though foreseeable as a substantial possibility, would only happen in a small minority of cases should not be regarded as having been in their contemplation".[42]

Hadley v. *Baxendale* distinguished between direct damages—damages that flow directly from an act or omission—and consequential damages—damages which flow as consequences of an act or omission—as in the loss of profits in the *Hadley case*. A commentator has perceptively observed: "Two important characteristics of the principle of Hadley v. Baxendale should be briefly stated at the outset. First, the principle is a default rule.14 Essentially, the principle serves as a device to limit sellers' liability. If the principle were dropped from the law, sellers could still limit liability by contractual provisions that preclude consequential damages, set a dollar or formula limit on liability, offer varying liability limits in exchange for higher or lower prices, or substitute for dollar liability some other obligation, such as replacement or repair.15 Second, although the principle is often characterized as a "foreseeability doctrine,"16 the principle as traditionally formulated and applied cuts off most foreseeable damages".[43] In the *Koufos* case Lord Reid added that the modern rules of tort extended the narrow criterion of the *Hadley* case and that the defendant could be held liable for any type of damage that is reasonably foreseeable as likely to happen.

At a point the courts were baffled by the difference between "contemplation" and "foreseeable". In *H. Parsons (Livestock) Ltd.,* v. *Uttley Ingham & Co. Ltd,*[44] lord Denning said: "I find it difficult to apply those principles universally to all cases of tort; and to draw a distinction between what a man "contemplates" and what he "foresees". I soon begin to get out of my depth. I cannot swim in the sea of semantic exercises—to say nothing of the different degrees of probability—especially when the cause of action can be laid either in contract or tort. I am swept under by the conflicting currents".[45] In *Robophone Facilities Ltd* v *Blank*[46] Lord Diplock held: "Parties to a contract should be free to stipulate not only primary obligations and rights but also the secondary rights and obligations, *i.e.* those which arise upon non-performance of any primary obligation by one of the parties to the contract, but (as to a penalty clause) whilst 'The court should not be astute to descry a 'penalty clause' in every provision of a contract which stipulates a sum to be payable by one

[42] *Id.* 384–386.

[43] Eisenberg (1992), p. 566.

[44] [1978] 1 Q.B. 791 (C.A.).

[45] *Id.* At 802.

[46] [1966] 3 All ER 128, [1966] 1 WLR 1428.

party to the other in the event of a breach by the former…the right of parties to a contract to make such a stipulation is subject to the rule of public policy that the court will not enforce it against the party in breach if it is satisfied that the stipulated sum was not a genuine estimate of the loss likely to be sustained by the party not in breach, but was a sum in excess of such anticipated loss and thus, if exacted, would be in the nature of a penalty or punishment imposed upon the contract-breaker. Where the court refuses to enforce a 'penalty clause' of this nature, the injured party is relegated to his right to claim that lesser measure of damages to which he would have been entitled at common law for the breach actually committed if there had been no penalty clause in the contract".[47]

References

Eisenberg MA (1992) The principle of Hadley v. Baxendale Melvin. Calif Law Rev 80(3):563–613

Todd S (2017) Noise rule threat to Brussels' air cargo. Lloyds Loading List, Tuesday, 24 January 2017. https://www.lloydsloadinglist.com/freight-directory/news/Noise-rule-threat-to-Brussels'-air-cargo/68457.htm#.Wp2wwUxFxjo

[47] *Id.* 138.

Chapter 8
Conclusion: A Suitable Analogy and Comparison

At its 67th Plenary Meeting the United Nations on 11 December 2008 adopted Resolution 63/122—*United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea* (hereinafter referred to as "Convention") which came within the United Nations Commission on International Trade Law (UNCITRAL) established by Resolution 2205 (XXI) of 17 December 1966, with a mandate to further the progressive harmonization and unification of the law of international trade and in that respect to bear in mind the interests of all peoples, in particular those of developing countries, in the extensive development of international trade. Resolution 63/122 was primarily on the carriage of goods by sea but also pertained to multimodal carriage which may include air transport. The General Assembly expressed its concern that the current legal regime governing the international carriage of goods by sea lacks uniformity and fails to adequately consider modern transport practices, including containerization, door-to-door transport contracts and the use of electronic transport documents.

It is interesting that the proposed Convention, which was calculated to govern the international carriage of goods involving a sea leg had, at its *raison d'etr*e the development of international trade on the basis of equality and mutual benefit is an important element in promoting friendly relations among States, the same philosophy reflected in the Chicago Convention of equality of opportunity for carriers and the promotion of friendship and understanding among the people of the world. Both Conventions also had the objective of the adoption of uniform rules to modernize and harmonize the rules would enhance legal certainty, improve efficiency and commercial predictability in the international carriage of goods and reduce legal obstacles to the flow of international trade among all States.

Above all, the main driver of the Convention was to provide shippers and carriers with the benefit of a binding and balanced universal regime to support the operation of contracts of carriage involving various modes of transport. Therefore, the principles of the Convention, which also apply to air transport and the carriage of goods by air, is a fitting discussion to conclude the legal and regulatory aspects of the carriage of air cargo. First off, the Convention defines a contract of carriage as a

R. Abeyratne, *Law and Regulation of Air Cargo*,
https://doi.org/10.1007/978-3-319-92489-2_8

contract in which a carrier, against the payment of freight, undertakes to carry goods from one place to another. The contract must provide for carriage by sea and may provide for carriage by other modes of transport in addition to the sea carriage. There is no such definition pertaining to air carriage in the Montreal Convention of 1999. A "carrier" under the Convention is a person that enters into a contract of carriage with a shipper and a shipper means a person that enters into a contract of carriage with a carrier. The modality of interpretation of the Convention is consistent with the principles of the Vienna Convention on the Law of Treaties (1969) which states that every treaty in force is binding upon the parties to it and must be performed by them in good faith (*pacta sunt servanda*).

The Convention stipulates that it applies to contracts of carriage in which the place of receipt and the place of delivery are in different States, and the port of loading of a sea carriage and the port of discharge of the same sea carriage are in different States, if, according to the contract of carriage, any one of the following places is located in a Contracting State: (a) The place of receipt; (b) The port of loading; (c) The place of delivery; or (d) The port of discharge. It also states that anything that is to be in or on a transport document under the Convention may be recorded in an electronic transport record,[1] provided the issuance and subsequent use of an electronic transport record is with the consent of the carrier and the shipper; and the issuance, exclusive control, or transfer of an electronic transport record has the same effect as the issuance, possession, or transfer of a transport document.

The carrier is required, subject to the Convention and in accordance with the terms of the contract of carriage, carry the goods to the place of destination and deliver them to the consignee. It is interesting to note that the contract ends upon delivery, and it does not say delivery by whom. However, the Convention goes on to clarify that the period of responsibility of the carrier for the goods under the Convention begins when the carrier or a performing party receives the goods for carriage and ends when the goods are delivered.

If the law or regulations of the place of receipt require the goods to be handed over to an authority or other third party from which the carrier may collect them, the period of responsibility of the carrier begins when the carrier collects the goods from the authority or other third party. If the law or regulations of the place of delivery require the carrier to hand over the goods to an authority or other third party from which the consignee may collect them, the period of responsibility of the carrier ends when the carrier hands the goods over to the authority or other third party. For the purpose of determining the carrier's period of responsibility, the parties may agree on the time and location of receipt and delivery of the goods, but a provision in a contract of carriage is void to the extent that it provides that the time of receipt

[1] "Electronic transport record" means information in one or more messages issued by electronic communication under a contract of carriage by a carrier, including information logically associated with the electronic transport record by attachments or otherwise linked to the electronic transport record contemporaneously with or subsequent to its issue by the carrier, so as to become part of the electronic transport record, that: (a) Evidences the carrier's or a performing party's receipt of goods under a contract of carriage; and (b) Evidences or contains a contract of carriage.

of the goods is subsequent to the beginning of their initial loading under the contract of carriage; or the time of delivery of the goods is prior to the completion of their final unloading under the contract of carriage.

The carrier is expected to properly and carefully receive and handle goods during the time the goods are in his custody. The carrier is liable for loss of or damage to the goods, as well as for delay in delivery, if the claimant proves that the loss, damage, or delay, or the event or circumstance that caused or contributed to it took place during the period of the carrier's responsibility but is relieved of all or part of its liability pursuant if it proves that the cause or one of the causes of the loss, damage, or delay is not attributable to its fault or to the fault of any performing party; the master or crew of the ship; employees of the carrier or a performing party; or Any other person that performs or undertakes to perform any of the carrier's obligations under the contract of carriage, to the extent that the person acts, either directly or indirectly, at the carrier's request or under the carrier's supervision or control. The carrier is also relieved of all or part of its liability pursuant to the Convention if, alternatively to proving the absence of fault as provided, it proves that one or more of the following events or circumstances caused or contributed to the loss, damage, or delay: act of God; Perils, dangers, and accidents of the sea or other navigable waters; war, hostilities, armed conflict, piracy, terrorism, riots, and civil commotions; quarantine restrictions; interference by or impediments created by governments, public authorities, rulers, or people including detention, arrest, or seizure not attributable to the carrier or any person referred to earlier in this paragraph; strikes, lockouts, stoppages, or restraints of labour; fire on the ship; latent defects not discoverable by due diligence; act or omission of the shipper, the documentary shipper, the controlling party, or any other person for whose acts the shipper or the documentary shipper is liable; loading, handling, stowing, or unloading of the goods performed pursuant to an provisions of the Convention unless the carrier or a performing party performs such activity on behalf of the shipper, the documentary shipper or the consignee; wastage in bulk or weight or any other loss or damage arising from inherent defect, quality, or vice of the goods; insufficiency or defective condition of packing or marking not performed by or on behalf of the carrier; saving or attempting to save life at sea; reasonable measures to save or attempt to save property at sea; reasonable measures to avoid or attempt to avoid damage to the environment; or acts of the carrier in pursuance of the powers conferred by the Convention.

It is noteworthy that whereas the Montreal Convention does not detail the various exemptions of liability of the carrier, the Convention enumerates the instances when the carrier can exempt itself from liability. This is an inclusionary approach which precludes the carrier from going on a general basis to prove that it took all reasonable measures to avoid the damage. In this context, the Montreal Convention is favourable to the carrier.

Under the Convention, the carrier is liable for all or part of the loss, damage, or delay: if the claimant proves that the fault of the carrier or of a person referred to above caused or contributed to the event or circumstance on which the carrier relies; or if the claimant proves that an event or circumstance not listed as earlier contributed to the loss, damage, or delay, and the carrier cannot prove that this event or

circumstance is not attributable to its fault or to the fault of any person referred to in the Convention. The carrier is also liable, for all or part of the loss, damage, or delay if: the claimant proves that the loss, damage, or delay was or was probably caused by or contributed to by the unseaworthiness of the ship; the improper crewing, equipping, and supplying of the ship; or the fact that the holds or other parts of the ship in which the goods are carried, or any containers supplied by the carrier in or upon which the goods are carried, were not fit and safe for reception, carriage, and preservation of the goods; and the carrier is unable to prove either that: none of the events or circumstances referred to in the Convention caused the loss, damage, or delay; or it complied with its obligation to exercise due diligence. When the carrier is relieved of part of its liability, the carrier is liable only for that part of the loss, damage or delay that is attributable to the event or circumstance for which it is liable.

In terms of compensation, the Convention offers damages to the value of goods in accordance with the commodity price index. This differs drastically from liability limits of the Montreal Convention of 1990 at 17 Special Drawing Rights per kilogram unless a special declaration has been made at the point of conclusion of the contract. However, exemption from liability provisions in both Conventions are similar except that the Convention is more detailed.

In conclusion, it must be said that one of the most proactive provisions in the Montreal Convention is the requirement that States Parties must require their carriers to maintain adequate insurance covering their liability under this Convention. A carrier may be required by the State Party into which it operates to furnish evidence that it maintains adequate insurance covering its liability under this Convention. This is good risk management as a State can compel its national carrier to obtain cargo legal liability insurance as well as encourage the consignor and consignee cargo all risks insurance. This is all the more important since cargo insurance is usually not covered in the aircraft insurance policy. All that carriers would need is either a separate policy or an endorsement in the existing policy to ensure coverage.

Annex

MONTREAL CONVENTION
Convention for the Unification of Certain Rules Relating to International Carriage by Air—opened for Signature at Montreal on 28 May 1999 (ICAO Doc No 4698)

THE STATES PARTIES TO THIS CONVENTION

RECOGNIZING the significant contribution of the Convention for the Unification of Certain Rules Relating to International Carriage by Air signed in Warsaw on 12 October 1929, hereinafter referred to as the "Warsaw Convention", and other related instruments to the harmonization of private international air law;

RECOGNIZING the need to modernize and consolidate the Warsaw Convention and related instruments;

RECOGNIZING the importance of ensuring protection of the interests of consumers in international carriage by air and the need for equitable compensation based on the principle of restitution;

REAFFIRMING the desirability of an orderly development of international air transport operations and the smooth flow of passengers, baggage and cargo in accordance with the principles and objectives of the Convention on International Civil Aviation, done at Chicago on 7 December 1944;

CONVINCED that collective State action for further harmonization and codification cation of certain rules governing international carriage by air through a new Convention is the most adequate means of achieving an equitable balance of interests;

R. Abeyratne, *Law and Regulation of Air Cargo*,
https://doi.org/10.1007/978-3-319-92489-2

HAVE AGREED AS FOLLOWS:

CHAPTER I

General Provisions

Article 1 — Scope of Application

1. This Convention applies to all international carriage of persons, baggage or cargo performed by aircraft for reward. It applies equally to gratuitous carriage by aircraft performed by an air transport undertaking.

2. For the purposes of this Convention, the expression international carriage means any carriage in which, according to the agreement between the parties, the place of departure and the place of destination, whether or not there be a break in the carriage or a transhipment, are situated either within the territories of two States Parties, or within the territory of a single State Party if there is an agreed stopping place within the territory of another State, even if that State is not a State Party. Carriage between two points within the territory of a single State Party without an agreed stopping place within the territory of another State is not international carriage for the purposes of this Convention.

3. Carriage to be performed by several successive carriers is deemed, for the purposes of this Convention, to be one undivided carriage if it has been regarded by the parties as a single operation, whether it had been agreed upon under the form of a single contract or of a series of contracts, and it does not lose its international character merely because one contract or a series of contracts is to be performed entirely within the territory of the same State.

4. This Convention applies also to carriage as set out in Chapter V, subject to the terms contained therein.

Article 2 Carriage Performed by State and Carriage of Postal Items

1. This Convention applies to carriage performed by the State or by legally constituted public bodies provided it falls within the conditions laid down in Article

1. 2. In the carriage of postal items, the carrier shall be liable only to the relevant postal administration in accordance with the rules applicable to the relationship between the carriers and the postal administrations. 3. Except as provided in paragraph 2 of this Article, the provisions of this Convention shall not apply to the carriage of postal items.

CHAPTER II

Documentation and Duties of the Parties Relating to the Carriage of Passengers, Baggage and Cargo

Article 3 — Passengers and Baggage

1. In respect of carriage of passengers, an individual or collective document of carriage shall be delivered containing: (a) an indication of the places of departure and destination; (b) if the places of departure and destination are within the territory of a single State Party, one or more agreed stopping places being within the territory of another State, an indication of at least one such stopping place.

2. Any other means which preserves the information indicated in paragraph 1 may be substituted for the delivery of the document referred to in that paragraph. If any such other means is used, the carrier shall offer to deliver to the passenger a written statement of the information so preserved.

3. The carrier shall deliver to the passenger a baggage identification tag for each piece of checked baggage.

4. The passenger shall be given written notice to the effect that where this Convention is applicable it governs and may limit the liability of carriers in respect of death or injury and for destruction or loss of, or damage to, baggage, and for delay. 5. Non-compliance with the provisions of the foregoing paragraphs shall not affect the existence or the validity of the contract of carriage, which shall, nonetheless, be subject to the rules of this Convention including those relating to limitation of liability.

Article 4 — Cargo

1. In respect of the carriage of cargo, an air waybill shall be delivered. 2. Any other means which preserves a record of the carriage to be performed may be substituted for the delivery of an air waybill. If such other means are used, the carrier shall, if so requested by the consignor, deliver to the consignor a cargo receipt permitting identification of the consignment and access to the information contained in the record preserved by such other means.

Article 5 Contents of Air Waybill or Cargo Receipt

The air waybill or the cargo receipt shall include: (a) an indication of the places of departure and destination; (b) if the places of departure and destination are within the territory of a single State Party, one or more agreed stopping places being within the territory of another State, an indication of at least one such stopping place; and (c) an indication of the weight of the consignment.

Article 6 Document Relating to the Nature of the Cargo

The consignor may be required, if necessary to meet the formalities of customs, police and similar public authorities, to deliver a document indicating the nature of the cargo. This provision creates for the carrier no duty, obligation or liability resulting therefrom.

Article 7 — Description of Air Waybill

1. The air waybill shall be made out by the consignor in three original parts.

2. The first part shall be marked "for the carrier"; it shall be signed by the consignor. The second part shall be marked "for the consignee"; it shall be signed by the consignor and by the carrier. The third part shall be signed by the carrier who shall hand it to the consignor after the cargo has been accepted. 3. The signature of the carrier and that of the consignor may be printed or stamped. 4. If, at the request of the consignor, the carrier makes out the air waybill, the carrier shall be deemed, subject to proof to the contrary, to have done so on behalf of the consignor.

Article 8 Documentation for Multiple Packages

When there is more than one package: (a) the carrier of cargo has the right to require the consignor to make out separate air waybills; (b) the consignor has the right to require the carrier to deliver separate cargo receipts when the other means referred to in paragraph 2 of Article 4 are used.

Article 9 Non-compliance with Documentary Requirements

Non-compliance with the provisions of Articles 4 to 8 shall not affect the existence or the validity of the contract of carriage, which shall, nonetheless, be subject to the rules of this Convention including those relating to limitation of liability.

Article 10 Responsibility for Particulars of Documentation

1. The consignor is responsible for the correctness of the particulars and statements relating to the cargo inserted by it or on its behalf in the air waybill or furnished by it or on its behalf to the carrier for insertion in the cargo receipt or for insertion in the record preserved by the other means referred to in paragraph 2 of Article 4. The foregoing shall also apply where the person acting on behalf of the consignor is also the agent of the carrier. 2. The consignor shall indemnify the carrier against all damage suffered by it, or by any other person to whom the carrier is liable, by reason of the irregularity, incorrectness or incompleteness of the particulars and statements furnished by the consignor or on its behalf. 3. Subject to the provisions of paragraphs 1 and 2 of this Article, the carrier shall indemnify the consignor against all damage suffered by it, or by any other person to whom the consignor is liable, by reason of the irregularity, incorrectness or

incompleteness of the particulars and statements inserted by the carrier or on its behalf in the cargo receipt or in the record preserved by the other means referred to in paragraph 2 of Article 4.

Article 11 — Evidentiary Value of Documentation

1. The air waybill or the cargo receipt is prima facie evidence of the conclusion of the contract, of the acceptance of the cargo and of the conditions of carriage mentioned therein. 2. Any statements in the air waybill or the cargo receipt relating to the weight, dimensions and packing of the cargo, as well as those relating to the number of packages, are prima facie evidence of the facts stated; those relating to the quantity, volume and condition of the cargo do not constitute evidence against the carrier except so far as they both have been, and are stated in the air waybill or the cargo receipt to have been, checked by it in the presence of the consignor, or relate to the apparent condition of the cargo.

Article 12 — Right of Disposition of Cargo

1. Subject to its liability to carry out all its obligations under the contract of carriage, the consignor has the right to dispose of the cargo by withdrawing it at the airport of departure or destination, or by stopping it in the course of the journey on any landing, or by calling for it to be delivered at the place of destination or in the course of the journey to a person other than the consignee originally designated, or by requiring it to be returned to the airport of departure. The consignor must not exercise this right of disposition in such a way as to prejudice the carrier or other consignors and must reimburse any expenses occasioned by the exercise of this right.

2. If it is impossible to carry out the instructions of the consignor, the carrier must so inform the consignor forthwith.

3. If the carrier carries out the instructions of the consignor for the disposition of the cargo without requiring the production of the part of the air waybill or the cargo receipt delivered to the latter, the carrier will be liable, without prejudice to its right of recovery from the consignor, for any damage which may be caused thereby to any person who is lawfully in possession of that part of the air waybill or the cargo receipt.

4. The right conferred on the consignor ceases at the moment when that of the consignee begins in accordance with Article 13. Nevertheless, if the consignee declines to accept the cargo, or cannot be communicated with, the consignor resumes its right of disposition.

Article 13 — Delivery of the Cargo

1. Except when the consignor has exercised its right under Article 12, the consignee is entitled, on arrival of the cargo at the place of destination, to require the carrier to deliver the cargo to it, on payment of the charges due and on complying with the conditions of carriage.

2. Unless it is otherwise agreed, it is the duty of the carrier to give notice to the consignee as soon as the cargo arrives.

3. If the carrier admits the loss of the cargo, or if the cargo has not arrived at the expiration of 7 days after the date on which it ought to have arrived, the consignee is entitled to enforce against the carrier the rights which flow from the contract of carriage.

Article 14 Enforcement of the Rights of Consignor and Consignee

The consignor and the consignee can respectively enforce all the rights given to them by Articles 12 and 13, each in its own name, whether it is acting in its own interest or in the interest of another, provided that it carries out the obligations imposed by the contract of carriage.

Article 15 Relations of Consignor and Consignee or Mutual Relations of Third Parties

1. Articles 12, 13 and 14 do not affect either the relations of the consignor and the consignee with each other or the mutual relations of third parties whose rights are derived either from the consignor or from the consignee.

2. The provisions of Articles 12, 13 and 14 can only be varied by express provision in the air waybill or the cargo receipt.

Article 16 Formalities of Customs, Police or Other Public Authorities

1. The consignor must furnish such information and such documents as are necessary to meet the formalities of customs, police and any other public authorities before the cargo can be delivered to the consignee. The consignor is liable to the carrier for any damage occasioned by the absence, insufficiency or irregularity of any such information or documents, unless the damage is due to the fault of the carrier, its servants or agents.

2. The carrier is under no obligation to enquire into the correctness or sufficiency of such information or documents.

CHAPTER III

Liability of the Carrier and Extent of Compensation for Damage

Article 17 Death and Injury of Passengers — Damage to Baggage

1. The carrier is liable for damage sustained in case of death or bodily injury of a passenger upon condition only that the accident which caused the death or injury took place on board the aircraft or in the course of any of the operations of embarking or disembarking.

2. The carrier is liable for damage sustained in case of destruction or loss of, or of damage to, checked baggage upon condition only that the event which caused the destruction, loss or damage took place on board the aircraft or during any period within which the checked baggage was in the charge of the carrier. However, the carrier is not liable if and to the extent that the damage resulted from the inherent defect, quality or vice of the baggage. In the case of unchecked baggage, including personal items, the carrier is liable if the damage resulted from its fault or that of its servants or agents.

3. If the carrier admits the loss of the checked baggage, or if the checked baggage has not arrived at the expiration of 21 days after the date on which it ought to have arrived, the passenger is entitled to enforce against the carrier the rights which flow from the contract of carriage. 4. Unless otherwise specified, in this Convention the term “baggage” means both checked baggage and unchecked baggage.

Article 18 — Damage to Cargo

1. The carrier is liable for damage sustained in the event of the destruction or loss of, or damage to, cargo upon condition only that the event which caused the damage so sustained took place during the carriage by air.

2. However, the carrier is not liable if and to the extent it proves that the destruction, or loss of, or damage to, the cargo resulted from one or more of the following: (a) inherent defect, quality or vice of that cargo; (b) defective packing of that cargo performed by a person other than the carrier or its servants or agents; (c) an act of war or an armed conflict; (d) an act of public authority carried out in connection with the entry, exit or transit of the cargo.

3. The carriage by air within the meaning of paragraph 1 of this Article comprises the period during which the cargo is in the charge of the carrier.

4. The period of the carriage by air does not extend to any carriage by land, by sea or by inland waterway performed outside an airport. If, however, such carriage takes place in the performance of a contract for carriage by air, for the purpose of loading, delivery or transhipment, any damage is presumed, subject to proof to the contrary, to have been the result of an event which took place during the carriage by air. If a carrier, without the consent of the consignor, substi-

tutes carriage by another mode of transport for the whole or part of a carriage intended by the agreement between the parties to be carriage by air, such carriage by another mode of transport is deemed to be within the period of carriage by air.

Article 19 — Delay

The carrier is liable for damage occasioned by delay in the carriage by air of passengers, baggage or cargo. Nevertheless, the carrier shall not be liable for damage occasioned by delay if it proves that it and its servants and agents took all measures that could reasonably be required to avoid the damage or that it was impossible for it or them to take such measures.

Article 20 — Exoneration

If the carrier proves that the damage was caused or contributed to by the negligence or other wrongful act or omission of the person claiming compensation, or the person from whom he or she derives his or her rights, the carrier shall be wholly or partly exonerated from its liability to the claimant to the extent that such negligence or wrongful act or omission caused or contributed to the damage. When by reason of death or injury of a passenger compensation is claimed by a person other than the passenger, the carrier shall likewise be wholly or partly exonerated from its liability to the extent that it proves that the damage was caused or contributed to by the negligence or other wrongful act or omission of that passenger. This Article applies to all the liability provisions in this Convention, including paragraph 1 of Article 21.

Article 21 Compensation in Case of Death or Injury of Passengers

1. For damages arising under paragraph 1 of Article 17 not exceeding 100,000 Special Drawing Rights for each passenger, the carrier shall not be able to exclude or limit its liability.

2. The carrier shall not be liable for damages arising under paragraph 1 of Article 17 to the extent that they exceed for each passenger 100,000 Special Drawing Rights if the carrier proves that: (a) such damage was not due to the negligence or other wrongful act or omission of the carrier or its servants or agents; or (b) such damage was solely due to the negligence or other wrongful act or omission of a third party.

Article 22 Limits of Liability in Relation to Delay, Baggage and Cargo

1. In the case of damage caused by delay as specified in Article 19 in the carriage of persons, the liability of the carrier for each passenger is limited to 4150 Special Drawing Rights.

2. In the carriage of baggage, the liability of the carrier in the case of destruction, loss, damage or delay is limited to 1000 Special Drawing Rights for each passenger unless the passenger has made, at the time when the checked baggage was

handed over to the carrier, a special declaration of interest in delivery at destination and has paid a supplementary sum if the case so requires. In that case the carrier will be liable to pay a sum not exceeding the declared sum, unless it proves that the sum is greater than the passenger's actual interest in delivery at destination.

3. In the carriage of cargo, the liability of the carrier in the case of destruction, loss, damage or delay is limited to a sum of 17 Special Drawing Rights per kilogramme, unless the consignor has made, at the time when the package was handed over to the carrier, a special declaration of interest in delivery at destination and has paid a supplementary sum if the case so requires. In that case the carrier will be liable to pay a sum not exceeding the declared sum, unless it proves that the sum is greater than the consignor's actual interest in delivery at destination.

4. In the case of destruction, loss, damage or delay of part of the cargo, or of any object contained therein, the weight to be taken into consideration in determining the amount to which the carrier's liability is limited shall be only the total weight of the package or packages concerned. Nevertheless, when the destruction, loss, damage or delay of a part of the cargo, or of an object contained therein, affects the value of other packages covered by the same air waybill, or the same receipt or, if they were not issued, by the same record preserved by the other means referred to in paragraph 2 of Article 4, the total weight of such package or packages shall also be taken into consideration in determining the limit of liability.

5. The foregoing provisions of paragraphs 1 and 2 of this Article shall not apply if it is proved that the damage resulted from an act or omission of the carrier, its servants or agents, done with intent to cause damage or recklessly and with knowledge that damage would probably result; provided that, in the case of such act or omission of a servant or agent, it is also proved that such servant or agent was acting within the scope of its employment.

6. The limits prescribed in Article 21 and in this Article shall not prevent the court from awarding, in accordance with its own law, in addition, the whole or part of the court costs and of the other expenses of the litigation incurred by the plaintiff, including interest. The foregoing provision shall not apply if the amount of the damages awarded, excluding court costs and other expenses of the litigation, does not exceed the sum which the carrier has offered in writing to the plaintiff within a period of 6 months from the date of the occurrence causing the damage, or before the commencement of the action, if that is later.

Article 23 — Conversion of Monetary Units

1. The sums mentioned in terms of Special Drawing Right in this Convention shall be deemed to refer to the Special Drawing Right as defined by the International Monetary Fund. Conversion of the sums into national currencies shall, in case of judicial proceedings, be made according to the value of such

currencies in terms of the Special Drawing Right at the date of the judgement. The value of a national currency, in terms of the Special Drawing Right, of a State Party which is a Member of the International Monetary Fund, shall be calculated in accordance with the method of valuation applied by the International Monetary Fund, in effect at the date of the judgement, for its operations and transactions. The value of a national currency, in terms of the Special Drawing Right, of a State Party which is not a Member of the International Monetary Fund, shall be calculated in a manner determined by that State.

2. Nevertheless, those States which are not Members of the International Monetary Fund and whose law does not permit the application of the provisions of paragraph 1 of this Article may, at the time of ratification or accession or at any time thereafter, declare that the limit of liability of the carrier prescribed in Article 21 is fixed at a sum of 1,500,000 monetary units per passenger in judicial proceedings in their territories; 62,500 monetary units per passenger with respect to paragraph 1 of Article 22; 15,000 monetary units per passenger with respect to paragraph 2 of Article 22; and 250 monetary units per kilogramme with respect to paragraph 3 of Article 22. This monetary unit corresponds to sixty-five and a half milligrammes of gold of millesimal fineness nine hundred. These sums may be converted into the national currency concerned in round figures. The conversion of these sums into national currency shall be made according to the law of the State concerned.

3. The calculation mentioned in the last sentence of paragraph 1 of this Article and the conversion method mentioned in paragraph 2 of this Article shall be made in such manner as to express in the national currency of the State Party as far as possible the same real value for the amounts in Articles 21 and 22 as would result from the application of the first three sentences of paragraph 1 of this Article. States Parties shall communicate to the depositary the manner of calculation pursuant to paragraph 1 of this Article, or the result of the conversion in paragraph 2 of this Article as the case may be, when depositing an instrument of ratification, acceptance, approval of or accession to this Convention and whenever there is a change in either.

Article 24 — Review of Limits

1. Without prejudice to the provisions of Article 25 of this Convention and subject to paragraph 2 below, the limits of liability prescribed in Articles 21, 22 and 23 shall be reviewed by the Depositary at 5 year intervals, the first such review to take place at the end of the fifth year following the date of entry into force of this Convention, or if the Convention does not enter into force within 5 years of the date it is first open for signature, within the first year of its entry into force, by reference to an inflation factor which corresponds to the accumulated rate of inflation since the previous revision or in the first instance since the date of entry into force of the Convention. The measure of the rate of inflation to be used in determining the inflation factor shall be the weighted average of the annual rates

of increase or decrease in the Consumer Price Indices of the States whose currencies comprise the Special Drawing Right mentioned in paragraph 1 of Article 23.

2. If the review referred to in the preceding paragraph concludes that the inflation factor has exceeded 10 per cent, the Depositary shall notify States Parties of a revision of the limits of liability. Any such revision shall become effective 6 months after its notification to the States Parties. If within 3 months after its notification to the States Parties a majority of the States Parties register their disapproval, the revision shall not become effective and the Depositary shall refer the matter to a meeting of the States Parties. The Depositary shall immediately notify all States Parties of the coming into force of any revision.

3. Notwithstanding paragraph 1 of this Article, the procedure referred to in paragraph 2 of this Article shall be applied at any time provided that one-third of the States Parties express a desire to that effect and upon condition that the inflation factor referred to in paragraph 1 has exceeded 30 per cent since the previous revision or since the date of entry into force of this Convention if there has been no previous revision. Subsequent reviews using the procedure described in paragraph 1 of this Article will take place at 5-year intervals starting at the end of the fifth year following the date of the reviews under the present paragraph.

Article 25 — Stipulation on Limits

A carrier may stipulate that the contract of carriage shall be subject to higher limits of liability than those provided for in this Convention or to no limits of liability whatsoever.

Article 26 — Invalidity of Contractual Provisions

Any provision tending to relieve the carrier of liability or to fix a lower limit than that which is laid down in this Convention shall be null and void, but the nullity of any such provision does not involve the nullity of the whole contract, which shall remain subject to the provisions of this Convention.

Article 27 — Freedom to Contract

Nothing contained in this Convention shall prevent the carrier from refusing to enter into any contract of carriage, from waiving any defences available under the Convention, or from laying down conditions which do not conflict with the provisions of this Convention.

Article 28 — Advance Payments

In the case of aircraft accidents resulting in death or injury of passengers, the carrier shall, if required by its national law, make advance payments without delay to a natural person or persons who are entitled to claim compensation in order to meet the immediate economic needs of such persons. Such advance pay-

ments shall not constitute a recognition of liability and may be offset against any amounts subsequently paid as damages by the carrier.

Article 29 — Basis of Claims

In the carriage of passengers, baggage and cargo, any action for damages, however founded, whether under this Convention or in contract or in tort or otherwise, can only be brought subject to the conditions and such limits of liability as are set out in this Convention without prejudice to the question as to who are the persons who have the right to bring suit and what are their respective rights. In any such action, punitive, exemplary or any other non-compensatory damages shall not be recoverable.

Article 30 Servants, Agents — Aggregation of Claims

1. If an action is brought against a servant or agent of the carrier arising out of damage to which the Convention relates, such servant or agent, if they prove that they acted within the scope of their employment, shall be entitled to avail themselves of the conditions and limits of liability which the carrier itself is entitled to invoke under this Convention.

2. The aggregate of the amounts recoverable from the carrier, its servants and agents, in that case, shall not exceed the said limits. 3. Save in respect of the carriage of cargo, the provisions of paragraphs 1 and 2 of this Article shall not apply if it is proved that the damage resulted from an act or omission of the servant or agent done with intent to cause damage or recklessly and with knowledge that damage would probably result.

Article 31 — Timely Notice of Complaints

1. Receipt by the person entitled to delivery of checked baggage or cargo without complaint is prima facie evidence that the same has been delivered in good condition and in accordance with the document of carriage or with the record preserved by the other means referred to in paragraph 2 of Article 3 and paragraph 2 of Article 4.

2. In the case of damage, the person entitled to delivery must complain to the carrier forthwith after the discovery of the damage, and, at the latest, within 7 days from the date of receipt in the case of checked baggage and 14 days from the date of receipt in the case of cargo. In the case of delay, the complaint must be made at the latest within 21 days from the date on which the baggage or cargo have been placed at his or her disposal.

3. Every complaint must be made in writing and given or dispatched within the times aforesaid.

4. If no complaint is made within the times aforesaid, no action shall lie against the carrier, save in the case of fraud on its part.

Article 32 — Death of Person Liable

In the case of the death of the person liable, an action for damages lies in accordance with the terms of this Convention against those legally representing his or her estate.

Article 33 — Jurisdiction

1. An action for damages must be brought, at the option of the plaintiff, in the territory of one of the States Parties, either before the court of the domicile of the carrier or of its principal place of business, or where it has a place of business through which the contract has been made or before the court at the place of destination.

2. In respect of damage resulting from the death or injury of a passenger, an action may be brought before one of the courts mentioned in paragraph 1 of this Article, or in the territory of a State Party in which at the time of the accident the passenger has his or her principal and permanent residence and to or from which the carrier operates services for the carriage of passengers by air, either on its own aircraft, or on another carrier's aircraft pursuant to a commercial agreement, and in which that carrier conducts its business of carriage of passengers by air from premises leased or owned by the carrier itself or by another carrier with which it has a commercial agreement.

3. For the purposes of paragraph 2, (a) "commercial agreement" means an agreement, other than an agency agreement, made between carriers and relating to the provision of their joint services for carriage of passengers by air; (b) "principal and permanent residence" means the one fixed and permanent abode of the passenger at the time of the accident. The nationality of the passenger shall not be the determining factor in this regard. 4. Questions of procedure shall be governed by the law of the court seized of the case.

Article 34 — Arbitration

1. Subject to the provisions of this Article, the parties to the contract of carriage for cargo may stipulate that any dispute relating to the liability of the carrier under this Convention shall be settled by arbitration. Such agreement shall be in writing.

2. The arbitration proceedings shall, at the option of the claimant, take place within one of the jurisdictions referred to in Article 33.

3. The arbitrator or arbitration tribunal shall apply the provisions of this Convention.

4. The provisions of paragraphs 2 and 3 of this Article shall be deemed to be part of every arbitration clause or agreement, and any term of such clause or agreement which is inconsistent therewith shall be null and void.

Article 35 — Limitation of Actions

1. The right to damages shall be extinguished if an action is not brought within a period of 2 years, reckoned from the date of arrival at the destination, or from the date on which the aircraft ought to have arrived, or from the date on which the carriage stopped.

2. The method of calculating that period shall be determined by the law of the court seized of the case.

Article 36 — Successive Carriage

1. In the case of carriage to be performed by various successive carriers and falling within the definition set out in paragraph 3 of Article 1, each carrier which accepts passengers, baggage or cargo is subject to the rules set out in this Convention and is deemed to be one of the parties to the contract of carriage in so far as the contract deals with that part of the carriage which is performed under its supervision.

2. In the case of carriage of this nature, the passenger or any person entitled to compensation in respect of him or her can take action only against the carrier which performed the carriage during which the accident or the delay occurred, save in the case where, by express agreement, the first carrier has assumed liability for the whole journey. 3. As regards baggage or cargo, the passenger or consignor will have a right of action against the first carrier, and the passenger or consignee who is entitled to delivery will have a right of action against the last carrier, and further, each may take action against the carrier which performed the carriage during which the destruction, loss, damage or delay took place. These carriers will be jointly and severally liable to the passenger or to the consignor or consignee.

Article 37 — Right of Recourse against Third Parties

Nothing in this Convention shall prejudice the question whether a person liable for damage in accordance with its provisions has a right of recourse against any other person.

CHAPTER IV

Combined Carriage

Article 38 — Combined Carriage

1. In the case of combined carriage performed partly by air and partly by any other mode of carriage, the provisions of this Convention shall, subject to paragraph 4 of Article 18, apply only to the carriage by air, provided that the carriage by air falls within the terms of Article 1.

2. Nothing in this Convention shall prevent the parties in the case of combined carriage from inserting in the document of air carriage conditions relating to

other modes of carriage, provided that the provisions of this Convention are observed as regards the carriage by air.

CHAPTER V

Carriage by Air Performed by a Person other than the Contracting Carrier

Article 39 Contracting Carrier — Actual Carrier

The provisions of this Chapter apply when a person (hereinafter referred to as "the contracting carrier") as a principal makes a contract of carriage governed by this Convention with a passenger or consignor or with a person acting on behalf of the passenger or consignor, and another person (hereinafter referred to as "the actual carrier") performs, by virtue of authority from the contracting carrier, the whole or part of the carriage, but is not with respect to such part a successive carrier within the meaning of this Convention. Such authority shall be presumed in the absence of proof to the contrary.

Article 40 Respective Liability of Contracting and Actual Carriers

If an actual carrier performs the whole or part of carriage which, according to the contract referred to in Article 39, is governed by this Convention, both the contracting carrier and the actual carrier shall, except as otherwise provided in this Chapter, be subject to the rules of this Convention, the former for the whole of the carriage contemplated in the contract, the latter solely for the carriage which it performs.

Article 41 — Mutual Liability

1. The acts and omissions of the actual carrier and of its servants and agents acting within the scope of their employment shall, in relation to the carriage performed by the actual carrier, be deemed to be also those of the contracting carrier.
2. The acts and omissions of the contracting carrier and of its servants and agents acting within the scope of their employment shall, in relation to the carriage performed by the actual carrier, be deemed to be also those of the actual carrier. Nevertheless, no such act or omission shall subject the actual carrier to liability exceeding the amounts referred to in Articles 21, 22, 23 and 24. Any special agreement under which the contracting carrier assumes obligations not imposed by this Convention or any waiver of rights or defences conferred by this Convention or any special declaration of interest in delivery at destination contemplated in Article 22 shall not affect the actual carrier unless agreed to by it.

Article 42 Addressee of Complaints and Instructions

Any complaint to be made or instruction to be given under this Convention to the carrier shall have the same effect whether addressed to the contracting carrier or to the actual carrier. Nevertheless, instructions referred to in Article 12 shall only be effective if addressed to the contracting carrier.

Article 43 — Servants and Agents

In relation to the carriage performed by the actual carrier, any servant or agent of that carrier or of the contracting carrier shall, if they prove that they acted within the scope of their employment, be entitled to avail themselves of the conditions and limits of liability which are applicable under this Convention to the carrier whose servant or agent they are, unless it is proved that they acted in a manner that prevents the limits of liability from being invoked in accordance with this Convention.

Article 44 — Aggregation of Damages

In relation to the carriage performed by the actual carrier, the aggregate of the amounts recoverable from that carrier and the contracting carrier, and from their servants and agents acting within the scope of their employment, shall not exceed the highest amount which could be awarded against either the contracting carrier or the actual carrier under this Convention, but none of the persons mentioned shall be liable for a sum in excess of the limit applicable to that person.

Article 45 — Addressee of Claims

In relation to the carriage performed by the actual carrier, an action for damages may be brought, at the option of the plaintiff, against that carrier or the contracting carrier, or against both together or separately. If the action is brought against only one of those carriers, that carrier shall have the right to require the other carrier to be joined in the proceedings, the procedure and effects being governed by the law of the court seized of the case.

Article 46 — Additional Jurisdiction

Any action for damages contemplated in Article 45 must be brought, at the option of the plaintiff, in the territory of one of the States Parties, either before a court in which an action may be brought against the contracting carrier, as provided in Article 33, or before the court having jurisdiction at the place where the actual carrier has its domicile or its principal place of business.

Article 47 — Invalidity of Contractual Provisions

Any contractual provision tending to relieve the contracting carrier or the actual carrier of liability under this Chapter or to fix a lower limit than that which is applicable according to this Chapter shall be null and void, but the nullity of any such provision does not involve the nullity of the whole contract, which shall remain subject to the provisions of this Chapter.

Article 48 Mutual Relations of Contracting and Actual Carriers

Except as provided in Article 45, nothing in this Chapter shall affect the rights and obligations of the carriers between themselves, including any right of recourse or indemnification.

CHAPTER VI

Other Provisions

Article 49 — Mandatory Application

Any clause contained in the contract of carriage and all special agreements entered into before the damage occurred by which the parties purport to infringe the rules laid down by this Convention, whether by deciding the law to be applied, or by altering the rules as to jurisdiction, shall be null and void.

Article 50 — Insurance

States Parties shall require their carriers to maintain adequate insurance covering their liability under this Convention. A carrier may be required by the State Party into which it operates to furnish evidence that it maintains adequate insurance covering its liability under this Convention.

Article 51 Carriage Performed in Extraordinary Circumstances

The provisions of Articles 3 to 5, 7 and 8 relating to the documentation of carriage shall not apply in the case of carriage performed in extraordinary circumstances outside the normal scope of a carrier's business.

Article 52 — Definition of Days

The expression "days" when used in this Convention means calendar days, not working days.

CHAPTER VII

Final Clauses

Article 53 Signature, Ratification and Entry into Force

1. This Convention shall be open for signature in Montreal on 28 May 1999 by States participating in the International Conference on Air Law held at Montreal from 10 to 28 May 1999. After 28 May 1999, the Convention shall be open to all States for signature at the Headquarters of the International Civil Aviation Organization in Montreal until it enters into force in accordance with paragraph 6 of this Article.

2. This Convention shall similarly be open for signature by Regional Economic Integration Organisations. For the purpose of this Convention, a "Regional Economic Integration Organisation" means any organisation which is consti-

tuted by sovereign States of a given region which has competence in respect of certain matters governed by this Convention and has been duly authorized to sign and to ratify, accept, approve or accede to this Convention. A reference to a "State Party" or "States Parties" in this Convention, otherwise than in paragraph 2 of Article 1, paragraph 1(b) of Article 3, paragraph (b) of Article 5, Articles 23, 33, 46 and paragraph (b) of Article 57, applies equally to a Regional Economic Integration Organisation. For the purpose of Article 24, the references to "a majority of the States Parties" and "one-third of the States Parties" shall not apply to a Regional Economic Integration Organisation.

3. This Convention shall be subject to ratification by States and by Regional Economic Integration Organisations which have signed it.

4. Any State or Regional Economic Integration Organisation which does not sign this Convention may accept, approve or accede to it at any time.

5. Instruments of ratification, acceptance, approval or accession shall be deposited with the International Civil Aviation Organization, which is hereby designated the Depositary.

6. This Convention shall enter into force on the sixtieth day following the date of deposit of the thirtieth instrument of ratification, acceptance, approval or accession with the Depositary between the States which have deposited such instrument. An instrument deposited by a Regional Economic Integration Organisation shall not be counted for the purpose of this paragraph.

7. For other States and for other Regional Economic Integration Organisations, this Convention shall take effect 60 days following the date of deposit of the instrument of ratification, acceptance, approval or accession.

8. The Depositary shall promptly notify all signatories and States Parties of: (a) each signature of this Convention and date thereof; (b) each deposit of an instrument of ratification, acceptance, approval or accession and date thereof; (c) the date of entry into force of this Convention; (d) the date of the coming into force of any revision of the limits of liability established under this Convention; (e) any denunciation under Article 54.

Article 54 — Denunciation

1. Any State Party may denounce this Convention by written notification to the Depositary. 2. Denunciation shall take effect one hundred and eighty days following the date on which notification is received by the Depositary.

Article 55 Relationship with other Warsaw Convention Instruments

This Convention shall prevail over any rules which apply to international carriage by air: 1. between States Parties to this Convention by virtue of those States commonly being Party to (a) the Convention for the Unification of Certain Rules Relating to International Carriage by Air Signed at Warsaw on 12 October 1929

(hereinafter called the Warsaw Convention); (b) the Protocol to Amend the Convention for the Unification of Certain Rules Relating to International Carriage by Air Signed at Warsaw on 12 October 1929, Done at The Hague on 28 September 1955 (hereinafter called The Hague Protocol); (c) the Convention, Supplementary to the Warsaw Convention, for the Unification of Certain Rules Relating to International Carriage by Air Performed by a Person Other than the Contracting Carrier, signed at Guadalajara on 18 September 1961 (hereinafter called the Guadalajara Convention); (d) the Protocol to Amend the Convention for the Unification of Certain Rules Relating to International Carriage by Air Signed at Warsaw on 12 October 1929 as Amended by the Protocol Done at The Hague on 28 September 1955 Signed at Guatemala City on 8 March 1971 (hereinafter called the Guatemala City Protocol); (e) Additional Protocol Nos. 1 to 3 and Montreal Protocol No. 4 to amend the Warsaw Convention as amended by The Hague Protocol or the Warsaw Convention as amended by both The Hague Protocol and the Guatemala City Protocol Signed at Montreal on 25 September 1975 (hereinafter called the Montreal Protocols); or

2. within the territory of any single State Party to this Convention by virtue of that State being Party to one or more of the instruments referred to in subparagraphs (a) to (e) above.

Article 56 States with more than one System of Law

1. If a State has two or more territorial units in which different systems of law are applicable in relation to matters dealt with in this Convention, it may at the time of signature, ratification, acceptance, approval or accession declare that this Convention shall extend to all its territorial units or only to one or more of them and may modify this declaration by submitting another declaration at any time.

2. Any such declaration shall be notified to the Depositary and shall state expressly the territorial units to which the Convention applies.

3. In relation to a State Party which has made such a declaration:

(a) references in Article 23 to "national currency" shall be construed as referring to the currency of the relevant territorial unit of that State; and

(b) the reference in Article 28 to "national law" shall be construed as referring to the law of the relevant territorial unit of that State.

Article 57 — Reservations

No reservation may be made to this Convention except that a State Party may at any time declare by a notification addressed to the Depositary that this Convention shall not apply to: (a) international carriage by air performed and operated directly by that State Party for non-commercial purposes in respect to its functions and duties as a sovereign State; and/or (b) the carriage of persons, cargo and

baggage for its military authorities on aircraft registered in or leased by that State Party, the whole capacity of which has been reserved by or on behalf of such authorities. IN WITNESS WHEREOF the undersigned Plenipotentiaries, having been duly authorized, have signed this Convention. DONE at Montreal on the 28th day of May of the year one thousand nine hundred and ninety-nine in the English, Arabic, Chinese, French, Russian and Spanish languages, all texts being equally authentic. This Convention shall remain deposited in the archives of the International Civil Aviation Organization, and certified copies thereof shall be transmitted by the Depositary to all States Parties to this Convention, as well as to all States Parties to the Warsaw Convention, The Hague Protocol, the Guadalajara Convention, the Guatemala City Protocol, and the Montreal Protocol.

Index

R. Abeyratne, *Law and Regulation of Air Cargo*,
https://doi.org/10.1007/978-3-319-92489-2