Legal aspects of facilitation in civil aviation: health issues

by

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To Arnaud

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Gaël Poget

Montreal, October 2003

ABSTRACT

As you probably know, to board the B777-300ERⁱ in Geneva for Anchorage via London, is not just that simple. With your ticket you bought several days before, you come to the airport, check in, pay airport's fees, go through the customs and security checks, walk in the terminal following signs, maybe you stop in the duty free shops, and finally find your gate. By this time, you are ready to board, about one hour after you enter the airport.

We will be essentially interested in air law that is why, the purpose of this master's thesis is to consider the legal aspect of facilitation in civil aviation. The term *facilitation* refers to the process that passengers, crew, luggage, cargo and mail have to go through when they cross borders to fly from a point A to a point B.

Recently, an aspect of facilitation took an outstanding importance: health issues. At the end of last year, the Severe Acute Respiratory Syndrome (SARS) outbreak was a real threat to international civil aviation because passengers (and crews) could have been exposed to an infected person inside the terminal or on board the plane, also, aircrafts were considered a fast vector of this disease through the world. The economic consequences for airlines and airports were very painful.

ⁱ Boeing 777-300 Extended Range.

RESUME

Vous avez probablement remarqué qu'embarquer à bord d'un B777-300ERⁱⁱ à Genève pour Anchorage via Londres n'est pas aussi simple qu'il le paraît. En arrivant à l'aéroport avec son billet d'avion acheté plusieurs jours auparavant, il faut commencer par l'enregistrement, puis payer les taxes, passer les douanes et les contrôles de sûreté, se repérer dans l'aérogare en suivant les panneaux tout en s'arrêtant éventuellement aux boutiques hors taxes, pour finalement arriver à la porte d'embarquement. Dès lors, vous êtes prêt à embarquer environ une heure après être entré dans l'aéroport.

En nous concentrant essentiellement sur le droit aérien, nous nous proposons d'aborder dans le cadre de ce mémoire de maîtrise, la problématique légale de la facilitation dans l'aviation civile. Le terme de *facilitation* se réfère au processus par lequel passagers, équipages, bagages, cargo et courrier vont devoir accomplir en traversant les frontières pour voler d'un point A à un point B.

Récemment, les considérations de santé publique dans le cadre de la facilitation ont fait l'objet d'une plus grande attention. A la fin de l'année dernière, le Syndrome Respiratoire Aigu Sévère (SRAS) a constitué une menace importante pour l'aviation civile internationale tant par le fait qu'un passager malade pouvait transmettre la maladie à d'autres passagers (et équipages), mais aussi par le fait que l'avion est apparu comme un vecteur très rapide de la maladie à travers le monde. Les conséquences économiques, tant pour les compagnies aériennes que pour les aéroports, ont été très dommageables.

ⁱⁱ Boeing 777-300 Extended Range.

TABLE OF ABBREVIATIONS

ACI Airports Council International

AFA Association of Flight Attendants

Annex 9 Standards and Recommended Practices on

Facilitation

CDC United States Centers for Disease Control and

Prevention

CEAC Conférence Européenne de l'Aviation Civile

Chicago Convention Convention on International Civil Aviation

DOT United States Department of Transportation

ECAC European Civil Aviation Conference

FAA United States Federal Aviation Administration

FAL Facilitation

FAO Food and Agriculture Organization

HHS United States Department of Health and Human

Services

IATA International Air Transport Association

ICAO International Civil Aviation Organization

IFALPA International Federation of Air Line Pilots' Associations

IHR International Health Regulations

NOTAM Notice to airmen

OIE Office International des Epizooties

PIC Pilot-in-command

RS Recueil systématique du droit fédéral

SARPs Standards and Recommended Practices

SARS Severe Acute Respiratory Syndrome

SIA Singapore Airlines

SRAS Syndrome Respiratoire Aigu Sévère

UK United Kingdom

Unique Airport Zurich International Airport

UPU Universal Postal Union

US United States

USC United States Code

WCO World Customs Organization

WHO World Health Organization

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C'est le propre des grands voyageurs que de ramener tout autre chose que ce qu'on allait chercher

Nicolas Bouvier, L'usage du monde

I. INTRODUCTION

Who has never dreamed of boarding a plane like taking a train: to have a look at the timetable, to buy a ticket at the railway station (or in the train) and to go up the platform. In a few minutes, a family is comfortably seated in the train and ready for their journey! For the same family, it would not be the same if they decided to travel by plane, not just because the flight time is shorter than the time in train. It will take more time before they fasten their seatbelts. Yet, civil aviation has tried over several decades to facilitate the process, to simplify formalities for passengers and goods crossing borders, that is to say to keep the speed of air travel attractive. New technologies help greatly but work has to continue in order to resist to new barriers (legal, practical, for security or safety reasons) which commercial aviation has to face from day to day in the routine of the industry.

I.1. General points

The purpose of our present thesis is to study aspects of facilitation that concern health issues in international civil aviation. On one hand, States try to facilitate as much as possible the worldwide air transport of people, goods and mail. On the other hand, States have to defend themselves against spread of disease and other health menaces by taking protective measures which do not always lead in the right direction when, for instance, they are in fact comparable to a form of disguised protectionism.

First of all, after a short introduction, we will focus on the facilitation in general, essentially through the policy material of the International Civil Aviation Organization (ICAO). It is important to understand the international work that has been done in this domain, from a legal point of view, considering its coverage of a wide spectrum of activities such as customs regulations, food and plant restrictions, quarantine rules, narcotics prohibition and more recently, the development of biometric identification that will greatly facilitate the checking of passengers.¹

Then, our interest and analysis will be more thorough in one aspect of facilitation that became in 2003, more and more important, i.e. health issues in civil aviation. For this purpose, we will be guided not only by the legal but also the technical point of view of ICAO. One of the key aspects of this perspective is the close relation that exists between ICAO and the World Health Organization (WHO).

Finally, we consider to be very important the analysis of different practical approaches in facilitation and linked health matters that chose associations of airports and airlines. Moreover, we will turn in the States' (Canada, Switzerland and the United States) response to the recent epidemic of Severe Acute Respiratory Syndrome (SARS) that affected air transport, particularly in Asia.

¹ Heitmeyer, R., "Biometric Identification Promises Fast and Secure Processing of Airline Passengers" (2000) 55:9 ICAO Journal 10.

Nowadays, doctrine and literature regarding facilitation are common, even if health issues did not recently receive so much attention from the legal point of view. Our study will be based primary on international law and ICAO's documents. Secondly, legal articles, studies and reports that emanate from legal and technical specialists of international private and public organizations will be a good support for our work. Finally, national legislations and government documents will be also a legal reference to report practical results.

I.2. Aviation industry's health in 2002-2003

Before going any further through the facilitation and the health issue aspect, we consider it necessary to have a short overview on recent statistics of civil aviation and to put these results in the context of our memoir, i.e. facilitation and health issues related to it.

In the year 2002, the busiest airport in the world was Atlanta Hartsfield International Airport with 76'876'128 passengers² (i.e. arriving, departing and direct transit passengers). For the same period, in the 29th world rank, Toronto Pearson International Airport was the first Canadian airport with 25'930'363 passengers³. Far behind, but well situated, the most important Swiss airport, Zurich Unique International Airport, saw 17'948'058 passengers⁴ last year.

² ACI "Passenger Traffic Reports" online: http://www.airports.org (date accessed: August 29, 2003).

³ Ibid.

⁴ Unique Airport "Facts" online: http://www.uniqueairport.com/e_partner/8unique/fact01sd.htm (date accessed: September 30, 2003).

It seems clear that to absorb this flow of passengers not only at airports but also by airlines (which transported 1.6 billion passengers in 2002⁵), it is absolutely necessary to have a proper technical, operational and legal structure to allow the industry in general to perform. Despite civil aviation's good organization, its economy is probably one of the most sensitive industries in the world. Major events, not necessarily with a worldwide implication, have a direct economical influence on commercial aviation: passengers hesitate to fly during disturbed periods, investments are rare and airlines cut jobs.

Recently, on the top of wars and terrorist acts, the spread of a disease became a new threat for the good health of aviation: the Severe Acute Respiratory Syndrome. Thus, during the period of January to April 2003, the number of passengers in Toronto dropped by 1.3%⁶. Other countries affected by SARS lost passengers also: -21.7% for Hong-Kong International Airport, -13% for Singapore Changi International Airport, -2.3% for Beijing Capital International Airport.⁷ Airlines through the world reduced their capacities to respond to the decrease of demand; a irlines from s outheast A sia were p articularly a ffected during the first semester of 2003.⁸

⁵ IATA "Fast Facts: The Air Transport Industry in Europe Has United to Present its Key Facts and Figures" online: http://www.iata.org/pressroom/industry_stats/2003-04-10-01.htm (date accessed: September 29, 2003).

⁶ ACI "Year to Date Traffic Reports" online: http://www.airports.org (date accessed: August 29, 2003).

⁷ Ibid.

⁸ See e.g. Dragonair, an airline based in Hong-Kong. It is interesting to compare months between January and July 2003, to see the curve due to SARS that affected Asia; Dragonair "Operational Statistics" online: http://www.dragonair.com/icms/servlet/template?series=1&lang=eng&article=1082 (date accessed: September 29, 2003).

Those facts and figures underline the interconnection and the dependence of civil aviation with several actors and factors. In other words, we consider that all incidents have quite an impact on the industry. Moreover, every new participant in the process (that is to say the international traffic by air of passengers, goods and mail) is always a new obstacle that slows down efforts made in favour of the aviation to go further and faster. Facilitation will try to limit the negative aspects of new measures that are implemented within airlines and airports, for passengers, baggage, cargo, goods and mail, to maintain the ease of air travel.

II. FACILITATION IN THE CIVIL AVIATION

Since the beginning of the third millennium, aviation went into an area of turbulence. Major events like September 11, 2001 in New York, the regime's change in Afghanistan in 2002 or the second Gulf War and the SARS's epidemic in 2003 hit the whole airline industry. Recently, Giovanni Bisignani, IATA's Director General and CEO, stated that "[t]he industry turned the corner in June [2003]. Although we are still well below where we were at the same time last year, travellers are returning".

In other words, it is probable that in the next few years, traffic of passengers and cargo will regain an ordinary situation. The International Civil Aviation Organization forecasts for the year 2004 an increase of worldwide traffic of about 4.4%. Thus, "[t]he escalation of air transport requires major changes to the scenario faced nowadays", and that is why "it is evident that air transport facilitation is going to be one of the key issues of this decade (...)". This affirmation was expressed in 1995 but we can reasonably affirm that it is still valid today and will be for the future too.

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⁹ IATA "International Traffic Statistics: June 2003" online: http://www.iata.org/pressroom/industry_stats/2003-08-04-01.htm (date accessed: September 1, 2003).

¹⁰ ICAO, News release PIO 12/2003, "World Air Passenger Traffic to Stabilize in 2003, Growth Expected in 2004" (11 August 2003), online: http://www.icao.org/cgi/goto.pl?icao/en/nr/pio200312.htm (date accessed: September 2, 2003).

¹¹ Piera, A. J., "Facilitation of Air Transport" (2001) XXVI:6 Air & Space Law 315.

¹² Abeyratne, R. I. R., "The Role of Automation in Facilitation of Air Transport into the 21st Century" (1995) XX:I Annals of Air & Space Law 259, 266.

Facilitation issues are now again on the cutting edge of civil aviation throughout the world. Not only is ICAO preoccupied, but also all actors like airports, airlines, employees and passengers, who care about the good health of international civil aviation.

II.1. A need for facilitation?

The term of facilitation is used in the common language. The dictionary gives the following definition: "1. The action or an act of facilitating something; 2. A means of facilitating something, a help". 13 This definition is wide and not very precise but it can be deduced that the scope of facilitation is not strictly limited to civil aviation only. Thus, all means of transport (such as aircrafts, trains, busses, ferries, cars, etc.) might be concerned by issues related to facilitation.

Focusing on civil aviation, facilitation could be defined as "[the promotion of] the free, expeditious and unimpeded passage of an aircraft, its passengers, crew, baggage, cargo and mail across international boundaries". 14 that is to sav "to cut red tape, reduce, simplify and where possible eliminate border crossing formalities". 15 The development of facilitation is important because it concerns not only travellers and crews but also all goods that are imported or exported throughout the world.

¹³ The New Shorter Oxford English Dictionary, 4th ed., Oxford, Clarendon Press, 1993, s.v.

¹⁴ Supra note 12. See also *infra* note 21. 15 Supra note 12.

In this field, key words are 'reduction', 'simplification', but not necessarily 'elimination' of legs through the entire process; to facilitate does not mean absolute freedom. Thus, "[I]t is not the absence of controls, nor the elimination of inspection formalities, but rather the setting of priorities, the standardization of information requirements and the maximizing of customer service". ¹⁶

To cross international borders, formalities for a passenger or goods do not simply mean to go through customs and to show a passport or a declaration of goods to clear departure or arrival. Special measures should be taken regarding the status of a person (e.g. immigrant, refugee, tourist, stateless person or person with a disease, etc.). The same attitude concerns the type of goods (e.g. fruits, animals, dangerous goods, narcotics, medicines, etc.).

In other words, "[t]he subject of facilitation covers a wide field and involves authorities dealing with customs, immigration, agriculture, health and tourism, in addition to civil aviation authorities and national airlines". Moreover, participation of a large number of different administrations might be a source of despondency from the perspective of facilitation.

Four major groups are concerned and interested in the evolution of facilitation and its implementation. The first group is the consumers of air transport, that is to

¹⁶ McMunn, M., "Aviation Security and Facilitation Programmes Are Distinct but Closely Intertwined" (1996) 51:9 ICAO Journal 7.

¹⁷ Abeyratne, R. I. A., "Facilitation and the ICAO Role – A Prologue for the Nineties" (1990) XV Annals of Air & Space Law 3, 8.

say, passengers and cargo shippers who are looking for an efficient service like anyone else. This category wants to, "being allowed to proceed through airports with minimal delay and difficulty". The second and the third group are the airports' and airlines' operators, which are always looking for a way that "increas[es] productivity by minimizing the costs of operational delays and administrative procedures". Finally, the fourth group the States themselves, are important actors because they are supposed to change and to adapt their internal laws to international standards in order to maximize the efficiency of international air transport.

Definitely, in order to "preserv[e] the inherent advantage of speed that air transport offers over other modes of transport", 20 the real interest of the facilitation is to satisfy those four groups by coordinating and simplifying different legs that exist. In this view, the function of the facilitation could "be either negative or positive, the former designed to preclude unnecessary delays and the latter, meant to adopt all practicable measures to facilitate and expedite navigation by aircraft". 21

The importance of a proper regulation on facilitation has been recently reminded by the European Civil Aviation Conference (ECAC), through its resolution 27-1 (2003):

¹⁸ Supra note 16.

¹⁹ Supra note 16.

²⁰ Supra note 12 at 259.

²¹ ICAO, Aims of ICAO in the Field of Facilitation, Doc 7891-C/906/2, 2nd ed. (1965), at sect. 4.10.

Reconnaissant que l'amélioration de la facilitation dans l'aviation est de l'intérêt de tous les passagers du transport aérien;

Reconnaissant que la croissance du trafic de passagers et de marchandises pourrait, à cause d'une facilitation insuffisante, poser des problèmes graves pour les services au sol dans les aéroports;

Reconnaissant la nécessité de concilier les objectifs de la facilitation avec ceux de la sûreté, et d'assurer un équilibre entre ces deux objectifs.²²

This resolution, adopted in July 2003, is accompanied by a declaration of the ECAC that attempts to make mere precise the aims and scope of the resolution. These extracts clearly demonstrate that facilitation has to be considered as a matter of the same importance as security concerns, especially nowadays. Thus, different kinds of measures have to be taken to see significant evolution in the way to facilitate all aeronautical procedures that are conducted on the ground (for the function of airports and airlines).

II.2. The Chicago Convention of 1944

The International Civil Aviation Organization is probably one of the most successful specialized agencies of the United Nations in the second half of the last century. This began just at the end of the Second World War, when the need for reconstruction of the world, especially in Europe, was necessary.

11

²² ECAC, *Déclaration de politique de la CEAC dans le domaine de la facilitation de l'aviation civile*, CEAC Doc 30 Part 1, 9th ed. (2003), online: http://www.ecac-ceac.org/fr/ (date accessed: August 16, 2003).

On the initiative of the United States, fifty-four States²³ were urged to participate in an international civil aviation conference held in Chicago on 1 November 1944²⁴. The purpose of this meeting was "to discuss uniform principles that would lead to the development of international air transport as a post-war measure". 25

On 7 December 1944, the Conference adopted the Final Act which contained four instruments²⁶ including the Convention on International Civil Aviation²⁷, the so-called Chicago Convention. It was not able to reach a unanimous solution due to many opposing points of view from different States.²⁸ According to the Convention, main principles are «la souveraineté et l'égalité des Etats, ainsi que la non-ingérence dans les affaires de chacun d'eux. A ces principes s'ajoute une règle directrice: l'obligation d'uniformiser les réglements aéronautiques »²⁹.

The Convention entered into force on 4 April 1947 after ratification by twenty-six States.30 Since this time, several amendments have been proposed but not all are in force. It is a fact that today, this legal instrument is well ratified around the world: in August 2003, one hundred and eighty-eight States were part of the

²³ U.S.. Department of State. *Proceedings of the International Civil Aviation Conference*, n° 1 & 2, Chicago (November 1, 1944 - December 7, 1944) 1.

Abeyratne, R. I. R., "The Legal Status of the Chicago Convention and its Annexes" (1994) XIX:3 Air & Space Law 113. ²⁵ *Ibid.*

Other instruments: International Air Services Transit Agreement (Transit Agreement); International Air Transport Agreement (Transport Agreement); Interim Agreement on International Civil Aviation. All of these Agreements were signed at Chicago on 7 December 1944.

Convention on International Civil Aviation, signed at Chicago, on 7 December 1944, ICAO Doc 7300 (hereinafter the Chicago Convention).

²⁸ Matte, N. M., *Treatise on Air-Aeronautical Law* (Montreal: McGill University, 1981) 127.

²⁹ Naveau, J., Godfroid, M., *Précis de droit aérien* (Bruxelles: Emile Bruylant S.A., 1988) 28. ³⁰ Article 91(b) of the Chicago Convention.

Chicago Convention³¹ and it definitely remains the main and best known instrument in public international air law. This is the charter of international civil aviation.³²

The Chicago Convention is divided into four parts (Air Navigation, the International Civil Aviation Organization, International Air Transport and Final Provisions). Essentially the first part is relevant to matters of facilitation. Nevertheless, the Article 44 of the Chicago Convention expresses objectives of the Organization. Especially, Article 44(c) combined with 44(i) concerns facilitation's aims of ICAO:

The aims and the objectives of the Organization are to develop the principles and techniques of international air navigation and to foster the planning and development of international air transport so as to: (...) encourage the development of airways, airports, and air navigation facilities for international civil aviation (...) [and] promote generally the development of all aspects of international civil aeronautics.³³

It is clear that at the time of the Chicago Conference in 1944, participants were aware that "the civil aviation community [has] to comply with laws governing inspection of aircraft, cargo and passengers by authorities such as customs, immigration, agriculture and public health, and (...) [also] obligate Contracting States to adopt standards to expedite the necessary formalities in order to minimize operational delays".³⁴

³² Supra note 29 at 21 [translated by author].

³¹ Supra note 10.

³³ Articles 44(c) and 44(i) of the Chicago Convention.

³⁴ Supra note 16.

Following this general statement, the Chicago Convention contains, in the first part, eight articles related to the facilitation of air transport that constitute the backbone of this field. Before going any further, it is important to remember the spirit of the Convention regarding airspace sovereignty. As stated in the first article of the Convention:

The contracting States recognize that every State has complete and exclusive sovereignty over the airspace above its territory.³⁵

Following articles that concern facilitation of the civil aviation are not the only expression of this matter. ICAO is not unique in its consideration of this aspect, as we will demonstrate later. Articles relating to facilitation are referred to the choice made by the ICAO:³⁶

- Article 10, landing at customs airport. According to the principle that was mentioned before, Article 10 states that every foreign aircraft has to take off and land from designated customs airports (a list is published by every States). In other words, "a foreign aircraft, together with its crew and passengers, must comply with local laws and regulations".
- Article 13, entry and clearance regulations. All entry, transit and exit regulations for passengers and goods are within the competence of States and have to be fulfilled by passengers and cargo shippers. In fact, national laws will apply even if Courts have several interpretations.³⁸
- Article 14, prevention of spread of disease. States have to take measures to prevent spread of dangerous health hazards that can occur throughout the world by the way of air navigation (airports, aircrafts). This provision will be the purpose of the chapter III.

³⁶ ICAO, *Consolidated Statement of Continuing ICAO Policies in the Air Transport Field*, Res. A33-19 Appendix D.

³⁵ Article 1 of the Chicago Convention.

Cheng, B., The Law of International Air Transport (London: Stevens & Sons limited, 1962) 122.
 Prof. Matte proposes in his book an analysis of two contradictory judicial decisions regarding Article 13, supra note 28 at 178-179.

- Article 22, facilitation of formalities. This article strongly encourages States to take all reasonable measures to avoid unnecessary legs in air navigation, especially in the field of customs, immigration or health. This provision should be understood as an issue that concerns ground facilities only. In other words, it is defined as "what happens before and after the flight in meeting the requirements of the border control authorities".³⁹
- Article 23, customs and immigration procedures. States have to adopt specific rules for customs and immigration in the field of air transport. With the Article 22, Article 23 represent "the sedes materiae regarding the facilitation of international air traffic (...)". 40
- Article 24, customs duty. When a foreign aircraft lands and then takes off with regular materials that needs an aircraft to fly, they are exempted from taxes. It is interesting to note that regulations regarding customs and immigration contained in Articles 10, 13, 23, 24 have their origin in the Convention Concerning the Exemption from Taxation for Liquid Fuel and Lubricants Used in Air traffic⁴¹.
- Article 29, documents carried in aircraft. To expedite air navigation, this provision standardizes aircraft's documents that are requested by authorities to clear arrival or departure of flights.
- Article 35, cargo restrictions. Again, to permit an expeditious clearance by the authorities, certain type of goods are normally prohibited from transport (munitions of war and implements of war).

It is possible to make two different groups of those provisions regarding the obligation that is assigned to States. On one hand, for Articles 10, 13, 14, 29 and 35, the Chicago Convention legally and directly binds States by prescribing a

⁴⁰ Supra note 37 at 166.

³⁹ Supra note 16.

⁴¹ This Convention has been signed in London on 1 March 1939 and is not in force today, *infra* note 51 at 36, n. 72.

particular behaviour. The principle pacta sunt servanda⁴² applies to States. In that case, the Convention has a direct prescribed action on States, even if a reserve⁴³ is still possible in international law. By ratifying the Convention, States accept to restrain their legislative functions that would normally retain to all sovereign States.

On the other hand, i.e. Articles 22⁴⁴, 23⁴⁵ and 24⁴⁶, contracting States have the obligation to cooperate in the field of facilitation.⁴⁷ In that aspect, States have to take action and to conform their national regulations to international rules but they still have a certain latitude to interpret and to decide in which way rules will apply.48

II.3. International standards and practices

As it appears in the above-mentioned articles, "the Convention does not succeed in establishing precise obligations, and that simplification of administrative formalities is rather a desire, the realization of which is left to the Annexes". 49

43 Ibid. at Articles 18 to 23 of the Vienna Convention.

⁴⁶ Article 24 of the Chicago Convention.

⁴² Convention on the Law of Treaties, signed at Vienna, on 23 May 1969 (Vienna Convention), UNGA Doc A/CONF39/27, 1155 UNTS 331. Article 11 Vienna Convention.

⁴⁴ Article 22 of the Chicago Convention stated: "Each contracting State agrees to adopt all

practicable measures, through the issuance of special regulations or otherwise (...)". ⁴⁵ Article 23 of the Chicago Convention stated: "Each contracting State undertakes, so far as it may find practicable, to establish customs and immigration procedures (...)".

⁴⁷ Supra note 12 at 267.

⁴⁸ Supra note 37 at 136.

⁴⁹ Supra note 28 at 181-182.

II.3.a. Annexes to the Chicago Convention

There are currently eighteen Annexes⁵⁰ to the Chicago Convention "which give technical rules in implementation of its Articles".⁵¹ This number is not absolute. Annex 9⁵² is devoted only to facilitation, although there are also a few articles in other Annexes that are relevant to facilitation. Annex 9, like the seventeen other Annexes, has been adopted on the basis of Article 37 of the Chicago Convention which states:

Each contracting State undertakes to collaborate in securing the highest practicable degree of uniformity in regulations, standards, procedures, and organization in relation to aircraft, personnel, airways and auxiliary services in all matters in which such uniformity will facilitate and improve air navigation.

To this end 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:

(...) (j) 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.⁵³

This provision constitutes the origin of the quasi-legislative function of ICAO that the Organization exercises through the Council of ICAO.⁵⁴ This function is a particularity in the United Nations' family. Only a few international organizations

⁵⁰ The 18 Annexes are: 1. Personnel Licensing; 2. Rules of the Air; 3. Meteorological Service for International Air navigation; 4. Aeronautical Charts; 5. Units of Measurements to be Used in Air and Ground Operations; 6. Operation of Aircraft; 7. Aircraft Nationality and Registration Marks; 8. Airworthiness of Aircraft; 9. Facilitation; 10. Aeronautical Telecommunications; 11. Air Traffic Services; 12. Search and Rescue; 13. Aircraft Accident Investigation; 14. Aerodromes; 15. Aeronautical Information Services; 16. Environmental Protection; 17. Security; 18. Safe Transport of Dangerous Goods by Air. *Infra* note 51 at 10-11.

⁵¹ Diederiks-Verschoor, I. H. Ph., *An Introduction to Air Law*, 5th ed. (Deventer: Kluwer Law and Taxation Publishers, 1993) 10.

⁵² ICAO, Annex 9 (Facilitation) to the *Convention on International Civil Aviation*, 11th ed., (July 2002) (hereinafter Annex 9).

Article 37 of the Chicago Convention.
 Article 54(I) of the Chicago Convention.

have such opportunity to contribute to a kind of legislative process (e.g. ICAO or WHO). In fact, this ability is considered as 'quasi-legislative' more than legislative due to the fact that "these international standards are not binding on member States against their will". 55 The distinction is important.

Thus, States have to comply with Annexes' regulations otherwise they can declare that they will implement specific provisions by following the procedure described in Article 38 of the Chicago Convention: filt in a commitment of collaboration presupposes that the ICAO member States will adopt, in their national legislations, regulations that satisfy ICAO standards. Indeed, these ICAO standards are not self-executing and each State has the duty to implement them". 57 Article 38 of the Chicago Convention requires an active participation of States.

Nevertheless, it is a fact that several States do not meet their obligation to inform in the case of non-conformity to the rules of the Annexes.⁵⁸ This could be a real problem, since ICAO has no enforcement power, that is to say that the Organization cannot take any measure of pressure against recalcitrant countries:

⁵⁵ Supra note 37 at 64.

⁵⁶ Article 38 of the Chicago Convention stated: Any State which finds it impracticable to comply in all respects with any such international standard or procedure, or to bring its own regulations or practices into full accord with any international standard or procedure after amendment of the latter, or which deems it necessary to adopt regulations or practices differing in any particular respect from those established by an international standard, shall give immediate notification to the International Civil Aviation Organization of the differences between its own practice and that established by the international standard (...). In any such case, the Council shall make immediate notification to all other states of the difference which exists between one or more features of an international standard and the corresponding national practice of that State.

⁵⁷ Ducrest, J., "Legislative and Quasi-Legislative Functions of ICAO: Towards Improved Efficiency" (1995) XX:I Annals of Air & Space Law 343, 354. 58 Ibid. at 355.

"[t]he international community cannot presume that the standards are observed throughout the world and must consider with great concern the silence of States, because it may endanger the safety of flight". 59

II.3.b. Annex on facilitation

The first edition of Annex 9, namely *Standards and Recommended Practices* – *Facilitation*, was adopted by the Council of ICAO on 25 March 1949 and entered into force 1 September 1949. The adoption was based on recommendations made by the Facilitation Division on its first and second session held in Montreal (1946) and Geneva (1948). Since that time, the Annex has been amended several times. The latest edition is the eleventh that became effective on 15 July 2002.

Annex 9 deals specifically with technical regulations regarding "facilitation of landside formalities for clearance of aircraft and commercial traffic through the requirements of customs, immigration, public health and agriculture authorities". ⁶¹ The purpose of those rules are "[to provide] a frame of reference for planners and managers of international airport operations, describing maximum limits on obligations of industry and minimum facilities to be provided by governments". ⁶²

60 Supra note 52 at (v).

⁵⁹ *Ibid.* at 356.

⁶¹ ICAO "Annex 9, Status" online: http://www.icao.int/icao/en/atb/fal/annex-9-status.htm (date accessed: August 18, 2003).

⁶² Ibid.

Like other Annexes, Annex 9 is composed of international standards and recommended practices (SARPs). One particularity of this Annex is that these standards and practices contain two aspects: "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 movements, 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.".63

It is important to distinguish standard from recommended practice. These two categories are principal norms that compose Annex 9. The foreword of the Annex gives a good definition to distinguish them:

Standard: Any specification, the uniform observance of which has been recognized as practicable and as necessary to facilitate and improve some aspect of international air navigation (...).

Recommended Practice: Any specification, the observance of which has been recognized as generally practicable and as highly desirable to facilitate and improve some aspect of international air navigation (...).⁶⁴

The main difference is the use of word 'shall' for the international standard instead of 'should' for the recommended practice. 65 An international standard has a constraining effect for States. Moreover, in case of non-compliance of national laws to an international standard, the procedure of Article 38 of the Chicago Convention applies, but it is not the case with a recommended practice.

Supra note 52 at (v)-(vi).
 Supra note 52 at (vi).

⁶⁵ Wijesinha, S. S., Legal Status of the Annexes to the Chicago Convention (Montreal: McGill thesis, Institute of Air and Space Law, 1960) 126.

It can be said without doubt that the role of the ICAO in facilitation "has positively contributed towards the advancement of international civil aviation". ⁶⁶ That is why there is constant endeavour to keep the Annex up to date. This amelioration is made through the Facilitation Panel, a group of experts that are concerned with facilitation, which makes proposals to the Facilitation Division. The latter is a worldwide meeting where States and all the actors of the aviation industry can discuss recommendations⁶⁷ that will eventually be transmitted to the Council of ICAO for adoption⁶⁸.

Even if great results have been reached in the field of facilitation, the Facilitation Division, during its last meeting in April 1995, recognized that several countries did not comply with Article 38 to notifying ICAO of differences, and tried to explain this lack of conformation by the fact that "the process of aligning national laws, regulations and practices with Annex 9 was long and complex, requiring the participation of a number of different agencies and government departments, with the result that States were in some cases reluctant to provide ICAO with formal notification until this review process was completed". This attempt at explanation is, from our point of view, not strong enough to explain all cases of non-conformation to Article 38 of the Chicago Convention; facilitation of air transport is just not a priority for several States (according to their sovereignty).

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⁶⁶ Supra note 17 at 8.

⁶⁷ Supra note 61.

⁶⁸ Article 54(I) of the Chicago Convention.

⁶⁹ ICAO, Report of the Eleventh Session, Doc 9649, FAL/11 (1995) 6.

The twelfth session of the Facilitation Division (FAL/12) is scheduled from 22 March to 2 April 2004 in Cairo (Egypt) and will have the theme *Managing Security Challenges to Facilitate Air Transport Operations*. The aim is to pursue the process of constant updating of Annex 9. The main areas of discussion will be facilitation and security (cargo, passengers, documents), modernization of airport facilities and health issues. The main areas of discussion of airport facilities and health issues.

The latest edition of Annex 9 is composed of a foreword, eight chapters and twelve appendices. The health issue related to facilitation will be the object of the next chapter (§ III.). Nevertheless, it is useful to have a global approach on the Annex 9 before going more deeply into health issues related to international civil aviation.

The foreword of the Annex contains an historical background and some general information. Chapter One gives several definitions of relevant words that concern facilitation (like 'narcotics control' or 'international airport') and general principles that govern the application of the Annex which "shall apply to all categories of aircraft operation except where a particular provision refers specifically to only one type of operation". General principles recall that disturbance should be kept to a minimum and effective procedures should be the goal. Moreover, the

⁷⁰ ICAO, State Letter SD 6/1-03/57 and Attachment "Facilitation Division – Twelfth Session" (27 June 2003).

^{&#}x27; Ibid.

⁷² Annex 9, section 1.1.

⁷³ Annex 9, sections 1.2-1.5.

Annex expressly reserves the application of security measures that could be ordered by States.⁷⁴

The Chapter Two concerns the entry and departure of aircraft, that is to say that "[c]ontracting States shall adopt appropriate measures for the clearance of aircraft arriving from or departing to another Contracting State and shall implement them in such a manner as to prevent unnecessary delays". The Part B deals with required documents the use thereof. Especially documents which are accepted when presented in paper or electronic form and so, it permits the use of "electronic data interchange (EDI) clearance of both passengers and cargo". Normally, general declaration, passenger manifest or cargo manifest are not requested between contracting States or limited to information requirements that are provided in Appendix 1 (general declaration), Appendix 2 (passenger manifest) or Appendix 3 (cargo manifest) of the Annex. Parts D and E regulate disinsection and disinfection of aircraft (see also Appendix 4), a subject which we will develop in the next chapter. The Part F defines arrangements concerning international general aviation and other non-scheduled flights that essentially request a prior authorization from the concerned contracting States.

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⁷⁴ Annex 9, section 1.6.

⁷⁵ Annex 9, standard 2.1.

⁷⁶ Annex 9, standard 2.8.

⁷⁷ Piera, A. J., *Automation in Facilitation of Air Transport* (Montreal: McGill thesis, Institute of Air and Space Law, 2000) 9 . For an explanation of EDI, *ibid.* at n. 42.

⁷⁸ Annex 9, standards 2.10-2.13.

⁷⁹ Annex 9, sections (i.e. standards and recommended practices) 2.31-2.44.

Moreover, the recommended practice 2.4 suggests not interrupting air transport for health reasons.80 This is a sensitive political area and there is, understandably, no international standard. Section 2.3 is a recommended practice that calls for a memorandum of understanding among contracting States and airlines to set guidelines for cooperation in the war against international traffic of narcotics and psychotropic substances.⁸¹ In his thesis, A. J. Piera supports the idea of "replacing the aforesaid recommended practice with an «international standard» to strengthen the language of the provision".82 Nevertheless, this change did not seem to be in the plan of the Facilitation Division according to the tenth and eleventh session's reports.⁸³

Chapter Three is related to the entry and departure of persons and their baggage. In fact, "[I]n order to facilitate and expedite the clearance of persons entering or departing by air, Contracting States shall adopt border control regulations appropriate to the air transport environment and shall apply them in such a manner as to prevent unnecessary delays".84 Especially, this chapter describes documents that are required for travel, i.e. passports, entry and exit visas, embarkation/disembarkation cards (see also Appendix 5)85, certificate of vaccination86 and the custody and care related to passengers and crews (see

⁸⁰ Annex 9, recommended practice 2.4. See § III.2.a and III.3 below.

⁸¹ Annex 9, recommended practice 2.3.

⁸² *Supra* note 77 at 10.

⁸³ Supra note 69 and ICAO, Rapport de la dixième session, Doc 9527, FAL/10 (1988).

Annex 9, standard 3.1.
 Annex 9, sections 3.3-3.24.

⁸⁶ Annex 9, standard 3.25. See § III.2.c and III.3 below.

also Appendix 9)87. Those rules "strongly supports the use of Machine Readable Travel Documents (MRTD) (...) and the Advance Passenger Information System (API)".88

This chapter contains also an recommendation for a very important factor in commercial aviation. The recommended practice 3.2889 encourages airport authorities to manage the departure procedure within sixty minutes for an ordinary passenger. In the note related to this recommended practice, the required departure formalities "would include airline check-in, aviation security measures and, where applicable, the collection of airport charges and other levies and outbound border control measures, e.g. passport, quarantine or customs controls". 90 The goal is forty-five minutes for the entry procedure 91, for which the dual-channel system⁹² has to be used (Appendix 6) for customs and quarantine. Finally, the aspect of formalities for crew (Appendix 7) and for cabin safety personnel (Appendix 8) is also regulated. 93

Chapter Four is similar to the previous chapter but concerns entry and departure of cargo and other facilities. The spirit is the same as for Chapter Three and also

⁸⁷ Annex 9, sections 3.52-3.71.

⁸⁸ Supra note 77 at 11 and ICAO "Facilitation, Advance Passenger Information" online: http://www.icao.int/icao/en/atb/fal/api.htm (date accessed: August 18, 2003).

Annex 9, recommended practice 3.28 and ICAO, News release PIO 4/95, "ICAO Facilitation Meeting Considers Aircraft Disinsection, Public Health, Asylum Seekers and Persons with Disabilities" (April 1995), online: http://www.icao.org/cgi/goto.pl?icao/en/nr/nr.htm (date accessed: August 16, 2003).

⁹⁰ Annex 9, note to the recommended practice 3.28. A note "give[s] factual information or references bearing on the Standards or Recommended Practices in question, but not constituting part of the Standards or Recommended Practices" (See Annex 9, foreword at (vii)).

⁹¹ Annex 9, recommended practice 3.31. ⁹² Annex 9, standard 3.37 and Appendix 6.

⁹³ Annex 9, sections 3.72-3.81.

encourages the use of electronic systems to expedite procedures.⁹⁴ Chapter Five has been removed from the eleventh edition of the Annex.

Chapter Six concentrates on facilities and services for traffic at international airports, especially with the inbound and outbound ground flow to airports. In other words, adequate infrastructures and services are "essential for the rapid handling and clearance of passengers, crews, baggage, cargo and mail". ⁹⁵ Moreover, it contains several rules for the implementation of public health, emergency medical relief and animal and plant quarantine procedures. ⁹⁶ Finally, there are also dispositions for clearance controls and operation of control services ⁹⁷ and monetary exchange ⁹⁸.

Chapter Seven concerns landings other than at international airports for reasons beyond the control of the pilot-in-command.⁹⁹

The last chapter deals with other facilitation provisions such as: bonds and exemption from requisition or seizure¹⁰⁰, environmental issues¹⁰¹, implementation of International Health Regulations and related provisions¹⁰².

⁹⁵ Supra note 77 at 13.

⁹⁴ Supra note 77 at 12.

⁹⁶ Annex 9, sections 6.51-6.57. See § III.2.d and III.3 below.

⁹⁷ Annex 9, sections 6.58-6.62.

⁹⁸ Annex 9, sections 6.63-6.69.

⁹⁹ Annex 9, standards 7.1-7.4.4.

¹⁰⁰ Annex 9, recommended practices 8.1 and 8.2.

¹⁰¹ Annex 9, standards 8.8-8.11.

¹⁰² Annex 9, sections 8.12-8.16. See § III.3 below.

Probably the most interesting aspect of Chapter Eight is the establishment of a national air transport facilitation programme¹⁰³ following the guidelines of Appendix 11¹⁰⁴. The implementation of this programme shall be made by a National Air Transport Facilitation Committee and an Airport Facilitation Committee as proposed in the Appendix 12¹⁰⁵. For these purposes, ICAO prepared a strategy to guide the two Committees to reach the goal of the facilitation programme:

- Improvement of procedures for border control, clearance and security;
- Development of new technical specifications designed to implement systems for the automated border inspection of passengers;
- Containment of security problems such as trafficking in narcotics, illegal migration and travel document fraud;
- Promoting the standardization of information requirements essential to global interoperability of systems; (...)
- Strengthening communications links between ICAO, Contracting States, international organizations and the aviation industry in Facilitation matters;
- Providing Contracting States the necessary tools to set realistic goals and objectives in their normal FAL programmes and to attain their Facilitation goals and objectives;
- Promoting Annex 9 as a living document, which sends an unambiguous message as to what is expected of airlines, airports and control authorities.

In this context, "[t]he purpose of a National FAL Programme is to implement the Chicago Convention mandate that Contracting States provide for and facilitate the border-crossing formalities which must be accomplished with respect to aircraft engaged international operations and their passengers, crews and

¹⁰³ Annex 9, standards 8.17 and 8.18.

¹⁰⁴ Annex 9, recommended practice 8.18.1.

Annex 9, standard 8.19 and recommended practice 8.21.

¹⁰⁶ ICAO "Facilitation Overview" online: http://www.icao.int/icao/en/atb/fal/overview.htm (date accessed: August 18, 2003).

cargo". 107 Regarding the airport FAL Programme the purpose of such a programme will be "to pursue the objectives of Annex 9 at the operational level, to facilitate the completion of border clearance formalities at the airport with respect to aircraft, crews, passengers and cargo". 108

After this general overview which encompasses the large domain of application of facilitation to civil aviation, it has to be considered that this aspect of air law is not easy to implement and to put into practice. For this reason, the Facilitation Section of ICAO is currently working on solutions to simplify Annex 9 by "express[ing] in modern terminology, using simple sentences and implying a tangible, unambiguous result. The SARPs also reflect a logical progression and have been drafted with the functions of the user (Government agency or operator) in mind". 109 Moreover, to simplify comprehension of legal facilitation material, a FAL Manual is currently under development at the ICAO. 110

¹⁰⁷ ICAO, Models for National Facilitation (FAL) Programmes and Airport FAL Programmes, WP/13 presented at FALP/3, 12-16 February 2001 (22 January 2001) A-3. 108 Ibid. at A-1.

Supra note 61.

¹¹⁰ Supra note 61.

III. HEALTH ISSUES: ICAO's PERSPECTIVE

The threat of the spread of disease has been known for centuries. The first intentional case to preserve public health concerned the city of Venice (Italy) in 1377 when the local Authorities promulgated a quarantine legislation to protect the population against epidemic bubonic plague. At that time, it was possible to institute quarantine because "incubation periods for many diseases were shorter than transit times; thus, epidemic diseases usually were evident during transport or upon arrival at the port of entry (…)". 112

Nowadays, in the age of air travel, the situation is no longer the same. Hepatitis A and B, typhoid fever, meningococcal meningitis, cholera, yellow fever, malaria, tuberculosis, plague, 113 or more recently Lassa fever, Ebola virus 114 or SARS might be carried by a passenger from point A to B very quickly and without evidence during flight or might contaminate another traveller during a flight without precursor signs and in an insidious way. Nevertheless, flying is not a health hazard in itself even if "[t]here is a lot of anecdotal evidence relating to the effects of flying on health (...)". 115

¹¹¹ Weiss, E. L., "Epidemiologic Alert at International Airports" in Robert S., ed., *Textbook of Travel Medicine and Health*, 2nd ed. (Hamilton ON: B. C. Decker, 2001) 530-531. Etymologically speaking, it is interesting to relieve the origin of the word quarantine. In fact, "[n]avigators were detained for a period of 40 days, from which derives the word "quarantine" (quaranti giorp)" ibid at 531.

⁽quaranti giorni)", ibid. at 531.

112 Roberts, M. A., "Role of Aviation in the Transmission of Disease" in R. L. DeHart, ed.,
Fundamentals of Aerospace Medicine, 2nd ed. (Baltimore: Williams & Wilkins, 1996) 1003, 1004.

113 Mohler, S. R., "Layovers in Underdevelopped Countries Increase Risk of Contracting Infectious Diseases" (2000) 39 Focus on Commercial Aviation Safety 10ff.

114 Supra note 112 at 1006.

¹¹⁵ "Flying – A Health Hazard?" Aircraft & Aerospace (July 2000) 48.

Moreover, it is important to consider that "if there is person-to-person transmission in the airline cabin, it is probably due to a passenger with an infectious disease who is sitting in a nearby seat or row. The same could occur in an office or in a room". ¹¹⁶

III.1. Article Fourteen of the Chicago Convention

The Chicago Convention¹¹⁷ is concerned, among others, with safety: "[i]t is significant that throughout the Chicago Convention the word 'safety' has been used. This practice should by no means make the public health and air safety factors mutually exclusive. On the contrary". In other words, safety encompasses health issues in the same way as airworthiness or crew licence. But, it is a fact that most people are not concerned with health problems that can be linked to the civil aviation. Thus "aviation safety regulators are the only speciali[z]ed groups with the potential to integrate considerations of passenger health (...)". This thesis does not present such a clear-cut opinion regarding health and aviation, as we will demonstrate.

Article 14 of the Chicago Convention constitutes the key legal disposition for the health issue in civil aviation. It states:

¹¹⁶ Rayman, R. B., "Passenger Safety, Health, and Comfort: A Review" (1997) 68:5 Aviation, Space and, Environmental Medicine 432, 437-438.

Convention on International Civil Aviation, signed at Chicago, on 7 December 1944, ICAO Doc 7300 (hereinafter the Chicago Convention).

¹¹⁸ Abeyratne, R. I. R., "Tobacco Smoking in Aircraft – A Fog of Legal Rhetoric?" (1993) XVIII:2 Air & Space Law 50, 54.

¹¹⁹ Caplan, H., "Passenger Health – Who's in Charge?" (2001) XXVI:4-5 Air & Space Law 203, 208.

Each contracting State agrees to take effective measures to prevent the spread by means of air navigation of cholera, typhus (epidemic), smallpox, yellow fever, plague, and such other communicable diseases as the contracting States shall from time to time decide to designate, and to that end contracting States will keep in close consultation with the agencies concerned with international regulations relating to sanitary measures applicable to aircraft. Such consultation shall be without prejudice to the application of any existing international convention on this subject to which the contracting States may be parties. 120

This article was adopted at the Chicago Conference in 1944 and has never been amended since it came into force. It seems that this disposition is not very precise, neither for what kind of communicable diseases is concerned nor with which agencies are responsible for coordination and consultation. Also, there is a reserve for other international conventions. In fact, it is important to keep in mind that "[t]he phraseology of Article 14 was left deliberately vague because, at the time of the Chicago Conference, neither the World Health Organization nor even the United Nations were in existence". 121

Thus, this disposition looks today a slight outdated. For example, the smallpox has been considered totally eradicated throughout the world since December 1979 when it was certified by scientists and then confirmed by a vote of the World Health Assembly in 1980. 122 Nevertheless, accidental exposures still occur sometimes in research laboratories. 123

¹²⁰ Article 14 of the Chicago Convention.

¹²¹ ICAO, Disruption of International Air Transport Services on Grounds of Public Health, WP/27 presented at FAL/11, 18-28 April 1995 (20 March 1995) at 3 n. 2. ¹²² WHO "Fact Sheet on Smallpox" online:

http://www.who.int/mediacentre/factsheets/smallpox/en/ (date accessed: September 9, 2003). Ibid. The latest accidental exposure was reported in 2000 in the Russian Federation.

On the contrary, problems of cholera, typhus, yellow fever or plague are still a current preoccupation of the World Health Organization 124 (and assuredly for States too), even if these illnesses are limited to specific areas in the world. The expression 'such other communicable diseases' is not very precise but allows for the addition of new diseases or variants of old diseases that come within the scope of Article 14.

The WHO does not define the notion of communicable disease but prefers to have a list of such "disease[s] that can be communicated from one person to another". 125 On the index of the Organization, there are, among others: anthrax, dengue fever, diphtheria, Ebola haemorrhagic fever, influenza, Lassa fever, legionellosis, malaria, meningoccal disease, poliomyelitis, rabies, tuberculosis, West Nile fever 126 and, of course, the recent SARS epidemic. Moreover, it appears to us that Article 14 is concerned with diseases affecting humans but also hazards that concern animals (i.e. epizootic, such as foot and mouth disease) or plants (e.g. common tree disease in British Colombia). This thesis supports that nothing in this provision closes the door to an extensive interpretation of words 'communicable disease'. The spread of disease that affects animals or plants could have the same, or even more, devastating impact as a human disease.

124 WHO "Disease Outbreak News" online: http://www.who.int/csr/don/en/ (date accessed:

September 8, 2003).

Hyperdictionary online: http://www.hyperdictionary.com/dictionary/communicable+disease (date accessed: September 8, 2003). ¹²⁶ Supra note 124.

In any case, it is true that aviation is a factor in the spread of a disease. The best example is probably the influenza which comes back year after year: "[e]pidemiologic mapping of recent influenza epidemics points towards the aircraft as being a major factor in the rapid global spread of new viral strains". 127 Actually, it is possible to follow the development of the yearly epidemic through the world first along the main stream of travellers and then by penetrating more and more into territories. Moreover, "[a]ltough the aircraft is known to be an efficient 'vector' of influenza, on rare occasions it has been demonstrated to be the focal environment of a disease outbreak". 128 In other words, "thus far no major epidemics have been attributed to scheduled civilian air transportation". 129

By taking adequate measures that are conform to Article 14 against the spread of disease, it is interesting to notice that "[t]his provision explicitly devolves primary responsibility on states to take effective measures to prevent airborne diseases in aircraft, and implicitly requires states to issue guidelines for airlines, by working with the international agencies concerned". 130 At the first stage, it seems normal that States are bearing the international responsibility of the implementation of international treaties. Nevertheless, it would be inconsistent to have only States concerned, especially with the liberalization that occurs nowadays in commercial aviation.

¹²⁷ Supra note 112 at 1007.

¹²⁸ Supra note 112 at 1007.

¹²⁹ McFarland, R., *Human Factors in Air Transportation: Occupational Health and Safety*, 1st ed. (New York, Toronto, London: McGraw-Hill Book Company, 1953) 641.

130 Abeyratne, R. I. R., "The Spread of Tuberculosis in the Aircraft Cabin – Issues of Air Carrier

Liability" (2000) 27:1 Transportation Law Journal 41, 45.

Consequently, it means that primary actors in the civil aviation industry (essentially airlines and airports) have to be involved by taking appropriate steps. Thus "airlines have to face certain legal issues themselves in terms of their conduct. Primarily, airlines are expected to conform to applicable international health regulations and the laws of the countries where their aircraft land". ¹³¹

Moreover, in the same article as quoted before, Dr. R. I. R. Abeyratne gives the example of an evidently sick passenger with a cough who wants to check-in at the desk of an airline. In such a case, the air company concerned, which has a duty of care towards its passengers, cannot simply ignore the patent situation. The common law principles of tort call this situation wilful blindness. Regarding this, the Canadian Supreme Court stated:

[W]illful blindness arises where a person who has become aware of the need for some inquiry declines to make the inquiry because he does not wish to know the truth. He would prefer to remain ignorant. The culpability (...) in willful blindness is justified by the accused's fault in deliberately failing to inquire when he knows there is reason for inquiry. 133

It is important to underline that 'the agencies concerned with international regulations relating to sanitary measures' is without reasonable doubt essentially the World Health Organization, a United Nations specialized Agency, established by convention the 7 April 1948, in Geneva. The WHO is frequently involved in the scope of Article 14.

¹³¹ lbid. at 46 and accord to WHO, International Health Regulations, Geneva, 3rd ed. (1983).

¹³² *Ibid*. at 46.

¹³³ R. v. Sansregret [1985] S.C.R. 570, 584.

There are two aspects of the involvement of the Organization in civil aviation. On one hand, it developed International Health Regulations that we will analyze later in this chapter¹³⁴.

On the other hand, the Organization was implicated in the instauration of guidelines concerning the hygiene and the sanitation, specifically regulated for the aviation industry. The first version was drafted in 1960, and revised in 1977. A new version is currently in preparation. Among others, this Guide proposes measures to limit the spread of disease such as the disinfection of aircrafts by the regular use of an efficient bactericide (...) in the daily cleaning routine of aircraft interiors (...). Such action will prevent the case of an infectious disease breaks out in a plane but is reported several days later and could infect, in the meantime, lots of other passengers. Nevertheless, these guidelines are quite outdated today (evolution of knowledge) and have to be considered more as a reference or a source of inspiration than real guidelines.

The other field of recent implication of the WHO¹³⁹, already well documented and for which a lot of studies have been carried out, is the spread of tuberculosis in aviation, especially through the air cabin. In 1998, the WHO published guidelines

134 See § III.3 below.

¹³⁵ WHO, *Guide to Hygiene and Sanitation in Aviation*, 2nd ed. (1977).

¹³⁶ WHO "International Norms ('Guidelines') on Water, Sanitation and Hygiene" online: http://www.who.int/water_sanitation_hygiene/norms/en (date accessed: September 11, 2003).

137 Here, the term 'disinfection' has not the same signification as described by the standard 2.30 of the Annex 9 (see § III.2.b below).

138 Supra note 135 at 100.

¹³⁹ WHO, Press release WHO/96, "WHO Guidelines Address Risk of Tuberculosis Transmission during Air Travel" (17 December 1998) online: http://www.who.int/inf-pr-1998/en/pr98-96.html (date accessed: August 23, 2003).

for the prevention and control of tuberculosis in air travel.¹⁴⁰ The illness affects approximately one third of the world population¹⁴¹ but it does not mean that one passenger out of three is a potential danger. A few indirect cases have been reported.¹⁴² In fact, the guidelines recall "that air travel does not carry a greater risk of infection with *M[ycobacterium] tuberculosis* [¹⁴³] than other activities in which contact with potentially infectious individuals may occur (e.g. train travel, bus travel, attending conferences, etc.)".¹⁴⁴ Several studies have been conducted but they concluded that, "despite a significant contact time with an actively infectious individual, there were no demonstrated instances of tuberculosis transmission in the aircraft".¹⁴⁵

The cutting edge of these guidelines is:

- Airline companies, in collaboration with health authorities, should inform passengers and crew of their possible exposure to [tuberculosis] infection.
- Boarding can and should be denied to persons known to have infectious [tuberculosis].
- Persons with infectious [tuberculosis] must not travel by public air transportation until rendered non-infectious.
- In case of ground delays of more than 30 minutes, provisions must be made to supply adequate ventilation on board.
- Risk of [tuberculosis] among flight attendants is similar to that of the general population. No mandatory routine or periodic [tuberculosis] screening is indicated for flight crew.¹⁴⁶

¹⁴⁰ WHO, *Tuberculosis and Air Travel: Guidelines for Prevention and Control*, Doc WHO/TB/98.256 (1998).

¹⁴¹ *Ibid.* at 11.

¹⁴² For examples see: Abeyratne, R. I. R., "The Spread of Tuberculosis in the Aircraft Cabin – Air Carrier Liability" (1999) XXIV:4/5 Air & Space Law 181.

¹⁴³ The bacterium that causes tuberculosis.

¹⁴⁴ Supra note 140 at 14.

¹⁴⁵ Parmet, A. J., "Tuberculosis on the Flight Deck" (1999) 70:8 Aviation, Space, and Environmental Medicine 817-818.

¹⁴⁶ Supra note 140 at 17, 19, 22 and 31 (red squares).

It should be finally noted that the WHO enacted in 1997 *Guidelines for the Safe Transport of Infectious Substances and Diagnostic Specimens*¹⁴⁷. This second guide deals with air transport but not exclusively. They are also essentially based on the International Health Regulations¹⁴⁸ of the WHO. Moreover, it is certain that the World Health Organization is still ready to work and to propose improvements to the current guidelines or rules for a new concern.

The statement on health issues of the Chicago Convention obligates States to take measures to prevent the spread of disease. Parts of those measures are in the Annex 9 that we will discuss hereinafter, but it is quite obvious that, "[m]illions of people fly every year. It is not possible to assess them medically before their flight". Thus, we are convinced that Article 14 of the Chicago Convention is going to have more and more importance. People and goods move faster and further around the world, that is why appropriate rules to protect civil aviation should be implemented. Today, "[t]he speed of travel and the volume of people and cargo will only increase the risk of disease transmission. Tourism to formerly remote and isolated regions will expose greater numbers of susceptible individuals to disease (...)". 150

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¹⁴⁷ WHO, Guidelines for Safe Transport of Infectious Substances and Diagnostics Specimens, Doc WHO/EMC/97.3 (1997).

¹⁴⁸ See § III.3 below.

¹⁴⁹ Supra note 140 at 11.

¹⁵⁰ Supra note 112 at 1014.

To conclude this section, it is important to underline that one of the fundamental problems also related to matters of the spread of disease is "the general lack of recognition by the public and their primary health advisers that fitness is a serious matter for air passengers (...). [A]irlines [should] do more to dissuade people from flying while ill with a communicable disease since they are likely to infect others". 151

This reflection, among others, stands out in the report of the United Kingdom's House of Lords Select Committee on Science and Technology in November 2000¹⁵². The purpose of this inquiry was to have an overview on the theme of air travel and health, but also to express recommendations. In the section related to the spread of disease, the Committee concludes that: "It like small number of confirmed cases of flight-related cross-infection is a call for continued vigilance rather than an excuse for complacency". 153 Preventative measures against spread of disease in the civil aviation (and other scenes too) exist and work well but there has to be a permanent concern for health and sanitation by authorities. governments, concerned international organizations (public or private) and obviously airlines and airports.

¹⁵¹ Curdt-Christiansen, C., "Report of U.K. Parliamentary Inquiry Calls for a Higher Profile for Passenger Health" (2001) 56:8 ICAO Journal 16, 18.

¹⁵² U.K., H.L., "Report of the Science and Technology Committee on Air Travel and Health", Cm 121-II in *Sessional Papers*, 5th report (1999-2000), online: http://www.parliament.the-stationery- office.co.uk/pa/ld199900/ldselect/ldsctech/121/12101.htm (date accessed: August 31, 2003). Ibid. at section 7.18.

III.2. Annex Nine

There exists no Annex to the Chicago Convention that concerns in particular health issues in civil aviation. Annex 9154 seems to be the most adequate for this purpose even if a few other international standards and recommended practices¹⁵⁵ contain some references as well. As we will demonstrate, there is neither a specific chapter nor section dedicated exclusively to health but rather one or two dispositions here and there.

In Chapter One of the Annex, which contains definitions and general principles. notions of 'disinsection', 'infected area' are described in the perspective of health issues. Moreover, the definition of 'international airport' is defined as: "[a]ny airport designated by the Contracting State in whose territory it is situated as an airport of entry and departure for international air traffic, where the formalities incident to (...) public health, animal and plant quarantine (...) are carried out". 156 The problem of health appears to be related only to international airports, but a hazard might also appear in an airport which is not involved into international scheduled air traffic; small regional airports could also be the departure point of a disease within a country.

¹⁵⁴ ICAO, Annex 9 (Facilitation) to the *Convention on International Civil Aviation*, 11th ed. (July

¹⁵⁵ See § III.4 below.
156 Annex 9, Chapter 1, definition of 'international airport'.

III.2.a. Air transport

Probably the best way to avoid the spread of a disease is to stop any means of transportation to and from the infected area where the outbreak occurs. So, the disease remains local and restricts risks for the entire planet. The Article 14 of the Chicago Convention would allow such measures. Articles 1, 5 and 6 of the Convention also confirm this interpretation of Article 14.

For the first time in twenty-eight years, in September 1994, an outbreak of plague took place in India. As a consequence, a large population from the disaster-stricken area moved into other cities like Bombay, Calcutta and New Delhi. Consequently, several foreign countries prohibited Indian travelers from entering their countries and major foreign airlines suspended their scheduled flights (passengers and cargo) to and from India to prevent the spread of plague. The Government of India complained to the International Civil Aviation Organization for such interruption of international air transport services, arguing that the reaction of foreign airlines and countries was totally exaggerated and inappropriate. In response to this situation, the Facilitation Division, during its eleventh session held in Montreal in April 1995, drafted and proposed four amendments to Annex 9 related to the events of India, but only one was approved by the Council of ICAO 158 as the recommended practice 2.4 159 and not as a standard as it was originally presented by the Secretariat 160.

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¹⁵⁷ Supra note 111 at 531.

¹⁵⁸ Article 54 (I) of the Chicago Convention.

Annex 9, recommended practice 2.4. See § II.3.b above.

¹⁶⁰ Supra note 121 at 1.

This disposition, included in the eleventh edition of Annex 9, states in substance:

In accordance with the International Health Regulations of the World Health Organization, Contracting States should not interrupt air transport services for health reasons. In case where, in exceptional circumstances, such service suspensions are under consideration, Contracting States should first consult with the World Health Organization and the health authorities of the State of occurrence of the disease before taking any decision as to the suspension of air transport services.¹⁶¹

This solution seems, from our point of view, to be influenced by diplomatic and political talks. Maybe it was due to that "in retrospect, the entire plague 'epidemic' in India has come under considerable question of having occurred at all". ¹⁶² But it is a fact that is more useful to have such large consensus among member States in a recommended practice than an international standard that most of countries will deny.

III.2.b. Disinsection and disinfection of aircraft

Disinsection and disinfection should be distinguished. According to the definition in Chapter One of Annex 9, disinsection is "[t]he operation in which measures are taken to control or kill insects present in aircraft and in containers", ¹⁶³ whereas disinfection concerns animals and products of animal origin (the Annex 9 does not provide a definition for disinfection).

¹⁶³ Annex 9. Chapter 1, definition of 'disinsection'.

¹⁶¹ Annex 9, recommended practice 2.4.

¹⁶² Supra note 111 at 531.

The preoccupation with disinsection has existed since the early 1930s when exotic mosquitoes¹⁶⁴ were found alive on board several aircraft arriving from Central America and the West Indies at Miami Airport. 165 There are two consequences with transporting foreign species of insects.

On one hand, to import species into a new area can disturb the ecosystem, which is not used to it. On the other hand, there are cases of so-called airport malaria that are regularly reported in Europe or in North America, regions that are normally not subject to such types of mosquitoes. Airport malaria is "[t]he most direct evidence of transmission of disease by mosquitos imported on aircraft (...) i.e. cases of malaria in and near international airports, among persons who have not recently travelled to areas where the disease is endemic or who have not recently received blood transfusions". 166 For instance, Switzerland reported nine cases of airport malaria between 1969 and 1998, France declared twenty-six cases during the same period. 167 It is evident that airport cases could concern any other diseases transmitted by insects, but malaria is just the most common today.

Rules regarding disinsection of aircraft are standards 2.22 to 2.29 in the second chapter. The principle expresses:

¹⁶⁴ Species: culex quinquefasciatus and aedes aegypti! Infra note 165.

¹⁶⁵ Gratz, N. G., Steffen, R. & Cocksedge, W., "Why Aircraft Disinsection?" (2000) 78:8 Bulletin of the World Health Organization 995, 997.

lbid. at 996. Authors speak also of 'baggage malaria' and 'runway malaria', cases that are nearly similar to 'airport malaria', *ibid.* at 998. ¹⁶⁷ *Ibid.* at 998.

Contracting States shall limit any routine requirement for the disinsection of aircraft cabins and flight decks with an aerosol while passengers and crews are on board, to same-aircraft operations originating in, or operating via territories that they consider to pose a threat to their public health, agriculture or environment.¹⁶⁸

This is the new version of the standard, very influenced by the United States' point of view which is worried about the protection of passengers' and flight crews' health due to the disinsection of the aircraft¹⁶⁹. They want to have disinsection only when strictly necessary.¹⁷⁰

The treatment should be applied when a State requires it. The disinsection shall be made in accordance (methods and insecticides) with the World Health Organization¹⁷¹ and being sure that those procedures do not injure the health or create a discomfort for passengers and crews¹⁷² or have deleterious effects on the structure and equipment of the aircraft¹⁷³. Relevant is that "there is no evidence of a causal relationship between exposure to pyrethroids or other components of the sprays and the development of symptoms, provided that the recommended methods and products are used correctly for disinsection", ¹⁷⁴ even if they "might cause skin irritation". ¹⁷⁵ Moreover, passengers and crews shall be

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¹⁶⁸ Annex 9, standard 2.22.

¹⁶⁹ For an explanation of the position of the United States, see Smith, A. J., "Cabin Air Quality in Aircraft: What is the Problem?" (1996) 61:3 The Journal of Air Law and Commerce 721, 747ff.

¹⁷⁰ Supra note 69 at 16.

Annex 9, standard 2.24. It exists three methods that are prescribed by WHO, see WHO, Weekly Epidemiological Record, 73:15 (10 April 1998) 105, 110 online: http://www.who.int/docstore/wer/pdf/1998/wer/315.pdf (date accessed: September 15, 2003).

¹⁷² Annex 9, standard 2.25. ¹⁷³ Annex 9, standard 2.29.

Martinez, L., ed., International Travel and Health (Geneva: WHO, 2002) 20.

¹⁷⁵ Addy, N. A., *Aviation: the New Order* (Montreal: McGill thesis, Institute of Air and Space Law, 2002) 38.

informed of the disinsection. 176 When this treatment has been done, the declaration of health of the general declaration as described in Appendix 1177 or the certificate of residual disinsection 178 have to be completed and should be considered sufficient for authorities 179 when required.

The procedure for disinfection of the aircraft is described in standard 2.30. Essentially, aircraft shall be exempted if animals and animal products are transported in specially approved containers formally certified. The treatment should be applied in accordance with the rules of the International Office of Epizootics¹⁸¹, in particular the recommendations for transport contained in Chapter 1.4.1 of the Terrestrial Animal Health Code and Chapter 1.5.1 of the Aquatic Animal Health Code 183.

III.2.c. Certificates of vaccination and medical examination

Chapter Three deals with entry and departure of persons and their baggage. Standard 3.25 prescribes that the International Certificate of Vaccination or Revaccination is the form prescribed by the World Health Organization in the International Health Regulations¹⁸⁴ and shall be recognized worldwide.¹⁸⁵

¹⁷⁶ Annex 9, standard 2.26.

¹⁷⁷ Annex 9, Appendix 1.

¹⁷⁸ Annex 9, Appendix 4.

¹⁷⁹ Annex 9, standard 2.27.

¹⁸⁰ Annex 9, standard 2.30.

¹⁸¹ OIE "What is the OIE" online: http://www.oie.int/eng/oie/en_oie.htm (date accessed: September 10, 2003).

182 OIE, Terrestrial Animal Health Code, Paris, 12th ed. (2003).

183 OIE, Aquatic Animal Health Code, Paris, 6th ed. (2003).

¹⁸⁴ See § III.3 below.

¹⁸⁵ Annex 9, standard 3.25.

The recommended practice 3.42 suggests that medical examination should concern only disembarking passengers who are within the incubation period of the concerned disease. Here also, the Annex 9 makes a referral to the International Health Regulations (incubation periods). In the field of facilitation, this article "[is] quite clear as to the limits of the screening procedures allowed (...)". The form our point of view, this practice should also concern embarking passengers to be in accordance with the Article 14 of the Chicago Convention.

III.2.d. Facilities at international airports

Chapter Six of Annex 9 gives some guidelines for services in the airport in the field of public health. The main goal in the scope of facilitation is defined in standard 6.51:

Contracting States, in cooperation with airport authorities, shall ensure the maintenance of public health, including human, animal and plant quarantine at international airports.¹⁸⁸

Recommended practices 6.52 and 6.53 suggest that the most important international airports of contracting States have, in the airport area, services for vaccination and adequate services for public health, animal and plant quarantine measures regarding aircrafts, passengers, crews, baggage, cargo and mail.¹⁸⁹

Another problem can occur when passengers or crews, even animals, land in a transit airport of a hazardous region (e.g. risk of malaria). For this purpose,

¹⁸⁸ Annex 9, standard 6.51.

¹⁸⁶ Annex 9, recommended practice 3.42.

¹⁸⁷ Supra note 121 at 4.

¹⁸⁹ Annex 9, recommended practices 6.52 and 6.53.

recommended practice 6.54 encourages States to have a transit area free of health hazards that might come from bacterium, viruses, insects or because of the poor public health situation in the country of transit.¹⁹⁰ This way avoids new health control at the point of destination.

Standards 6.55 and 6.56 request that States to have a proper and hygienic production line, storage and distribution regarding food and water supplies that will be consumed in the airport or on board aircrafts. In the same way, wastewater and food should also be removed in safe and hygienic ways. These procedures shall be carried out in accordance with the World Health Organization and the Food and Agriculture Organization¹⁹¹. Finally, a medical squad should be organized in all main international airports to respond to first aid and a medical procedure should be established for more serious cases. ¹⁹³

Moreover, medical examinations or vaccinations provided under International Health Regulations, have to be provided free of charge and completed without delay. Finally, recommended practice 6.62 allows States to make arrangements among themselves to conduct investigations of aircraft, passengers, crew, baggage, and cargo prior to departure by the outbound public authorities to facilitate clearance at the point of destination. 195

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¹⁹⁰ Annex 9, recommended practice 6.54.

¹⁹¹ FAO "Food and Agriculture Organization of the United Nations" online: http://www.fao.org/ (date accessed: October 5, 2003).

¹⁹² Annex 9, standards 6.55 and 6.56.

¹⁹³ Annex 9, recommended practice 6.57.

Annex 9, notes 1 and 2 related to standards 6.60 and 6.60.1 and 6.61.

¹⁹⁵ Annex 9, recommended practice 6.62.

III.2.e. Other aspects

In case of landing at other than an international airport, the pilot-in-command has to take all necessary steps to protect the health of crew and passengers. 196

Otherwise, Chapter Eight is devoted to other facilitation provisions, in particular the implementation of International Health Regulations¹⁹⁷ and related provisions. These will be the object of the next part (§ III.3). In particular, standard 8.14 urges States to do as much as possible to apply the ruling by vaccinators and to use the International Certificates of Vaccination or Revaccination form. 198 The recommended practice 8.15 suggests that States inform passengers, airlines and agencies of the vaccination requirements of countries, as soon as possible before departure, in order to facilitate air transportation. 199 Moreover, standard 8.16 states that in case of a suspected airsickness on board an aircraft, a radio report must be sent as soon as practicable to the destination airport to facilitate medical assistance upon arrival.²⁰⁰

It is always understood that the overall goal of these recommended practices and standards related to health issues is to facilitate all procedures relating to the requested clearance for departure and arrival of aircraft. Nevertheless, they could not be complete without support from other specialized organizations such FAO, OIE, UPU, WCO and WHO.

¹⁹⁶ Annex 9, standard 7.4.1. ¹⁹⁷ Annex 9, standard 8.12.

¹⁹⁸ Annex 9, standard 8.14.

¹⁹⁹ Annex 9, recommended practice 8.15.

²⁰⁰ Annex 9, standard 8.16.

III.3. International Health Regulations

As it appeared in the previous chapter, Annex 9 and Article 14 of the Chicago Convention make frequent references to the International Health Regulations²⁰¹ of the World Health Organization. Thus, it seems to us necessary to pay special attention to those rules linked to aviation even if they concern means of transport in general like aircraft, train, boat, road transportation or any method of travel. We will concentrate only on provisions that directly concern air transport and disregard specific measures intended for other kinds of transportation.

The first edition of the IHR was adopted on 25 July 1969 by the 22nd World Health Assembly. It is a revised and consolidated version of the former international sanitary regulations.²⁰² Articles were amended in 1973 and 1981 by the World Health Assembly. Following the 34th World Health Assembly of 1981, the current third version entered into force 1 January 1982. Today, more than one hundred and ninety States are bound by the International Health Regulations (194 States in November 1997).²⁰³ This high degree of ratification is an achievement for public international law.

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²⁰¹ WHO, International Health Regulations, Geneva, 3rd ed. (1983) (hereinafter IHR).

²⁰² IHR, foreword. For a complete overview on international health law in civil aviation, see *supra* note 37 at 153-156.

Fidler, D. P., *International Law and Public Health* (Ardsley: Transnational Publishers, Inc., 2000) 129. In fact, this book contains an adaptation of another book of the same author entitled *International Law and Infectious Diseases* (for complete reference, *infra* note 209).

In 2001, the 54th World Health Assembly launched a process of revision of these regulations. Recommendations were transmitted to the 111th Executive Board in January 2003²⁰⁴ and revised regulations will be probably submitted to the 58th World Health Assembly in 2005²⁰⁵. Moreover, the outbreak of SARS late in 2002 permitted the 56th World Health Assembly to recall the necessity for a rapid renewal of the International Health Regulations²⁰⁶ as stated in the resolution drafted during the Assembly in 2003:

Emphasizing that, as demonstrated by SARS, any upsurge in cases of infectious disease in a given country is potentially of concern for the international community, and that weaknesses in disease reporting and control in a given country can compromise containment globally;²⁰⁷

The implementation of international protective regulations against diseases, through the IHR, is based on the following principle: "[t]he purpose of the International Health Regulations is to ensure the maximum security against the international spread of diseases with a minimum interference with world traffic". 208 This fundamental principle contains two objectives. First, it is the 'maximum security' which is achieved by "establish[ing] a global surveillance system for the diseases subject to the IHR, require certain types of health related capabilities at (...) airports, and set out disease-specific provisions for the covered diseases". 209

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²⁰⁴ WHO, *Revision of the International Health Regulations*, 111th Executive Board Session, Doc EB111/34 (15 December 2002).

²⁰⁵ WHO, *Revision of the International Health Regulations*, 56th World Health Assembly, Doc A56/25 (24 March 2003) 3.

²⁰⁶ WHO, *Revision of the International Health Regulations – SARS*, 56th World Health Assembly, Doc A56/48 (17 May 2003) 5 to 7.

²⁰⁷ *Ibid.* at 6.

²⁰⁸ IHR, foreword.

²⁰⁹ Fidler, D. P., *International Law and Infectious Diseases* (Oxford: University Press, 1999) 61 [footnotes omitted].

Second, 'minimum interference' is respected by the fact that "[t]he IHR prescribe limits for procedures that may be taken against diseases subject to the Regulations" 210 and "regulate restrictive measures to prevent Member States from overreacting when one of them notifies WHO of an outbreak". 211

Thus, the general purpose of the IHR is to facilitate as much as possible commercial aviation but also to be efficient from the point of view of health, i.e. "to strengthen the use of epidemiological principles as applied internationally, to detect, reduce or eliminate the sources from which infection spreads, to improve sanitation in and around (...) airports, to prevent the dissemination of vectors and, in general, to encourage epidemiological activities on the national level so that there is little risk of outside infection establishing itself".²¹²

An overview to the entire IHR is necessary as Article 14 of the Chicago Convention makes references to 'international regulations relating to sanitary measures applicable to aircraft' and standard 8.12 of Annex 9 expressly refers to them:

Contracting States shall comply with the pertinent provisions of the current edition of the International Health Regulations of the World Health Organization (...).²¹³

The current third edition of the International Health Regulations contains a foreword, nine parts, four appendices and several annexes. It is a fact that

²¹² IHR, foreword.

²¹⁰ *Ibid.* at 63 [footnotes omitted].

²¹¹ *Ibid.* at 65.

²¹³ Annex 9, standard 8.12.

several international standards and recommended practices of Annex 9 make explicit references to provisions of the International Health Regulations such as sections 6.60 and 6.60.1, 8.12 and 8.13²¹⁴, or only a general reference to the IHR such 2.4, 3.25, 3.42 and 8.15. Moreover, sections 2.24, 2.27, 6.55, 6.56 refer to the whole WHO's policy, not necessarily the IHR.

For the first two categories described earlier, it is useful to see the direct equivalence between Annex 9 and IHR:

Annex 9	International Health Regulations
Recommended practice 2.4	Articles 23, 24 and 41
Standard 3.25	Appendix 2
Recommended practice 3.42	Articles 34 and 36
Standard 6.60	Article 82
Standard 6.60.1	Article 82
Standard 8.12	Article 23
Recommended practice 8.13	Articles 85.1 and 85.1.d.
Recommended practice 8.15	Appendix 2

Leading principles that guide the International Health Regulations are expressed in two main articles:

The health measures permitted by these Regulations are the maximum measures applicable to international traffic, which a State may require for the protection of its territory against the diseases subject to the Regulations.²¹⁵

Health measures shall be initiated forthwith, completed without delay, and applied without discrimination.²¹⁶

²¹⁴ Annex 9, recommended practice 8.13.

IHR, Article 23. See Annex 9, recommended practice 2.4.

²¹⁶ IHR, Article 24. See Annex 9, recommended practice 2.4.

After the foreword, the first chapter of IHR is dedicated to general definitions such as 'aircraft', 'airport', 'baggage', 'container', 'crew', 'diseases subject to regulations', 'disinsecting' or 'medical examination'.

Part Three contains several elements that concern civil aviation (aircrafts and airports):²¹⁷

- Article 14: hygienic supply and elimination of water and food at airport and on board aircrafts.²¹⁸
- Article 15: adequate medical staff at airport.²¹⁹
- Article 16: airport should be free of rodents and rats.
- Article 17: necessity to have proper equipment and personnel for aircraft's deratting.
- Article 18: sanitary airport.²²⁰
- Article 19: by taking active measures, a perimeter of at least four hundred meters around the airport area should be free of malaria mosquito-vector.

Part Four concerns health measures and procedures. We already gave the two main principles that were expressed in Articles 23 and 24²²¹. This part contains several provisions that concern health and aviation:²²²

²¹⁸ See Annex 9, standards 6.55 and 6.56.

²¹⁷ IHR, Articles 14 to 19.

See Annex 9, standard 6.51 and recommended practices 6.52, 6.53 and 6.57.

²²⁰ In substance, Article 18 of the IHR states:

^{1.} Depending upon the volume of its international traffic, each health administration shall designate as sanitary airports a number of the airports in its territory, provided they meet the conditions laid down in paragraph 2 of this Article, and the provisions of Article 14.

^{2.} Every sanitary airport shall have at its disposal:

⁽a) an organized medical service and adequate staff, equipment and premises:

⁽b) facilities for the transport, isolation, and care of infected persons or suspects;

 ⁽c) facilities for efficient disinfection and disinsecting, for the control of vectors and rodents, and for any other appropriate measure provided for by these Regulations;

⁽d) a bacteriological laboratory, or facilities for dispatching suspected material to such a laboratory;

⁽e) facilities within the airport or available to it for vaccination against yellow fever.

²²¹ Supra notes 215 and 216.

²²² IHR, Articles 25, 27, 28, 30, 31, 34-36, 38, 40-49.

- Article 25: disinfection, disinsection, deratting shall not cause harm to passengers and crews' health nor damage the structure of the aircraft neither cause risk of fire.²²³
- Article 27: a person under surveillance for medical reason shall move freely, under special circumstances.
- Article 28: excepted in case of emergency, an aircraft shall not stop the handling's process on the ground when it is not infected (or suspected) with a disease.
- Article 30: health authorities may prevent the spread of disease by stopping the departure of an infected person or the introduction of health hazard agents on board aircraft. Vaccine certificate may be required at departure. In case of suspicion, medical examination is possible for outbound passengers.
- Article 31: when in flight, nothing should be thrown from the airplane that causes health hazards.
- Article 34: only medical examination of passengers could eventually be required in case of direct transit.²²⁴
- Article 35: free radio pratique granted for healthy plane.²²⁵
- Article 36: any aircraft, passenger or crew member might be the object of a medical examination by the health authorities.²²⁶
 A destination address could be requested in case of sanitary danger. Further actions are reserved regarding a special situation.
- Article 38: an infected passenger should be removed and isolated upon arrival.
- Article 40: other medical examinations should not be conducted when a previous one has been carried out except in the case of a significant epidemic incident or if the first one was not properly investigated.
- Article 41: aircraft may call any airport for a medical purpose. If it is not equipped, aircraft must proceed to another one.²²⁷
- Article 42: aircraft is considered as coming from an infected airport if that airport does not comply with rules of sanitary airport.
- Article 43: passengers and crew in transit in an infected area are not considered suspects if the transit conforms to Article 34.
- Article 44: an airplane that refuses sanitary measures shall not be cleared for takeoff or landing at another airport in the same territory.

²²³ See Annex 9, standards 2.24-2.27 and 2.29.

See Annex 9, recommended practice 6.54.

²²⁵ See Annex 9, standard 8.16.

See Annex 9, recommended practice 3.42.

²²⁷ See Annex 9, standard 8.16.

 Article 45: in case of a landing in a place other than an airport, the pilot should make contact with the nearest health authorities and leave.²²⁸

 Articles 46 to 49: health measures regarding cargo, goods, baggage and mail.

Articles of Part Five describe specific measures related to plague, cholera and yellow fever (Articles 50 to 75 of the IHR). It is interesting to note that, besides Articles 23 and 41, India invoked Articles 51 to 54 when it complained in 1995 to ICAO about the interruption of air transportation (by foreign airlines) because of the outbreak of plague.²²⁹

Finally, in the sixth part, Article 78 prescribes that the pilot-in-command completes the health part of the aircraft general declaration following the model of Appendix 4²³⁰.

According to Part Seven, Article 82, medical examination and vaccination shall not be charged to the passenger if they are performed according to the rules of the IHR.²³¹ Finally, Article 83 prescribes a particular behaviour for areas where the disease malaria exists.²³² Article 85 authorizes a special arrangement among countries to facilitate the processing of health issues between countries by exchange of information.²³³

²²⁸ See Annex 9, standard 7.4.1.

²²⁹ Supra note 121 at 4. See § III.2.a above.

²³⁰ IHR, Article 78 and Appendix 4. See Annex 9, Appendix 1.

²³¹ IHR, Article 82. See Annex 9, recommended practice 6.58 and standards 6.60 and 6.60.1.

²³² IHR, Article 83.

²³³ IHR, Article 85.

This approach gives evidence that the Chicago Convention and Annex 9 are not the only elements regarding health in civil aviation. The general reference of Article 14 and the international standard 8.12 clearly demonstrate the need for a multilateral approach to the problem; that it is not the reserve of aeronautic specialists alone. That is the raison d'être of the IHR, even if they seem to be not totally effective today²³⁴ and are urging a revision. In this context, work through the United Nations family is essential.

III.4. The next seventeen Annexes

In this chapter, we would like to present a short overview of the rest of the seventeen Annexes²³⁵ to the Chicago Convention on the subject of health issues in civil aviation. We have to say that rules on facilitation are essentially contained in Annex 9. Nevertheless, a few dispositions in other Annexes are part of the theme of our thesis.

Annex 1²³⁶, so called *Personnel Licensing* has a Chapter Six concerning medical provisions for licensing commercial and private pilots and air traffic controllers. It seems to us implicit in standard 6.2.2237 that licensees shall not be infected at all by any disease in order to get their licences. In other words, pilots are concerned in the same way as passenger about contagious disease.

Supra note 209 at 65-71.Supra note 50.

²³⁶ ICAO, Annex 1 (Personnel Licensing) to the *Convention on International Civil Aviation*, 9th ed. (July 2001).

Ibid., standard 6.2.2.

Annex 6²³⁸ entitled *Operation of Aircraft* contains in fact three parts. The standard 4.1.1 states that:

An operator shall ensure that a flight will not be commenced unless it has been ascertained by every reasonable means available that the ground and/or water facilities available and directly required on such flight, for the safe operation of the aeroplane and the protection of the passengers, are adequate for the type of operation under which the flight is to be conducted and are adequately operated for this purpose.²³⁹

The note linked to this standard considers terms 'reasonable means' as all information that could be obtained at the point of departure.²⁴⁰ In other words, information related to a disease outbreak at destination or information regarding an infected passenger are part of its scope. Moreover, the term 'protection of the passengers' encompasses also health matters.

According to standard 4.5.1²⁴¹, the pilot-in-command is responsible for the safety of crew, passengers and cargo. As we said before, the scope of safety includes health issues²⁴². Finally, Attachment B of the first part of Annex 6 describes first-aid medical supplies that have to be on board, according to type of aircraft.

²³⁸ ICAO, Annex 6 – Part I (Operation of Aircraft – Aeroplanes) to the *Convention on the International Civil Aviation*, 8th ed. (July 2001) & ICAO, Annex 6 – Part II (Operation of Aircraft – Aeroplanes) to the *Convention on the International Civil Aviation*, 6th ed. (July 1998).

lbid. at Part I, note to standard 4.1.1.

²⁴¹ *Ibid.* at standard 4.5.1.

²⁴² See § III.1 above.

Chapter Nine of Annex 14²⁴³ concerns emergency at airports. This situation can occur with a health hazard even if this case is not expressly described in the chapter.244

Since September 11, 2001, security and facilitation, and so health matters are becoming more intertwined. Annex 17²⁴⁵ is becoming very important for health issues. In other words, "[t]he aviation industry should be considered a key target and preferred vehicle for the intentional or accidental distribution of infectious disease and must be adequately prepared for any eventuality". 246 It is not necessary to be alarmed but the case of spread of disease has become a source of preoccupation for the aviation industry, especially a virus or bacteria as "[b]iological weapons are natural organisms or diseases used in a harmful or destructive manner (...)". 247 Thus, they could be considered as 'tous autres engins dangereux' as stated in standard 4.1.1 in the chapter regarding 'mesures préventives de sûreté':

> Chaque Etat contractant prendra des mesures pour empêcher que des armes, explosifs ou tous autres engins dangereux pouvant être employés pour commettre un acte d'intervention illicite, et dont le port ou le transport n'est pas autorisé, ne soient introduits, par quelque moven que ce soit, à bord d'un aéronef effectuant un vol d'aviation civile internationale.²⁴⁸

²⁴⁴ *Ibid.*, note to standard 9.1.2 which gives only examples (non-exhaustive).

²⁴³ ICAO, Annex 14 - volume I (Aerodromes) to the Convention on International Civil Aviation, 3rd ed. (July 1999).

²⁴⁵ ICAO, Annexe 17 (Sûreté) à la Convention relative à l'aviation civile internationale, 6th ed.

⁽Mach 1997). ²⁴⁶ Kuepper, G. J., "Aviation Terrorism & Biological Agents" *ARFF News* (March 2003) 4, online: http://www.emergency-management.net/pdf/arff.pdf (date accessed: August 23, 2003).

Raffel, R., "Weapons of Mass Destruction and Civil Aviation Preparedness" FBI Law Enforcement Bulletin 72:5 (May 2003) 1.

²⁴⁸ Supra note 245, standard 4.1.1.

The same reference to 'tous autres engins dangereux' is mentioned also in standards 4.1.3 and 4.1.4. The recommended practice 3.1.12 uses nearly the same words to remove from airports all 'objets qui présentent d'autres dangers'. Moreover, it is important in this context to recall that "[a]ny investment in public health care infrastructure will serve a dual purpose in the 21st century as the threat of bio-terrorism attacks grows all too real. A bio-terror attack easily could start an epidemic. The SARS outbreak shows that good disease surveillance (...) is needed".²⁴⁹ The threat that represents a disease combined with the speed and wide network of the civil aviation requires "an early warning system to catch the next outbreak in the beginning when there may still be a chance of eradicating it, before people start boarding airline aircraft to carry the problem to other nations".²⁵⁰

The last Annex that could be seen to be involved in health issues is the Annex 18²⁵¹ on *The Safe Transport of Dangerous Goods by Air.* As it appears, persons are not only concerned but goods could also be a vector of disease too. As stated in Chapter One on the definition of 'dangerous goods':

Articles or substances which are capable of posing a risk to health (...) and which are shown in the list of dangerous goods (...).

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 ^{249 &}quot;World Needs Biological Early Warning System", Editorial, Aviation Week & Space Technology
 158:17 (April 2003) 58.

²⁵¹ ICAO, Annex 18 (The Safe Transport of Dangerous Goods by Air) to the *Convention on International Civil Aviation*, 3rd ed. (July 2001).
²⁵² *Ibid.* at Chapter 1, definition of 'dangerous goods'.

Standards do not give examples of dangerous goods. Nevertheless, infected live animals are dangerous goods that are forbidden for air transport.²⁵³ In case of hazardous contamination, removal shall be conducted without delay.²⁵⁴ If dangerous goods are in the presence of another which might have a hazardous

reaction, they shall not be stowed next to each other to avoid any risk.²⁵⁵

Another method of prevention against the spread of disease by passengers, is to provide information to them on the nature and type of dangerous goods and also on what is forbidden to take on board a plane.²⁵⁶ Finally, we will mention that the recommended practice 11.4 suggests that States establish procedures to control postal services.

III.5. ICAO on alert: SARS outbreak

When the SARS outbreak appeared in November 2002 in China, it was something totally new for civil aviation. It was a very serious case made all the more so as "[I]t is noted that air travel has played an important role in the international spread of Severe Acute Respiratory Syndrome (SARS) which has now been reported in twenty-six countries around the world". We will go through the work that has been done under the auspices of ICAO to set guidelines for the protection of airports.

²⁵³ *Ibid.* at standard 4.2.b).

lbid. at standard 8.6.1.

²⁵⁵ Ibid. at standard 8.7.1.

²⁵⁶ *Ibid.* at standard 9.3.

²⁵⁷ ICAO, Letter AN 5/23-03/50 "Severe Acute Respiratory Syndrome" (2 May 2003).

The problem with SARS, a serious illness caused by a new type of coronavirus, is that "[I]t spreads from person to person, primarily through direct close contact". 258 In other words, every person is a potential victim because people use trains, busses, go shopping or to the opera. Thus not only aviation is concerned, but air travel, taking place in a confined space, contributes to the spread of disease quickly around the world. According to medical advisors, the incubation period is about five days. Thus, a passenger on a Monday flight could be exposed to an infected passenger and only show symptoms the next weekend anywhere in the world.

As described by the Aviation Medicine Section of the ICAO,

[a]Ithough the global spread had been caused by patients travelling from one part of the world to another by air, the risk of in-flight transmission of SARS is very small, with less than five probable cases reported worldwide, all of which occurred before airport screening procedures were implemented (...). For passengers, travelling on board an aircraft, which also carries a SARS patient, there may be a risk, especially if they are seated in the immediate vicinity of the SARS patient, i.e. on the same row or up to two rows in front and behind. For the rest of the passengers the risk is insignificant, partly because the cabin air circulates transversally, limiting the spread of droplets to only a few rows of seats, partly because modern passenger aircraft are equipped with high efficiency particulate air filters which clean the air of 99.97 per cent of all particles suspended in the air, including bacteria and virus.²⁶⁰

²⁵⁸ ICAO "ICAO Aviation Medicine Section, SARS" online: http://www.icao.org/cgi/goto.pl?icao/en/med/aviomed.htm (date accessed: August 26, 2003).

²⁵⁹ Ibid. ²⁶⁰ Ibid.

First of all, the one hundred and eighty-eight member States of the ICAO have the obligation, according to Article 14 of the Chicago Convention²⁶¹, to take all necessary measures to prevent the spread of disease. Especially, "[s]everal States within the affected areas screen passengers at check-in and deny embarkation to those with symptoms and signs compatible with SARS, thus reducing the likelihood of in-flight infection of other passengers". 262

The first responsibility concerns States and their health authorities. Nevertheless, States are not alone. ICAO is very involved in helping States in the prevention of the spread of disease because consumer confidence (essentially that of passengers) in aviation and therefore, the economic health of this industry have been strongly affected.²⁶³

That is why, early after the outbreak, ICAO proposed guidelines for States and more recently new anti-SARS protective measures to complement the guidelines²⁶⁴, to limit damages already created by the illness as much as possible. One of the major problems was the need for coordination and cooperation among the actors in civil aviation, that is to say: airlines, airports, passengers, States, international organizations for health or aviation.

²⁶¹ See § III.1 above. ²⁶² *Supra* note 257.

²⁶³ ICAO, Dr. Curdt-Christiansen C., "Report on Mission to Singapore 2 to 4 June 2003" [unpublished]. See also ICAO, News release PIO 07/2003, "ICAO Issues Guidelines Regarding SARS" (May 2003), online: http://www.icao.org/cgi/goto.pl?icao/en/nr/nr.htm (date accessed: August 21, 2003).

264 "SARS Measures Developed for Use at International Airports" *ICAO Journal* 58:4 (2003) 26.

On 2 May 2003, ICAO published for its member States, following the policy of the WHO and the travel advisory issued in March 2003. 265 its own guidelines to limit and stop the spread of SARS disease around the world. In substance, those guidelines are:

- implement pre-boarding medical screening of passengers at check-in in accordance with the guidelines issued by the WHO[²⁶⁶]:
- provide all incoming passengers with a leaflet on SARS containing information about the disease, outlining the cardinal symptoms as described by WHO and advising on the procedure to follow in case of illness (...);
- implement medical screening of passengers arriving directly from or via affected areas in accordance with Recommended Practice $3.42[^{267}]$ of Annex 9 - Facilitation;
- issue NOTAM[268] requesting the pilot-in-command to radio ahead to the airport of destination when symptoms, compatible with SARS, are detected in someone on board (...);
- issue guidelines for air crew who come into contact with a suspected SARS-patient on board in accordance with the guidelines issued by the WHO; and
- undertake disinfection of aircraft on which a suspected SARSpatient has travelled in accordance with the guidelines issued by WHO and using disinfection solutions approved by the aircraft manufacturer. 269

It is clear that all measures that were proposed before comply with the Chicago Convention and the Annexes, especially Annex 9. Nevertheless, they constitute

²⁶⁵ Supra note 257 and infra note 266.

²⁶⁶ The quidelines of the WHO: WHO "World Health Organization Issues Emergency Travel Advisory" online: http://www.who.int/csr/sarsarchive/2003_03_15/en/ (date accessed: September 17, 2003). See infra notes 309 and 310.

²⁶⁷ See § III.2.c above.

²⁶⁸ NOTice to Air Men. The Annex 15 – *Aeronautical Information Services* defines NOTAM in Chapter 2 as: "A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations".

ICAO, Annex 15 (Aeronautical Information Services) to the Convention on International Civil Aviation, 11th ed. (July 2003). ²⁶⁹ Supra note 257.

also a break to the improvement of facilitation like the pre-boarding screening of passengers or upon arrival and the disinfection of aircraft. It appears to us that such measures are practicable in the short-term. Nevertheless, given the long-term perspective, and considering the fact that such outbreak might reappear seasonally,²⁷⁰ it is necessary to have a meaningful reflection on the implementation of permanent steps regarding health issues in the facilitation process.

More recently, early in June 2003, the ICAO working group on anti-SARS protective measures for airports met in Singapore with representatives from different aspects of civil aviation, at the invitation of the Civil Aviation Authority of Singapore:²⁷¹ "[t]he purpose of the meeting was to develop a set of adequate anti-SARS protective measures to be adopted by international airports in SARS-affected areas, and to develop corresponding guidelines (including a checklist) for a team of ICAO inspectors to follow when evaluating and assessing airports".²⁷²

At the end of the meeting, the committee produced eight recommendations²⁷³ that confirm and complete previous guidelines. Measures contained in those

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²⁷⁰ Meeting with Dr. Claus Curdt-Christiansen, Chief of the Aviation Medicine Section (MED), Air Navigation Bureau at the ICAO Headquarters in Montreal, September 2003.

Supra note 263.Supra note 263.

The entire text of eight recommendations is reproduced in the Appendix of this thesis as Appendix A (§ VI.1) below.

recommendations²⁷⁴ concern essentially concrete procedures for screening passengers²⁷⁵ at departure and arrival and also information²⁷⁶ that each passenger has to receive about SARS. Moreover, it deals with measures taken in favour of airport employees²⁷⁷ who are also very exposed, even more so than passengers, to the disease. Moreover, an official person²⁷⁸ has to be designated to implement anti-SARS protective measures. Finally, they provide guidance to manage a suspected case on board or at destination.²⁷⁹

Following the Singapore meeting, the President of the Council of ICAO, Dr. Assad Kotaite revealed that: "[t]hese measures can become a valuable model for dealing effectively with other contagious diseases that may emerge in the future". 280 Measures taken for SARS will probably be useful for other communicable diseases that may appear in the future. Nevertheless, as with plague, cholera or yellow fever, every health hazard is particular regarding steps that should be taken. Thus, those recommended anti-SARS protective measures will be probably a good source of inspiration in case of a new disease's outbreak, but particular measures valid for all communicable illnesses are not realistic.

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²⁷⁴ ICAO, News release PIO 10/2003, "ICAO Develops Anti-SARS Protective Measures for International Airports" (4 June 2003), online: http://www.icao.org/cgi/goto.pl?icao/en/nr/nr.htm (date accessed: August 20, 2003). See also ICAO, Letter PRES AK/893 "Implementation of Anti-SARS Protective Measures at Airports" (18 June 2003).

²⁷⁵ See Appendix A, # 3 and # 4 of the recommended anti-SARS protective measures. ²⁷⁶ See Appendix A, # 2 and # 5 of the recommended anti-SARS protective measures.

See Appendix A, # 7 and # 8 of the recommended anti-SARS protective measures.

²⁷⁸ See Appendix A, # 1 of the recommended anti-SARS protective measures.

See Appendix A, # 6 of the recommended anti-SARS protective measures.
 Supra note 274.

In this chapter, we note that the idea is to gather public international air law within the international health law to which it is related. Regarding health in aviation, it is necessary to have not only health specialists from the aviation industry but also indications from specialized experts from outside the air transport industry. We have the feeling that health issues are becoming a more and more important aspect of the aviation industry's attention due to the fact that a health hazard such as SARS causes impressive economical damages to the airline industry; as important, perhaps even more so, as a war or a new political regime in a country. Nevertheless, new problems are erected by the implementation of new steps: the way of facilitation will not be that simple.

IV. INTERNATIONAL RESPONSES TO HEALTH PREOCCUPATION: THE SARS EXPERIENCE

As we described earlier, the International Civil Aviation Organization and the World Health Organization are major actors in health matters for civil aviation but they are not the only two. We were speaking previously of the importance of coordination and cooperation among participants within commercial aviation, that is to say with airlines, airports, but also international associations such as Airports Council International (ACI) or International Air Transport Association (IATA), as well as other institutional organizations from the United Nations family.

The participation of different government administrations concerned by health, customs, agriculture, food, veterinarian, etc. is vital. Moreover, it seems to us that one often overlooked but very important voice is that of consumers themselves, that is to say passengers and also the employees of the airline industry.

The risk, by implementing more steps regarding health on a journey of passengers or goods, is that the attraction of aviation might be compromised. So a good balance between the facilitation of air transport and safety, in general, has to be respected while developing the usefulness of facilitation. As was mentioned concerning the ICAO work on it, heavy temporary measures are acceptable but a permanent step greatly changes the perspective.

That is why it is necessary to have an overview of the different interpretations of facilitation that are made by participants to get steps in the field of health in commercial aviation.

IV.1. ACI and Asian airports

The Airports Council International is the association of airports around the world, calling itself the 'voice of the world's airports'. 281 The ACI, with its headquarters in Geneva, was created in 1991 (in fact, joining several airports' organizations) and represents today 555 members exploiting more than 1500 airports through 170 countries.²⁸² Inside the organization, there exists among others, a standing committee on facilitation and services, which proposes policies to its members regarding the facilitation of passengers, goods, cargo and mail.²⁸³ In this field, one of the fundamental objectives is:

ACI s'efforce de combattre les tracasseries administratives et d'étranglement dus services d'inspection aux gouvernementaux inefficaces dans un grand nombre d'aéroports internationaux, qui entravent l'acheminement des passagers et la livraison des bagages et du courrier. La situation a été aggravée du fait de l'introduction de consignes plus strictes en matière de sûreté (...). Les gouvernements, les compagnies aériennes et les aéroports doivent unir tous leurs efforts pour concilier facilitation et sûreté (...).²⁸⁴

ACI, *Rôle et activités* (June 2003) 1 [translated by author].

²⁸¹ ACI, *Policy handbook*, 3rd ed. (2000) 1.

²⁸³ ACI "ACI Committees" online: http://www.airport-technology.net/aci/committees.html (date accessed: September 22, 2003). ²⁸⁴ Supra note 282 at 4.

This extract, quite incisive, has the merit to practically delimit the work of the ACI in the field of aviation. It is kind of a summary of what could be found in the ACI *Policy Handbook* (policies' synthesis) which is intended for its members; they are periodically revised. Thus, Chapter Three of the ACI *Policy Handbook*²⁸⁵ deals with facilitation in general (baggage delivery, cargo facility, transport of dangerous goods, etc.).

Nevertheless, in the extract that we were mentioning earlier, there are no explicit references to health issues in airports. But it is a fact that ACI is worried about the hygiene and sanitation of its members as it appears from its inclusion in the ACI *Policy Handbook*. Especially, Chapter Eight²⁸⁶ contains three references: emergency medical service at airports²⁸⁷, hygiene and sanitation at airports²⁸⁸ and public health and animal plant quarantine measures²⁸⁹. This section makes an explicit reference to the ICAO Annex 9²⁹⁰ and to the IHR²⁹¹.

According to our thesis' subject, sections 8.2 and 8.3 are the most appropriate:

Although airport operators in many countries are not responsible for sanitation programs at airports, ACI recognizes the need to maintain high standards of hygiene. Health inspection at airports should be undertaken by the competent local health administration, in cooperation with airport operators and the airport tenants and users involved. Procedures for the procurement, preparation, handling, storage and delivery of food

²⁸⁸ *Ibid.* at 8.2.

²⁸⁵ ACI, *Policy handbook*, 4th ed. (2003) Chapter 3.

²⁸⁶ *Ibid.* at Chapter 8.

²⁸⁷ *Ibid.* at 8.1.

²⁸⁹ Ihid at 8.3

²⁹⁰ ICAO, Annex 9 (Facilitation) to the *Convention on International Civil Aviation*, 11th ed. (July 2002)

²⁹¹ WHO, International Health Regulations, Geneva, 3rd ed. (1983).

and water supplies intended for consumption, both at airports and on board aircraft, and for the removal and safe disposal of waste materials should not unnecessarily interfere with airport ground operations nor should they inconvenience passengers, for example by delaying their embarkation or disembarkation.²⁹²

Governments require adequate space and facilities for the administration of public health and animal and plant quarantine measures (...). The necessary space and facilities, as well as staffing, should be provided at government expense, not at the expense of the airport operator.²⁹³

From those two policies, it appears to us that they return to and repeat ideas that we were describing before²⁹⁴. Nevertheless, it clearly emerges from the text that the interpretation used stands up for its partners, i.e. airports; the text is quite corporatist. Thus, ACI admits the importance of health issues but strongly suggests that States assume their responsibility and certainly not surcharge airports' operators. In other words, airports shall accept public health measures that impede airport's facilitation but means and financing fall within the exclusive competence of States themselves.

Nevertheless, this tendency to leave all the responsibility of measures to States probably did not help to resist the SARS outbreak in late 2002. On 31 March 2003, ACI communicated the travel advisory enacted by the WHO²⁹⁵ to all of its members.²⁹⁶

²⁹² Supra note 285, section 8.2.1.

²⁹³ Supra note 285, section 8.3.1.

See § III.2 and § III.3 above.

²⁹⁵ Supra note 266.

²⁹⁶ ACI, Press release, "Atypical Pneumonia/ Severe Acute Respiratory Syndrome" (7 April 2003), online: http://www.airports.org (date accessed: August 29, 2003).

At the end of April 2003 and then in May 2003, the ACI-Pacific Regional Office²⁹⁷ published a report on the impact of SARS on airports in the Pacific region²⁹⁸, the most affected area (especially the coast from China to Indonesia²⁹⁹). The importance of the ACI's Regional Offices is great for the circulation of information and to help, as closely as possible, their members by "answer[ing] numerous inquiries from member airports (...) [and] were given specific health regulations and guidelines to follow. ACI's Regional Offices have also been engaged in facilitating the sharing of information through such initiatives (...)".³⁰⁰

As stated before, airports follow measures carried out by their governments, but not exclusively. Early in April 2003, the WHO "recommend[ed] that airport (...) health authorities in affected areas undertake screening of passengers presenting for international travel". At the Beijing Capital International Airport, the Chinese Government put in infrared machines at every terminal entrance and security checkpoints, which are capable of detecting fever, a symptom of SARS³⁰².

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²⁹⁷ In fact, ACI is one organization but six regions. *Supra* note 282 at 2, 6 [translated by author].
²⁹⁸ ACI, *The Impact of Severe Acute Respiratory Syndrome (SARS) on the Airports in the Pacific Region*, ACI-Pacific Regional Office, revised version (May 28, 2003).
²⁹⁹ See date provided by the ACI in the ACI

²⁹⁹ See datas provided by the ACI, *ibid*. at 6-8.

³⁰⁰ Ibid at 3

³⁰¹ WHO, *Weekly Epidemiological Record*, 78:14 (4 April 2003) 97-98 online: http://www.who.int/wer/pdf/2003/wer7814.pdf (date accessed: August 23, 2003) 97. 302 Supra note 298 at 9.

The Singapore Changi International Airport took the same step³⁰³ and was the first airport to implement the new recommendations discussed in the same city in June 2003.304

Hong Kong International Airport took the most draconian measures to struggle against the spread of SARS, besides screening passengers' temperatures (departing, arriving and in transit), it also took the temperature of all airport workers before duty. 305 Moreover, following measures were taken:

- More frequent replacement of air conditioning filters:
- Maximized inflow of fresh air into the Passenger Terminal;
- Sanitization of all telephones;
- Disinfecting all check-in counters, airline service desks, boarding gate desks and transfer desks before and after shift change (...), lifts, escalators and toilets daily; (...)
- All drinking fountains have been closed and sealed off.³⁰⁶

Experts from the airports' field recognize that SARS "will have significant future implications for the aviation and tourism industry due to the tremendous impact that it has had on traveler perception". 307 Nevertheless, governments remain the first responsible to enact any legislation on health and to ensure its implementation in airport areas.

³⁰³ Crampton, T., "Airports Stepping Up Screening for SARS" The International Herald Tribune (28 March 2003), online: http://www.iht.com/cgi-bin/generic.cgi?template=articleprint.tmplh& ArticleId=91396 (date accessed: March 28, 2003).

WHO, "Disease Outbreak News - Update on Situation in Singapore" (June 6, 2003) online: http://www.who.int/csr/don/2003_06_06/en/ (date accessed: August 23, 2003). Supra note 274 and see also Appendix A (§ VI.1) below. ³⁰⁵ Supra note 298 at 10.

³⁰⁶ Supra note 298 at 10.

³⁰⁷ Supra note 298 at 12.

It appears that the main measure implemented by airports was to screen passengers' temperature. From the legal point of view, the question is to know if such screening is a medical examination or not. This thesis supports that taking the temperature of passengers has to be considered as a medical examination because temperature could be an aspect of a medical diagnosis, depending of the type of disease concerned. Besides, fever is one of the symptoms of the SARS disease.³⁰⁸

Thus, it is evident that such medical examination has to conform to the recommended practice 3.42 of Annex 9³⁰⁹, to Articles 30, 34, 36, 38, 40 and 43 of the International Health Regulations³¹⁰, and assuredly to the norms of ACI. Especially, we do not see evident conflict between screening passengers and international policies of the ICAO and WHO, but recommended practice 3.42 suggests limiting medical examination to disembarking passengers that are within the period of incubation, although some Asian airports (e.g. Hong Kong International Airport) oblige all departing, in transit and arriving passengers to go through such medical screening. Due to the fact that it is only recommended, it will be difficult to blame airports for implementing extra examinations for departing and transit passengers. Finally, it is important to keep in mind that the installation of these controls has to conform to the rest of international air and health law.

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³⁰⁸ Supra note 258.

 $^{^{309}}$ Annex 9, recommended practice 3.42. See $\$ III.2.c above. 310 IHR, Articles 30, 34, 36, 38, 40 and 43. See $\$ III.3 above.

IV.2. IATA, cases of Singapore Airlines and Cathay Pacific

A second major participant in the field of facilitation is airlines themselves and their association, the International Air Transport Association. The association was created in Montreal in 1945 (in fact, succeeding to a former association created in 1919) where it still has its headquarters.³¹¹ The IATA, by representing the air transport companies, gathers together major airlines of the world. In 2003, there were approximately 280 members, i.e. airlines, representing more than ninety-five per cent of the worldwide scheduled traffic.³¹²

The association is involved in facilitation. The facilitation section of the Security and Facilitation Department is composed of four Committees³¹³ that are trying "to encourage universal acceptance of ICAO's Annex 9 Standards and Recommended Practices". Obviously, the organization will facilitate the transport of goods and passengers through international boundaries from the airlines' perspective, that is to say by trying to reduce as much as possible all barriers (customs, security, etc.) that exist to speed the process of air travel of a person or goods from A to B. Moreover, airlines seek also, from an economic perspective, to minimize the cost of such compulsory, and from their point of view, non-productive, steps in the processing of every flight.

³¹¹ De Juglart, M., *Traité de droit aérien*, t. 1, 2nd ed. (Paris: Libraire Générale de Droit et de Jurisprudence, 1989) 123 [translated by author].

Jurisprudence, 1989) 123 [translated by author].

312 [ATA "About Us" online: http://www.iata.org/about/index (date accessed: September 22, 2003).

313 The four Committees are: i) Passenger Facilitation Panel; ii) IATA/Control Authorities Working Group; iii) U.S. Airline Working Group; iv) Cargo facilitation Panel. See IATA "Facilitation" online: http://www.iata.org/soi/securityfacilitation/facilitation/index (date accessed: September 23, 2003).

314 Ibid.

One of the activities of the IATA is to encourage standardization of procedures among its members. For this purpose, IATA regularly publishes recommended practices and guidelines that may interest the airlines.³¹⁵

Regarding matters of health consideration, the recommended practice 1798 published in 1998 concerns expressly passengers with infectious disease.³¹⁶ In substance, this practice provides guidelines for airlines in such hazardous situations. Thus, members should discourage infected passengers from traveling and inform them of the risk of transmission.³¹⁷ Informed by a health administration that an infected passenger has travelled on board, airlines should cooperate with the authority concerned. Nevertheless, all the tracking process (including expenses) of passengers is the responsibility of State. The latter has to use primary data from customs and eventually the register from the airline by making a formal request subject to the local policy on transmission of data.³¹⁸

It is important to notice that such recommended practice of the IATA applies to airlines whereas recommended practices of Annex 9 apply first to States as subject to international law.

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³¹⁵ IATA provides to its members several documents. Regarding facilitation, IATA published in 1991 a *Guide to Facilitation* that comments the Annex 9. This guide is currently under revision. See IATA, *Guide to Facilitation*, 3rd ed. (1991). Moreover, a *Facilitation Directory* is published every year.

³¹⁶ IATA, *Carriage of passengers with infectious diseases*, recommended practice 1798,

PSC(20)1798 (1998) online: http://www.iata.org/pressroom/pr/2003-04-10-01.htm (date accessed: September 22, 2003). See Appendix B (§ VI.2) below. Moreover, to complete the explanation, it could be interesting to have a look into the resolution 700 of the IATA: IATA, *Acceptance and Carriage of Incapacitated Passengers*, resolution 700, PSC(23)700 (2002).

³¹⁷ See Appendix B, # 1 of the recommended practice 1798.

³¹⁸ See Appendix B, # 2 to 11 of the recommended practice 1798.

It is clear that the SARS outbreak hits airlines deeply as mentioned by Kevin Dobby, IATA's Corporate Secretary: "The impact of SARS on the global air transport has been devastating", 319 but not only for the airline industry. Early in April, IATA recalled to its members the application of the recommended practice we mentioned previously and also the necessity of complying with the WHO recommendations. Since the beginning, IATA was involved and is permanently monitoring the evolution of the situation. Already, it is certain that "[I]n the longer term, the airlines will have to engage in ongoing education and training of gate agents, flight attendants and pilots on serving among the first lines of defence against any future outbreaks of disease that might spread worldwide".

Major scheduled airlines around the world, but in particular those from southeast Asia such as Cathay Pacific in Hong Kong³²⁴ or Singapore Airlines were in the heart of the epidemic and were significantly disrupted: reducing capacity and employees.³²⁵ Consequently, they were urged to take consequent measures, according to international recommendations and also national laws on public health.

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³¹⁹ IATA, News release n° 11, "Airlines Refine Battle Plans to Fight SARS", (24 April 2003), online: http://www.iata.org/pressroom/pr/2003-04-24-02.htm (date accessed: September 23, 2003).

Fan, E. X., "SARS: Economic Impacts and Implications" (2003) 15 ERD Policy Brief, Asian Development Bank.

³²¹ IATA, News release n° 8, "Fighting SARS" (10 April 2003), online:

http://www.iata.org/pressroom/pr/2003-04-10-01.htm (date accessed: September 22, 2003).

³²² IATA "Severe Acute Respiratory Syndrome (SARS) Information Site" online: http://www.iata.org/WHIP/Public/frmMain_Public.aspx?Wgld=0263 (date accessed: September 23, 2003).

³²³ Supra note 249.

³²⁴ Airline "Cathay Pacific" online: http://www.cathaypacific.com (date accessed: August 30, 2003)

Fiorino, F., "SARS: A New Blow Mysterious Illness Could Wreak Serious Economic Effects for Airlines" *Aviation Week & Space Technology* 158:14 (April 2003) 59.

In April 2003, Cathay Pacific tried to restore passengers' confidence by implementing several actions towards the fight against spread of disease. In the event of a suspected case on board an aircraft, the suspected passenger had to wear a facemask, to be isolated from the rest of the plane in the back and assigned a dedicated toilet. 326 Crew members in contact and on request for other passengers wore gloves and mask. Ordinary disinfections and cleaning of the aircraft were to be conducted after each flight and of the air conditioning vents every week.³²⁷ Nevertheless, when transporting a suspected case, more important disinfection has to be done, such as cleaning the water system and toilets, removing the infected seat. 328

In the same way, Singapore Airlines took measures³²⁹, two days after the publication of the WHO guidelines in March³³⁰ to inform and warn travellers and to conform to the recommendations. At the outset, on flights between Singapore and other infected regions (e.g. Beijing or Hanoi), the airline provided masks for all passengers and crew. 331 A few weeks later, Singapore Airlines took additional precautions by distributing to all passengers on certain routes a health kit that contains:

³²⁶ "Risk of Deadly Respiratory Infection Fuels Fear of Air Travel" Air Safety Week 17:15 (April 2003) 1, 4.

³²⁷ *Ibid*. at 5.

³²⁸ *Ibid.* at 5.

³²⁹ Singapore Airlines, News release, "Singapore Airlines Responds to World Health Organization Travel Advisory" (17 March 2003), online: http://www.singaporeair.com/saa/app/saa (date accessed: August 29, 2003). 330 Supra note 266.

³³¹ Singapore Airlines, News release, "SARS: SIA Introduces New On-Board Measures" (3 April 2003), online: http://www.singaporeair.com/saa/app/saa (date accessed: August 29, 2003).

two surgical masks, three antiseptic wipes and a single use clinical thermometer. In addition, there will also be a set of contact slips in the pack that passengers can use to participate in the voluntary 'contact bowl' programme at participating establishments in Singapore. The contact slip allows the establishments to get in touch with the customer quickly in the remote event of an outbreak at their location. 332

These measures were probably not absolutely necessary but it was a good way to counteract passengers' fear of plane travel because of the disease. Late in April and in the beginning of May, major airlines concluded that an efficient measure against the spread of SARS is "a standardized pre-check-in screening of air passengers in countries affected by the SARS outbreak".

To conclude, it is important to mention briefly that crews, i.e. flying personnel and cabin crews are also exposed in a particular way to SARS and other communicable diseases, due to regular contact with passengers³³⁴ and by the way they fly to infected regions. For this reason, their respective worldwide associations³³⁵ also published recommendations for their members to safeguard their health.

³³² Singapore Airlines, News release, "SIA to Distribute Health Kit Onboard" (13 May 2003), online: http://www.singaporeair.com/saa/app/saa (date accessed: August 29, 2003).

³³³ IATA, News release n°14, "World Airline CEOs Support Pre-check-in Screening of Passengers" (5 May 2003), online: http://www.iata.org/pressroom/pr/2003-05-05-01.htm (date accessed: September 22, 2003). See also IATA, Press release n°13, "IATA Supports ASEAN Plan to Fight SARS" (30 April 2003), online: http://www.iata.org/pressroom/pr/2003-04-30-01.htm (date accessed: September 23, 2003).

⁽date accessed: September 23, 2003).

334 Maynard, M., "Fears Arise on Hygiene of Cabin Air" *The New York Times* (4 April 2003), online: http://www.iht.com/cgi-bin/generic.cgi?template=articleprint.tmplh&ArticleId=92134 (date accessed: April 4, 2003).

Syndrome" online: http://www.afanet.org/sars2.asp (date accessed: September 24, 2003). For flying personnel, see International Federation of Air Line Pilots' Associations: IFALPA "Safety Bulletins" online: http://www.ifalpa.org/ (date accessed: September 24, 2003).

Here again, from the legal aspect, airlines comply with national and international rules even for the 'standardized pre-check-in screening', as we explained it before for ACI. It is also clear that, by requesting more important disinfection of aircraft and screenings, it will go against the tendency of facilitation. Nevertheless, a few months after the peak of the disease, airlines seem to have slowly removed special measures to protect passengers and crews.

IV.3. Government administrations

The international approach made earlier would not be complete without turning to national agencies, which are also very concerned with health issues and the SARS outbreak. It is important to bear in mind Article 14 of the Chicago Convention³³⁶ and Annex 9, which require that States take measures against the spread of disease.

IV.3.a. The United States: FAA and CDC

The choice of the United States' authorities is totally subjective but it seems to us useful to take such governmental agencies because they are often mentioned as a reference for other governments throughout the world. Nevertheless, States implement their own rules, too.

³³⁶ Convention on International Civil Aviation, signed at Chicago, on 7 December 1944, ICAO Doc 7300 (hereinafter the Chicago Convention). Article 14 of the Chicago Convention.
³³⁷ For example, Health Canada and Swiss Federal Office for Public Health refer, on their

websites, to the provisions of CDC.

The Federal Aviation Administration (FAA) is a U.S. Agency that is dependent upon the United States Department of Transportation³³⁸, based in Washington D.C.: "[t]he FAA is responsible for civil aviation safety, including developing safety regulations, and certifying pilots and aircraft". 339 From the first stage, the FAA is not directly involved in facilitation and health issues, but it is important to recall that safety is encompassed within its scope, facilitation and health issues as we were explaining previously³⁴⁰. Regarding SARS, the Agency published a notice on 2 April 2003 relative to interim guidance for air carriers regarding SARS.341 In fact, this note has been distributed to regional offices of the FAA and urges them to refer to Centers for Disease Control and Prevention (CDC).

It is true that the CDC is probably more appropriate to implement measures regarding health in aviation. The CDC is an Agency from the United States Department of Health and Human Services³⁴². The mission of the Centers for Disease Control and Prevention is "[to protect] the health and safety of people (...), [to provide] credible information to enhance health decisions, (...). CDC serves as the national focus for developing and applying disease prevention and control, (...) to improve the health of the people of the United States". 343

³³⁸ DOT "DOT Agencies" online: http://www.dot.gov/DOTagencies.htm (date accessed: September 25, 2003).

³³⁹ FAA "Air Travelers Info" online: http://www1.faa.gov/index.cfm/1146/ (date accessed: September 25, 2003).

See § III.1 above.

³⁴¹ U.S., Federal Aviation Administration, *Interim Guidance Surrounding Severe Acute Respiratory* Syndrome (SARS), Notice 8400.45 (Department of Transportation: 2 April 2003) online: http://www1.faa.gov/avr/afs/notices/8400-sars.htm (date accessed: September 24, 2003).

342 HHS "About HHS" online: http://www.hhs.gov/about/index.html (date accessed: September 25,

<sup>2003).

343</sup> CDC "About CDC" online: http://www.cdc.gov/aboutcdc.htm (date accessed: September 25, 2003).

Through this allocation, CDC was early concerned with SARS and measures that should be implemented to struggle against the spread of disease. The Agency enacted lots of different guidelines and guidance materials to limit SARS in the United States³⁴⁴, where in fact no death due the illness occurred at all according to the statistics of the WHO³⁴⁵.

For the purpose of aviation, the CDC passed five major recommendations to limit the spread of disease on its territory and to protect the health of the personnel:

- Interim Guidance for Cleaning of Commercial Aircraft Following a Flight with a Passenger with Suspected Severe Acute Respiratory Syndrome (SARS)346: in addition to the routine cleaning, the guidance recommends paying particular attention to objects or surfaces that passengers touch very often (e.g. armrests, light and air controls).
- Interim Guidelines about Severe Acute Respiratory Syndrome (SARS) For Airline Flight Crew Members³⁴⁷: recall the importance of proper hand hygiene for crew members and encourage correct use of gloves and mask in the case of SARS suspicious.
- Interim Guidelines about Severe Acute Respiratory Syndrome (SARS) for Workers Handling Cargo or Other Packages³⁴⁸: express that there is no occurrence between transmission other than person to person and not with cargo or packages.

U.S., Centers for Disease Control and Prevention, *Interim Guidance for Cleaning of* Commercial Passenger Aircraft Following a Flight with a Passenger with Suspected Severe Acute Respiratory Syndrome (SARS) (Department of Health and Human Services: 8 May 2003) online: http://www.cdc.gov/ncidod/sars/airpersonnel.htm (date accessed: August 28, 2003).

September 26, 2003).

³⁴⁴ For a global review of materials: CDC "SARS Infection Control and Exposure Management" online: http://www.cdc.gov/ncidod/sars/ic.htm (date accessed: September 25, 2003). ³⁴⁵ WHO "Summary Table of SARS Cases by Country, 1 November 2002 – 7 August 2003" online: http://www.who.int/csr/sars/country/en/country2003_08_15.pdf (date accessed:

U.S., Centers for Disease Control and Prevention, Interim Guidelines about Severe Acute Respiratory Syndrome (SARS) For Airline Flight Crew Members (Department of Health and Human Services: 8 May 2003) online: http://www.cdc.gov/ncidod/sars/airpersonnel.htm (date accessed: August 28, 2003).

³⁴⁸ U.S., Centers for Disease Control and Prevention, *Interim Guidelines about Severe Acute* Respiratory Syndrome (SARS) for Workers Handling Cargo or Other Packages (Department of Health and Human Services: 8 May 2003) online: http://www.cdc.gov/ncidod/sars/airpersonnel.htm (date accessed: August 28, 2003).

- Interim Guidance: Air Medical Transport for Severe Acute Respiratory Syndrome (SARS) Patients³⁴⁹: summarizes provisions to air medical transport.
- Interim Guidelines for Personnel Interacting with Passengers Arriving from Areas with SARS³⁵⁰: describe elementary rules when close contact occurs with an infected person.

Finally, the CDC issued a travel alert³⁵¹ on 11 July 2003 for passengers arriving from SARS affected regions. 352 The rules enacted by the CDC are conforming to the general mandate that is described in the United States Code³⁵³. Moreover. regulations from the CDC are a kind of reference through health divisions of different countries. The importance of these rules is probably to have a good network to transmit information and to have feed back or reports to be as precise as possible. It is probable that these guidelines could be reutilized or reactivated for another disease outbreak even though the epidemic situation will be different for the next occurrence.

³⁴⁹ U.S., Centers for Disease Control and Prevention, *Interim Guidance: Air Medical Transport for* Severe Acute Respiratory Syndrome (SARS) Patients (Department of Health and Human Services: 8 May 2003) online: http://www.cdc.gov/ncidod/sars/airpersonnel.htm (date accessed: August 28, 2003).

U.S., Centers for Disease Control and Prevention, *Interim Guidelines for Personnel Interacting* with Passengers Arriving from Areas with SARS (Department of Health and Human Services: 5 June 2003) online: http://www.cdc.gov/ncidod/sars/airpersonnel.htm (date accessed: August 28, 2003).

According to CDC, a travel alert is: "notification by CDC that an outbreak of a disease is occurring in a geographic area. The purpose of an alert is to provide accurate information to travelers and resident expatriates about the status of the outbreak, how they can reduce their risk for infection, and what to do if they should become ill while in the area. The risk for the individual traveler is felt to be definable and limited; transmission has occurred in defined settings or is associated with specific risk factors (e.g., transmission in a health-care or hospital setting where ill patients are being cared for). CDC does not recommend against nonessential travel to the area". See CDC "Travel Alerts vs. Travel Advisories" online: http://www.cdc.gov/ncidod/sars/travel_

<u>alertadvisory.htm</u> (date accessed: September 25, 2003).

352 U.S., Centers for Disease Control and Prevention, *Health Alert Notice for International* Travelers Arriving in the United States from Areas with SARS (Department of Health and Human Services: 11 July 2003) online: http://www.cdc.gov/ncidod/sars/travel_alert.pdf (date accessed: September 25, 2003). 353 U.S., *The Public Health and Welfare*, 42 U.S.C. § 264-272 (2001) 264, 265 and 270.

IV.3.b.Health Canada

Contrary to the United States, Canada, mostly in Toronto³⁵⁴ (Province of Ontario), was affected by the SARS outbreak and forty-one persons died from the illness.³⁵⁵ To implement measures in the case of the spread of disease, such as the recent outbreak, the federal department of Health Canada is responsible to conduct the action of the Canadian Government in this domain, essentially based on the *Quarantine Act*³⁵⁶ and the related *Quarantine Regulations*³⁵⁷ which "protect Canadians from dangerous and infectious diseases which might pose a threat to public health through the international movement of people, goods and conveyances (airplanes (...))". 358

Regarding the SARS outbreak and civil aviation³⁵⁹, Health Canada enacted several travel advisories and warnings for travellers and also took measures for airports³⁶⁰ in March 2003: incoming passengers have to read the informative health alert notice on SARS, namely the "yellow card", and to answer three important questions regarding symptoms of the illness³⁶¹; inbound flights to

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³⁵⁴ For an overview on the economic impact in Toronto, see e.g. Harris, C., "The Cost of SARS" *Canadian Underwriter* 70:6 (June 2003) 16.

³⁵⁵ *Supra* note 345.

³⁵⁶ Canada, *Quarantine Act*, R.S.C. 1985, c. Q-1.

³⁵⁷ Canada, *Quarantine Regulations*, C.R.C., c. 1368.

Health Canada "Quarantine Act and Regulations – SARS Amendments" online: http://www.hc-sc.gc.ca/english/protection/warnings/sars/fact_sheet.html (date accessed: September 28, 2003).

It is interesting to note that the federal department concerned by the civil aviation, i.e.

Transport Canada, returns to Health Canada for all information and measures regarding SARS.

Transport Canada, returns to Health Canada for all information and measures regarding SARS.
³⁶⁰ Curry, B., "Health Minister Warns of Arguments at Airport" *National Post* (1 May 2003), online:
http://www.nationalpost.com/components/printstory/printstory.asp?id=d6411db9-2f0e-4d69-9
(date accessed: May 1, 2003).

³⁶¹ Canada, Health Canada, *Health Alert Notice: Health Canada Message for International*

³⁶¹ Canada, Health Canada, *Health Alert Notice: Health Canada Message for International Travellers Arriving in or Returning to Canada*, 4th version (8 August 200), online: http://www.hc-sc.gc.ca/pphb-dgspsp/sars-sras/arc-cra/pdf notice/sars_yellow_notice_4efckj.pdf (date accessed: September 28, 2003).

Canada from infected areas have to provide an in-flight video on SARS for passengers; finally, thermal screening machines were installed in Toronto and Vancouver airports for arriving passengers. 362 For outgoing passengers, the essential measure was to receive another health alert notice, namely the "cherry card"³⁶³, which is in substance similar to the yellow card.

In the end, it is interesting to note that the Government of Canada strongly supports today a partial revision of the Quarantine Act and its linked Regulations to include, in the legislation, the specific case of SARS.³⁶⁴ At the time of the writing of this thesis, the Canadian Parliament has not yet accepted the legislative modification.

IV.3.c. Swiss Federal Office for Public Health

Switzerland, headquarters of World Health Organization, was not very affected by the SARS outbreak.³⁶⁵ Nevertheless, the Swiss Federal Office for Public Health (a branch of the Federal Department of Home Affairs) took several measures in accordance with the Loi sur les épidémies³⁶⁶.

³⁶² Canada, Health Canada, *Enhanced Screening Measures on SARS* (30 May 2003) online: http://www.hc-sc.gc.ca/english/protection/warnings/sars/backgrounder.html (date accessed:

September 26, 2003).

September 26, 2003). International Travellers, 3rd version (8 May 2003), online: http://www.hc-sc.gc.ca/pphbdgspsp/sars-sras/arc-cra/pdf_notice/sars_cherry_notice.pdf (date accessed: September 28, 2003).
364 Supra note 358.
365 Supra note 345.

³⁶⁶ Switzerland, Loi fédérale du 18 décembre 1970 sur la lutte contre les maladies transmissibles de l'homme (Loi sur les épidémies), RS 818.101, online: http://www.admin.ch/ch/f/rs/c818_101.html (date accessed: September 26, 2003).

Especially, the Government adopted in April 2003, a special regulation, limited in duration, on SARS and so-called SRAS-Ordonnance³⁶⁷.

Moreover, the Federal Office took, since mid-April last, some measures at the three national airports (Basel, Geneva and Zurich). Essentially, information on SARS was posted in airports for passengers arriving from abroad. Moreover, it requested that airlines flying from infected regions to Switzerland give notice to their passengers on the disease and also to note down their addresses during their stay in Switzerland. Those measures have been cancelled since mid-July 2003.³⁶⁸

Such measures to limit the spread of disease were less restricting than in Canada, for sure. Nevertheless, the Swiss Federal Office for Public Health is working today on a new concept for a possible future disease outbreak, by taking lessons from the past experience. 369

It seems to us that those government administrations comply with their international obligations, according to the Chicago Convention or International Health Regulations.

³⁶⁷ Switzerland, Ordonnance du 1^{er} avril 2003 concernant les mesures de l'Office fédéral de la santé publique sur la prévention du Syndrome Respiratoire Aigu Sévère (SRAS) (SRAS-Ordonnance), RS 818.101.22, online: http://www.admin.ch/ch/f/rs/c818_101_22.html (date accessed: September 26, 2003). Note: SRAS is the french shortening of SARS and means Sydrome Respiratoire Aigu Sévère.

Switzerland, Office fédéral de la santé publique, SRAS: levée des mesures appliquées dans les aéroports suisses (Département fédéral de l'intérieur: 17 July 2003), online: http://www.baq.admin.ch/dienste/medien/2003/f/03071737.htm (date accessed: September 26, 2003). ³⁶⁹ *Ibid*.

This chapter permits us to analyze a little bit more the concrete effect of the outbreak on the field. It is clear that States were first to react and to implement measures, but this work was made in close collaboration with main actors such the airlines and the airports. It is interesting to note that, according to three governments that we analyzed, civil aviation authorities were not very involved in the field of the spread of disease, even if it is certain that measures had probable negative effects on the facilitation of aviation (e.g. screening all passengers). It is certain that if such disease outbreak comes again and more often, civil aviation authorities will be more involved due to measures that will interfere with the ordinary process of passengers, goods, cargo and mail.

V. CONCLUSION

This paper allowed us to go through the field of facilitation, especially the matter of health in aviation. The purpose was to put together different materials. In fact, we only analyzed one aspect of health among others that concern civil aviation, that is to say, the aspect of the spread of disease and protection against it, which appeared to us as one of the most significant topic in this domain for the moment.

V.1. Synthesis

After a statistical introduction, we went into the field of facilitation by analyzing, on the basis of the Chicago Convention³⁷⁰, the policy of Annex 9³⁷¹, which contains widely different aspects regarding customs, documents of travel, facilities, cargo restrictions and health issues.

Secondly, we considered health matters from the perspective of facilitation regarding the spread of disease. Essentially based on ICAO's perspective, it was useful to go through the International Health Regulations³⁷² enacted by the WHO to catch the importance of the relationship between these two actors in international public legal activity. Within the framework of those rules, ICAO was

³⁷⁰ Convention on International Civil Aviation, signed at Chicago, on 7 December 1944, ICAO Doc

<sup>7300.

371</sup> ICAO, Annex 9 (Facilitation) to the *Convention on International Civil Aviation*, 11th ed. (July 2002). ³⁷² WHO, International Health Regulations, Geneva, 3rd ed. (1983).

ready to suggest efficient guidelines for contracting States to limit the spread of disease.

Finally, our work would not be complete without turning into the important policy work that has been conducted by State health agencies in Canada, Switzerland and the United States, and also by associations that bring together airlines (i.e. IATA) or airports (i.e. ACI) and defend their corporate interests. It appears that States, as well as airlines and airports were key players in this field, because they are always working on the "terrain".

The subject we chose for our thesis has not been widely or recently the object of careful attention by legal specialists. In this context, it is significant that "[m]ost passengers are unaware of the medical aspects of air travel and need to be better informed by airlines and medical professionals about inflight health issues". Civil aviation is an industry, among many others, that requires constant attention due to its daily involvement with human behaviour.

As we demonstrated, health issues in the civil aviation are an incredible contribution of international public and private law, but also law from private entities, national regulations and government documents. From our point of view, it was necessary to gather together rudiments that were not a priori linked.

³⁷³ Caplan, H., "Passenger Health Issues Are Best Addressed by Aviation Safety Regulators" (2001) 56:8 ICAO Journal 19, 20.

V.2. What is next?

It is true that the factor of health, especially the one regarding passengers, is becoming more and more important for civil aviation.³⁷⁴ Health was certainly a subject of preoccupation but today it takes on another dimension. It is certain that questions about bio-terrorism are becoming more present in the mind of certain countries, but this fear finds a greater *raison d'être* in new security matters of States.

The SARS epidemic probably gave a serious warning to governments and civil aviation authorities and put into evidence a lack of efficient collaboration among them. Health topics in aviation have definitely to be considered as important and valuable as the drug traffic or customs formalities. Dr. Abeyratne R. I. R. wrote recently an article entitled *International Responsibility in Preventing the Spread of Communicable Disease Through Air Transport – The SARS Crisis*. Airlines suffered enormously from the fear of the disease, even if they are recovering slowly. Illnesses were present well before the aviation era, but represent a new worldwide worry to which the industry is not very used. Basic rules were in place but experience failed for airlines and airports as well as for States throughout the world.

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³⁷⁴ ECAC, *Certains aspects de la santé du passager liés au voyage aérien – Actes*, CEAC Symposium (2002), online: http://www.ecac-ceac.org/fr/ (date accessed: August 16, 2003). ³⁷⁵ This article is not already published at the time of the submission of this thesis. Publication in the Journal of Air Transport is expected in November 2003. See Abeyratne, R. I. R., "Journal Articles" online: http://www.abeyratne.com/journalarticles.html (date accessed: August 22, 2003).

In this context, it is clear that health matters have to be integrated in a more global approach that is on the way in the field of facilitation. The facilitation of the movement of persons and goods worldwide will not be adequate if questions regarding health are not fully considered.

The influence of new technology is also very important: biometrics processing, MRTD, thermal screening, better X-ray detection are supposed to facilitate all procedures but the impact of security concerns on it are more and more tangible. For all that, security is not turned towards facilitation but it is certain that the past two years saw more evolution in the field of security than in facilitation. Nevertheless, those security measures seem to have become permanent and it is now the time for facilitation to integrate and find practical solutions to fit these new barriers.

Technical considerations could greatly help the progress, but it is also important that legal provisions are part of the evolution. An appropriate organization will permit solutions to problems that could be faced at any time in the aviation industry. In other words, it is probably not necessary to adopt a specific international text regarding spread of disease and aviation but it is recommendable to have more visible links between those two fields of work.

The next important meeting of ICAO regarding facilitation will be held in March 2004 in Cairo³⁷⁶. This will be the first worldwide meeting on this matter since the events of September 11, 2001. This occasion will be an appropriate opportunity to evaluate facilitation and above all to regard its future and certainly to consider the place assigned to the consideration of and preoccupation with health by States, airlines, airports, employees and passengers. It is hoped that consequences from the events of 2002-2003 will be included in the final decisions of the Conference.

³⁷⁶ *Supra* note 70.

VI. APPENDIX

VI.1. Appendix A

This appendix A is reproduced from the ICAO Aviation Medicine Section website³⁷⁷:

Recommended anti-SARS protective measures

An international airport is considered as having adequate protection against SARS if the following protective measures have been adopted:

- An airport public health emergency official has been appointed as responsible for the implementation of all SARS protective measures. This person, who is not necessarily a physician, coordinates the SARS protective measures at the airport.
- 2. Warning is given (e.g. posters, PA announcements) to crew and passengers before or immediately on entering the airport premises that no one with symptoms of SARS will be allowed to board any flight.

Note: Sample text of such warning- "This airport has SARS screening in place. Passengers found to be possible SARS cases will not be allowed to board any flight. The most common symptoms of SARS are fever, cough, and shortness of breath".

- Screening of <u>departing</u> passengers for SARS symptoms is undertaken in accordance with WHO recommendations. This is accomplished by:
 - a. Asking, as a minimum, the three WHO questions[³⁷⁸], of all departing passengers, preferably before but no later than at check-in;

and

³⁷⁷ ICAO "ICAO Aviation Medicine Section, SARS" online: http://www.icao.org/cgi/goto.pl?icao/en/ med/aviomed htm (date accessed: August 26, 2003)

med/aviomed.htm (date accessed: August 26, 2003).

378 Questions are: a) Have you had contact with SARS?; b) Do you have any SARS symptoms?; c) Have any of your family members contact with SARS? *Supra* note 326 at 5.

b. Objective temperature measurement by a reliable method such as thermal imaging, infrared measurement or the use of thermometers (oral or axillary with disposable sheaths, aural with disposable caps, sublingual strips, forehead fever strips).

Note i: Temperature screening takes place as early as possible and no later than before passengers and crew enter the secure airside area.

Note ii: Temperature screening machines are calibrated and maintained according to the manufacturers' recommendations and operators are knowledgeable in their use.

Personnel using thermometers are knowledgeable in their proper use and the correct interpretation of readings.

- c. If any of the WHO questions are answered positively and/or if the temperature reading exceeds 37.5 degrees, the passenger is isolated and evaluated by a designated health care provider.
- d. A passenger who is coughing is provided with a face mask.

Note i: A positive response to any of the three questions is normally a trigger for the check-in staff or the immigration staff to make the decision that a secondary screening is required. However, the answer to the query as to whether the passenger comes from a SARS affected area is of little importance when the two other questions are answered in the negative. Consequently, these passengers need not be sent for secondary screening if there are no other indications for them to be so screened.

Note ii: The current WHO recommended level (38 degrees Celsius) is based on core body temperature and since the temperature measuring devices may vary, a lower screening temperature is specified to avoid false negatives.

- e. If the secondary screening determines that the person in question is a possible case of SARS, then the person has to undergo a medical examination and assessment by a qualified medical practitioner.
- f. If the medical practitioner determines that the said person is well and does not meet the WHO SARS suspect case definition, the person is allowed to continue the voyage.

- g. If the medical practitioner determines that the said person meets the suspect SARS case definition, the person is taken to the designated SARS hospital.
- h. If the person does not meet the SARS case definition but the medical practitioner determines that the person is ill, continuation of the voyage may only be allowed after the usual IATA procedures for such cases have been followed (submission of the MEDIF form to the airline's medical service).
- 4. <u>Disembarking</u> passengers arriving from affected areas are normally screened by responding to questionnaires, completed during the flight or at the latest, immediately upon disembarkation. These questionnaires are reviewed at the time of disembarkation. Passengers offering positive responses are referred for secondary screening.

Note i: A positive response to any of the three WHO questions is normally a trigger for the check-in staff or the immigration staff to make the decision that a secondary screening is required. However, the answer to the query as to whether the passenger comes from a SARS affected area is of less importance when the two other questions are answered in the negative. Consequently, these passengers need not be sent for secondary screening if there are no other indications for them to be so screened.

Note ii: Temperature screening of disembarking passengers is accomplished as early as possible after disembarkation and before passengers are divided into transit and arriving passengers and always before immigration clearance. Steps are taken to prevent passengers arriving from affected areas to enter any common arrival or transit areas before screening has taken place.

Passengers arriving from non-affected areas but who may have been routed through/from an affected area are normally screened as well.

Note: The initial, secondary and tertiary screening procedures are in the same format as for departing passengers.

- All passengers are provided with information about SARS symptoms and the appropriate public health contact numbers if available.
- 6. Procedures are in place to respond to the arrival of an aircraft with a possible SARS case on board. These procedures are:

- a. Formal questions to be asked of the pilot-in-command (PIC) of the arriving aircraft (number of passengers involved, their symptoms, and time of onset of symptoms).
- Information to be provided to the PIC: where to park (usually away from the jet-bridge), no disembarkation of ill passenger/s until medical clearance, which doors to open.
- c. In the eventuality that a sick passenger has to be removed from the aircraft before being medically assessed, removal to a designated isolation area should await the arrival of the medical practitioner. In this situation all infection control measures are to be employed including personal protective equipment for persons in close contact with the passenger. Persons using the equipment are to be trained in its proper use.
- d. A sick passenger (meeting the WHO SARS suspect case definition) should be removed directly from the aircraft, without passing through arrival areas used by other passengers. Only if direct removal is impossible should other procedures be employed. In all cases, contact with other passengers and airport staff must be minimized.
- e. Airport management and designated public health authorities are immediately alerted.
- f. Passengers and crew from this flight are segregated until contact information is obtained and passengers and crew have been advised of the precautionary measures necessary.
- g. Procedures are in place for Immigration and Customs clearance of ill passengers taken directly from the arriving aircraft.
- h. The necessary infection control measures are implemented by the airport authorities.

Note i: Personal protective equipment is worn by all persons in close contact with the suspect case. This equipment includes disposable surgical gloves, eye protection (close fitting goggles or face shield), facemask or respirator, disposable outer garment. In all cases a facemask is provided to the ill person.

Note ii: Receiving hospital and ambulance service are designated.

Note iii: All disposable materials possibly in contact with the suspect case including protective equipment worn by caregivers to be disposed of as biohazardous waste.

Note iv: All surfaces in contact with or possibly contaminated by the suspect case are to be properly disinfected.

- 7. All airport workers are subject to daily temperature screening at the beginning of their work shift.
- 8. Workers are reminded by posted information or other means of their obligation not to report to work if they are unwell.

VI.2. Appendix B

This appendix B is reproduced from the IATA website³⁷⁹:

RECOMMENDED PRACTICE 1798

CARRIAGE OF PASSENGERS WITH INFECTIOUS DISEASES PSC(20)1798

Published in 1998

RECOMMENDED that, when it is determined by a Member that it unknowingly and/or unwittingly transported a passenger with an infectious disease, the following guidelines be implemented.

1. Members should inform passengers through their public relations, literature, inflight magazines, etc. that passengers who know they have an infectious disease should not travel by air, as they can expose other passengers and crew members to such infectious disease.

³⁷⁹ IATA, *Carriage of passengers with infectious diseases*, recommended practice 1798, PSC(20)1798 (1998) online: http://www.iata.org/pressroom/pr/2003-04-10-01.htm (date accessed: September 22, 2003).

- 2. When a Member is advised by a health authority that it may have transported a passenger with an infectious disease (hereafter referred to as the "index case"), it shall co-operate with such health authority, with the understanding that it is not the Member's responsibility to trace and notify other passengers who may have been exposed to the infectious disease.
- 3. The Member should notify its Medical Department or Advisor.
- 4. If the health authority requests a list of other passengers who may have been exposed to the infectious disease, the health authority should be advised to first utilise immigration records of the arriving passengers, such as landing cards, in order to determine the names and addresses of such passengers.
- 5. If the health authority advises the Member that it was unable to determine from immigration records, the names of other passengers who may have been exposed to the infectious disease, the Member should ask the health authority to make a formal request for a list of passengers and provide at least the following information:
- · the index passenger's full name, nationality and permanent address;
- · names of other passengers who travelled with the index case;
- · the flight(s) and dates of travel, origin/destination of the index passenger, duration of flight and seat number:
- · confirmation of the nature of the communicable disease, including mode of transmission, incubation period, period of communicability, susceptibility, and control measures;
- · distance from the infected passenger that other passengers could have been infected, e.g. number of rows in the aircraft, to the best knowledge of the health authorities;

Note: It should be noted that there is an increase in tuberculosis, meningitis, and similar infectious diseases, and that seating proximity to the infected passenger is relevant.

· confirmation of posting on the World Health Organi[z]ation Internet Bulletin Board at: http://www.who.ch/outbreaks;

- · endorsement of a competent national authority to proceed with contact tracing of other passengers, and/or preventive therapy;
- commitment to contact trace all at risk passengers;
- · information "cascade" to foreign "Health Authorities" of originating and intermediate countries.
- 6. The health authority should exonerate the Member of any liability or responsibility, or costs, that could result from notifying other passengers.
- 7. The Member should attempt to verify/confirm that it in fact carried the index passenger.
- 8. After the Member verifies that it did in fact transport the index passenger, and if the health authority requests a list of other passengers who could have been infected, the Member should attempt to compile a list of such passengers, including the contact information which is available, and seat numbers.
- 9. The Member should deny disclosure to the health authority if disclosing passenger list/seat assignment data violates local, national or international laws and/or regulations (e.g. privacy/ confidentiality laws, data protection laws, etc.)
- 10. The Member should make it clear to the health authority that if the Member's data is inadequate, e.g. the information on other passengers may no longer be available, it may only consist of passenger names, and possibly telephone number at the time the booking was made.
- 11. The Member could, depending on the circumstances and/or local regulations, contact the crew members who may have been exposed to the infectious disease, and offer necessary diagnostic procedures and/or treatment, or handle as deemed appropriate by the Member concerned.

VII. BIBLIOGRAPHY

VII.1. International materials

- Convention on International Civil Aviation, signed at Chicago, on 7
 December 1944 (Chicago Convention), ICAO Doc 7300.
- Convention on the Law of Treaties, signed at Vienna, on 23 May 1969
 (Vienna Convention), UNGA Doc A/CONF/39/27, 1155 UNTS 331.
- ICAO, Annex 1 (Personnel Licensing) to the *Convention on International Civil Aviation*, 9th ed. (July 2001).
- ICAO, Annex 6 Part I (Operation of Aircraft Aeroplanes) to the Convention on the International Civil Aviation, 8th ed. (July 2001).
- ICAO, Annex 6 Part II (Operation of Aircraft Aeroplanes) to the *Convention on the International Civil Aviation*, 6th ed. (July 1998).
- ICAO, Annex 9 (Facilitation) to the *Convention on International Civil Aviation*, 11th ed. (July 2002).
- ICAO, Annex 14 volume I (Aerodromes) to the *Convention on International Civil Aviation*, 3rd ed. (July 1999).
- ICAO, Annex 15 (Aeronautical Information Services) to the *Convention on International Civil Aviation*, 11th ed. (July 2003).
- ICAO, Annexe 17 (Sûreté) à la Convention relative à l'aviation civile internationale, 6th ed. (March 1997).
- ICAO, Annex 18 (The Safe Transport of Dangerous Goods by Air) to the *Convention on International Civil Aviation*, 3rd ed. (July 2001).
- OIE, Aquatic Animal Health Code, Paris, 6th ed. (2003).
- OIE, Terrestrial Animal Health Code, Paris, 12th ed. (2003).

• WHO, International Health Regulations, Geneva, 3rd ed. (1983).

VII.2. Resolutions, documents, studies and news releases (from public and private organizations)

- ACI, Policy Handbook, 3rd ed. (2000).
- ACI, Policy Handbook, 4th ed. (2003).
- ACI, Rôle et activités (June 2003).
- ACI, The Impact of Severe Acute Respiratory Syndrome (SARS) on the Airports in the Pacific Region, ACI-Pacific Regional Office, revised version (May 28, 2003).
- ACI, Press release, "Atypical Pneumonia/ Severe Acute Respiratory Syndrome" (7 April 2003), online: http://www.airports.org (date accessed: August 29, 2003).
- ECAC, Certains aspects de la santé du passager liés au voyage aérien –
 Actes, CEAC Symposium (2002), online: http://www.ecac-ceac.org/fr/
 (date accessed: August 16, 2003).
- ECAC, Déclaration de politique de la CEAC dans le domaine de la facilitation de l'aviation civile, CEAC Doc 30 Part 1, 9th ed. (2003), online: http://www.ecac-ceac.org/fr/ (date accessed: August 16, 2003).
- IATA, Acceptance and Carriage of Incapacitated Passengers, resolution 700, PSC(23)700 (2002).
- IATA, Carriage of Passengers with Infectious Diseases, recommended practice 1798, PSC(20)1798 (1998), online: http://www.iata.org/pressroom/pr/2003-04-10-01.htm (date accessed: September 22, 2003).
- IATA, Guide to Facilitation, 3rd ed. (1991).

- IATA, News release n°8, "Fighting SARS" (10 April 2003), online: http://www.iata.org/pressroom/pr/2003-04-10-01.htm (date accessed: September 22, 2003).
- IATA, News release n°11, "Airlines Refine Battle Plans to Fight SARS" (24 April 2003), online: http://www.iata.org/pressroom/pr/2003-04-24-02.htm (date accessed: September 23, 2003).
- IATA, Press release n°13, "IATA Supports ASEAN Plan to Fight SARS" (30 April 2003), online: http://www.iata.org/pressroom/pr/2003-04-30-01.htm (date accessed: September 23, 2003).
- IATA, News release n°14, "World Airline CEOs Support Pre-check-in Screening of Passengers" (5 May 2003), online: http://www.iata.org/pressroom/pr/2003-05-05-01.htm (date accessed: September 22, 2003).
- ICAO, Consolidated Statement of Continuing ICAO Policies in the Air Transport Field, Res. A33-19.
- ICAO, Sickle Cell Trait in Civil Aviation, Res. A21-24, online: http://www.icao.int/icao/en/res/a21_24.htm (date accessed: August 26, 2003).
- ICAO, Smoking Restrictions on International Passenger Flight, Res. A29-15, online: http://www.icao.int/icao/en/res/a29_15.htm (date accessed: August 26, 2003).
- ICAO, Aims of ICAO in the Field of Facilitation, Doc 7891-C/906/2, 2nd ed. (1965).
- ICAO, Disruption of International Air Transport Services on Grounds of Public Health, WP/27 presented at FAL/11, 18-28 April 1995 (20 March 1995).
- ICAO, Models for National Facilitation (FAL) Programmes and Airport FAL Programmes, WP/13 presented at FALP/3, 12-16 February 2001 (22 January 2001).
- ICAO, Rapport de la dixième session, Doc 9527, FAL/10 (1988).
- ICAO, Report of the Eleventh Session, Doc 9649, FAL/11 (1995).

- ICAO, State Letter SD 6/1-03/57 and Attachment "Facilitation Division Twelfth Session" (27 June 2003).
- ICAO, Letter PRES AK/893 "Implementation of Anti-SARS Protective Measures at Airports" (18 June 2003).
- ICAO, Letter AN 5/23-03/50 "Severe Acute Respiratory Syndrome" (2 May 2003).
- ICAO, Dr. Curdt-Christiansen C., "Report on Mission to Singapore 2 to 4 June 2003" [unpublished].
- ICAO, News release PIO 4/95, "ICAO Facilitation Meeting Considers Aircraft Disinsection, Public Health, Asylum Seekers and Persons with Disabilities" (April 1995), online: http://www.icao.org/cgi/goto.pl?icao/en/nr/nr.htm (date accessed: August 16, 2003).
- ICAO, News release PIO 07/2003, "ICAO Issues Guidelines Regarding SARS" (May 2003), online: http://www.icao.org/cgi/goto.pl?icao/en/nr/nr.htm (date accessed: August 21, 2003).
- ICAO, News release PIO 10/2003, "ICAO Develops Anti-SARS Protective Measures for International Airports" (4 June 2003), online: http://www.icao.org/cgi/goto.pl?icao/en/nr/nr.htm (date accessed: August 20, 2003).
- ICAO, News release PIO 12/2003, "World Air Passenger Traffic to Stabilize in 2003, Growth Expected in 2004" (11 August 2003), online: http://www.icao.org/cgi/goto.pl?icao/en/nr/pio200312.htm (date accessed: September 2, 2003).
- WHO, Guidelines for Safe Transport of Infectious Substances and Diagnostics Specimens, Doc WHO/EMC/97.3 (1997).
- WHO, Guide to Hygiene and Sanitation in Aviation, 2nd ed. (1977).
- WHO, Revision of the International Health Regulations, 111th Executive Board Session, Doc EB111/34 (15 December 2002).
- WHO, Revision of the International Health Regulations, 56th World Health Assembly, Doc A56/25 (24 March 2003).

- WHO, Revision of the International Health Regulations SARS, 56th World Health Assembly, Doc A56/48 (17 May 2003).
- WHO, Tuberculosis and Air Travel: Guidelines for Prevention and Control,
 Doc WHO/TB/98.256 (1998).
- WHO, Weekly Epidemiological Record, 73:15 (10 April 1998) 105, online: http://www.who.int/docstore/wer/pdf/1998/wer7315.pdf (date accessed: September 15, 2003).
- WHO, Weekly Epidemiological Record, 78:14 (4 April 2003) 97, online: http://www.who.int/wer/pdf/2003/wer7814.pdf (date accessed: August 23, 2003).
- WHO, Press release WHO/96, "WHO Guidelines Address Risk of Tuberculosis Transmission during Air Travel" (17 December 1998), online: http://www.who.int/inf-pr-1998/en/pr98-96.html (date accessed: August 23, 2003).
- Singapore Airlines, News release, "Singapore Airlines Responds to World Health Organization Travel Advisory" (17 March 2003), online: http://www.singaporeair.com/saa/app/saa (date accessed: August 29, 2003).
- Singapore Airlines, News release, "SARS: SIA Introduces New On-Board Measures" (3 April 2003), online: http://www.singaporeair.com/saa/app/saa (date accessed: August 29, 2003).
- Singapore Airlines, News release, "SIA to Distribute Health Kit Onboard" (13 May 2003), online: http://www.singaporeair.com/saa/app/saa (date accessed: August 29, 2003).

VII.3. Legislation

- Canada, Quarantine Act, R.S.C. 1985, c. Q-1.
- Canada, *Quarantine Regulations*, C.R.C., c. 1368.

- Switzerland, Loi fédérale du 18 décembre 1970 sur la lutte contre les maladies transmissibles de l'homme (Loi sur les épidémies), RS 818.101, online: http://www.admin.ch/ch/f/rs/c818_101.html (date accessed: September 26, 2003).
- Switzerland, Ordonnance du 1^{er} avril 2003 concernant les mesures de l'Office fédéral de la santé publique sur la prévention du Syndrome Respiratoire Aigu Sévère (SRAS) (SRAS-Ordonnance), RS 818.101.22, online: http://www.admin.ch/ch/f/rs/c818 101_22.html (date accessed: September 26, 2003).
- U.S., The Public Health and Welfare, 42 U.S.C. § 264-272 (2001).

VII.4. Government documents

- Canada, Health Canada, Enhanced Screening Measures on SARS (30 May 2003), online: http://www.hc-sc.gc.ca/english/protection/warnings/sars/backgrounder.html (date accessed: September 26, 2003).
- Canada, Health Canada, Health Alert Notice: Health Canada Message for International Travellers Arriving in or Returning to Canada, 4th version (8 August 200), online: http://www.hc-sc.gc.ca/pphb-dgspsp/sars-sras/arc-cra/pdf notice/sars yellow notice 4efckj.pdf (date accessed: September 28, 2003).
- Canada, Health Canada, Health Alert Notice: Health Canada Message to All Departing International Travellers, 3rd version (8 May 2003), online: http://www.hc-sc.gc.ca/pphb-dgspsp/sars-sras/arc-cra/pdf notice/sars_cherry_notice.pdf (date accessed: September 28, 2003).
- Switzerland, Office fédéral de la santé publique, SRAS: levée des mesures appliquées dans les aéroports suisses (Département fédéral de

- l'intérieur: 17 July 2003), online: http://www.bag.admin.ch/dienste/ medien/2003/f/03071737.htm (date accessed: September 26, 2003).
- U.K., H.L., "Report of the Science and Technology Committee on Air Travel and Health", Cm 121-II in Sessional Papers, 5th report (1999-2000), online: http://www.parliament.the-stationery-office.co.uk/pa/ld199900/ldselect/ldsctech/121/12101.htm (date accessed: August 31, 2003).
- U.S., Department of State, *Proceedings of the International Civil Aviation Conference*, n° 1 & 2, Chicago (November 1, 1944 December 7, 1944).
- U.S., Federal Aviation Administration, Interim Guidance Surrounding Severe Acute Respiratory Syndrome (SARS), Notice 8400.45 (Department of Transportation: 2 April 2003), online: http://www1.faa.gov/avr/afs/notices/8400-sars.htm (date accessed: September 24, 2003).
- U.S., Centers for Disease Control and Prevention, Interim Guidance for Cleaning of Commercial Passenger Aircraft Following a Flight with a Passenger with Suspected Severe Acute Respiratory Syndrome (SARS) (Department of Health and Human Services: 8 May 2003), online: http://www.cdc.gov/ncidod/sars/airpersonnel.htm (date accessed: August 28, 2003).
- U.S., Centers for Disease Control and Prevention, Interim Guidelines
 about Severe Acute Respiratory Syndrome (SARS) For Airline Flight Crew
 Members (Department of Health and Human Services: 8 May 2003),
 online: http://www.cdc.gov/ncidod/sars/airpersonnel.htm (date accessed:
 August 28, 2003).
- U.S., Centers for Disease Control and Prevention, Interim Guidelines about Severe Acute Respiratory Syndrome (SARS) for Workers Handling Cargo or Other Packages (Department of Health and Human Services: 8 May 2003), online: http://www.cdc.gov/ncidod/sars/airpersonnel.htm (date accessed: August 28, 2003).

- U.S., Centers for Disease Control and Prevention, Interim Guidance: Air Medical Transport for Severe Acute Respiratory Syndrome (SARS)
 Patients (Department of Health and Human Services: 8 May 2003), online:
 http://www.cdc.gov/ncidod/sars/airpersonnel.htm (date accessed: August 28, 2003).
- U.S., Centers for Disease Control and Prevention, Interim Guidelines for Personnel Interacting with Passengers Arriving from Areas with SARS (Department of Health and Human Services: 5 June 2003), online: http://www.cdc.gov/ncidod/sars/airpersonnel.htm (date accessed: August 28, 2003).
- U.S., Centers for Disease Control and Prevention, Health Alert Notice for International Travelers Arriving in the United States from Areas with SARS (Department of Health and Human Services: 11 July 2003), online: http://www.cdc.gov/ncidod/sars/travel_alert.pdf (date accessed: September 25, 2003).

VII.5. Jurisprudence

• R. v. Sansregret [1985] S.C.R. 570.

VII.6. Books and monographs

- Abeyratne, R. I. R., *Aviation Security: Legal and Regulatory Aspects* (Aldershot: Ashgate, 1998).
- Addy, N. A., Aviation: the New Order (Montreal: McGill thesis, Institute of Air and Space Law, 2002).
- Cheng, B., *The Law of International Air Transport* (London: Stevens & Sons limited, 1962).

- Diederiks-Verschoor, I. H. Ph., An Introduction to Air Law, 5th ed.
 (Deventer: Kluwer Law and Taxation Publishers, 1993).
- Draeger, J., Kriebel, J., Praktische Flugmedizin (Landsberg: Ecomed Verlagsgesellschaft AG & Co. KG, 2002).
- Fidler, D. P., *International Law and Infectious Diseases* (Oxford: University Press, 1999).
- Fidler, D. P., *International Law and Public Health* (Ardsley: Transnational Publishers, Inc., 2000).
- De Juglart, M., *Traité de droit aérien*, t. 1, 2nd ed. (Paris: Libraire Générale de Droit et de Jurisprudence, 1989).
- Matte, N. M., Treatise on Air-Aeronautical Law (Montreal: McGill University, 1981).
- Martinez, L., ed., International Travel and Health (Geneva: WHO, 2002).
- McFarland, R., Human Factors in Air Transportation: Occupational Health and Safety, 1st ed. (New York, Toronto, London: McGraw-Hill Book Company, 1953).
- Naveau, J., Godfroid, M., Précis de droit aérien (Bruxelles : Emile Bruylant S.A., 1988).
- Piera, A. J., Automation in Facilitation of Air Transport (Montreal: McGill thesis, Institute of Air and Space Law, 2000).
- Shawcross C., Beaumont M., *Air Law*, vol. 1, 4th ed. (London: Butterworths, 1977).
- Roberts, M. A., "Role of Aviation in the Transmission of Disease" in R. L. DeHart, ed., Fundamentals of Aerospace Medicine, 2nd ed. (Baltimore: Williams & Wilkins, 1996) 1003.
- Weiss, E. L., "Epidemiologic Alert at International Airports" in Robert S., ed., Textbook of Travel Medicine and Health, 2nd ed. (Hamilton ON: B. C. Decker, 2001) 530.
- Wijesinha, S. S., Legal Status of the Annexes to the Chicago Convention (Montreal: McGill thesis, Institute of Air and Space Law, 1960).

VII.7. Periodicals

- Abeyratne, R. I. R., "Facilitation and the ICAO Role A Prologue for the Nineties" (1990) XV Annals of Air & Space Law 3.
- Abeyratne, R. I. R., "The Legal Status of the Chicago Convention and its Annexes" (1994) XIX:3 Air & Space Law 113.
- Abeyratne, R. I. R., "The Role of Automation in Facilitation of Air Transport into the 21st Century" (1995) XX:I Annals of Air & Space Law 259.
- Abeyratne, R. I. R., "The Spread of Tuberculosis in the Aircraft Cabin Air Carrier Liability" (1999) XXIV:4/5 Air & Space Law 181.
- Abeyratne, R. I. R., "The Spread of Tuberculosis in the Aircraft Cabin Issues of Air Carrier Liability" (2000) 27:1 Transportation Law Journal 41.
- Abeyratne, R. I. R., "Tobacco Smoking in Aircraft A Fog of Legal Rhetoric?" (1993) XVIII:2 Air & Space Law 50.
- Caplan, H., "Passenger Health Issues Are Best Addressed by Aviation Safety Regulators" (2001) 56:8 ICAO Journal 19.
- Caplan, H., "Passenger Health Who's in Charge?" (2001) XXVI:4-5 Air &
 Space Law 203.
- Clark, L. S., "Deep Vein Thrombosis A New Risk Exposure Area?"
 (2001) XXVI:4-5 Air & Space Law 218.
- Curdt-Christiansen, C., "Report of U.K. Parliamentary Inquiry Calls for a Higher Profile for Passenger Health" (2001) 56:8 ICAO Journal 16.
- Ducrest, J., "Legislative and Quasi-Legislative Functions of ICAO:
 Towards Improved Efficiency" (1995) XX:I Annals of Air & Space Law 343.
- Fan, E. X., "SARS: Economic Impacts and Implications" (2003) 15 ERD Policy Brief, Asian Development Bank.
- Gratz, N. G., Steffen, R. & Cocksedge, W., "Why Aircraft Disinsection?"
 (2000) 78:8 Bulletin of the World Health Organization 995.
- Heitmeyer, R., "Biometric Identification Promises Fast and Secure Processing of Airline Passengers" (2000) 55:9 ICAO Journal 10.

- McMunn, M., "Aviation Security and Facilitation Programmes Are Distinct but Closely Intertwined" (1996) 51:9 ICAO Journal 7.
- Mohler, S. R., "Layovers in Underdevelopped Countries Increase Risk of Contracting Infectious Diseases" (2000) 39 Focus on Commercial Aviation Safety 10.
- Parmet, A. J., "Tuberculosis on the Flight Deck" (1999) 70:8 Aviation,
 Space, and Environmental Medicine 817.
- Piera, A. J., "Facilitation of Air Transport" (2001) XXVI:6 Air & Space Law
 315.
- Rayman, R. B., "Passenger Safety, Health, and Comfort: A Review" (1997)
 68:5 Aviation, Space and, Environmental Medicine 432.
- Smith, A. J., "Cabin Air Quality in Aircraft: What is the Problem?" (1996)
 61:3 The Journal of Air Law and Commerce 721.
- "SARS Measures Developed for Use at International Airports" *ICAO Journal* 58:4 (2003) 26.

VII.8. Newspapers and magazines

- Crampton, T., "Airports Stepping Up Screening for SARS" The International Herald Tribune (28 March 2003), online: http://www.iht.com/cgibin/generic.cgi?template=articleprint.tmplh&ArticleId=91396 (date accessed: March 28, 2003).
- Curry, B., "Health Minister Warns of Arguments at Airport" National Post (1 May 2003), online: http://www.nationalpost.com/components/printstory/
 printstory.asp?id=d6411db9-2f0e-4d69-9 (date accessed: May 1, 2003).
- Fiorino, F., "SARS: A New Blow Mysterious Illness Could Wreak Serious Economic Effects for Airlines" Aviation Week & Space Technology 158:14 (April 2003) 59.

- Harris, C., "The Cost of SARS" Canadian Underwriter 70:6 (June 2003)
 16.
- Kuepper, G. J., "Aviation Terrorism & Biological Agents" *ARFF News* (March 2003), online: http://www.emergency-management.net/pdf/arff.pdf (date accessed: August 23, 2003).
- Maynard, M., "Fears Arise on Hygiene of Cabin Air" The New York Times
 (4 April 2003), online: <a href="http://www.iht.com/cgi-bin/generic.cgi?template="http:/
- Raffel, R., "Weapons of Mass Destruction and Civil Aviation Preparedness" FBI Law Enforcement Bulletin 72:5 (May 2003) 1.
- Sparaco, P. "SARS in Europe" *Aviation Week & Space Technology* 158:17 (April 2003) 24.
- "Contaminated Cabins Can Spread Disease" Air Safety Week 14:11
 (March 2000) 1.
- "Flying A Health Hazard?" Aircraft & Aerospace (July 2000) 48.
- "Risk of Deadly Respiratory Infection Fuels Fear of Air Travel" *Air Safety Week* 17:15 (April 2003) 1.
- "World Needs Biological Early Warning System", Editorial, Aviation Week
 & Space Technology 158:17 (April 2003) 58.

VII.9. Other materials

• The New Shorter Oxford English Dictionary, 4th ed., Oxford, Clarendon Press, 1993, *s.v.* "facilitation".

VII.10. Internet sites

- Abeyratne, R. I. R., "Journal Articles" online: http://www.abeyratne.com/ journalarticles.html (date accessed: August 22, 2003).
- ACI "ACI Committees" online: http://www.airport-technology.net /aci/committees.html (date accessed: September 22, 2003).
- ACI "Passenger Traffic Reports" online: http://www.airports.org (date accessed: August 29, 2003).
- ACI "Year to Date Traffic Reports" online: http://www.airports.org (date accessed: August 29, 2003).
- AFA "SARS Severe Acute Respiratory Syndrome" online:
 http://www.afanet.org/sars2.asp (date accessed: September 24, 2003).
- Airline "Cathay Pacific" online: http://www.cathaypacific.com (date accessed: August 30, 2003).
- CDC "About CDC" online: http://www.cdc.gov/aboutcdc.htm (date accessed: September 25, 2003).
- CDC "SARS Infection Control and Exposure Management" online: http://www.cdc.gov/ncidod/sars/ic.htm (date accessed: September 25, 2003).
- CDC "Travel Alerts vs. Travel Advisories" online: http://www.cdc.gov/ncidod/sars/travel_alertadvisory.htm
 (date accessed: September 25, 2003).
- DOT "DOT Agencies" online: http://www.dot.gov/DOTagencies.htm (date accessed: September 25, 2003).
- Dragonair "Operational Statistics" online: http://www.dragonair.com/
 /icms/servlet/template?series=1&lang=eng&article=1082 (date accessed: September 29, 2003).
- FAA "Air Travelers Info" online: http://www1.faa.gov/index.cfm/1146/ (date accessed: September 25, 2003).
- FAO "Food and Agriculture Organization of the United Nations" online:
 http://www.fao.org/ (date accessed: October 5, 2003).

- Health Canada "Quarantine Act and Regulations SARS Amendments" online: http://www.hcsc.gc.ca/english/protection/warnings/sars/fact_sheet.
 httml (date accessed: September 28, 2003).
- HHS "About HHS" online: http://www.hhs.gov/about/index.html (date accessed: September 25, 2003).
- Hyperdictionary online: http://www.hyperdictionary.com/dictionary/
 communicable+disease (date accessed : September 9, 2003).
- IATA "About Us" online: http://www.iata.org/about/index (date accessed: September 22, 2003).
- IATA "Facilitation" online: http://www.iata.org/soi/securityfacilitation
 /facilitation/index (date accessed: September 23, 2003).
- IATA "Fast Facts: The Air Transport Industry in Europe Has United to Present its Key Facts and Figures" online: http://www.iata.org/pressroom/industry_stats/2003-04-10-01.htm (date accessed: September 29, 2003).
- IATA "International Traffic Statistics: June 2003" online: http://www.iata.org/pressroom/industry_stats/2003-08-04-01.htm (date accessed: September 1, 2003).
- IATA "Severe Acute Respiratory Syndrome (SARS) Information Site" online: http://www.iata.org/WHIP/Public/frmMain_Public.aspx?Wgld=0263 (date accessed: September 23, 2003).
- ICAO "Annex 9, Status" online:
 http://www.icao.int/icao/en/atb/fal/annex-9-status.htm (date accessed: August 18, 2003).
- ICAO "Facilitation, Advance Passenger Information" online: http://www.icao.int/icao/en/atb/fal/api.htm (date accessed: August 18, 2003).
- ICAO "Facilitation Overview" online: http://www.icao.int/icao/en/atb/fal/overview.htm (date accessed: August 18, 2003).
- ICAO "ICAO Aviation Medicine Section, SARS" online: http://www.icao.org/cgi/goto.pl?icao/en/med/aviomed.htm
 (date accessed: August 26, 2003).

- IFALPA "Safety Bulletins" online: http://www.ifalpa.org/ (date accessed: September 24, 2003).
- OIE "What is the OIE" online: http://www.oie.int/eng/oie/en_oie.htm (date accessed: September 10, 2003).
- Unique Airport "Facts" online: http://www.uniqueairport.com/e partner/8unique/fact01sd.htm (date accessed: September 30, 2003).
- WHO "Disease Outbreak News" online: http://www.who.int/csr/don/en/ (date accessed: September 8, 2003).
- WHO, "Disease Outbreak News Update on Situation in Singapore" (June 6, 2003) online: http://www.who.int/csr/don/2003_06_06/en/ (date accessed: August 23, 2003).
- WHO "Fact Sheet on Smallpox" online:
 http://www.who.int/mediacentre/factsheets/smallpox/en/ (date accessed: September 9, 2003).
- WHO "International Norms ('Guidelines') on Water, Sanitation and Hygiene" online: http://www.who.int/water-sanitation-hygiene/norms/en (date accessed: September 11, 2003).
- WHO "Summary Table of SARS Cases by Country, 1 November 2002 7
 August 2003" online: http://www.who.int/csr/sars/country/en/country/2003_08_15.pdf (date accessed: September 26, 2003).
- WHO "World Health Organization Issues Emergency Travel Advisory" online: http://www.who.int/csr/sarsarchive/2003_03_15/en/ (date accessed: September 17, 2003).