



## SUMMARY REPORT

### Introduction

The [International Civil Aviation Organization](#) (ICAO) and the [Institute of Air and Space Law \(IASL\) of McGill University](#), in Montreal, co-organized a worldwide [Air Transport Conference: What Route to Sustainability](#), which preceded the [37th Session of the ICAO Assembly](#). The event attracted over 240 participants from around the globe. It was sponsored by Bombardier, the International Air Transport Association (IATA), Air Canada, the Civil Air Navigation Services Organisation (CANSO), EUROCONTROL, Embraer, Aéroports de Montréal (ADM) and The World Bank. Other event support was provided by Airports Council International (ACI), Flight Safety Foundation; International Federation of Airline Pilots' Associations (IFALPA), and International Coordinating Council of Aerospace Industries Associations (ICCAIA).

The Conference was opened with "Welcoming Remarks" by Prof. Daniel Jutras, Dean, Faculty of Law, McGill University and an "Introductory Address" by Mr. Raymond Benjamin, Secretary General, ICAO.

The Conference proper began with an interactive panel setting the scene by examining how the financial crisis had impacted airlines and other industry stakeholders, especially with respect to the lingering cost and revenue crises airlines were facing. The panel also examined the Recovery Strategies being used to address in the long term, the multi-layered challenges airlines were confronted with, in order to maintain financial sustainability and achieve profitability.

Subsequent panels dealt mostly with issues pertaining to global aviation – same issues as reflected in the Assembly theme of "ICAO Uniting Aviation on: Safety, Security and Environment". All panels were led and conducted by renowned experts from States, civil aviation industries, academic institutions including McGill University and international organizations, including ICAO.

The Conference was rounded up by an expert round-table discussing the way forward for the industry. Excerpts of the Conference proceedings are as follows:

### Welcoming remarks

Prof. Jutras welcomed participants to Montreal and described ICAO as the nerve centre of the world air transport industry, and McGill as its conscience. He depicted McGill University's Air and Space Law Institute as a catalyst for careful reflection on the contemporary challenges facing the air transport system today.

One of these challenges was identified as that of sustaining a balance between security and efficiency in the screening of over 2.5 billion passengers annually. He noted that higher energy costs, as well as global sustainability aspirations, would require fundamental shifts in air transport operations while concluding that the extraordinary expansion of air travel had made this world both smaller and more complex.

## Introductory address

In his address, Mr. Benjamin concurred with Mr. Giovanni Bisignani's (Director General of the International Air Transport Association (IATA)) assertion that the past 18 months had been the most financially difficult in the history of the industry. However, the latest ICAO passenger traffic forecast showed that there would be an increase to five billion passengers annually by the year 2030, up from the current 2.3 billion. Another way to formulate the sustainability question may be to ask: How do we bridge the gap between an extremely demanding present and a highly promising future?

The Conference was informed that highest on ICAO's list of priorities was safety, as a system that was not safe was not sustainable in the long term, adding that Delegates to the forthcoming Assembly would be considering a holistic safety strategy that resulted from the High-level Safety Conference held this past March at ICAO.

It was affirmed that ICAO's strategy was based on transparency and the greater sharing of information. However, the problem of dissemination and sharing of information on accidents and incidents currently collected and analyzed routinely by a number of organizations, including ICAO, was acknowledged. ICAO would therefore suggest a code of conduct to ensure that shared information was used only for the purpose of improving safety.

With regard to security, the attempted sabotage of a commercial airliner on 25 December 2009 illustrated the vulnerability of aviation to terrorist attacks. As terrorism is a global problem requiring global solutions, security measures must be uniform across the board and commensurate with the level of threat. This cannot be achieved without the full cooperation of States and collaboration of key stakeholders, including industry partners.

Citing environmental protection as another priority of ICAO, the Secretary General informed that much had been done to reduce the impact of aviation on the environment, although public and media pressure were demanding that much more be done, and at a more rapid rate. Most recently, the Programme of Action on International Aviation and Climate Change was adopted at the High-level meeting of October 2009.

In February 2010, ICAO's Committee on Aviation Environmental Protection (CAEP) produced a timetable for the development of a global CO<sub>2</sub> standard, aimed for 2013. Another milestone was the adoption, in November 2009, of a global framework on the development and deployment of sustainable alternative fuels for aviation.

Beyond safety, security and environmental protection, another aspect of air transport operations having a strong impact on sustainability was identified as efficiency. Efficiency stood to increase safety and security, while substantially reducing fuel burn - good for the environment and good for the bottom line, not to mention customer service satisfaction.

For the first time in history, ICAO convened last year a Global Air Traffic Management Forum on Civil/Military Cooperation. Another proactive action was ICAO's Next Generation of Aviation Professionals (NGAP) Symposium, which served to crystallize issues concerning the anticipated shortage of hundreds of thousands of pilots, mechanics and air traffic controllers in the coming years.

Efficiency also comes into play in times of emergency, as was shown by two recent examples. When the devastating earthquake struck Haiti on 12 January, ICAO, in cooperation with Member States in the Region, immediately took action to ensure the safety of the airspace in and around Haiti. A mission was then sent to Haiti to assess damage and was still helping with plans to rehabilitate the country's civil aviation infrastructure.

The second incident, the eruption of a volcano in Iceland in April, was the first time that a volcanic disruption of this magnitude impacted such a densely utilized airspace. The ICAO Council met together with IATA only two days after the eruption to review the situation. By the following day, ICAO's Air Navigation Commission (ANC) had considered proposed initiatives to improve aviation safety in airspace contaminated by volcanic ash. ICAO's new International

Volcanic Ash Task Force (IVATF) was said to be working at developing a global safety risk management framework, so as to be better prepared should a similar event occur.

## **SESSION 1 - THE REVENUE CRISIS: WHEN WILL THE AIRLINE INDUSTRY RECOVER?**

### **Moderator:**

**Narjess Teyssier** - Chief, Economic Analysis and Policy Section, ICAO

### **Speakers:**

**Philip A. Baggaley** - Managing Director, Standard & Poor's

**Chris Lyle** - Representative to ICAO, UN World Tourism Organization

**Brian Pearce** - Chief Economist, International Air Transport Association (IATA)

**Donald Schenk** - CEO, Airline Capital Associates, Inc.

The air transport industry had been severely impacted by the recent financial and economic crisis. This crisis resulted in a cost crisis followed by a revenue crisis which resulted in a significant reduction in international trade. This, in turn, affected air freight traffic and passenger air travel demand, hurting in particular, premium revenues.

Thanks to disciplined capacity management by airlines, stimulus packages from governments and a rebound in the economy, the air transport industry was able to recover in 2010, especially in the cargo and premium markets. Increased load factors helped yields to rise. Challenges, however, continued for airlines with fuel prices again beginning to rise. While more capacity was returning to the market, aircraft utilization still remained low. There were also strong geographical contrasts, with Europe, North America and Africa lagging behind Asia Pacific, Latin America and the Middle East.

Airline margins remained lower than those of other industries and the industry was not being able to cover the cost of capital. While the industry created substantial value, there was an uneven distribution within the value chain as most of this was being captured by customers rather than investors. The main source of financing within the industry was debt rather than capital. Whether capital would continue to be accessible in the future was thus an open question.

The air transport industry was characterized by an increased level of liberalization in the world air travel markets, even in recession, resulting in the proliferation of low cost carriers (LCCs), which in turn increased the competitive pressure. Airlines that had been able to identify their markets, created brand equity through product differentiation and elimination of unnecessary costs. Such airlines had demonstrated more success, if success was measured in profits rather than market size.

Airlines also had benefited in varying degrees from alliance strategy to improve revenue and costs while minimizing risk. Revenue-side benefits of alliances and mergers included improvement of traffic mix, increase of market share, enhanced bargaining power when dealing with suppliers and optimized load factors. Cost-side benefits included the sharing of airport facilities and services, lessening corporate overhead, sharing technology, and joint procurement. The magnitude of these benefits varied by the type of alliances and mergers. Generally, while mergers generated higher risks and revenues, code sharing arrangements involved lesser risks and revenues.

However, consolidation had been limited globally due to liberalization issues, especially restrictions on foreign ownership and control. While the tourism industry was global, the air transport industry was fragmented. Further liberalization of air transport, especially through the development of a pluri-lateral framework, coupled with an improved level of security and facilitation, as well as a global environmental framework, was necessary for a sustainable air transport development. In addition, economic liberalization would also reduce the industry's dependence on the debt market.

## **SESSION 2 - THE COST CRISIS: HOW WILL THE AIRLINE INDUSTRY RECOVER?**

### **Moderator:**

**Kenneth Quinn** - Partner, Pillsbury LLP & General Counsel, Flight Safety Foundation

### **Speakers:**

**David Grizzle** - Acting Deputy Administrator and Chief Counsel, Federal Aviation Authority (FAA)

**Roderick van Dam** - Head of Legal Service, EUROCONTROL

**Frank Manuhutu** - Chief Legal Advisor, European Aviation Safety Agency (EASA)

**Paul McCarthy** - Representative of the International Federation of Air Line Pilots' Associations (IFALPA) to ICAO

**John Samiotis** - Partner, Clyde & Co LLP

**Bill Voss** - CEO, Flight Safety Foundation

The airline industry was normally characterized as having low barriers to entry, high barriers to exit and was plagued by perennial high capacity, with a lack of stability. The challenge for airlines was to find a workable business model, where costs were reduced, without sacrificing safety, security or environmental protection.

Successful airlines were those having low unit costs. Fuel had recently become the highest cost component in an airline's total cost, ahead of labour. The cost of running infrastructure was large, given the thin profit margin of airlines, even if the related costs was not ranked high in the total airline's costs. Utilizing user charges to finance these costs was an efficient approach in most States. The financial crisis was not seen as having an effect on safety since this was an area where airlines could not cut costs, as airlines, facing financial difficulties, tended to attract increased attention from State regulatory bodies.

The challenge for regulators was to try not to increase an airline's costs. On the contrary, for some regulators, the development of future systems, including technological developments, would aim at containing costs, while increasing safety at the same time. Having an efficient system in place was therefore beneficial, both from an environmental and economic point of view.

Regarding governments and industry response to natural disasters, such as the recent volcanic ash crisis, the meeting agreed that the reaction of the aeronautical community was not efficient enough. Regrets were expressed at the attendant financial losses. This unprecedented event demonstrated the positive impact of existing information-sharing mechanisms, and underlined the need for international consensus (for example, on acceptable levels of ash particles) and for coordinated contingency plans. Engine and aircraft manufacturers should have intervened earlier to provide appropriate technical guidance. New initiatives, such as the multidisciplinary/interagency International Volcanic Ash Task Force, were a positive by-product of this crisis.

## **LUNCH SPONSOR: BOMBARDIER**

### **Keynote speaker:**

**Gary R. Scott**, President, Commercial Aircraft, Bombardier

Aviation was meeting the needs of new businesses and a growing middle class population, whose purchasing power was increasing, thereby fuelling further demand for air travel. However, as a whole, the airline industry had not been profitable and not being profitable was not sustainable in the long term. Nevertheless, there were some good signs of recovery this year:

- Most recent forecasts projected an \$8.9B net profit, a significant improvement over the past two years of losses and just \$4B shy of the record year of \$12.9B in 2007.
- Despite annual revenues in excess of \$550B, the industry was struggling to reach a 2 per cent profit margin.

Aviation's impact on the environment, including 2 per cent of world CO<sub>2</sub> emissions, albeit small in global terms, was not negligible and needed to be aggressively addressed.

The speaker went on to provide three examples of Bombardier products designed to address the sustainability challenge by targeting efficiencies. First, the CRJ (Canadair Regional Jet) delivering a small unit of capacity at lower trip cost, with the speed, range and comfort to reach medium-haul markets. Before year-end, the latest member of the CRJ family, the 100-seat CRJ1000 NextGen would be certified and delivered. Secondly, the Q400 turboprop aircraft, optimized for high-cycle operations and challenging airfields, had a reduced noise footprint and was more fuel-efficient on short flights. Thirdly, the C-Series, with advanced technology producing a 20 per cent lower fuel burn (compared to in-production aircraft), allowed for substantial reductions of emissions and noise.

### **SESSION 3 - PROTECTION OF THE ENVIRONMENT: TECHNOLOGICAL & OPERATIONAL SOLUTIONS**

**Moderator:**

**Dr. Charles Schlumberger** - Principal Air Transport Specialist, The World Bank

**Speakers:**

**Richard L. Altman** - Executive Director, Commercial Aviation Alternative Fuels Initiative

**Guilherme de Almeida Freire** - Director, Environmental Strategy and Technology, Embraer

**Richard Wynne** - Director, Business Strategy, Boeing Commercial Airplanes

**Ian Matheson** - Vice-President, Airport Development of the Transportation Division, SNC Lavalin

**Ebad Jahangir** - Environment Officer (Noise), Environment Branch, ICAO

The ICAO Conference on Aviation Alternative Fuels, held in 2009, had set the foundation for more rapid progress and improved coordination between all stakeholders. Speakers highlighted the life-cycle benefits of alternative fuels and their advantages in improving the local air quality and overall carbon footprint. New types of alternative fuels and new blends were being developed and a framework for their certification through ASTM International Standard 7566 had been established. The industry speakers reiterated their goal of carbon neutral growth from 2020 onwards and a 50 per cent reduction in carbon emissions by 2050.

New technologies had been and were continuously being incorporated into aircraft, resulting in significant improvement in the environmental performance of today's aircraft relative to aircraft of 40 or 50 years ago. There were also significant technical challenges in further developments such as the incorporation of open rotors. With regard to infrastructure, such as airports, the challenge was to make green designs more cost-effective than traditional designs.

ICAO had been leading in the aviation environmental protection front for more than 40 years. New technology Standards had recently been put in place and more were to follow. CO<sub>2</sub> Standard for aircraft was being developed and was well on its way for adoption in the near future. Similarly, ICAO had established technology goals for CO<sub>2</sub> emissions reduction which, for the medium and long term, would translate respectively to 20 and 40 per cent better fuel efficient aircraft than aircraft of today. In addition to technology improvements, optimization in air traffic operations was said to offer great promise in fuel burn reductions which was proportional to CO<sub>2</sub> emissions. ICAO had delivered significant improvements on environmental issues and remained committed to improving international Standards and operational practices. The Conference was reminded of the contribution of aviation to world economy which was more than double its share of the environmental burden.

## SESSION 4 - PROTECTION OF THE ENVIRONMENT: LEGAL & POLICY SOLUTIONS

### **Moderator:**

**Alejandro Piera** - Advisor, United Arab Emirates Delegation on the ICAO Council

### **Speakers:**

**David Batchelor** - Policy Officer, Aviation Safety and Environment, European Commission

**John Deacon** - Partner, Hunton & Williams

**Jane Hupe** - Chief, Environment Branch, ICAO

**Tim Johnson** - Director, Aviation Environment Federation on behalf of the International Coalition for Sustainable Aviation (ICSA)

Europe was committed to a 20 per cent reduction in CO<sub>2</sub> emissions below 1990 levels by 2020 and is ready to commit to 30 per cent if an international agreement could be reached. Reductions of 80 to 85 per cent below 1990 levels by 2050 would be required to meet the global vision of less than a 2 degree C change in temperature compared to pre-industrial levels. The key issues for the 37th Session of the Assembly were a more ambitious global goal and a framework for market-based measures.

Europe believed that technology and operational measures were insufficient on their own to meet the current environmental challenge. For this reason, the region was moving ahead with its own Emissions Trading System (ETS) but was open to bilateral accommodation of other similar schemes as well as to a global framework for market-based measures. The revenues generated from European ETS would go towards climate change mitigation and helping developing States. It might be more cost effective to fund emissions reduction in other sectors from these revenues since the costs of abatement in the aviation sector were substantially higher.

The carbon market by its very nature was an artificial market (as opposed to a market for physical commodities) and, for this reason, very susceptible to fluctuations that were caused by an almost arbitrary allocation and distribution of credits. In addition, infrastructure was not ready in many States to enable the creation of a carbon market, while recent history had shown that the credibility of such a market depended considerably on the integrity of project definition and execution.

Non-governmental organizations (NGOs) agreed to the complementarity of market-based measures (MBM) to technological and operational improvements. These measures had the advantage of offering certainty to the business community and to the public that continuous improvements would be made. However, the NGOs also believed that a global emissions trading system would be desirable. In the absence of sufficient reductions of emissions from aviation, duties/taxes/levies would have to be introduced, which could be a simple mechanism with low transaction costs. Such schemes could be introduced quickly if legal barriers could be overcome.

There were strong environmental and economic rationales for using MBMs and levies in particular. Revenue generated from such schemes could be used to finance climate change projects and in assisting developing States in meeting environmental challenges.

Acknowledgement was given to the tremendous progress made so far, especially over the last three years. ICAO was, however, aware that more was required in terms of measures to reduce greenhouse gas (GHG) emissions from international aviation. It was emphasized that aviation provided one of the best value propositions of any industrial sector, especially when compared with other transport sectors. No comparable study of full life-cycle environmental impacts of other transport sectors had been done but a high-level view showed the relatively small environmental footprint of aviation compared to other transport sectors, such as road transport.

ICAO's achievements in the field of environmental protection were reiterated. ICAO's High-level Meeting (HLM) was held in 2009 subsequent to the work of the Group on International Aviation and Climate Change (GIACC) which was established during the Assembly of 2007.

The HLM produced a programme of action on aviation and climate change, the only harmonized international agreement from any industrial sector so far. The key elements of this programme of action were a global goal of 2 per cent annual improvement in fuel efficiency, agreement on establishing a CO<sub>2</sub> Standard, global framework on aviation alternative fuels (GFAAF) and identification of the need to elaborate on measures to assist States. There was also an agreement on improved data collection mechanisms and on assisting States with action plans to reduce GHG emissions from aviation. Other significant accomplishments had been the ICAO Colloquium on Aviation and Climate Change and the ICAO Environmental Report. Going forward, the challenges for the 37th Session of the Assembly would be setting more ambitious goals, agreement on a MBM framework, and elaboration on measures to assist developing States with their action plans.

## **SESSION 5 - AVIATION SECURITY: SCREENING, MORE SCREENING & SCREAMING**

### **Moderator:**

**Yaw Nyampong** - Editor, *Annals of Air & Space Law*, McGill University

### **Speakers:**

**Aws Al Khanjari** - Director, Aviation Security and Infrastructure, General Civil Aviation Authority of the United Arab Emirates

**Georgina Graham** - Director, ICAO Bureau, Airports Council International (ACI)

**Billie Vincent** – President & CEO, Aerospace Services International

**Denys Wibaux** - Director, Legal Affairs and External Relations Bureau, ICAO

The potential threat to civil aviation from cyber-terrorism had stressed the need to develop related countermeasures. As one of the newest threats to civil aviation, cyber-terrorism was defined as the act to cause disruption to airport and aircraft operations. Cyber-terrorism could also be carried out by obstructing communication between airborne aircraft and air traffic control and navigation satellites. In order to counter cyber-terrorism in civil aviation, it would be imperative for all States to put in place uniform rules and measures.

The insider threat to the aviation industry must not be overlooked or minimized. It must be addressed along with enhanced screening capabilities, including employee screening. Background checks should also be conducted on all those with access to aircraft. However, employee screening was not yet being implemented at all airports around the world due to operational and infrastructure-related reasons.

The air cargo security programme was one of many security measures that were being put in place to mitigate risks to passenger and baggage screening, employee screening, and airport access control. Strengthening and harmonizing the international air cargo security regime would help the world's economy and promote global efforts against terrorism.

Costs related to aviation security ranged in the billions of dollars, and there was a question on how much further terrorism against civil aviation would affect the industry economically, and who should pay for the bulk of the costs of aviation security?

The failed terrorist attack of 25 December 2009 involving Northwest flight NW 253 was not a failure of intelligence collection, but failure by the intelligence community to connect the dots, particularly the link-up between the intelligence community, the airlines and airports. The incident also confirmed that preventive security measures were able to be defeated (e.g. explosives were introduced on board the aircraft). It also highlighted the fact that terrorists were focusing more on the use of non-metallic threat items to commit such acts.

Three key challenges to aviation security were identified as: a) implementation of effective Advance Passenger Information (API) in order to connect the dots and provide a win-win solution for everyone; b) plugging the holes to bridge the gaps in making the layered security approach more risk-based and implementing a more risk-based approach to aviation security; and c) lifting the restrictions on the carriage on board aircraft of Liquids, Aerosols and Gels (LAGs), which would require new equipment and training for all involved.

The Conference was further informed that under the auspices of ICAO, a diplomatic conference held in Beijing with representatives from 77 States in attendance, adopted two international air law instruments for the suppression of unlawful acts relating to civil aviation. The two instruments adopted by this Diplomatic Conference on Aviation Security held from 30 August to 10 September, were the Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation and the Protocol Supplementary to the Convention for the Suppression of Unlawful Seizure of Aircraft. These legal instruments criminalize acts against international civil aviation, such as hijacking and sabotage, and facilitate the cooperation between States to make sure that such acts would not go unpunished. The treaties further criminalize the act of using civil aircraft as a weapon, and of using dangerous materials to attack aircraft or other targets on the ground. The unlawful transport of biological, chemical and nuclear weapons and their related material would now become punishable under these treaties. Moreover, organizers and perpetrators of attacks against aircraft and airports would have no safe haven. Making a threat against civil aviation might also trigger criminal liability.

## **SESSION 6 - AVIATION SECURITY: WHAT ABOUT FACILITATION?**

### **Moderator:**

**Jim Marriott** - Chief, Aviation Security Branch, ICAO

### **Speakers:**

**Urs Haldimann** - Head Legal and International Affairs, Federal Office for Civil Aviation, Switzerland

**Mauricio Siciliano** - Machine Readable Travel Document Officer, Air Transport Bureau, ICAO

**John W. Halinski** - Assistant Administrator for the Office of Global Strategies, Transportation Security Administration, United States

**James Bradbury** - Aviation Security Policy Officer, European Commission

Effective implementation of security required unpredictability and common sense. Facilitation was identified as an indispensable element of proper aviation security. However, security and facilitation were too often running on anti-cyclic waves, instead of being seen as complementary elements. Systematic monitoring of security processes from a facilitation view point would improve the whole security procedure.

The Northwest flight NW 253 incident on 25 December 2009 highlighted the limitations of narrowly defined aviation security screening. It mobilized political will to explore a broader security perspective, including closer aviation security integration with border security, intelligence-led solutions and profiling, data sharing and enhanced inter-agency cooperation. The event also emphasized the need for capacity-building efforts in weak/fragile countries affected by insecurity.

Machine Readable Travel Documents (MRTD) enhanced security and facilitation, facilitated the inspection process, strengthened border and national security, prevented identity fraud, automated criminal intelligence solutions, narrowed further opportunities for identity fraud and enabled immediate deployment of face biometric based checks against watch lists.

There was no perfect solution for security; otherwise the associated costs would be excessive. Consequently, aviation security processes should include elements of facilitation, which if properly integrated, could enhance the overall effectiveness of security.

The meeting noted the history and evolution of the United States Trusted Traveler Programme, such as NEXUS, SENTRI and GLOBAL ENTRY to provide expedited travel for pre-approved, low risk travelers through dedicated lanes and kiosks.

It was further gathered that the use of full body scanners in Europe was not yet regulated by



the European Union (EU) because a 2008 draft regulation on the use of such scanners was not supported by the European Parliament. The major issues were the impact of aviation security measures and body scanners on human rights, privacy laws, personal dignity, data protection, impact on fundamental rights of children, and impact on human health.

The Northwest flight NW 253 incident highlighted the fact that aviation security was facing new types of threats today; threats to which the traditional security technologies used at airports could not provide an adequate and efficient response. Consequently, some EU Member States started to try and deploy body scanners at their airports, thus resulting in different rules being used across the EU.

The analysis on the performance capability as well as the potential impact of body scanners on health and fundamental rights had been ongoing in the EU for some time. In order to end the current fragmented situation whereby Member States and airports decided on an ad-hoc basis if and how to deploy body scanners at airports, the use of scanners must be based on common standards, requesting basic detection performance and by imposing safeguards to comply with European fundamental rights and health provisions.

While the overall views on the potential of body scanners were positive, several serious fundamental rights and health concerns had been raised on the basis of the then available technological solutions.

#### **LUNCH SPONSOR: INTERNATIONAL AIR TRANSPORT ASSOCIATION**

##### **Keynote speaker:**

**Calin Rovinescu**, President & CEO, Air Canada

Mr. Rovinescu, in recalling the difficulties faced by the industry at the global level during the 2000 decade, particularly in 2009, where accumulated losses amounting to \$50B, affirmed the significant contribution made by aviation to the Canadian economy. He identified seven drivers on the road to sustainability. The first driver was identified as proper behaviour of governments, i.e. ensuring the correct policies were in place to support this industry because of its impact on the gross domestic product (GDP). The second driver of industry sustainability was trade policy. Here, what were needed were fair and balanced trade agreements on aviation, especially where state-owned or sovereign-fund controlled entities were involved.

The third driver for sustainability would derive from some form of consolidation in air transport industry, whether through mergers and acquisitions, or through revenue- or profit-sharing joint ventures. The fourth element related to keeping costs under control. The fifth driver covers two policy areas that were closely intertwined: safety and security because people wanted to feel safe and secure when they travel. The sixth element for sustainability was the simplest to explain and the hardest to achieve - good customer service. This meant that airlines needed to treat their customers well but not through regulatory measures, some of which purportedly had extra-territorial effects.

The last element of sustainability was in the area of the environment. As a stakeholder in the industry, Air Canada had done its share to curb greenhouse gases and operate in an environmentally responsible way. Furthermore, after having reached the initial goals, Air Canada had committed to new ones by endorsing IATA's targets that included attaining an average improvement in fuel efficiency of 1.5 per cent per year from 2009 to 2020.

Airlines had the potential to be one of the leading drivers of this global economy emerging from recession, and could produce multiple benefits in terms of economic return, passenger safety, national security and a healthier environment. The key was to let them flourish without resorting to re-regulation and allowing them to chart their own route to sustainability, as do so many other industries.

## SESSION 7 - STRATEGIES FOR IMMEDIATE SURVIVAL & EVENTUAL PROSPERITY

### Moderator:

**Peter Harbison** - Chairman, Centre for Asia Pacific Aviation (CAPA)

### Speakers:

**Jim Marriott** - ICAO

**Yaw Nyampong** - McGill University

**Kenneth Quinn** - Flight Safety Foundation

**Alejandro Piera** - United Arab Emirates Delegation on the ICAO Council

**Dr. Charles Schlumberger** - The World Bank

**Narjess Teyssier** - Chief, Economic Analysis and Policy Section, ICAO

There was a communication issue in the industry, and the high profile nature of aviation had led to negative perceptions. The media portrayed aviation as a less-than-safe transportation mode, constantly facing security threats, and as the biggest pollutant. On the other hand, consumers had become used to demanding total safety, total security and low fares. During the period of trans-Atlantic air traffic interruption as a result of volcanic ash clouds, passenger and freight traffic was significantly affected, which in turn led to disruptions in national and regional economies. Aviation as a sector should address this communication gap and highlight its value-proposition (i.e. benefits produced by aviation).

Aviation security was a highly complex issue involving political consideration. Whether aviation security should be a State's sole responsibility, or should instead involve the cooperation of all public and private stakeholders, was debated by the panel. Although the implementation of security measures always entailed costs that would be recovered ultimately from end-users or tax payers, the current level of security measures reflected huge public concern over aviation security.

Intelligence organizations, border control agencies and aviation security providers all were identified as having a role to play in countering the threat to aviation. There was a perception that intelligence organizations had good information on what was going on. The Intelligence did work but was often criticized for not finding the needle in the haystack. Connecting all the dots was a very illusive target.

Aviation was under increased scrutiny for its environmental impact. This pressure had been used to make the case for charges, taxes and levies that disproportionately targeted aviation. If ICAO did not move forward on the climate change front, non-optimal local solutions might be put forward for the industry. In order to avoid this scenario, all efforts must be made to reach agreement on global solutions.

## SESSION 8 – EXPERT ROUND-TABLE: THE WAY FORWARD

### Moderator:

**Prof. Paul Stephen Dempsey** - Tomlinson Professor of Law and Director of the Institute of Air & Space Law, McGill University

### Experts:

**Eckard Seebohm**, Head of Unit, Aviation Security, European Commission, Directorate for Energy and Transport

**Francois Gayet** - Chairman, Chairman, ICCAIA; Secretary General, ASD

**Graham Lake** - Director General, CANSO

**Folasade Odutola** - Director, Air Transport Bureau, ICAO

**Tom Windmuller** - Senior Vice President, IATA

The air transport industry, although highly vulnerable to macro-economic cycles and unforeseen external factors (for example, political instability, security concerns, military

conflict, pandemic and natural disaster), had strongly and quickly recovered from the 2009 drop in traffic. The recent financial crisis impacted negatively on the air transport industry, particularly general aviation.

In a liberalized environment, only airlines that could succeed in cutting costs and exploiting the market opportunities would be able to survive. The key to success for airlines was threefold: control costs, explore market opportunities and control capacity.

There needed not be a contradiction between social welfare, including environmental issues, and liberalization. The emphasis should be placed on making progress on all fronts simultaneously. Improved efficiency of aircraft and air traffic would help lower costs and reduce aviation's environmental footprint.

Europe had issued legislation regarding inclusion of aviation into the European emissions trading system. The EU believed that ICAO should allow regions the freedom to move faster than the overall global approach. The EU legislation also included flexibilities that accommodated concerns from developing countries about economic burden and also in cases where other countries or regions had similar systems in place. Countering the argument for unilateral actions, it was opined that there could be no disagreement among States, whether developed or developing, on the need for economic growth as well as concerning protection of the environment. For ICAO's 37th Session of the Assembly, with its focus on international aviation, reaching a compromise might be easier than what was seen at UNFCCC COP/15. Expectations were high that an agreement be reached in the context of the Assembly.

It was affirmed that despite their lower profit margins, airlines had created substantial values accrued to the general economy, albeit benefitting especially passengers (lower fares, more frequencies etc.) rather than investors. Although some airlines continued to be profitable, their operating conditions were often unique and their business models catered to their unique environments. Airlines should receive a fairer share of the total value generated by the industry. Access to capital markets was noted as an issue crucial to airlines' survival.

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