QUESTIONS AND CONCLUSIONS

Maximizing Civil Aviation's Economic Contribution

Challenges and Potentials







JOINT WORKSHOP

Air Transport Action Group

International Civil Aviation Organization

The World Bank

6 – 8 June 2005 Montreal Canada

Maximizing Civil Aviation's Economic Contribution Challenges and Potentials

Montreal, Canada, 6 – 8 June 2005

Working Group 1 – Air Carriers

Facilitator: Andrew Sentance, British Airways

I. KEY QUESTIONS

Industry structure

- 1. What is the long-term solution to the lack of profitability in the airline industry? Is some fundamental consolidation and industry restructuring needed? Is there a genuine problem of uneven returns in the value chain? Do aircraft manufacturers encourage excess capacity through their marketing policies?
- 2. How can the benefits of the low-cost/no-frills airline model be extended to emerging/developing countries?

Government policy and liberalisation

- 3. What is the role of the government in stimulating the growth of air services beyond establishing open markets and a sound framework for private enterprise?
- 4. How damaging has been state support to failing airlines and other forms of indirect subsidy? How should this issue be addressed at the national and international level?
- 5. Which international institution is best placed to champion the liberalisation of air services agreements globally? Should the World Trade Organisation have a more active role in promoting aviation liberalisation?







Infrastructure development and constraints on growth

- 6. What role should air carriers play in ensuring efficient development of airport and airspace infrastructure?
- 7. Are industry forecasts of growth realistic in light of the environmental constraints on the industry? How should we strike the right balance between securing the economic benefits of aviation and addressing environmental impacts?
- 8. Should the World Bank and other international bodies be supporting the development of aviation infrastructure in emerging/developing countries, to support the growth of airline networks?

II. CONCLUSIONS

LIBERALISATION AND COMPETITION

Why is this important?

- Generates value for customers and stimulates the market
- Regulatory changes are moving in this direction

Challenges

- Thin routes/remote locations may be poorly served
- Tourism and development may suffer if air services are inadequate

Solutions

- New ways of supporting thin routes not airline subsidies
- Bid/auction system open to competitive tender

GLOBALISATION

Why is this important?

- Global business is creating a global airline market
- Some large consolidated airlines will emerge coexisting with niche and regional carriers

Challenges

• Investment rules and bilateral system will inhibit development of global airlines

Solutions

- New multilateral system of regulation
- Exact structure and institutions for further discussionSupport for evolutionary approach

FINANCIALLY-SUSTAINABLE INDUSTRY

Why is this important?

• To support growth, investment and economic development

Challenges

- Labour and supplier costs
- Government intervention
- Complexity and fragmentation
- Excess capacity and volatile demand

Solutions

- Free management of political interference
- Reform of national bankruptcy, ownership and control laws
- More competition or better regulation in value chain

ENVIRONMENTALLY-SUSTAINABLE GROWTH

Why is this important?

• To allow expansion of infrastructure to support growth and sustainable development

Challenges

- Growth exceeds performance improvements
- Noise/emissions trade-offs

Solutions

- Open trading mechanisms for greenhouse gases
- ICAO's Balanced Approach for noise and local emissions

Maximizing Civil Aviation's Economic Contribution Challenges and Potentials

Montreal, Canada, 6 – 8 June 2005

Working Group 2 – Infrastructure

Facilitator: Vijay Poonoosamy, Airports of Mauritius

I. KEY QUESTIONS

Development constraints of AT infrastructure in emerging and developing countries

- 1. What are the most critical resource constraints in air transport (AT)?
- 2. Why is resource mobilization such a challenge and how can economic impact assessments for airports support fund raising for infrastructure development
- 3. Can developing a sustainable stakeholders approach achieve win-win solutions to meet the development constraints of airlines, airports, and air navigation services providers?

Economic policy and privatization/commercialization

- 4. What are the impediments to reforming economic regulations that affect airport operators and/or air navigation services providers?
- 5. How do governments exercise their responsibilities in a commercialized environment where airports and air navigation services changed their ownership and control structures as well as management approaches?
- 6. What are the benefits of an international charging policy in a commercialized environment?
- 7. Does commercialization of national services providers facilitate or hinder the harmonization of the global air navigation system?







II. CONCLUSIONS

- 1. What are the most critical resource constraints in air transport (AT)?
 - effective business plan;
 - technical expertise; and
 - financial resources.
- 2. Why is resource mobilization such a challenge and how can economic impact assessments for airports support fund raising for infrastructure development?
 - the competition for funding of essential needs at the national level;
 - insufficient revenue-generation; and
 - a positive economic impact study will assure the financial institutions of the viability of a project.
- 3. Can developing a sustainable stakeholders approach achieve win-win solutions to meet the development constraints of airlines, airports, and air navigation services providers?
 - formal consultations with all stakeholders;
 - consultation with airlines and other users concerning agreed service levels, transparency and cost-effectiveness.
- 4. What are the impediments to reforming economic regulations that affect airport operators and/or air navigation services providers?
 - economic regulation is essential in a commercialized environment to ensure safety, efficiency, cost-effectiveness and transparency.
- 5. How do governments exercise their responsibilities in a commercialized environment where airports and air navigation services changed their ownership and control structures as well as management approaches?

From a socio-economic dimension as well as a business/commercial dimension through

- development of a national infrastructure plan;
- different forms of regulation;
- a charter or agreement as the basis for granting permit to an entity's operations to ensure that operations are run in a safe and cost-effective manner consistent with ICAO's Policies on Charges for Airports and Air Navigation Services (Doc 9082/7, available on ICAO's website free of charge). [Additional guidance material is contained in the Airport Economics Manual (Doc 9562/2) and the Manual on Air Navigation Services Economics (Doc 9161/4).]

- 6. What are the benefits of an international charging policy in a commercialized environment?
 - uniform application of charging principles;
 - transparency for users; and
 - predictability.
- 7. Does commercialization of national services providers facilitate or hinder the harmonization of the global air navigation system?
 - facilitates with governments focussing on the regulatory role; and
 - regional cooperation to be encouraged.

-END-

Maximizing Civil Aviation's Economic Contribution Challenges and Potentials

Montreal, Canada, 6 – 8 June 2005

Working Group 3 – Development Cooperation and Resource Mobilization

Facilitator: Charles E. Schlumberger, World Bank

I. KEY QUESTIONS

Constraints

- 1. What are the most critical resource constraints in air transport (AT)?
 - a) shortcomings of existing AT services and facilities
 - b) financing
 - c) technology
 - d) human resources development/training

Development of AT services & infrastructure in emerging and developing countries

- 2. Why is resource mobilization such a challenge?
- 3. How can economic impact assessments support fund raising for civil aviation development?







Role of development cooperation agencies, governments and aviation industries

- 4. What is lacking to achieve more effective implementation of aviation programmes and projects?
- 5. How can development cooperation agencies, their recipients and aviation industries, including their associations, improve their collaboration?
 - a) among bilateral and multilateral donors themselves
 - b) between donors, governmental agencies and aviation industries

II. CONCLUSIONS

Constraints

- 1. Financial resource constraints prevail for air transport infrastructure (airports and air navigation services providers) if airport authorities and air navigation services providers under public ownership and control cannot retain their revenues for modernization and expansion.
- 2. In such a situation, low priority of aviation in overall governmental finances drains air transport services and facilities of resources for re-investment and makes it difficult to compete in a fast changing business environment.
- 3. If commercialization of publicly owned air transport operators is considered as diminishing sovereignty (fiscal and prestige), interference of regulators causes lack of flexibility and blocks the adoption or adaptation of business strategies as revenue-generating entities or even privatization as "firms".
- 4. Struggling airlines in developing countries face difficulties in financing the modernization and capacity of their fleets given the actual or perceived risk of asset recovery. For instance, foreign-registered aircraft have a higher collateral value.

Development of AT services & infrastructure in emerging and developing countries

- 5. A mechanism to reduce resource constraints of governmental/public agencies providing air transport facilities or delivering support services would be pooling of resources for certain functions on an inter-agency, bilateral, sub-regional or regional level and adjust the legal national frameworks, if required.
- 6. Build incentives for retention of qualified personnel to sustain efforts in human resource development and management.
- 7. Instead of the traditional loans to governments, financial schemes and business models for lacking or insufficient air transport infrastructure need to target airport concessions, management contracts, private/public partnership. The market shares of foreign carriers and the established intercontinental and intra-regional route networks led to market segmentation and contribute to small

traffic volumes and low economies of scale for small national carriers. However, national carriers may pursue opportunities for strategic alliances and foreign ownership.

- 8. For governmental/public agencies operating AT facilities and services, apart from established aviation revenues through the collection of air navigation services charges on a cost-recovery basis to the extent possible and appropriate, generation of non-aviation revenues can be explored for airport-based commercial activities.
- 9. ICAO's framework of global communication, navigation, surveillance/air traffic management (CNS/ATM) systems implementation forms the basis for new technologies for over-flight services. Assistance is needed for the harmonization of existing ground-based and complementary/substituting satellite-based systems, for instance, for those airlines that have aged fleets with aircraft not equipped with the respective avionics. To reduce life-cycle costs of ATM technology, the approach of low-cost and low-maintenance with long-term service contracts is favoured.
- 10. Although the airline industry structure is not optimal for development since market economy rules, mobilizing the political will and authority to recruit "change agents" is critical for carriers, airports, and ANS providers to operate safely and securely as well as to survive in an open competition.

Role of development cooperation agencies, governments and aviation industries

- 11. Development cooperation agencies, their recipients and aviation industries, including their associations, can extend and intensify their collaboration in assisting air transport industries directly or through the governmental authorities based on tailored needs assessments.
- 12. Support in national civil aviation master plans and their adoption, regional safety oversight programmes, regional or sub-regional harmonization of regulatory frameworks and collaboration in the provision of air navigation services are among those activities and models that achieved good results as foundation for future sector development.
- 13. Travel, tourism and trade are interdependent economic catalysts as negatively effected by infrastructure gaps and rigid regulatory and legal frameworks as they benefit from each others' industry development.
- 14. Entities that assess the economic impact of civil aviation or tourism are called to harmonize their methodologies and results and promote their application in support of policy making, planning and fund raising for their respective industries. ICAO intends to develop training modules and provide technical support to assist States upon request with the implementation of civil aviation impact assessments on a cost-recovery basis. Further cooperation among ICAO, ATAG, WTO-OMT and the World Bank as well as other relevant institutions should be mutually pursued in the field of research and implementation of impact assessments in the fields of aviation and tourism.

Maximizing Civil Aviation's Economic Contribution Challenges and Potentials

Montreal, Canada, 6 – 8 June 2005

Working Group 4 – Safety and Security

Facilitator: Vahid Motevalli, GWU

1. **KEY QUESTIONS**

- 1.1 What are the potential exclusions from air transport activities due to deficiencies in aviation safety and security?
- 1.2 What are the sources of revenue that can be used to enhance safety and security oversight?
- 1.3 What partnerships between government and industry (regulator and regulated) are possible?
- 1.4 Are the following items related to the infrastructure of the civil aviation safety and security?
 - a) Civil aviation organization
 - b) Training facilities and programs
 - c) Developing qualified technical personnel
 - d) Airport perimeter security
 - e) Airport terminal
 - f) ATC system







2. **CONCLUSIONS**

2.1 General Approach

- 2.1.1 The Working Group adopted the general approach that an air transport system that is neither safe nor secure cannot prosper. The overriding theme of the work undertaken by the group was therefore based on two key issues relating to the development of air transport and the ultimate goal of operational sustainability. This goal has to be attained in an environment of challenges brought to bear by safety and security and the solutions that were available to face those challenges. The Group was of the view that the key questions appearing above should be addressed as a whole rather than separately, with a view to providing answers to them within a structure of challenges and solutions.
- 2.1.2 It was generally recognised that challenges in safety and security as they impacted on a efficient air transport system, were particularly significant to developing nations and that, although there were already in existence partnerships between the regulators and industry, in many instances the basic challenge lay in the management of such relationships.
- 2.1.3 The Working Group noted that it had been requested to address safety and security, which were two separate areas of discipline and activity within the ICAO audit spectrum. It was the considered the view of the Group that the most pragmatic manner in which the two subjects could be addressed was to identify common grounds and commonalities in the two areas that would impact on the economic contribution of civil aviation.

2.2 Common Ground

- 2.2.1 The most critical factor identified was political commitment required on the part of States and the authorities to take measures in ensuring that the essential requirements for safety and security in aviation are complied with. Under this broad rubric, the following common grounds were identified:
 - Legal requirements (including compliance with international treaties and agreements);
 - Compliance with regulations;
 - Risk management;
 - Training and human resource development;
 - Funding;
 - Practical measures in implementation; and
 - Public perception;
- 2.2.2 It was agreed that the aforementioned grounds formed integral components of a value chain which culminated in the final product of administrative stability and operational sustainability of civil aviation.
- 2.2.3 Furthermore, it was observed that both safety and security were handled through common processes based on an empirical approach using accident or incident investigations and threat assessments

respectively. However, it was noted that the aviation industry had a better system for reporting safety incidents as opposed to security incidents.

2.3 Challenges and Solutions

- 2.3.1 The main concern was the issue relating to the economic viability of civil aviation and the attraction of investment through the private and public sectors. This issue involved measures that would be conducive to mobilization of resources and generation of funds. One of the obstacles to fundraising was the escalation of security costs in a gradually slowing economy. This difficulty was compounded by the fact that there were no credible figures identifying the person or persons who bore the burden of such costs. Additionally, the problem remained regarding the identification of sources of funding to bridge the increasing costs relating to safety and security. Therefore, it was concluded that the economic impact of safety and security would be dependent on the following factors:
 - Compliance of international treaties and regulations;
 - Training and human resource development;
 - Privacy and information protection; and
 - Risk analysis and management.
- 2.3.2 With regard to risk analysis and management, one of the key issues identified was third party war-risk insurance which had presented an almost insurmountable burden to the international aviation community and the regulators immediately after the events of 11 September 2001. The Working Group noted that, although there are various national insurance schemes currently in effect, the danger lay in the prospect of an act of unlawful interference with civil aviation leading to an accident that would spark a repetition of the withdrawal of third party war-risk insurance by the underwriters.

2.3.3 The following challenges and solutions were identified:

Challenges	Solutions
Security costs post 11 September 2001	Enhancement of safety and security as priorities and ensuring the availability of State guarantees as an immediate measure in the event of an act of unlawful interference.
Lack of local technical expertise to develop critical steps in safety and security, e.g., development of national aviation laws	Provision of experts through funding resources and the training local staff
Lack of locally qualified technical staff	Development of regional safety and security organizations with a view to sharing available staff

Lack of adequate safety and security culture	Safety and security awareness to be developed through regional organizations and ICAO missions
Lack of information sharing	Promotion of information sharing between public and private enterprise
Evolving commercial environment, which brings about safety and security implications (e.g., flags of convenience, virtual airlines).	Tighter national control of commercial enterprises
Preserving consumer rights	Regional and global legislation and regulation establishing rights of the consumer, to be translated to national legislation
Inequality in the application of charges	Ensure level playing field in accordance with existing regulation
Coping with levels of corruption	Build political will and commitment to address corruption
Privatisation	Recognition that while overall accountability for safety and security was placed on States, certain reliance has to be placed on the private sector in the provision of safety and security services.

2.4 Generating resources

- 2.4.1 The key to generating resources inevitably lay in the liberalization of air transport which in turn would attract foreign investment in a local aviation industry. In this regard, States should review existing constraints on ownership and control of airlines and burdensome control of air traffic management systems.
- 2.4.2 Any revenues generated should be reinvested in aviation and there should be transparency and accountability in revenue management.
- 2.4.3 Local investment in private enterprises offering exclusive technology enhancing aviation security, such as equipment with biometric identifiers and encryption and decryption capabilities for the establishment of a public key directory, would ensure credibility of a local aviation industry and consequently, attract investment.

2.5 Final conclusion

2.5.1 The Working Group was encouraged that the Workshop had brought to bear a paradigm shift from the perception that air transport, in particular, was the privilege of a few to the fact that it is a critically important activity in the economic progress of society. Under the circumstances, the abovementioned challenges and solutions would be viewed within an environment of greater understanding in the context of investment and the mobilization of funds.