

WORLDWIDE SYMPOSIUM ON THE FINANCE, TECHNOLOGY, REGULATION AND POLICY OF AIR NAVIGATION

REPORT OF CONCLUSIONS – ROUNDTABLE DISCUSSIONS

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McGill University and the International Civil Aviation Organization (ICAO) cosponsored a symposium addressing salient contemporary legal and policy issues impacting air navigation services at ICAO headquarters in Montreal in September 2006. The nontraditional format of the event included break-out sessions in which industry experts and governmental officials focused on specific issues, trends, needs and potential solutions, following which the team leaders reported the conclusions reached. What follows is a summary of those findings.

1. CONGESTION, EFFICIENCY AND SAFETY

With regard to efficiency, two inter-related sub-headings were considered, namely: the operations of ANSPs, and how ANSPs affect their customers. With respect to the former, the group considered that: ANSPs' overhead should be driven by business needs, and not external needs; there should be efficient use of technology in the operations of ANSPs, and the regulators' role should not impede, but enhance, the use of technology by ANSPs; employees should have adequate pay; and, there should be competitive procurement of services (e.g., meteorological services). It was concluded that the need to measure the performance of ANSPs (or benchmarking) is extremely important; and that, it is also essential for ANSPs to achieve broader outreach and to implement an inclusive notion, particularly with respect to customer/community relations, environmental pollution and noise, and governmental relations.

On the subject of how ANSPs affect their customers, the break-out panel focused on best practices and interoperability between ANSPs, concluding that: as regards flow management, sequencing should be done at high altitude; there was the need for predictability so that providers can plan before making decisions; and, finally ANSPs should make it possible for those customers that are equipped with new technology (for example ADS-B) to reap early benefits therefrom.

On the issue of congestion, the group focused on: the dynamic management of the airspace; the exchange of information and sharing of responsibility; and the provision of better service for already equipped customers. It was noted that, with respect to aircraft weight and associated restrictions, technology is presently available for purposes of reducing the weight and drag of aircraft. There is also some ongoing research and developments on the subject, but this has not reached the implementation stage as yet. The group also questioned whether the "first come, first served" concept, which historically has been the mode of operation of most ANSPs, should be modified.

It was observed that large increments in safety would be required in order to handle the expected growth in air transport in the coming years. Although new and/or improved technology makes significant contributions to safety, there still remain appreciable difficulties in the certification of new technology by the regulators. There is also the outstanding

problem of lack of harmonization of procedures across different ANSPs. These issues have severe implications for safety, and therefore need to be addressed in the near term. In concluding, the view was expressed that when estimating the applicability of certain models to different regions of the world, one needs to understand the circumstances and the context characterizing that particular region.

2. TECHNOLOGY

This group discussed the adoption of new technology; automation and the role of the human being (i.e. safety backup, implementing techniques to ensure a safe human-machine interface, etc); frequency requirements; data security, especially in relation to shared data; turbulence suppression and avoidance; and, interoperability and integration across different systems (even where standards are clearly defined). While noting that next generation technology for providing air navigation services is already available and its application would make ANS more efficient, the group identified a number of outstanding issues as follows:

- a. The need for cooperation between ANSPs and regulators is critical;
- b. Performance based operations need to be instituted;
- c. There is also the need for a harmonized certification regime on a global or regional basis. ICAO's assistance in this direction will be required;
- d. The implementation of new technology will require the integration of infrastructure providers (e.g. integrated CNS providers); and
- e. There is the need for harmonized/common operational concepts to be established across systems (e.g., common operational concepts for common activities should be deployed in both high density and low density airspaces).

In response to a question as to which organization should take the lead in the effort to harmonize technology in the industry, the opinion was expressed that the industry (instead of IATA or ICAO) could take the lead by reaching consensus on the core issues and presenting proposals to ICAO for inclusion in SARPs for example.

3. FINANCE AND ECONOMIC PERFORMANCE

General consensus was reached in this group concerning the financial and cost recovery aspects of air navigation service provision. It was agreed that following current trends, the users should pay for air navigation services. The question then arises as to exactly what the user must pay for. On this issue, it was observed that the time is ripe for a re-examination of the definition of costs/real costs, and also of the traditional weight/distance flown formula for assessing exigible ANSP charges. In so doing, the guiding principle should be that of securing a reasonable rate of return for the ANSP. It was also agreed that, since the user pays for the services rendered, the user should have a say regarding the manner in which the services are rendered by the ANSP. It was finally noted that financial autonomy (i.e. insulation of ANSPs from political interference) and commercial discipline were essential for every ANSP, and that the practice of using airlines to pre-fund capital infrastructure for the ANSP must stop. In concluding, the group fully endorsed the user pays principle.

A question was raised that, in a typical User pays/User says situation, would it not be possible for airline representatives on the board of an ANSP to use their position to pursue their own interests (for example, getting the ANSP to lower the cost of services to the airlines). In response, the NAVCANADA example was used as a good illustration of what happens in practice. It was made clear that although the board of NAVCANADA has members representing the airlines, these members are not airline people in a strict sense (they are kept in check by other interests, plus, as Directors, they have a fiduciary duty to

NAVCANADA). As a result, there is always a balance of interests on the board in order to forestall situations like the one suggested.

4. REGULATION

The question was asked as to what the hard-core data arising from the proliferation of privatized/corporatized ANSPs was, and also where the evidence could be found on the basis of which all the claims relating to compromised safety as result of ANSP privatization were being made. It was noted that there are inherent advantages and disadvantages in the Public/Private model of ANSPs (e.g. the regulator (the Government) becoming the service provider usually results in lower levels of productivity and transparency). There is thus some justification for commercialized ANSPs.

A question was raised that, were ANSPs were to become too customer focused, what would happen to the other equally important interests, such as noise and emissions? It was stated that public interest issues should also be taken into account in the effort to commercialize ANSPs.

In the opinion of the group, there has been too much wheel-inventing. The experiences gained from those States that have commercialized/privatized/corporatized their ANSPs should be used by other States in their efforts to commercialize, so as to not repeat previous mistakes. Economic oversight over ratemaking should, however, be retained by the regulator. The dispute resolution mechanism inherent therein enhances trust and confidence in the system.

5. LIABILITY AND INSURANCE

The break-out session on liability and insurance confirmed that the world of air traffic control (ATC) is changing fast and fundamentally, and that, currently, there are developments which need to be addressed, including:

- a. Issues arising from the autonomy of Air Navigation Service Providers (ANSPs) and the consequent liability implications for States (i.e. whether existing national laws adequately address the liability of States having regard to the provisions of Article 20 of the Chicago Convention); and
- b. The criminalization of aviation accidents/incidents; a change of attitudes towards such accidents has been observed in many countries; however, the sole application of domestic law would not be a feasible option in the future.

The group agreed that there is a need to harmonize national liability regimes applicable to ATC liability. However, the group was of the opinion that, under current circumstances, it would not be realistic to expect a hard core international convention on the subject, since most States are not yet ready for such an approach. Rather, a softer instrument such as a declaration of principles or a charter (for example, the Charter on the legal aspects of GNSS) might be a more realistic alternative. Issues that would require further consideration under the proposed soft law instrument include:

- a. Civil litigation (fault-based or strict liability) – the need to identify competent jurisdictions and applicable laws;
- b. Criminal liability – how best the instrument may be employed as a means of promoting “just culture”;
- c. The question of State immunity – this issue continues to be important although lately, its significance appears to be diminishing;
- d. Insurance coverage issues – how can the industry mitigate liability; lack of sufficient coverage on the commercial markets; alternatives such as pooling of ANSPs under a common scheme (although, service providers do not seem willing to join a “common pool” because they do not want to share the risks with other ANSPs with

- poor safety records); and, State assistance in the event of insufficient commercial insurance coverage;
- e. Disaster planning – Article 28 of the Chicago Convention addresses both actions and omissions of States, but it does not provide the basis for individuals to sue ATC providers;
 - f. The proliferation of Man-Portable Air Defense Systems (MANPADS) – How to combat the risk posed to civil aviation by the use of MANPADS;
 - g. Consequences of increased automation (human error liability versus technical error liability); and,
 - h. The impact of the US factor – the trend towards connecting all aviation accidents to the US in order to obtain huge amounts of damages.

Summing up, the group expressed the view that one of the greatest challenges facing the industry is the lack of harmonization of liability regimes across borders. The current legal and regulatory regimes were described as fair-weather - they assume that all will go well. The proposed declaration of principles or charter, on the other hand, will present a window of opportunity for addressing the issues raised in a harmonized fashion. The current difficulties are neither of a technical nor operational nature; there is the need to address regulatory and legal matters.