



WORKING PAPER

TWELFTH AIR NAVIGATION CONFERENCE

Montréal, 19 to 30 November 2012

Agenda Item 6: Future direction

6.1: Implementation plans and methodologies

ADDRESSING THE IMPEDIMENTS TO ATM MODERNIZATION

(Presented by the Civil Air Navigation Services Organisation)

SUMMARY

The ASBU framework is a significant new programmatic approach that will facilitate coordinated global planning and implementation processes based on available technology and expected operational improvements. However, a number of impediments exist in the regulatory, social and economic domains to the delivery of operational performance improvements that require political will and commitment to address.

Action: The Conference is invited to consider the recommendation in paragraph 4.1.

1. INTRODUCTION

1.1 ICAO has introduced a new framework for global harmonization and interoperability of the airspace called the aviation system block upgrades (ASBUs). Developed by State and industry interests, the ASBU framework is a significant new programmatic approach that offers coordinated global planning and implementation processes based on available technology and expected operational improvements. The Civil Air Navigation Services Organisation (CANSO) supports this construct for planned ATM system modernization as it is fully in line with CANSO's strategic objectives and its vision of a globally harmonized and interoperable air navigation system capable of delivering efficient seamless service.

1.2 However, achieving global harmonisation and interoperability in ATM is not just a technical challenge – for the most part, the technical capabilities already exist or will exist. Rather, a number of impediments exist in particular in the regulatory, social and financial domains. We have to ensure that the right institutional and regulatory framework exists for these block upgrades to be introduced and their full potential realized. For this to happen, commitment is needed on the policy front that will facilitate delivery of the operational performance improvements as envisioned by the ASBUs.

¹Arabic, Chinese, English, French, Spanish and Russian versions provided by CANSO.

2. BACKGROUND

2.1 Air traffic management today remains utterly fragmented and this fragmentation impacts on safety, efficiency, capacity and has adverse effects on the environment. ATM performance is compromised. National and regional visions and implementation programs, many of them diverging from global planning for various reasons, have led us to where we are today. The ASBU initiative follows on a long history of ICAO efforts to coordinate worldwide planning processes to support the global ATM system.

2.2 However, the block upgrades will only play their intended role if all stakeholders involved align their activities as envisaged by the ASBU framework. The ASBU implementation has its root in State policy-making and will require a global collaborative and multidisciplinary effort, involving policy-makers, legislators and regulators; operators and service providers; manufacturers and solution providers – all working together. The objective must be to increase overall capacity and efficiency, cost-effectiveness, improve safety, and reduce the impact on the environment.

2.3 Agreement by this Conference to a new way of global planning, developing standards, and identifying and implementing operational improvements, must carry with it a commitment by States to address the impediments to progress. ATM modernisation is not foremost a technical challenge; it is an economic and institutional challenge that requires leadership and political will. The 35th Session of the ICAO Assembly recognised “the central role ICAO shall play ... in facilitating the provision of assistance to States with regard to the technical, financial, managerial, legal and cooperative aspects of implementation.”² Yet, progress to realise the vision of an integrated, harmonised and globally interoperable air navigation system has been slow in view of the institutional hurdles that have been encountered.

2.4 This Conference is reminded of Assembly Resolution A35-15, re-confirmed during the 36th Assembly, that urged steps to be taken to ensure the future global ATM system is performance-based and called on States “to use the ICAO Global ATM Operational Concept as the common framework to guide planning and implementation of CNS/ATM systems.”³ The 35th Session of the ICAO Assembly also resolved that “States’ sovereignty and borders should not be affected by the CNS/ATM systems implementation” and noted that “economic and institutional issues, in particular cost/benefit analysis, and facility financing, cost recovery and cooperative aspects, need to be addressed by States individually and/or collectively.”⁴

3. IMPEDIMENTS TO ATM MODERNIZATION

3.1 At the political level, governments must acknowledge a more mature understanding of sovereignty; one that is in sync with air transportation of the 21st century. Airspace needs to be organised, and air navigation services need to be delivered, in line with the operational requirements of the airspace users, rather than being demarcated according to national borders. Appropriate policies, legislation, and regulations need to be introduced by States that will promote civil/military coordination and collaboration, and a more appropriate design and use of the airspace.

3.2 At the regulatory level, CANSO would like to draw attention to the following aspects:

3.2.1 The aviation industry is confronted with so many potential changes in regulations that govern their behaviour that they are uncertain about how to proceed. To overcome this uncertainty, the administrative processes to develop rules and regulations should be executed with maximum transparency and predictability,

² Assembly Resolutions in Force (as of 8 October 2010), ICAO Doc 9958, p. I-85

³ Ibid., p. I-85

⁴ Ibid., p. I-84

while also providing the regulated community with a meaningful opportunity for dialogue with those drafting policy and regulations.

3.2.2 The aviation industry will have to contend with numerous regulations and compliance obligations issued by multiple authorities. Regulators should therefore take into account the cumulative impact of regulations, and eliminate duplication where possible.

3.2.3 Standards-setting has to be understood as a strategic activity for securing ATM performance improvements and a key tool for safety, interoperability, knowledge dissemination, and promotion of innovation. The deployment of the various ATM modernization programs will require inter alia the development and delivery of necessary ICAO standards and recommended practices (SARPs) to States and industry. To respond rapidly to evolving needs a comprehensive, inclusive, efficient and technically up-to-date system of standards-setting is required.

3.2.4 New procedures need to be supported by an operations approval process; and the necessary equipment and systems in aircraft and on the ground require a timely certification program. Regulatory compliance processes require careful consideration to avoid unnecessary duplication of effort and diversion of resources away from productive activity.

3.2.5 Many technical solutions and concepts exist; we now need define a set of accompanying operational and economic principles and policies to realise the operational benefits. CANSO has been working with its industry partners to develop such enabling operational and economic principles and policies.

3.3 At the social level, we have to recognise that the demand for greater efficiency and productivity, and the introduction of new technology and more automation will continue to introduce change and uncertainty in the workplace. A legal and regulatory environment that encourages social dialogue and collaborative approaches to labour relations is needed in order to address current and future challenges.

3.4 At the economic and financial level, we understand the costs but we do not fully understand the benefits of ATM modernisation. Yet, we expect billions to be invested. ATM modernisation needs to be supported by a solid business case as it will require a significant financial outlay that cannot be easily met by funding through traditional user charges. In a time of sovereign debt crises and credit risk, government funding will likely be limited. Non-traditional approaches to financing need to be explored and that will invariably mean greater involvement of the private sector. Policy-makers and regulators should prevent unnecessary uncertainty for the aviation industry that is attempting to make strategic decisions and thus avoid delay and discourage investment.

3.5 This will inevitably call for new business models and governance structures for the delivery of air navigation services. Good ANS performance is enabled by good governance. And, good governance is in turn attributable to good government policy-making, enabling legislation and appropriate regulation. Greater accountability must be introduced into the delivery of air navigation services and that rests with good governance. Without it, substandard services, system performance and regulatory implementation by States and their ANSPs will continue to have to be tolerated as there is no real penalty for non-performance.

3.6 While ownership and organisational form are not critical factors, it is essential to have separation of service provision from regulatory oversight. Service provision needs to be independent. An approach to management in which business principles are applied and customer service becomes the focus also contributes to superior performance. These objectives can be achieved through various models that provide greater autonomy, including and not limited to, corporatisation, public/private partnerships, or privatisation. It is essential that the

management is empowered to take decisions on issues falling within its remit, independent of political interference.

4. CONCLUSION

4.1 The removal of impediments to ATM modernization has its basis in State policy-making, legislation and regulation, and will require political will and commitment to address. The Conference is invited to agree on the following recommendation:

Recommendation 6/x – State policy framework in support of the aviation system block upgrades

That the Conference agree that:

- a) States, working through the planning and implementation regional groups and in partnership with the aviation industry, develop action plans to address the identified impediments to air traffic management modernization as part of their aviation system block upgrade planning and implementation activities;
- b) ICAO shall facilitate the provision of assistance to States with regard to the various aspects of the aviation system block upgrade implementation; and
- c) ICAO, as a matter of priority and in partnership with all relevant international organisations, develop and execute a communications and stakeholder outreach strategy to address the economic and institutional impediments to implementation of the aviation system block upgrades.

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