



ASSEMBLY — 38TH SESSION

TECHNICAL COMMISSION

Agenda Item 36: Air Navigation — Emerging Issues

CREATING A STANDARDIZED FRAMEWORK FOR THE SAFETY AND SECURITY
OVERSIGHT OF AIR NAVIGATION SERVICE PROVIDERS

(Presented by Jamaica)

EXECUTIVE SUMMARY

This working paper presents the concerns and considerations of Jamaica in the creation of a facilitating environment for future air navigation service provision and oversight, and the steps that have been taken to bring these changes into effect.

Action: The Assembly is invited to:

- a) take note of the content of this working paper; and
- b) exhort the Assembly to:
 - i) obtain the opinion of member states regarding the development of Standards and guidance material regarding the certification of Air Navigation Service Providers; and
 - ii) support the initiatives of members for the development of guidance material by ICAO on the oversight and operational approval for ANSPs.

<i>Strategic Objectives:</i>	This working paper relates to all Strategic Objectives.
<i>Financial implications:</i>	The activities referred to herein will be undertaken through the resources available in 2014 –2016 Regular Programme budget and/or from extra budgetary contributions
<i>References:</i>	A38-WP/52 Annex 6 — <i>Operation of Aircraft</i> Doc 9734, <i>Safety Oversight Manual</i> Doc 9161, <i>Manual on Air Navigation Services Economics</i> Doc 9859, <i>Safety Management Manual (SMM)</i>

1. INTRODUCTION

1.1 Global Air Navigation Service (ANS) provision is under-going a significant transition towards a globally interoperable air traffic management system. The transition involves a shift from the use of conventional to performance based strategies in planning, design, validation, implementation and service provision in air navigation. Given that one of the major challenges for ANS administrators is to be able to keep up with all of the changes that are taking place in the environment, it is important to understand how strategic planning and the strategic planning process is used in today's organizations, particularly in the air navigation service provision organizations.

1.2 As States' political and economic environments continue to undergo changes, ANS organizations, like all other businesses, have also had to continuously adapt to maintain the viability of their services. Over time, the drive towards more efficient methods of administration and service provision has prompted vast research into technological and/or systemic improvements in every aspect of air transport operations. The end result of the research has been an array of varying technological and systemic improvements.

1.3 However, while these improvements have expanded the frontier of service provision and increased safety and security of ANS provision, the industry faces a challenge in its ability to manage the sustained growth in the complexity and scope of ANS. The challenges in management reside in the inability of conventional management systems and States' safety and security oversight mechanisms to keep pace with industry expansion. The challenge also resides in the non-standard manner in which States assign and grant operational approval to ANS providers.

1.4 Jamaica supports the policy and standardization under the Global Aviation Safety Plan (GASP) that, among other things, proposes the effective implementation of organizational based methods of mitigating safety risks. However, it is recognized that the environment within which the Safety Management Systems (SMS) are intended to operate may influence system performance and therefore requires equal attention. Jamaica believes that without measures to mitigate hazards in the operating environment, the global aviation industry may be leaving itself vulnerable to practical drift, the magnitude of which is highly correlated to economic health and other social and political factors.

1.5 Absence of measures to address these matters in the policy and standardization governing ANS organizational approval largely manifests itself in disparate levels of safety, security and quality of services across jurisdictions. These differences are themselves recognized as threats and currently form the subject of various integration and harmonization initiatives. For example, those initiatives aimed at addressing the hazards posed to flight crews associated with different procedures or application of similar procedures while crossing FIR boundaries.

1.6 In recognizing the existence of mature and standardized mechanisms to oversee the organizational approval of other large air transport operators under Certification programs, Jamaica has embarked on a program to streamline a similar mechanism for certification of ANS providers.

1.7 It is intended that State certification will serve as the State's official badge of approval for an entity, public or private, to provide these services on behalf of the State. It is also anticipated that the process of achieving and maintaining certification also gives ANSPs incentive to continually improve and refine their activities. Such certification would provide a predictable mechanism to administer the State's operational control and provide oversight of organizations, systems and procedures with greater specificity than current ICAO SARPs allow. This can be facilitated by States' control of the validity and terms of operations specified in the ANS certificate. This is not unlike the system of Certification and

Operations Specifications that currently appear in Annex 6 — *Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes.*

2. DISCUSSION

2.1 The last edition of the ICAO ATS planning manual was published in 1984, some 29 years ago. Modern Air Navigation Service Providers (ANSP) handles much larger volumes and provides a greater scope of services than their predecessors. The organizational structures, physical infrastructure, human resources, system and procedures required in the provision of modern ATS are therefore vast in comparison and more complex. Complexity is particularly increased as ANSPs become more reliant on Integrated Management Systems (IMS) that consistently interface to maintain the safety and security of services.

2.2 As the scope of services increases and the risk profiles of ANSPs approach those observed in larger operations, it becomes more plausible to justify standards of certification similar to those applied to air operators. As the scope of services expand, ANSPs will see further division of labour and see a departure from conventional organization structures to facilitate their larger portfolios. Furthermore, as the industry becomes more corporate and there is more separation of service provision and oversight roles, it is likely that service providers will use increased corporate control to fast-track these changes. Additionally, as air transport has matured, governments have re-examined their role in these areas. In Europe, a process of organizational separation between regulators and service providers has already taken place, and has been accompanied, in many cases, by liberalization and even the corporatization of state companies or entities.

2.3 The flexibility of organizational forms that may be facilitated under a certification regime will also allow ANSPs located in jurisdictions that face challenges in achieving economies of scale to outsource those portions of services for a more efficient allocation of resources. As a small open economy, Jamaica is often faced with challenges in achieving market efficiency in some areas of ANS provision. By liberalizing market access for the provision of ANS, under the ANS Certification framework, the State will facilitate a wider array of organizational and structural forms that may arise from the need to achieve efficiency. Otherwise, the absence of such regulation and control may force ANS organizations to accept certain inefficiencies that will undermine their ability to sustainably provide their services or impose the inefficiencies of a statutory or *de facto* monopoly on air transport operators. In the larger perspective, this will continue to undermine ICAO's global efforts under Strategic Objective "C" Sustainability of Air Transport.

2.4 By including security requirements as a part of certification, the State will also be provided with a more predictable framework to take such actions necessary, within the scope of the terms and conditions prescribed in the ANSP's Certificate which may be required to ensure that the flying public is not exposed to unmitigated security threats. The Certificate will provide a mechanism for the State to include in certification requirements, those elements that remain as guidance material in ICAO literature but which may be deemed persistent security threats that must be addressed in current systems. For example, methods of addressing cyber-related threats associated with increasingly automated service provision.

3. STATE ACTIVITIES

3.1 Jamaica's activities are based on its belief that the establishment of a facilitating legal and operating environment for a predictable performance based safety framework with maximum corporate flexibility and robust safety features and redundancies is the best preparation for the changes to come and those that have already begun in ANS provision.

3.2 The Jamaica Civil Aviation Authority (JCAA) recently introduced regulatory measures that outline a framework for the certification of ANS providers, the first of its kind in the Caribbean. The "*ANS Certificate*" is a two-part Certificate modeled from those used in Air Operator Certification. The Certificate includes operations specifications that outline the specific scope of services that are allowed to be provided under the authority of the organization's certification. The core requirements of ANS certification under the Jamaican Civil Aviation Regulations (CARs) enshrine desired commercial best practices by including the following as core requirements:

- a) allocation of core responsibilities to key personnel and officers;
- b) Integrated Management Systems (Safety and Quality Management Systems);
- c) development plans (Master planning and Annual Plans)
- d) routine and ad-hoc consultation;
- e) transparency;
- f) proof of financial capability and liability coverage; and
- g) procedure, documentation and administration requirements

3.3 The Primary Aviation Legislation (PAL) is currently under review to incorporate State flexibility in the process of identifying and designating ANSPs and specifying the legal, financial and administrative structures deemed acceptable by the State for the provision, wholly or in part, of ANS. The PAL will also provide a mechanism for applying mandatory performance based safety targets to ANSPs through its State Safety Program (SSP), compliance of which is included in the terms and conditions of its designation.