



ASSEMBLY — 39TH SESSION

TECHNICAL COMMISSION

Agenda Item 34: Aviation safety and air navigation policy

GLOBAL MANAGEMENT OF AVIATION SAFETY AND ENABLERS FOR RISK-BASED SAFETY OVERSIGHT

(Presented by the United Kingdom)

EXECUTIVE SUMMARY

The United Kingdom Civil Aviation Authority (CAA) has developed its own interpretation of a management system, known as the Regulatory Safety Management System (RSMS) to satisfy State Safety Programme and European Aviation Safety Agency (EASA) Authority Requirements. The RSMS is built on the principles for effective and consistent risk management specified in Annex 19 — *Safety Management*. It involves collecting and analysing safety data in order to create risk pictures at various levels of the aviation system. The United Kingdom sees the benefits of sharing risk pictures and validated outputs of safety assessments with other regulators and stakeholders. Joining safety intelligence at a regional level (through RASGs) is of great value to the broadest community regardless of the maturity level in safety management. In addition it allows us to proactively identify the safety priorities in the overall aviation system keeping the global aviation strategy current and in touch with the field.

<i>Strategic Objectives:</i>	This information paper relates to the Safety Strategic Objective .
<i>Financial implications:</i>	N/A
<i>References:</i>	Annex 19 — <i>Safety Management</i> Doc 10004, <i>Global Aviation Safety Plan (GASP)</i>

1. INTRODUCTION

1.1 The *Global Aviation Safety Plan* (GASP, Doc 10004) 2014 - 2016 encompasses the necessary strategic elements for managing aviation safety globally and sets the timescales to achieve this. In order to enable effective implementation of the plan, Annex 19 — *Safety Management* contains provisions and the regulatory frameworks for State Safety Programme (SSP) and Safety Management System (SMS) have been developed to provide the required vision and guidance.

1.2 Annex 19 lays out the safety management responsibilities directly applicable to the state and the service providers. These include the requirements that States and the service providers need to fulfil. In practical terms, for the State it means the development of a SSP and for service providers, the implementation of a SMS. The SSP provides the framework and the essential components of a management system for the regulation and administration of safety. It outlines the provisions to establish the State regulatory system and its functions in order to ensure safe operations. These provisions include legislation, regulation and policy as well as working methods and processes to discharge the safety oversight responsibilities. A performance based approach to safety oversight as advocated in the GASP, relies on the creation of a sound evidence base which is in turn used to manage risk and the sharing of intelligence both internally and externally.

1.3 The SSP also promulgates the SMS requirements to the service providers for which the State has the responsibility to oversee in terms of their effectiveness and their implementation. SMS requirements for service providers are structured around the following four areas, in full alignment with the SSP requirements:

- a) State safety policy and objectives;
- b) State safety risk management;
- c) State safety assurance; and
- d) State safety promotion.

1.4 The introduction of SMS within the aviation industry encourages the collection of data and evidence to identify risks and, sets the processes for systematic risk management. It enables informed and high quality decisions about mitigation actions by the appropriate experts and at the appropriate organisational level, which take into account the broadest safety perspective.

2. DISCUSSION

2.1 The United Kingdom Civil Aviation Authority (CAA) has fully endorsed the GASP and Annex 19 principles for effective safety management. In order to satisfy SSP and European Aviation Safety Agency (EASA) Authority Requirements, the United Kingdom CAA has developed its own interpretation of a management system, known as the Regulatory Safety Management System (RSMS).

2.2 The RSMS provides the United Kingdom CAA with the framework to enable consistent and systematic risk management. It sets the processes to collect and analyse safety data in order to identify, assess and prioritise risk. These risks are assessed and prioritised using a similar methodology to industry management systems. The risks are then consolidated and escalated through the governance process where decisions are made about how the United Kingdom CAA can best influence the management of these risks. This bottom up approach enables the right people with the competencies and authority to examine the risks and hence they are empowered to make well informed decisions about

mitigation options and actions. Once the system has matured, the United Kingdom CAA will be able to categorise the risks to provide perspectives at organisational level (e.g. airlines), sector level (e.g. large commercial airlines) and total system level (e.g. managing risks across aviation disciplines).

2.3 The greatest benefit of the United Kingdom CAA's RSMS comes from building 'pictures' of risk at various levels of the aviation system. The total system risk picture is essentially the United Kingdom State risk picture that highlights the safety priorities at the strategic level and reveals any deficiencies or areas that need focus across the national aviation system. However, considering that aviation is a cross border activity, it is very likely that risks identified within the United Kingdom area of responsibility are relevant and/or are in existence in neighbouring and other States. It is logical therefore to surmise that States with close aviation ties and similar regulatory regimes and culture face common safety issues and concerns.

2.4 Sharing information at a regional level and joining the output of State management systems - the "State risk picture" (which is produced following the Annex 19 approach) can only increase the opportunities to develop potential solutions and find allies in dealing with cross border/regional risks and issues. By following the United Kingdom RSMS model, the products produced (safety risk pictures) will have an appropriate scope to ensure total coverage of the issues and the granularity, in terms of the quality and quantity of data, to carry out the analyses. This ensures confidence for all users and hence increases the usability of the products.

2.5 Regional safety initiatives such as the European Aviation Safety Plan (EASP) led by EASA and the Regional Aviation Safety Groups (RASGs) led by ICAO can act as a repository for the formed data and conduits in reconciling state safety issues and strategies. This allows ICAO to play a global leadership role by setting data enabled standards and recommended practices against an international backdrop that can be shaped to provide a regional focus which allows different levels of SMS maturity to be accommodated.

2.6 The role of RASG is instrumental in the implementation of ICAO's GASP. As Member States work towards acquiring the necessary capabilities and establish the regulatory and organisational structures to improve safety oversight, it has to be recognised that not all will wish to, or have the capability to move forward at the same pace. Indeed, many Member States are already advanced in managing safety oversight whilst others are laying the SMS foundations. RASGs can act as platforms for the Member States – especially the ones with rich data and intelligence - and stakeholders to share validated and consolidated safety information which will be of great value to all regardless of the maturity level of safety oversight. Some information, provided it is validated and of the right quality, is better than none and the aspiration should be to continually improve the scope and depth of the data used and manufactured for the benefit of the broadest possible community.

2.7 Taking this concept of joining up regional risk pictures to a global level, allows us to proactively identify the safety priorities in the overall aviation system and strengthen the voice for raising aviation safety levels worldwide. This generates the solid and the compelling evidence required in order to influence and steer the universal aviation policy towards developing solutions for real aviation problems. In addition access to real time validated information keeps the strategy current and in touch with what is happening in the field.