



WORKING PAPER

HIGH-LEVEL CONFERENCE ON AVIATION SECURITY (HLCAS)

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Agenda item 6: Ensuring the sustainability of aviation security measures – equivalence

SUSTAINABLE AVIATION SECURITY SOLUTIONS

(Presented by the Secretariat)

SUMMARY

While security measures and State-level arrangements are proving to be effective in protecting civil aviation, a significant challenge faced by State authorities and industry is to assure the appropriate level of aviation security while also assuring the sustainability of the measures themselves. To address this matter, regulators and industry must recognize that sustainability is an important strategic aviation security issue and take steps to achieve sustainable aviation security solutions.

Action: The High-level Conference on Aviation Security is invited to endorse the conclusions and recommendations in paragraph 3.

1. INTRODUCTION

1.1 The ICAO framework of Standards and Recommended Practices (SARPs) with respect to aviation security comprises Annex 17 — *Security*, and relevant SARPs in Annex 2, Annex 6, Annex 8, Annex 9, Annex 10, Annex 11, Annex 13, Annex 14 and Annex 18. These SARPs have been progressively developed because of the threat of acts of unlawful interference with civil aviation, both in response to specific acts and in anticipation of acts that may materialize. Successive amendments to Annex 17, for example, have introduced new security measures to raise the minimum international baseline, refined existing measures to improve implementation and codified best practices as methods of organization, detection, prevention and response have evolved. Naturally, changes to these SARPs have been accompanied by incremental costs to State authorities, airport operators, aircraft operators and virtually all other entities involved in civil aviation. It is estimated by the International Air Transport Association that aviation security accounted for US \$8.55 billion in expenses for aircraft operators in 2011, which exceeded the level of profit of US \$7.9 billion.

1.2 ICAO estimates that civil aviation will grow by 6.0 per cent in 2013, 6.4 per cent in 2014, and 4.9 per cent on an annual basis until 2020, with aircraft operators facing a challenging profitability environment in the near term. At the same time, it is anticipated that the threat of unlawful interference with civil aviation will persist and will become more complex as new methods of attack are conceived. Aviation security vulnerabilities in the global air transport system, including those revealed by the ICAO Universal Security Audit Programme, are in need of significant attention over the long term so that gaps can be progressively reduced, denying terrorists and others opportunities to exploit aviation. A global economic climate characterized by fiscal austerity serves to exacerbate the challenges.

1.3 In this context, the sustainability of aviation security has emerged as an important policy issue, and was emphasized during a series of regional aviation security conferences convened by ICAO in 2011 and 2012. Increasingly, State authorities and industry partners in aviation security, and their

international and regional organizations, are seeking ways and means to maintain or improve the level of security effectiveness, achieve greater efficiency in the use of resources allocated to aviation security and, to the fullest extent possible, improve the travel experience.

2. DISCUSSION

2.1 'Sustainable aviation security' can be defined as the detection and prevention of, and response to and recovery from, acts or attempted acts of unlawful interference with civil aviation, utilizing means that can be sustained by the entity or entities responsible for the period of time required. It is worth noting a number of important inter-related policy principles and practices that can contribute to the achievement of sustainable aviation security, as follows. These and other means can, more broadly, support the development of a sound and economically-viable civil aviation system.

2.2 Risk-based security measures

2.2.1 The starting point for consideration of any security measure must be a risk assessment. Such risk assessments, carried out objectively by appropriate security authorities on a continuous basis and informed by available and relevant information, including security intelligence, help assure that new or revised security measures are justified, aligned with actual needs and are proportionate to the level of risk.

2.2.2 The 37th Session of the ICAO Assembly in 2010 directed the ICAO Council to instruct the Aviation Security Panel to identify and develop a risk-assessment methodology for aviation security and to include risk-based assessment with any recommendations for the adoption of new or amended aviation security measures in Annex 17 or in any other ICAO document.

2.2.3 At a State level, appropriate institutional arrangements should be made to ensure that risk assessment, conducted methodically, is a routine aspect of the national civil aviation security programme, and features in policy decision making.

2.3 Outcomes-focused security

2.3.1 ICAO has noted that, with regard to State practices in aviation security, there has been a general tendency for regulators to prescribe both the security outcomes to be achieved and the methods to be employed to achieve these outcomes. Prescribing both the security outcomes and methods offers a level of regulatory control that can be attractive to regulatory authorities, especially when dealing with uncertainty in the level and nature of threats and vulnerabilities, and the potential grave consequences of acts and attempted acts of unlawful interference with civil aviation.

2.3.2 Prescribing methods to achieve outcomes, however, can deny entities responsible for carrying out security measures with flexibility to use other methods that, while different, are as or more effective and efficient in achieving the objective. More recently, the concept of 'outcomes-focused security' has emerged as a viable policy approach to achieve security objectives while enabling those responsible for implementation to have options for the means to achieve the necessary risk management outcomes. These options could be defined by regulators or the responsible implementing entities could apply their ingenuity to the task. Naturally, if the latter course were followed, regulators would benefit from being in a position to exercise appropriate oversight, to be assured that the necessary outcomes have, in fact, been achieved.

2.4 **Rationalization of security measures**

2.4.1 While keeping under constant review the level of threat to civil aviation in accordance with Standard 3.1.3 of Annex 17, a State may conclude that security measures introduced earlier may no longer be necessary as threats are more fully understood, and security methods and technologies evolve. While it may be imprudent to conclude that threats encountered previously will never again materialize, the evolution of aviation risk management can create opportunities to scale back security measures. For example, an immediate response to the liquids, aerosols and gels (LAGs) threat in 2008 was a ban on the transportation of these items in the cabin. Subsequently, the level of restriction was eased to allow small quantities of LAGs as the nature of the risk and countermeasures evolved, and there is a prospect of further easing of the restrictions as detection technologies and screening methods are developed.

2.4.2 In the same manner as States bear responsibility to introduce new or strengthen existing security measures, as appropriate, it is suggested that States also bear responsibility to rationalize or reduce security measures when no longer necessary. In practice, this can be a challenging and controversial matter of public policy because reducing or appearing to reduce security measures may lead to concerns unless compensatory measures are in place to assure that the overall level of risk has not been increased. In this regard, States may find it beneficial to coordinate the rationalization of security measures with bilateral or regional partners, or at a global level, as part of strategies to manage such concerns.

2.5 **Optimization of technology**

2.5.1 Many security measures represent significant levels of capital investment in technology together with the associated infrastructure and airport modifications, as well as operating and labour costs. Examples include detection systems, access control systems, video surveillance and barriers. While such systems have a natural life cycle, the return on investment may be optimized through software upgrades, the use of best practices in system configuration and operation, and attention to human factors, including training.

2.6 **Mutual recognition of equivalence and one-stop security**

2.6.1 A fundamental principle of the international civil aviation security framework is ‘host-State responsibility’: the responsibility of each State to provide for the security of flights departing from airports in its territory in accordance with Annex 17 SARPs and security-related SARPs in other Annexes. The efficiency advantages of air transport, however, can be compromised when a State does not recognize as equivalent the measures applied in another territory, resulting in the re-application of security measures to arriving, transfer or transit passengers, baggage or cargo. The re-application of security measures may be considered necessary for risk management reasons but can cause delays, added costs and inconvenience. Ideally, States would be able to recognize the equivalency of measures applied in the territory of their aviation partners to support one-stop security. One-stop security, which is enshrined in Standards 4.4.2 (passengers and cabin baggage) and 4.5.4 (hold baggage) of Annex 17, can result in the reduction of connection times and costs incurred by security controls (e.g. equipment, security staff, etc.), as well as increased facilitation for passengers, and airport and aircraft operators.

2.6.2 While there are several examples of one-stop security or other equivalency agreements, including recent examples in the field of air cargo, the task of determining equivalency is not straightforward and tools to assist States in determining equivalency have not yet been developed by ICAO. Guidance material to assist State authorities in assessing equivalency could be developed and promoted to encourage cooperation in this area.

2.7 **Harmonization**

2.7.1 The international air transport system, by its very nature, causes air operators and other entities involved in air transport, such as integrators and freight forwarders, to come under the regulatory jurisdiction of numerous States. As a result, they must conform to a range of aviation security and border integrity requirements, some of which may be harmonized between States, thereby facilitating compliance, and others which may not be harmonized, thereby creating additional compliance challenges.

2.7.2 The sustainability of aviation security can be enhanced by harmonizing requirements across two or more jurisdictions. For example, adopting regulatory provisions harmonized on a bilateral or regional level can create efficiencies in regulatory compliance methods and open up opportunities for oversight to be conducted in collaborative ways.

2.8 **Preparedness for crisis events**

2.8.1 Crisis events in aviation security, such as acts or attempted acts of unlawful interference, inevitably cause significant levels of activity for the principal concerned parties, sometimes for extended periods of time. If unsuccessfully managed, threats can persist, response capabilities can be compromised, and recovery to normal operations can be stalled. The ability to sustain necessary activities by using appropriate management practices, such as having surge capacity available for contingency situations, enables organizations to anticipate and respond to crisis situations with sustainable activities, and thereby support the overall sustainability of State aviation security programmes.

3. **CONCLUSIONS AND RECOMMENDATIONS**

3.1 The High-level Conference on Aviation Security is invited to conclude that:

- a) the sustainability of aviation security measures and arrangements is an important strategic issue for all entities with aviation security-related responsibilities;
- b) risk-based security measures, outcomes-focused security measures, rationalization of security measures, optimization of technology, mutual recognition of equivalence and one-stop security, harmonization, and preparedness for crisis events are policy principles and practices whose implementation can contribute significantly to the sustainability of aviation security measures and arrangements;
- c) greater emphasis should be placed on achieving an appropriate balance between the effectiveness of security measures and facilitation.

3.2 The High-level Conference on Aviation Security is invited to recommend that:

- a) States adopt the policy principles and practices described in this working paper to ensure the sustainability of their national civil aviation security programmes;
- b) ICAO develop and promote guidance material to support States in their efforts to maintain sustainable national civil aviation security programmes;
- c) ICAO, States and all stakeholders collaborate to develop and implement ways and means to achieve sustainable aviation security.