

## ASSEMBLY — 36TH SESSION

## **EXECUTIVE COMMITTEE**

**Agenda Item 15: Aviation Security Programme** 

## HUMAN FACTORS IN CIVIL AVIATION SECURITY (OBLIGATION AND RECOMMENDED OPERATIONAL PRACTICES)

(Presented by Egypt)

## **EXECUTIVE SUMMARY**

This paper presents the Contracting State obligation to certify the persons carrying out screening operation and emphasizing the importance of the Human Factors in civil aviation security operations specially with implementing the advanced technology and recommends some operational practices.

**Action**: The Assembly is invited to discuss the paper and recommend the following operational practices:

- a) gradually integrate human factors knowledge in all aspects of aviation security planning;
- b) improve the operational environment and organizational culture within which personnel complete their tasks:
- c) establish and support a no blame culture among all civil aviation security stakeholders; and
- d) promote national and international collaboration through conferences and seminars on human factors in civil aviation security operations.

Strategic Objectives:	This working paper will further Strategic Objective B (Enhance global civil aviation security)
Financial implications:	Not applicable.
References:	Annex 14, Aerodromes Annex 17, Security Annex 9, Facilitation Annex 18, The Safe Transport of Dangerous Goods by Air Doc 9808, Human Factors in Civil Aviation Security Operations Doc 8973, Security Manual for Safeguarding Civil Aviation against Acts of Unlawful Interference.

- 1.1 ICAO Annex 17 Standard 3.4.3 "Each Contracting State shall ensure that the persons carrying out screening operations are certified according to the requirements of the national civil aviation security programme to ensure that performance standards are consistently and reliably achieved."
- 1.2 Screening is defined in Chapter one of ICAO Annex 17 (Security) as: "The application of technical or other means which are intended to identify and/or detect weapons, explosives or other dangerous devices, articles or substances which may be used to commit an act of unlawful interference."
- 1.3 Civil aviation security personnel and equipment have not received (and have not required) the same level of regulatory and certification attention that regulatory authorities have placed on flight crews, ACT, maintenance personnel and their respective aviation equipment.
- 1.4 Historically, the approach in civil aviation security has been to focus on technology, with the objective of eliminating error by removing the human operator from the system.
- 1.5 Some airport operators envisage security screening that would be completely invisible to passengers and others as they make their way through a terminal. Such a system would use sophisticated high definition cameras for facial recognition and profiling. Contents of luggage would be x-rayed from a distance through a laser system, and explosive traces would be collected from dedicated portals in the terminal.
- 1.6 All of these would be completed with minimal human intervention in order to get away from issues of recruitment, training, rostering, etc.
- 1.7 Apart from requiring absolute detection notes, no false alarm rate, and the perfect integration of systems; these scenarios could contribute to maximizing the deterrence effect that the current security checkpoints provide to the international civil aviation environment.
- 1.8 But reports concluded that integration is not expected to reduce the number of security personnel required at checkpoints because:
  - a) High alarm rate requires physical inspection and manual screening of pax and carry-on items;
  - b) Effective x-ray equipment use requires that bags be spaced apart and positioned to maximize image size, and minimize jamming;
  - c) Sufficient personnel are required to ensure that suspect passengers can be detained with minimal disruption to the continued processing of passengers; and
  - d) Despite clear signage at inspection points, passengers routinely neglect to remove metal objects from their person, thus requiring intervention.