

ICAO Aviation Security Global Risk Context Statement

Outline



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- The Need
- Global Risk Context Statement
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Objectives of the ICAO AVSEC Global RCS

- Provide a description of the current global risk picture;
- Assist States in their efforts to protect air transportation and prevent its use for unlawful acts;
- Present high-level statements to inform an improved approach in creating and maintaining States' national civil aviation security programmes;
- Assist ICAO in improving Standards and Recommended Practices (SARPs) and guidance material; and
- Offer States information and a framework to conduct risk assessments at the national level.

Information Sources



- Actual incidents, including successful or thwarted attacks on aviation, which provide information on terrorist objectives and methodologies;
- Closed sources, primarily counter-terrorist intelligence and assessments, which may be gathered or generated by intelligence, law enforcement and other agencies of States; and
- **Open sources**, which may include publicly available information on unusual or suspicious occurrences.

The Need



- The continuing threat of terrorism is most effectively managed by identifying, understanding and addressing the potential risks both to and from civil aviation
- Standard 3.1.3 of Annex 17 requires that:

Each Contracting State shall keep under constant review the level of threat to civil aviation within its territory, and establish and implement policies and procedures to adjust relevant elements of its national civil aviation security programme accordingly, based upon a security risk assessment carried out by the relevant national authorities.

Global Risk Context Statement

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THREAT TYPE	Likelihood	Consequence	Vulnerability	RISK	
PERSON-BORNE IED carried	High	High	Medium-High to	HIGH	
on the person or in cabin			High		
baggage					
MANPADS	Medium-High	High	High	MEDIUM-HIGH	
in conflict or proliferation zone					
IED IN CARCO	N.4. 12	112.1		MEDIUM	
IED IN CARGO	Medium	High	Medium	MEDIUM-HIGH	
LANDSIDE THREATS	Medium-High	Medium-Low	Medium-High	MEDIUM-HIGH	
EANDOIDE TIINEATO	Wediam-riigh	Wediaiii-Low	Wediam-riigh	WEDIOWEINOT	
PERSON-BORNE IED in Hold	Medium-Low	High	Medium to	MEDIUM	
Baggage			Medium-High		
VEHICLE-BORNE IED	Medium	Medium-High	Medium	MEDIUM	
MANPADS (non-conflict or	Low	High	High	MEDIUM-LOW	
proliferation zone)					
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AIRBORNE THREATS -	Medium-Low	High	Medium	MEDIUM-LOW	
aircraft used as weapon					
IED IN SERVICES	Medium-Low	Medium-High	Medium	MEDIUM-LOW	
(catering, in-flight supplies, etc.)					
AIRBORNE THREATS -	Medium-Low	Medium-High	Medium-High	MEDIUM-LOW	
remotely piloted aircraft systems	iviedium-Low	wedium-nigh	wedium-nigh	IVIEDIOIVI-LOVV	
remotery photed and all systems					

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THREAT TYPE	Likelihood	Consequence	Vulnerability	RISK
AIRBORNE THREATS -	Medium	Medium-Low	Low	LOW
conventional hijack				
CYBER ATTACKS	Low	High	Medium-Low	LOW
CHEMICAL, BIOLOGICAL, AND	Low	Medium	Medium	LOW
RADIOLOGICAL THREATS				



New Definition –

Behaviour detection. Within an aviation security environment, the application of techniques involving the recognition of behavioural characteristics, including but not limited to physiological or gestural signs indicative of anomalous behaviour, to identify persons who may pose a threat to civil aviation.

2.5 Equipment Innovation, research and development

Recommendation. — Each Contracting State should, where possible, encourage innovative approaches and promote research and development of new security equipment, innovative processes and procedures which will better achieve civil aviation security objectives and should cooperate with other Contracting States in this matter.

New 2.5.x Recommendation. — Each Contracting State should consider implementing innovative processes and operational procedures to allow in-line differentiation of screening and security controls.



3.1.3 Each Contracting State shall keep under constant review the level and nature of threat to civil aviation within its territory and airspace above it, and establish and implement policies and procedures to adjust relevant elements of its national civil aviation security programme accordingly, based upon a security risk assessment carried out by the relevant national authorities.

New heading

3.4 Quality control and qualifications

New Recommendation

4.1.3 Recommendation. — Each Contracting State should consider integrating behaviour detection into its aviation security practices and procedures.



New Standard

- 4.3.6 Each Contracting State, in accordance with the risk assessment carried out by its relevant national or local authorities, shall ensure that measures on the ground or operational procedures are established to mitigate possible attacks against aircraft with man-portable air defense systems
- (MANPADS) and other weapons representing a similar threat to aircraft at or near an airport.
- 4.8.1 **Recommendation.** Each Contracting State should ensure that landside areas are identified.
- **New 4.8.1** bis Each Contracting State should ensure that security measures are established in landside areas to mitigate the risk of and to prevent possible acts of unlawful interference in accordance with national and local risk assessments carried out by the relevant authorities.



- 4.9.1 **Recommendation.** Each Contracting State should, in accordance with the risk assessment carried out by its relevant national authorities, ensure that appropriate measures are developed in order to protect the confidentiality, integrity and availability of critical information and communications technology systems and data used for civil aviation purposes from interference that may jeopardize the safety of civil aviation.
- **4.9.2 Recommendation.** Each Contracting State should encourage entities involved with or responsible for the implementation of various aspects of the national civil aviation security programme to identify their critical information and communications technology systems and data, including threats and vulnerabilities thereto, and develop protective measures to include, inter alia, security by design, supply chain security, network separation, and remote access control, as appropriate.

Other Considerations



- The Panel noted that recent events may also reflect a shift in the modus operandi of terrorist groups towards the selection of "soft" targets and the exploitation of weak or poorly implemented, security measures using generally less sophisticated methods than in other recent plots.
- In this connection, the Panel further reiterated the significance of the potential threat and risk from insiders with privileged access and knowledge to perpetrate or assist in attacks on aviation.
- It is the duty of each Member State to make its own assessment of the risk applying to its territory and assets, and to establish risk mitigating measures
- Each Member State should document and review its risk assessment periodically, or when significant new developments arise

Other Considerations



 All States should be aware of the vulnerabilities and consequences associated with such threats. Terrorists are constantly seeking to identify the perceived limitations of aviation security measures and to identify and exploit remaining vulnerabilities and weak points within the global system.

Risk Assessment Process



- The risk assessment process comprises three elements:
- a) analysis of plausible threat scenarios and their likelihoods, and consequences;
- b) residual risk assessment taking account of vulnerability and current mitigations; and
- c) recommendations for further risk-based work and possible mitigation.

Critical Success Factors



- Risk Assessment
- Landside Security
- Behaviour Detection
- Information sharing
- Security Culture
- Intelligence
- Background checks



"The only thing necessary for the triumph of evil is for good men to do nothing." - Edmund Burke