



SAFE SKIES.  
**SUSTAINABLE  
FUTURE.**

**ICAO APAC Regional Aviation  
Cybersecurity Seminar  
12-14 Mar 2025  
Bangkok, APAC**



# Welcome & Opening Remarks



SAFE SKIES.  
**SUSTAINABLE  
FUTURE.**

**Coffee Break**



# Session 2: Aviation Cyber Threat Landscape



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# Global Aviation Cyber Threat & Risk Landscape

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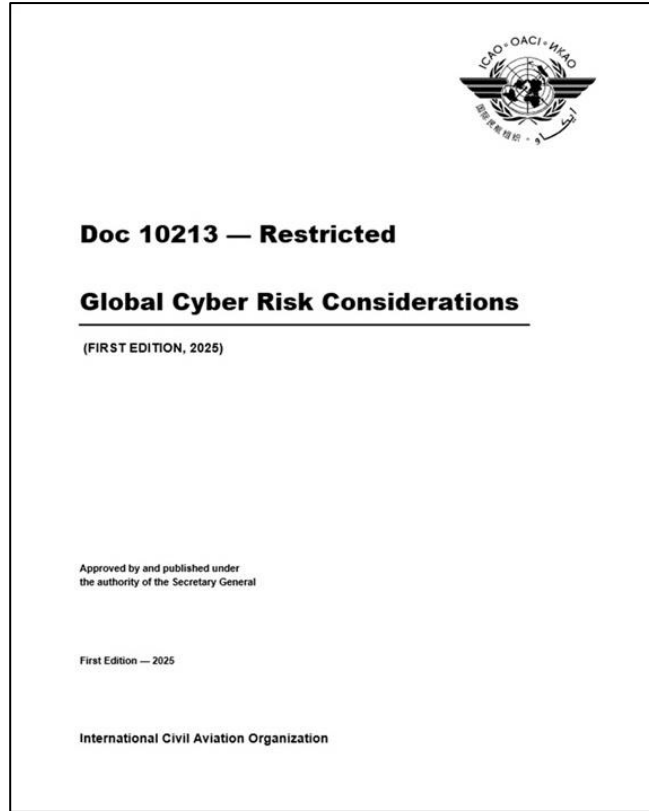


$$\textit{Likelihood} = \textit{Intent} \times \textit{Capability}$$

$$\textit{Residual Risk} = \textit{Likelihood} \times \textit{Impact} \times \textit{Vulnerability}$$

# ICAO Global Cyber Risk Considerations – Doc 10209






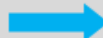




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Methodology to Integrate Cyber Risk  
Management into Aviation Risk  
Management






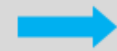


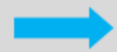
Global Cyber Threat & Risk Landscape

# Cyber Risk Scoring and Assessment Matrices

Cyber Risks	Likelihood	Impact/ Consequence/ Effect	Vulnerability	Residual Cyber Risk	Future Trend – Frequency of Cyber Incidents
Theft of Intellectual Property Rights (IPR)	MEDIUM-HIGH	HIGH	HIGH	HIGH	
Ransomware	MEDIUM-HIGH	MEDIUM-HIGH	HIGH	MEDIUM-HIGH	
Cyber-attack Causing an Unmanned Aircraft System to Collide with an Aircraft	MEDIUM	HIGH	HIGH	MEDIUM-HIGH	
Cyber-attack Causing UAS Intrusion to Aviation Dedicated Airspace	HIGH	MEDIUM-HIGH	HIGH	MEDIUM-HIGH	
Spoofing of Global Navigation Satellite System (GNSS)	HIGH	MEDIUM	MEDIUM (for some Aircraft)	MEDIUM-HIGH	
			LOW (for some Aircraft)	LOW	
Distributed Denial of Service (DDoS)	HIGH	MEDIUM-LOW	HIGH	MEDIUM	
Theft of Personally Identifiable Information (PII)	MEDIUM	MEDIUM-HIGH	HIGH	MEDIUM	
Unavailability of Heating Ventilation Air Conditioning (HVAC) in Operational or Data Centers	MEDIUM-LOW	HIGH	HIGH	MEDIUM	
Unavailability of Power Supply in Operational or Data Centers	MEDIUM-LOW	HIGH	HIGH	MEDIUM	
Corruption of Meteorological (MET) Data	HIGH	MEDIUM-LOW	HIGH	MEDIUM	



# Cyber Risk Scoring and Assessment Matrices

Cyber Risks	Likelihood	Impact/ Consequence/ Effect	Vulnerability	Residual Cyber Risk	Future Trend – Frequency of Cyber Incidents
Corruption/Spoofing of Surveillance Data	MEDIUM-LOW	HIGH	HIGH	MEDIUM	
Corruption of Flight Plan	MEDIUM-LOW	HIGH	HIGH	MEDIUM	
Corruption of Electronic Flight Bag (EFB) Data (depends on EFB Class)	MEDIUM	MEDIUM	HIGH	MEDIUM-LOW	
Unavailability of Internet Protocol (IP) Network for Aviation Operations	MEDIUM-LOW	MEDIUM	MEDIUM-HIGH	MEDIUM-LOW	
Corruption of Airport Security Screening Systems Detection Capability	MEDIUM	HIGH	MEDIUM-LOW	MEDIUM-LOW	
Unavailability of Flight Plan	MEDIUM-LOW	MEDIUM-HIGH	HIGH	MEDIUM-LOW	
Corruption/Spoofing of Instructions to Aircraft	MEDIUM-LOW	MEDIUM	HIGH	MEDIUM-LOW	
Jamming of GNSS	HIGH	MEDIUM	MEDIUM-LOW	MEDIUM-LOW	
Unavailability of Aircraft Systems (Aircraft Control or Airline Information Services Domains)	LOW	HIGH	HIGH (Airline Information Services)	MEDIUM-LOW	
			LOW (Aircraft Controls)	LOW	

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# Thank You

