



ICAO MID

ATM SG/10TH AND CNS SG/13TH
MEETINGS

2024

20 - 23 October

Saudi Arabia, Jeddah, Ritz Carlton





ICAO MID

ATM SG/10th AND CNS SG/13th MEETINGS

2024

20 - 23 October

Saudi Arabia, Jeddah, Ritz Carlton



ANS Cybersecurity Resilience

Mohamed Iheb Hamdi

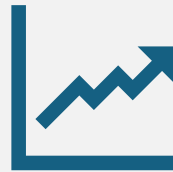
ICAO Regional Officer, Aerodromes and Ground Aids

ICAO MID ANS Cybersecurity Focal Point

Introduction



**IMPORTANCE OF
CYBERSECURITY IN AVIATION**



**GROWING THREATS
AND RISKS**



**NEED FOR EFFECTIVE
INTELLIGENCE AND
MONITORING**

Cybersecurity Intelligence

- **Definition and Scope of Cybersecurity Intelligence**
- **Gathering and Analyzing Threat Intelligence**
- **Collaboration and Information Sharing**





Monitoring Techniques

- **Continuous Monitoring and Surveillance**
- **Network and System Monitoring**
- **Intrusion Detection and Prevention Systems**

Impact Mitigation Strategies

- **Incident Response and Management**
- **Contingency Planning for Cyber-Attacks**
- **Business Continuity and Disaster Recovery**



The background features a stylized globe with a network overlay of white lines and nodes. Several padlock icons are scattered across the scene, some in white and some in a light blue color. The overall color palette is dominated by dark blues, purples, and reds, with bright white and yellow highlights from the network nodes and padlocks.

Best Practices

- **Multi-Layered Defense Strategy**
- **Regular Vulnerability Assessments**
- **Employee Awareness and Training**

International Collaboration

- **Importance of Collaboration in Cybersecurity**
- **International Civil Aviation Organizations**
- **Sharing Best Practices and Threat Intelligence**



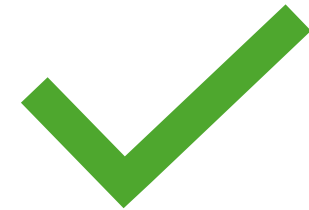
Case Studies



**Real-World Examples of
Cyber-Attacks in Aviation**



**Lessons Learned and
Impact Analysis**



**Successful Mitigation
Strategies**

Future Trends

- **Emerging Technologies in Cybersecurity**
- **Artificial Intelligence and Machine Learning**
- **Proactive Threat Hunting and Predictive Analytics**



MIDANPIRG/21 Meeting Outcomes on CS

- The MIDANPIRG/21 meeting was apprised of the outcomes of the Cybersecurity and Resilience Symposium held in Doha, Qatar, from 6 to 8 November 2023. The meeting noted with appreciation the symposium outputs reflected on the Appendix 5M of the MIDANPIRG Report and agreed to the following Conclusion:

MIDANPIRG Conclusion 21/28: Cybersecurity Systems Resilience

*That, States consider the recommendations in **Appendix 5M** which would support the enhancement of their cybersecurity systems resilience.*

Key Points

- In conclusion, effective cybersecurity intelligence and monitoring techniques are crucial for mitigating cyber-attack impact in international civil aviation.
- It is essential for aviation stakeholders to collaborate, share information, and adopt best practices to strengthen cybersecurity defenses.
- Let's work together to ensure the safety and security of our aviation systems and protect against cyber threats.

