Cybersecurity

TSA Perspective

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Possible Threats to the Air Domain

Aircraft Systems
  Communications
  Navigation

Airport Systems
  Access Control - CCTV
  Critical Infrastructure
  Aircraft Boarding
  Screening
  Law Enforcement

Aviation Authorities
  Procedures/Standards/Personnel

Air Traffic
Possible Threats to the Air Domain

INFORMATION!

RANSOME WARE
DENIAL OF SERVICE
HACKING
COMMUNICATIONS
Threats by WHOM?

Insider Threat
Disgruntled Employees
State Actors
Malicious Hackers
Motivated by Money

YOU!
Next Steps

Cybersecurity Laws and National Reporting Requirements
Thorough background checks
Insider Threat Programs
Agency IT Programs
Information Sharing – Lessons Learned
Cybersecurity Training for Employees
Partnership/Inter-Government Agencies/Private Industry
The TSA Cybersecurity Roadmap provides a solid framework for how TSA can operate within the cyber environment, ensure the protection of its data and information technology systems, and ensure the protection and resilience of the Transportation Systems Sector.

TSA is charged with securing the nation’s transportation systems from all threats, which involves protecting against both cyber and physical attacks.

The TSA Cybersecurity Roadmap aligns with both the National Cyber Strategy and the DHS Cybersecurity Strategy.

The Roadmap’s focus is the incorporation of cyber threats into the risk assessments for the Transportation Systems Sector (TSS) and increased information sharing among all stakeholders.
TSA Cybersecurity Roadmap | Six Goals for Action

Priority 1
Risk Identification

Goal 1.1 – Assess and prioritize evolving cybersecurity risks to TSA and the Transportation Systems Sector

Priority 2
Vulnerability Reduction

Goal 2.1 – Protect TSA information systems
Goal 2.2 – Protect Transportation Systems Sector Critical Infrastructure

Priority 4
Enable Cybersecurity Outcomes

Goal 4.1 – Strengthen the security and resilience of the cyber environment
Goal 4.2 – Improve management of TSA and TSS cybersecurity activities
Overview

• Goal 1.1: TSA will incorporate cybersecurity risks into the risk assessments of all modes within the TSS into the Transportation Sector Security Risk Assessment (TSSRA). This will require cyber threats and vulnerabilities to be assessed within the TSS.

• TSA will need to coordinate with the National Risk Management Center (NRMC) to accomplish this goal.

• Goal 2.1: IT will secure TSA’s enterprise network systems.

• Goal 2.2: PPE will engage with TSS stakeholders to provide information on cyber-related vulnerabilities and develop strategies to reduce the cyber-related risk to the TSS.

• For example, TSA will increase its 5N5 cyber workshops and develop a survey to track National Institute of Standards and Technology (NIST) Cybersecurity Framework adoption.
TSA Cybersecurity Roadmap Implementation Plan Overview

• Goal 3.1: TSA will work to improve information sharing of cyber-related events within the TSS. The TSOC will work to ensure it receives, analyzes, and distributes cyber-related information provided by TSS stakeholders.

• This will require coordination with Cybersecurity and Infrastructure Security Agency (CISA) and the National Cybersecurity and Communications Integration Center (NCCIC).

• Goal 4.1: TSA will continue its role of engaging with the international community to develop cybersecurity policies that protect global transportation systems.

• Goal 4.2: TSA will need to build capacity and further develop its capabilities to fulfill the milestones of the Cybersecurity Roadmap.
TSA Cybersecurity Roadmap | Conclusion

• Goals of the TSA Cybersecurity Roadmap and Implementation Plan
  
  • Cybersecurity risks are effectively managed
  
  • Critical networks are protected
  
  • Vulnerabilities are mitigated
  
  • Cyber threats are reduced and countered
  
  • Incidents are responded to in a timely way
  
  • The Transportation Systems Sector cyber environment is secure and resilient
Where

16 page document available on-line via Google

TSA Cybersecurity Roadmap 2018
Questions

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