

Welcome back!





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Facilitator



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Cybersecurity Workshop



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Mr. Andy Boff
Principal Consultant,
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Cyber Safety Task Force (CSTF)

- Diverse group, ~20 experts world-wide
- Safety and security, including its underlying culture, is not an established state, but something that needs to be pursued continuously

Cybersecurity Culture

Development of a positive and proactive cybersecurity culture

CANSO Emergency Response Planning Guide

- Planning Guide
- Contingency Procedures
- Lessons Learned

CANSO Standard of Excellence in Cybersecurity

- Maturity Model
- Advice and Lessons
- Learned

CANSO Cyber Risk Assessment Guide

- Risk Assessment Guide
- Risk Matrix
- Threat Landscape

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Workshop Objectives

- Discuss approaches to effective implementation of cybersecurity risk management measures for ANSPs and ANSP Supply Chain
 - Use of CANSO CSTF resources
 - Share lessons Learned and Recommended Practices
- Identify further actions / initiatives for the CSTF or other CANSO WGs to follow up

Case Study – Avinor ANS

Passengers

ATM functional system (people, procedures, equipment) Safety barriers Security barriers Protecting the environment from the system Protecting the system from the environment ATM System Standards, policy and procedure Hardware and software supply chair Threat actors Separation Infringement Potential Conflicts - traffic volume / Data encryption Anti-virus and malware protectio authorized personnel only Limiting number of person with access Continuous monitorering and control of access Overload Conflict Conflict Remote backup of systems Risk = likelihood x consequence **Risk** = threat x vulnerability x assets Vulnerability = likelihood x consequence

Preventive security (ex. security clearance)

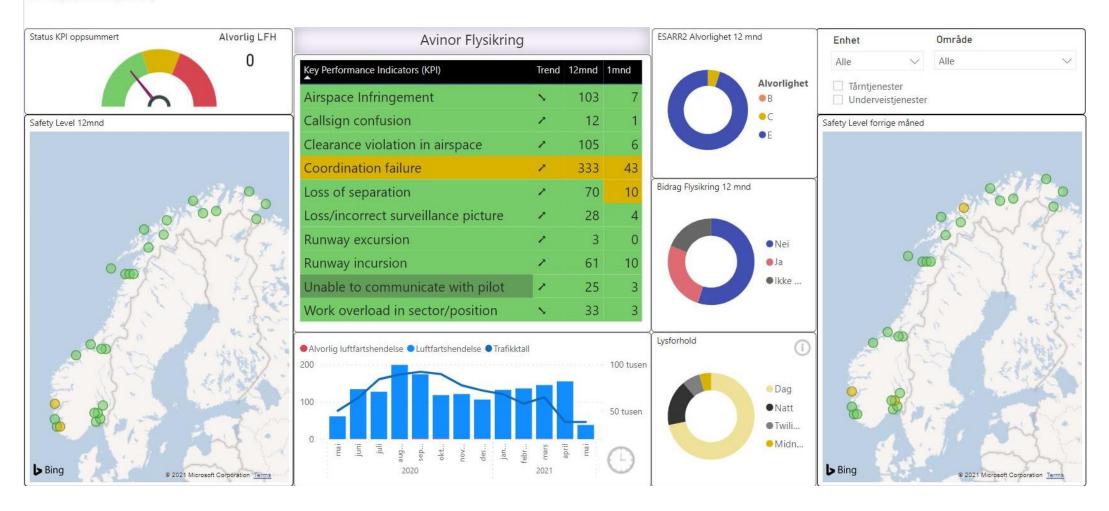
Case Study – Avinor ANS

DASHBOARD FLYSIKRING

Unntas for innsyn i medhold av offentleglova § 13, jf. forvaltningsloven § 13 første ledd 2.

SAFETY LEVEL KPI FO

FS Security, Flysikkerhet og Beredskap



Case Study – Avinor ANS

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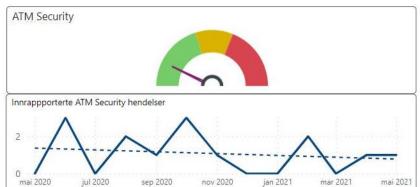
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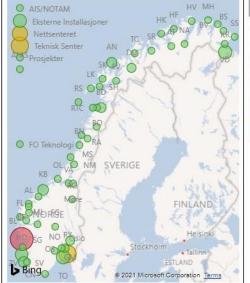
AVINOR FLYSIKRING - SECURITY

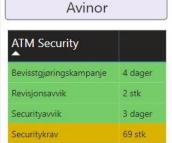
FS Security, Flysikkerhet og Beredskap



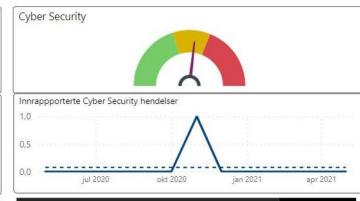








SEC kategori





Discussion Point 1

- What could be a cost effective and beneficial method for implementation of an ANSP cyber security management system?
 - Outsource to an external supplier to implement and manage on the ANSP's behalf
 - Use an existing IT security framework as a basis for development
 - Integrate it into an existing risk management approach (e.g. safety)
 - Others?

Discussion Point 2

- What are some of the main pitfalls / challenges when implementing a cyber security management system?
 - Lack of senior management engagement
 - Lack of competent internal resource to implement / manage it
 - Lack of integration with other risk management approaches / policies (stove piping / silo approach)
 - Organisational barriers to integrated risk management
 - Use of approaches/tools that are not suited to operational technology environments

Discussion Point 3

- How to ensure a holistic approach to cyber security as an integrated part of the safety management system?
 - Outsource to an external supplier to implement and manage on the ANSP's behalf
 - Use of existing IT security personnel
 - Develop cyber security competence scheme for existing personnel with operational technology experience
 - Combination of the above



Thank you



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