TRAFICOM
Finnish Transport and Communications Agency

Cybersecurity in Aviation

Katunayake Sri Lanka
5-7.2.2020

Workshop ONE: Cybersecurity From the Global Aviation Perspective

- Aviation is a global ecosystem, similar risks everywhere
- Local specialities
  - Environment, governance, culture etc.
- Limited resources and expertise
- ESCP & Finland

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Workshop THREE: The Implementation Plan for the Cybersecurity Strategy

- Strategy & implementation plan as an asset
  - The Pilars as building blocks at regional and national level
- At national level:
  - policy
  - governance model
  - Risk management
  - Information sharing
  - Incident management
  - Capacity building, training and awareness

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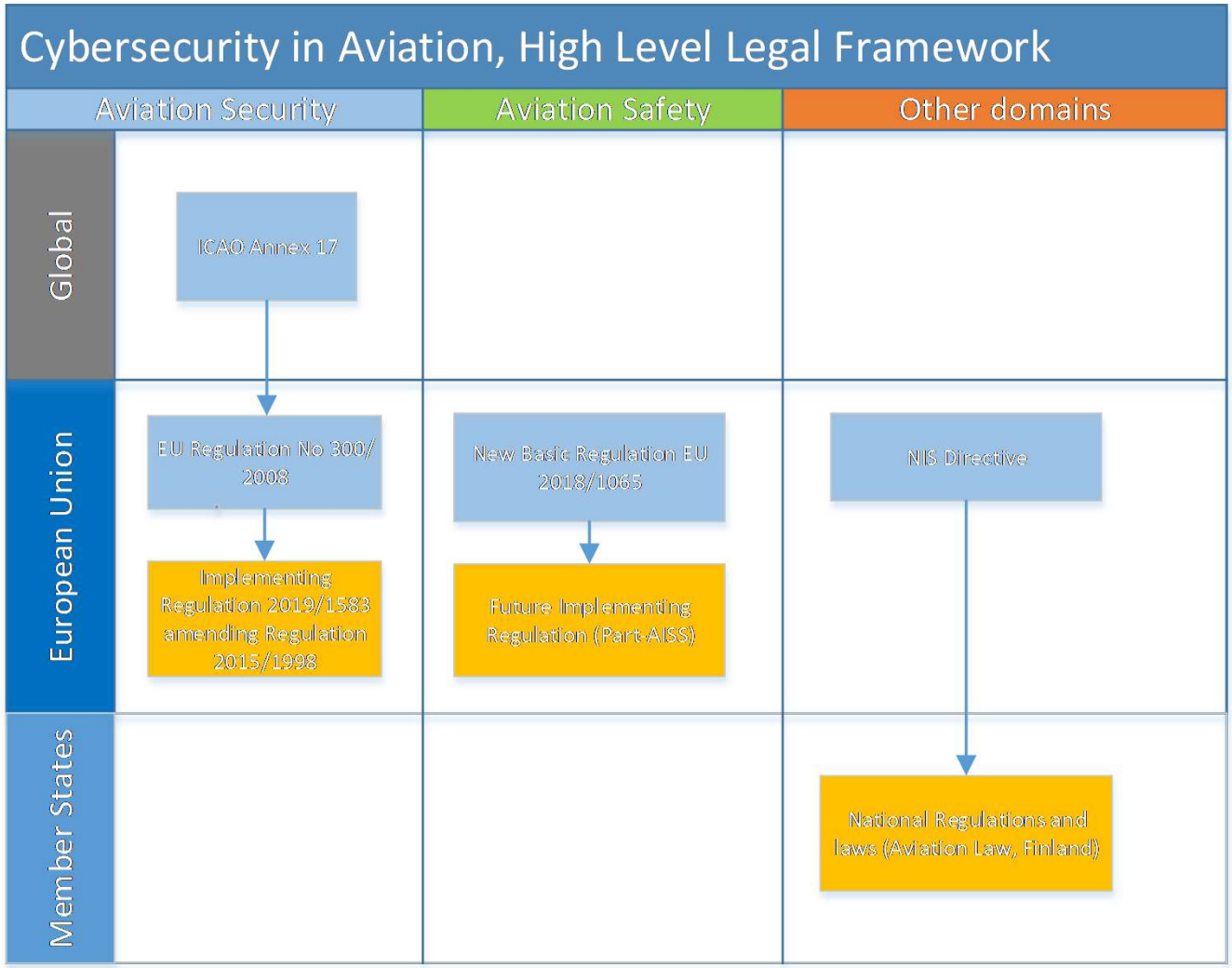
Cybersecurity in Aviation, High Level Legal Framework
Aviation Security
Aviation Safety
Other domains
Global
European Union
Member States
ICAO Annex 17
EU Regulation No 300/2008
Implementing Regulation 2019/1583 amending Regulation 2015/1998
New Basic Regulation EU 2018/1065
Future Implementing Regulation (Part-AISS)
NIS Directive
National Regulations and laws (Aviation Law, Finland)

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Workshop FIVE: Information Security Management System (ISMS) and coordination with other Regulatory Frameworks

- Several cyber regulations
  - Cybersecurity for: aviation safety, aviation security, society
  - Information security management as a common thread
- CAA-FI is the Competent Authority for civil aviation cybersecurity in Finland
  - Interactive collaboration with
    - Ministry, agencies, authorities and organizations
  - Aim to leverage existing strong safety & security culture
    - Integration of management systems: SMS (Safety Management System, Security Management Systems and Information Security Management System)
  - Holistic approach over different aviation domains

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Workshop SIX: Introduction to Risk Management Aspects

- Information security risk management in the safety context
  - Coordination between aviation security, safety and information security experts is a key

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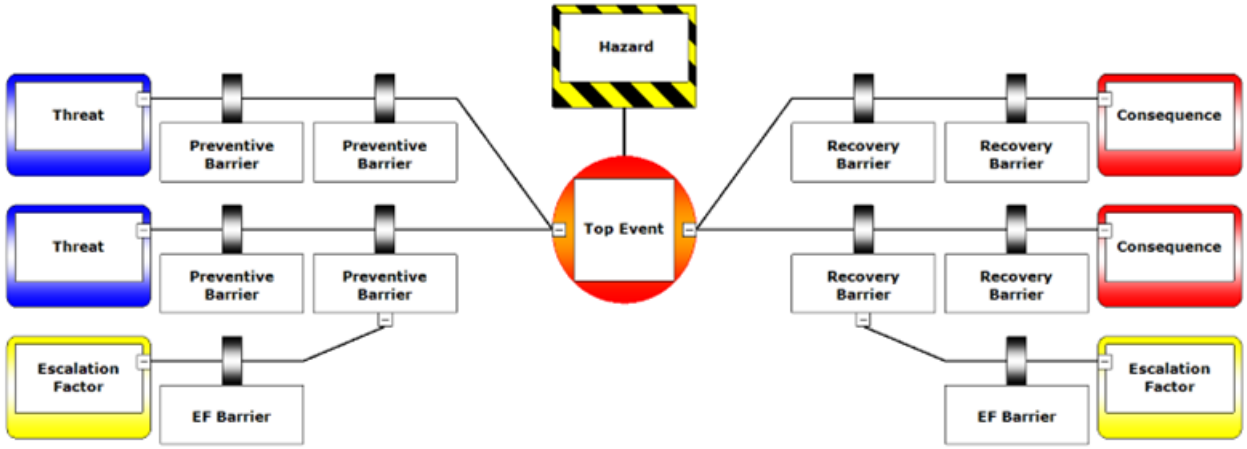
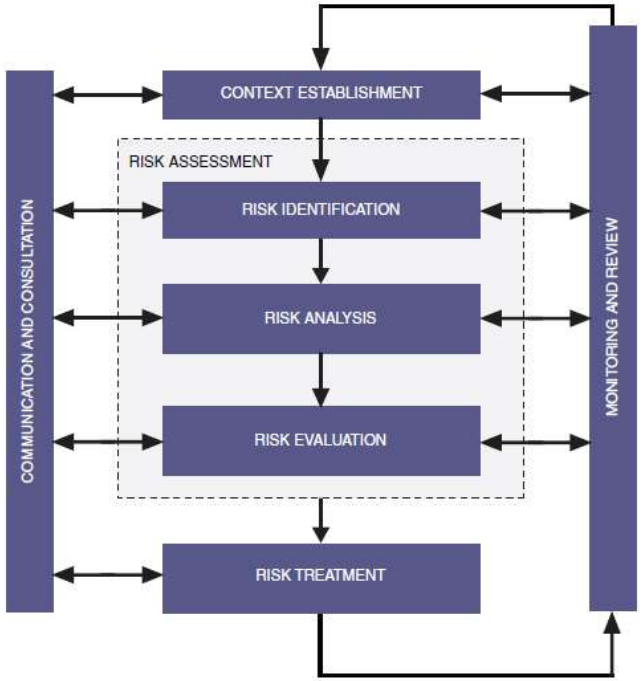
Workshop SIX: Introduction to Risk Management Aspects

- Different levels in risk management
  Short case study
  - National level
  - All aviation domains
  - Key strategic organization
  - NCSC-FI
  - No standards available



Workshop SIX: Introduction to Risk Management Aspects

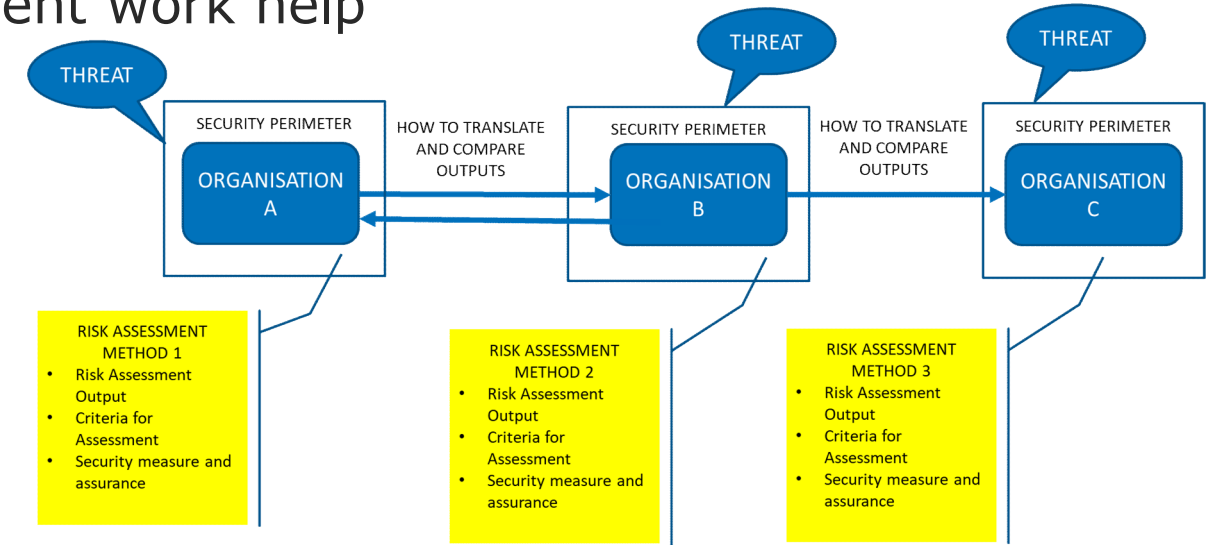
- Different levels in risk management
  Short case study
  - Organizational level
    - Iaw standards



ISO 31000 / 27005

Workshop EIGHT: Introduction to the Sharing of Information

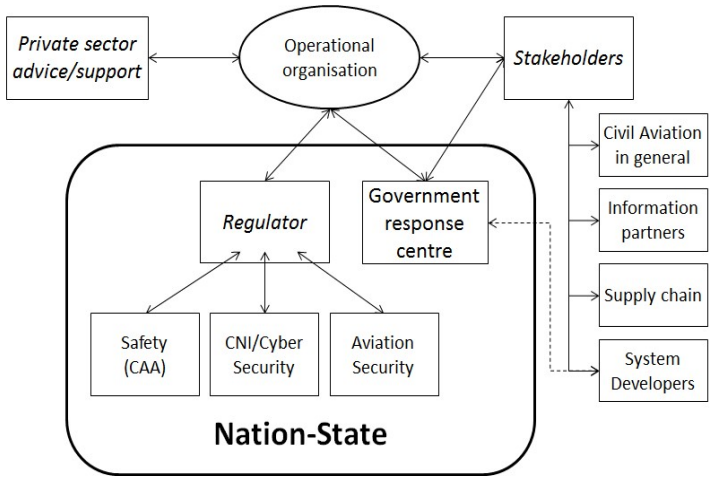
- Proactive: threat intelligence, vulnerability information
- National level risk management work help organizations to understand interdependencies



Picture: ED-201a?

Workshop EIGHT: Introduction to the Sharing of Information

- Reactive: incident response information
  - Collaboration when something is not right
  - Information sharing mechanism
    - What, when, with whom and how to should information be shared



ECAC Cyber Study Group in Civil Aviation: Guidance material, Information sharing relationships from the **national** perspective

Workshop NINE: Sharing of Operational Information (SOC, CERT, CSC, ISAC)

- Reactive: Incident response information
  - Continuous monitoring and quick incident response
    - Detect, respond and recovery
  - How to make right information available at right time at right context?

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