

# A Strategy for Cybersecurity in Aviation

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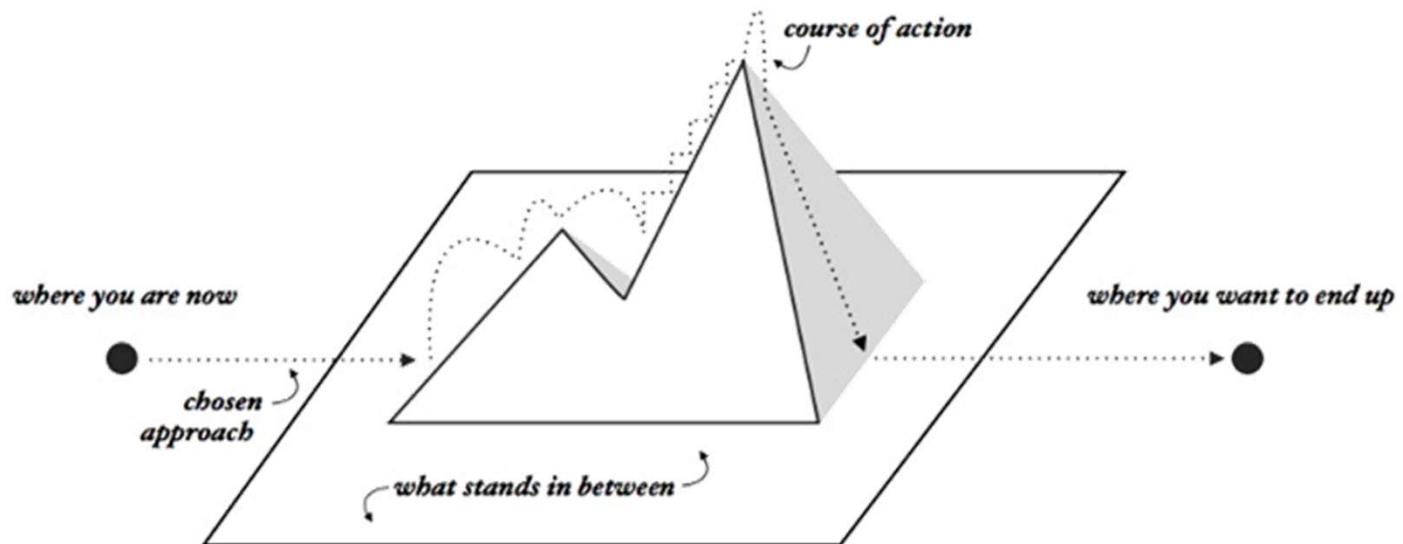
Colombo – Sri Lanka

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# STRATEGY

the practice of figuring out the best way to get from here to there



## The European Strategic Coordination Platform (ESCP)

### → Members:

- European Commission (*DG-MOVE, DG-CNECT, DG-GROW and DG-HOME*)
- Other EU Agencies and Organisations (*EEAS, EUROPOL, EASA, ENISA, CERT-EU, EUROCONTROL, SESAR*)
- European Defence Agency
- States (*ECAC plus 6 EU individual Member States: Finland, France, Poland, Romania, Sweden, UK*)
- EU relevant Aviation industry associations (*ASD, A4E, ACI, CANSO, ECA, EHA, EIMG, ERAA, ETF, GAMA, IATA*)

### → Observers:

- ICAO, FAA, TCCA, AIA, AIAC, NATO

The ESCP has been meeting regularly for the last 2.5 years

# Work Plan

ESCP ExCom finalisation

ESCP Technical Advisory Committee engaged

2018

Mid 2019

Table of Content

Structure of the Strategy Paper discussed and agreed

Strategy Objectives

Identified: objectives, critical elements and frames actions to be taken

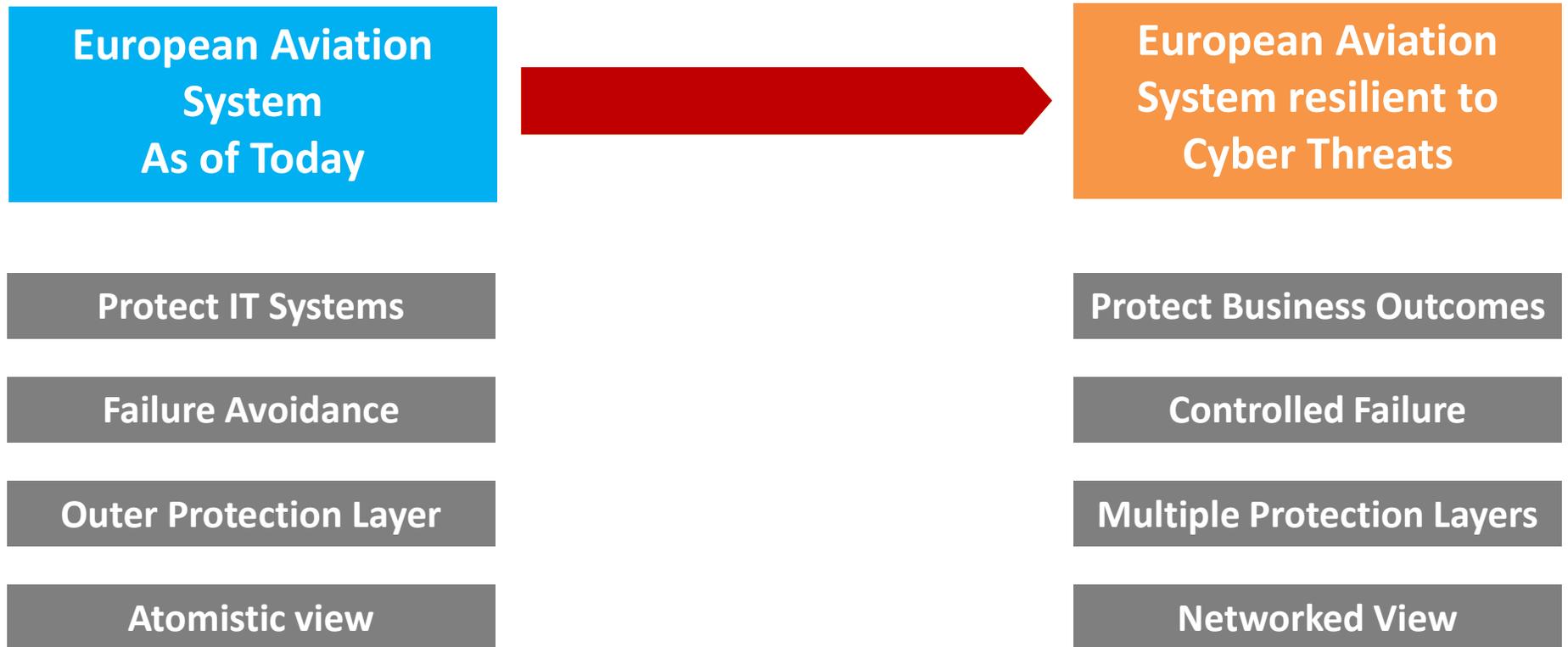
Draft Strategy

Draft proposals on course of coordinated actions and initiatives

Version 1.0

Agreement on objectives, coordinated actions and initiatives

# Step 1 – Gap Analysis



# Step 1 – Gap Analysis



## Step 2 – General Formulation

Where we want to be

The future aviation system will be a **trustworthy and dependable environment**, so that aviation stakeholders will be able to **rely on services and information provided by others** for the accomplishment of their operational objectives.

## Step 2 – Formulation

### Guiding Policy

We will focus resources and actions to introduce a **systemic approach to cybersecurity** in aviation of current and legacy systems to develop a **system-of-systems capable to adapt** and therefore, to **withstand new threats without significant disruptions**.

1<sup>st</sup> Direction

*Making Aviation  
an evolutionary  
cyber-resilient system*

2<sup>nd</sup> Direction

*Making Aviation  
self-strengthening  
by adopting a “built-in  
security” approach*

# Step 3 – Detailed Formulation



## Step 3 – Detailed Formulation

*Making Aviation self-strengthening by adopting a “built-in security” approach*

5

**Systems design practices are in place to avoid unintended use of functions exposed to users**

6

**Systems design practices are in place to assess the risks of loss of security attributes and to implement protection measures, including adaptive solutions**

7

**Assurance and scrutiny processes allow for the security effectiveness of systems during the whole lifecycle**

8

**The level of protection against external causes is re-evaluated following a change in the original assumptions and, if necessary, restored**

# ICAO Cybersecurity Strategy - Scope

- to protect civil aviation and the travelling public from cybersecurity threats;
- to maintain or improve the safety and security of the aviation system in preserving the continuity of air transport services;
- to **coordinate cybersecurity measures among State authorities** to ensure effective and efficient management of cybersecurity risks.

# ICAO Cybersecurity Strategy

- Recognizes that **cybersecurity is a cross-cutting issue** that involves all domains of the aviation sector;
- Provides States with a vision of the civil aviation sector as **resilient to cyber-attacks**, whilst **continuing to innovate and grow**.

# Referenced documents

→ ESCP Strategy

<https://www.easa.europa.eu/sites/default/files/dfu/Cybersecurity%20Strategy%20-%20First%20Issue%20-%2010%20September%202019.pdf>

→ ICAO Strategy / Resolution

<https://www.icao.int/cybersecurity/Documents/AVIATION%20CYBERSECURITY%20STRATEGY.EN.pdf>

<https://www.icao.int/cybersecurity/Documents/A40-10.pdf>

# An Implementation Plan goes along

**Captures actions and initiatives that need to be developed for a strategy implementation**

**Thank you for your attention!**

**Questions?**

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