



ICAO

UNITING AVIATION

ICAO Trust Framework Update

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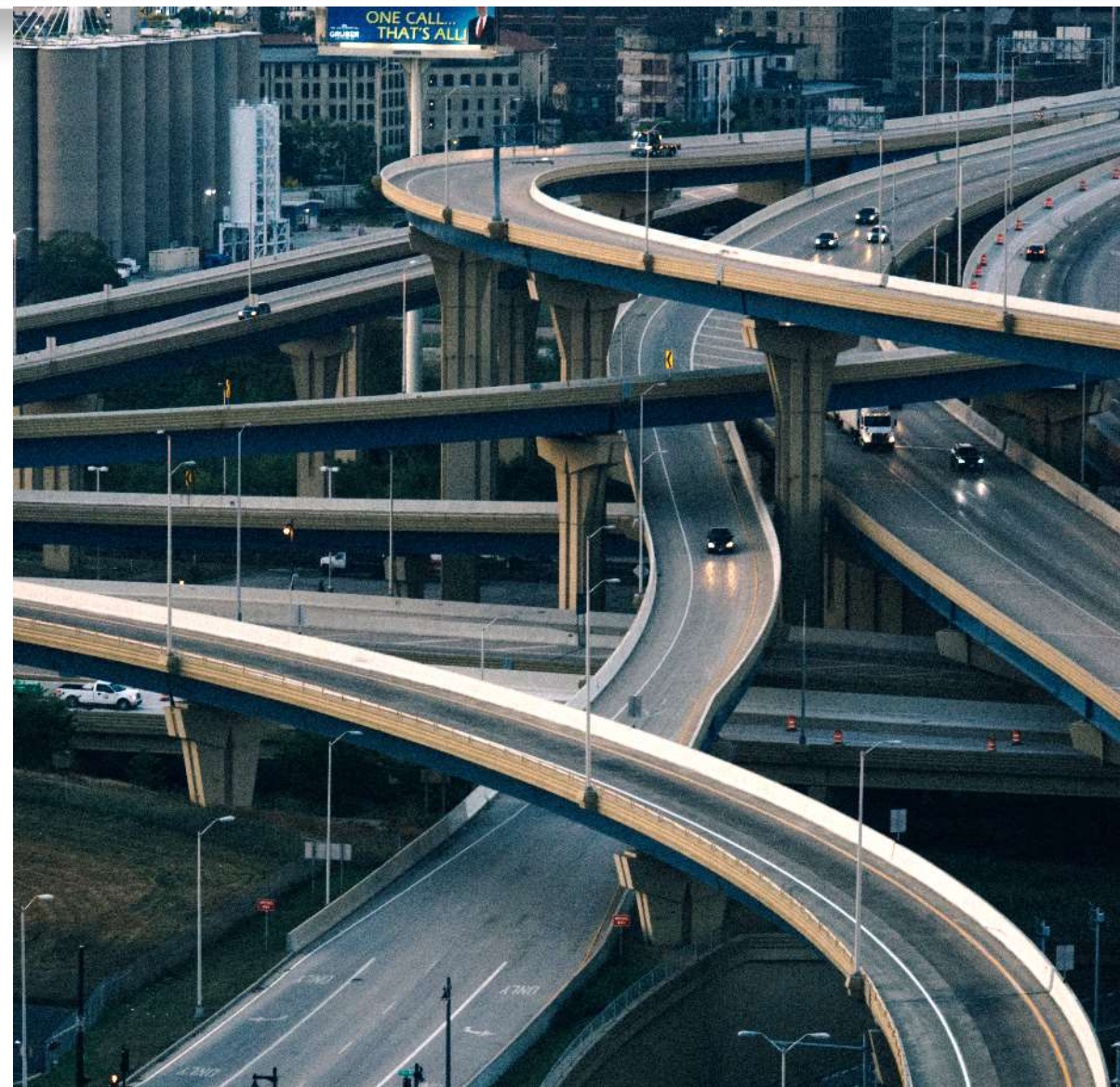


“ICAO’s vision for global cybersecurity is that the civil aviation sector is resilient to cyber-attacks and remains safe and trusted globally, whilst continuing to innovate and grow.”



Diverging Efforts

- Economic drivers require the increase of automation, increasing digital data exchange, requiring international interoperability
- Many taking action to secure their own part of the system
- States recognize need for securing their information exchange
- ICAO is ready to act on this need





Converging Strategy

- Interoperability requires global coordination and cooperation
- Identify common needs that can unite all aviation ecosystem stakeholders
- Develop common solutions that build on existing foundations
- Agree on a common destination – where there is still one interoperable sky



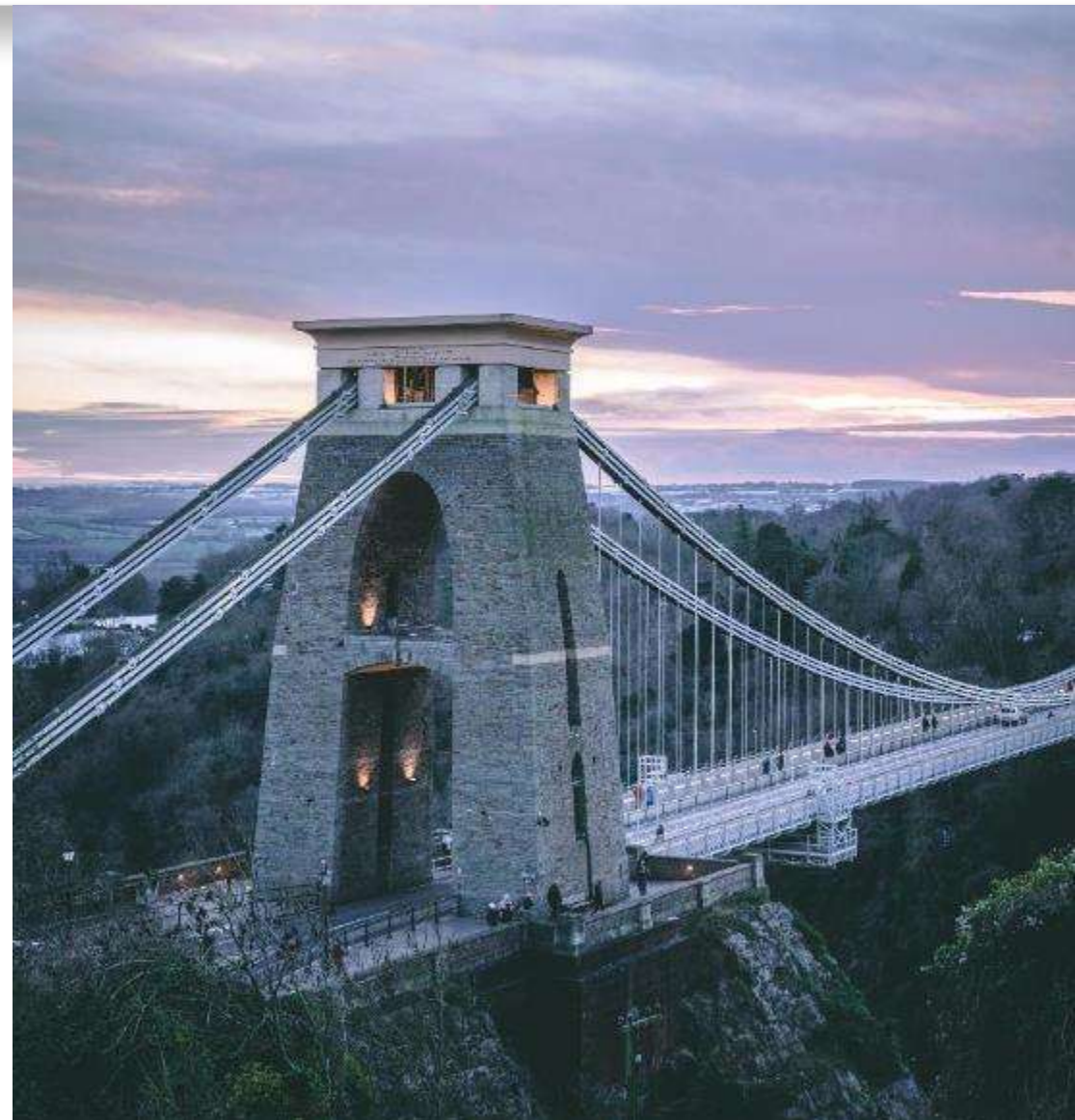
Trust framework



- A core function of ICAO since 1944
- A modern Identity and Trust Framework is now essential
 - Based on common standards
 - Anchored in State sovereignty
 - Facilitate global recognition of trust
 - Applied consistently across the system

A Common Solution

- Foundation - International Law
 - Chicago Convention, Beijing Convention (Article 21), Annexes, etc...
- Trusted Digital Identity
 - Anchored in proven regulatory processes
- Trust Bridge
 - Allows identities to be recognized across boundaries





- Processes and procedures to guarantee that stakeholders providing or consuming data and information in the aviation ecosystem are identified and the same stakeholders and the message they are exchanging are trusted.





Where are we now?



- Attended by 73 participants
- 14 States
- 8 international organizations
- 12 aviation and non-aviation industry stakeholders
- 1 representative of the academia.





ConOps

After preliminary discussion at the 13th AN. Conf., reviewing the concept of operations for an international aviation trust framework

Developing use cases related to the trust framework concept of operations

Developing governance models for the international aviation trust framework (To be presented to ICAO governing bodies)



Identity management

Developing requirements for identity management (Certificate Policy)

Guidance on identity management

Developing requirements and procedures for technical and organizational trust



Network operations

Defining performance-based requirements for exchange and storage of information (organizational, technical, procedural)

Developing an IPv6 address schema & allocation and management policy

Supporting ICAO in negotiating with Internet governing bodies a dedicated block of IPv6 address

Defining the size of the block of address necessary to cover current and future aviation needs



Coordination

Working with the IETF to develop the necessary protocols to allow logical isolation of aviation data communications from public Internet (AERO, OMNI, DRIP, HHIT, etc)

Coordination with ANC Panels (CP, IMP, RPASP, etc)

Coordinating with ICANN a gTLD for aviation



Trials

Enterprise Security Harmonization Proof of Concepts (ESHPOC) –
(FAA/EUROCONTROL)

Validating Trust Framework technical documents and implementation
strategies using SWIM Test cases



Thank you.