EASA
European Union Aviation Safety Agency

Agenda Item 12 - EASA Update

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SAB 01-2023, 15 March 2023

Your safety is our mission.

An Agency of the European Union

Outline

ABs Work Programme

Health Safety

(Cyber)-Security

Standardisation

Research

Artificial Intelligence

Impact of climate change on aviation

Collaborative platform

Events

Advisory Bodies Work Programme

2023 MAB Work Programme (WP)

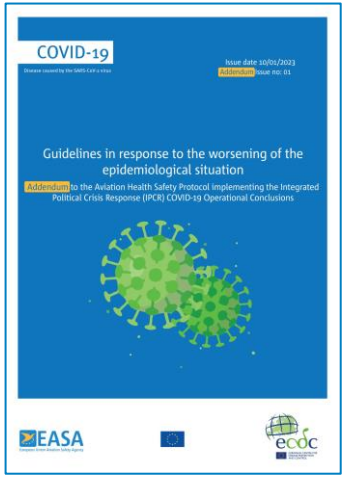
- → Objectives: list of priorities per area, to support MAB steering role, increase transparency, facilitate coordination & synergies
- → Focused on MS, however also indicates items of interest to both MS and Industry
- → End-of-year reporting
- → Available on SAB platform

Health Safety

The Addendum to the Aviation Health Safety Protocol

Coordinated and proportionate measures for aviation in response to developments in China:

- ✓ Reduce the risk of geographical spread of a potential new variant
- ✓ Reduce the likelihood of transmission during air travel
- ✓ Facilitate the early detection of new variants



Pre-departure testing of passengers from direct or indirect flight to the EU

Medical facemasks on board of the aircraft

Hygiene measures

Enhance cleaning and disinfection of aircraft

Random testing of passengers at arrival and sequencing of positive results

Monitoring of waste water as an early warning tool to detect new variants

Preliminary operational feedbacks on wastewater testing received in January

Operational

In BE, DE, DK, NL at airports with flights from China

Pilot sampling

Initiated in GR and FR at airports with flights from China

Identifying possibilities

Airports & airlines in IT, AT, ES in contact with National Public Health Authorities to discuss aircraft wastewater processing and identify sampling opportunities

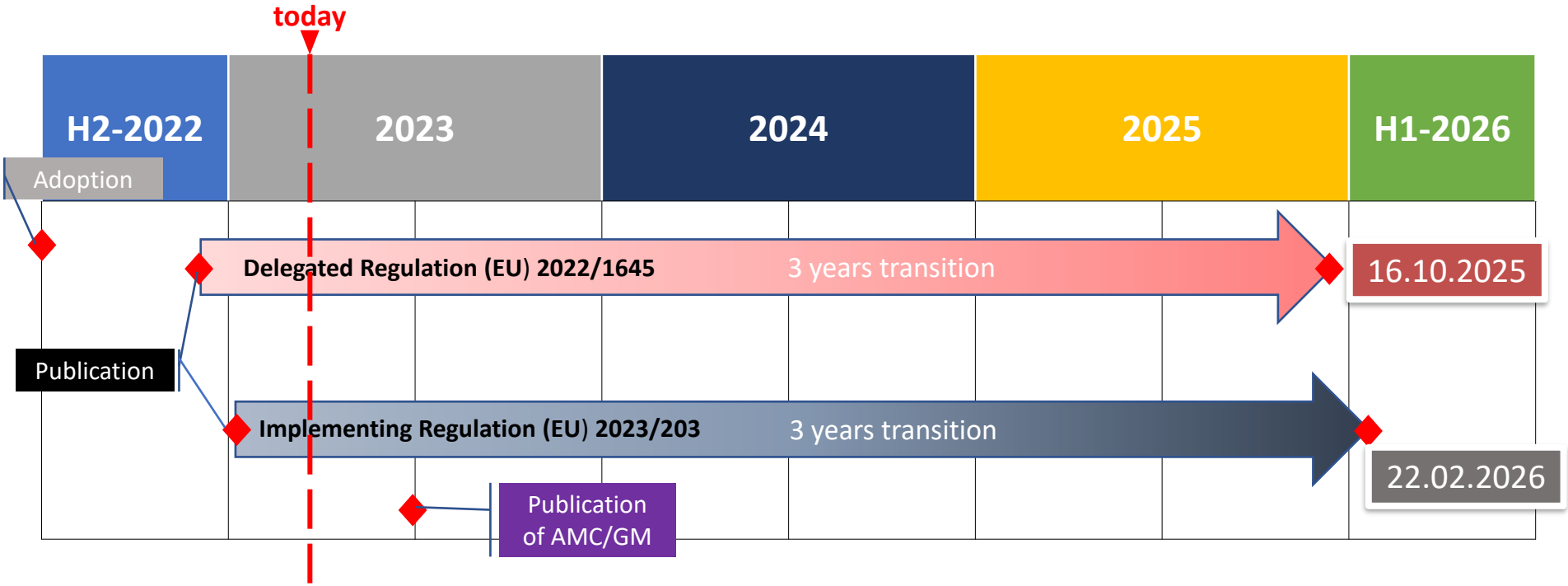
Impact on operations:

Reported to be minor with limited sampling (pilot cases; random sampling; once per week).

Extensive sampling could create operational delays at the airports and require more detailed coordination with Health authorities.

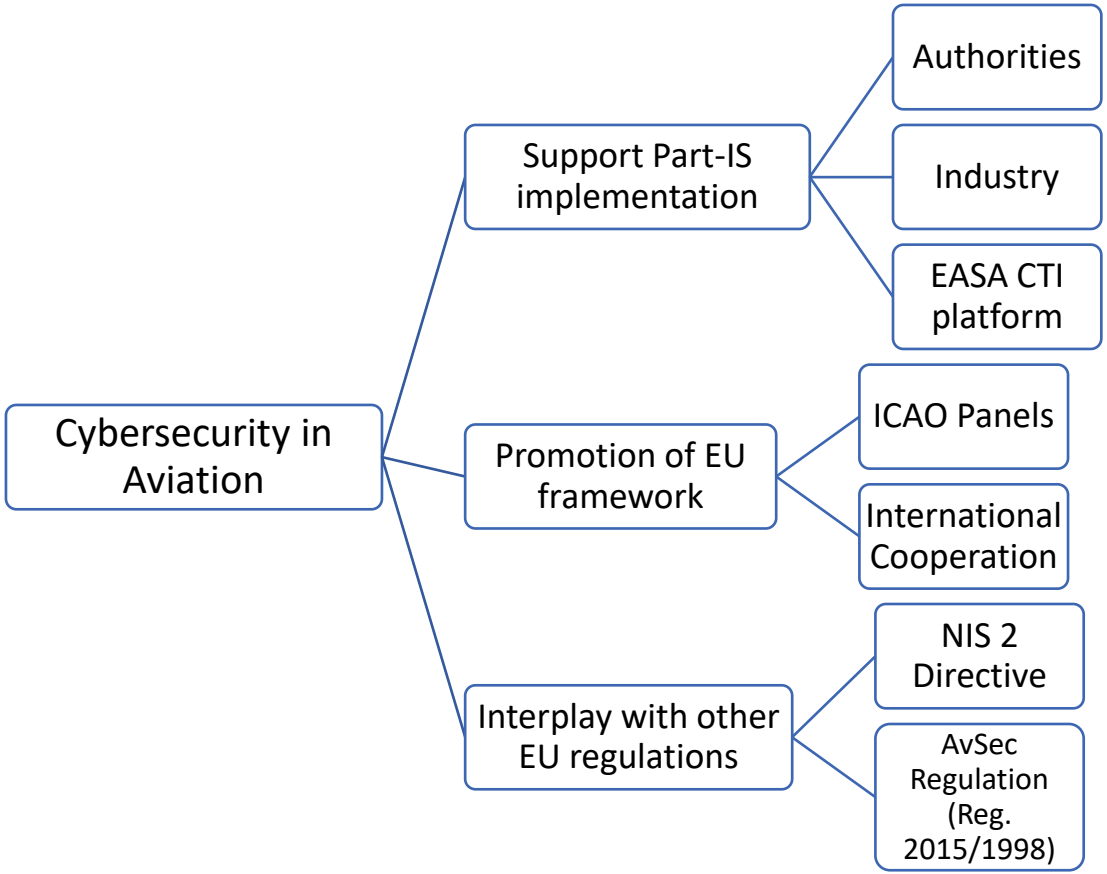
Cybersecurity

Part-IS implementation journey



Implementation of Part-IS is a challenge for everyone involved

What we want to do now



Pilot projects

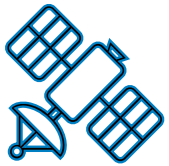
On-going EASA- and NAA-run pilot projects with selected organisations to:

- Obtain feedback from mature organisations (already implementing SMS/ISMS on a voluntary basis);
- Learn about specific needs of smaller/less complex organisations;
- Explore cases where existing AMC/GM is not fully appropriate, or where alternative solutions could be more effective;
- Discuss
  - how to pragmatically implement changes without duplicating audits;
  - synergies between SMS/ISMS to make implementation and oversight more efficient;
  - training needs;
- Prepare inspectors community for implementing the new requirements.

Information sharing - European Centre for Cybersecurity in Aviation (ECCSA)

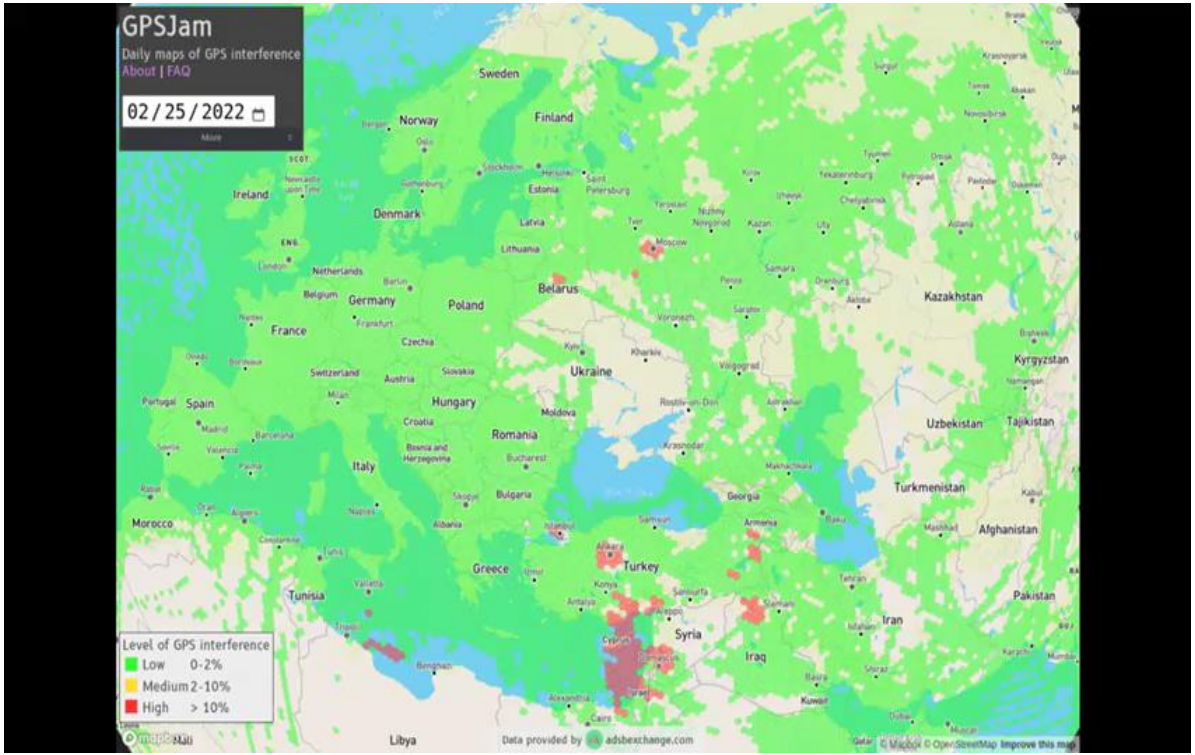
- → In March 2023, EASA will start using a tailor-made **Cyber Threat Intelligence platform**
- → The platform will contain information on aviation-specific cybersecurity events collected through Open Source Intelligence (OSINT) and specialized services
- → Selected information from the platform will be shared with ECCSA and Network of Cybersecurity Analysts (NoCA) members
- → Ad-hoc information could be shared with (potentially) targeted organisations

Global Navigation Satellite System (GNSS) degradation



Review of SIB 2022-02 on GNSS degradation

- Initially issued in March 2022 to address events related to Russian invasion of Ukraine
- Reports in the European Central Repository and open source data shows that events persist while the geographical distribution varies (see video)
- SIB 2022-02R1 of 17 February to address changed conditions



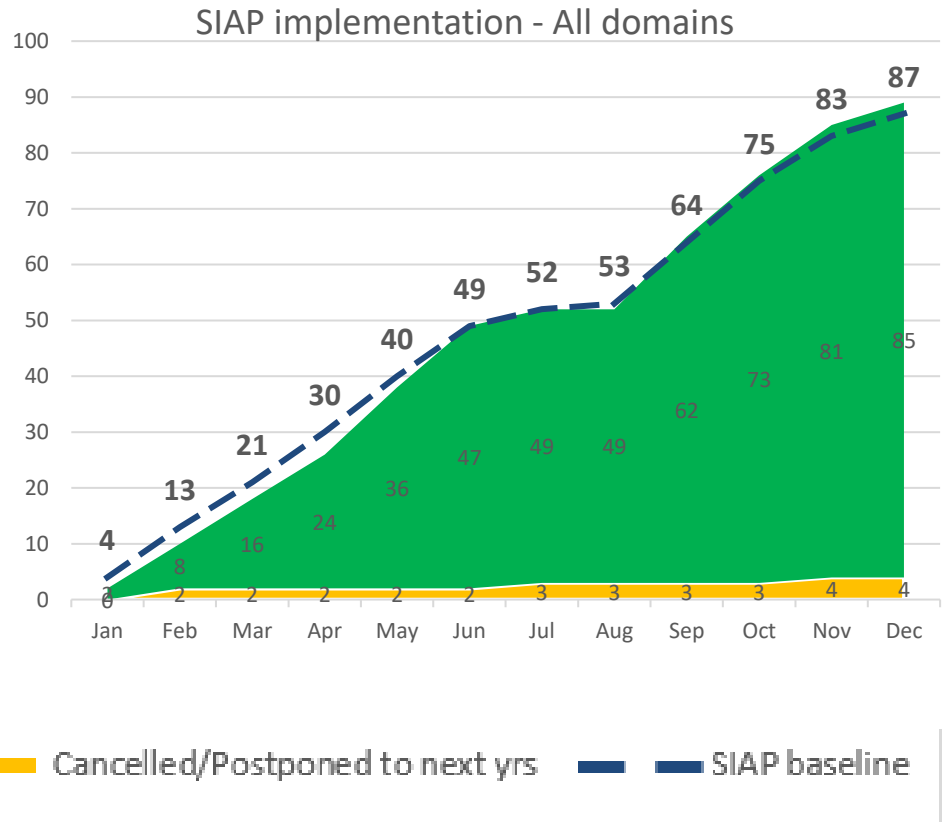
Standardisation

Standardisation Initial Audit Plan 2022 - The end of the Covid tunnel

- Standardisation back on track

95% of the original plan performed

- **87** inspections planned - **86** performed
  - Highest number of audits in ANS (14), AIR (12), OPS, FCL & MED (11)

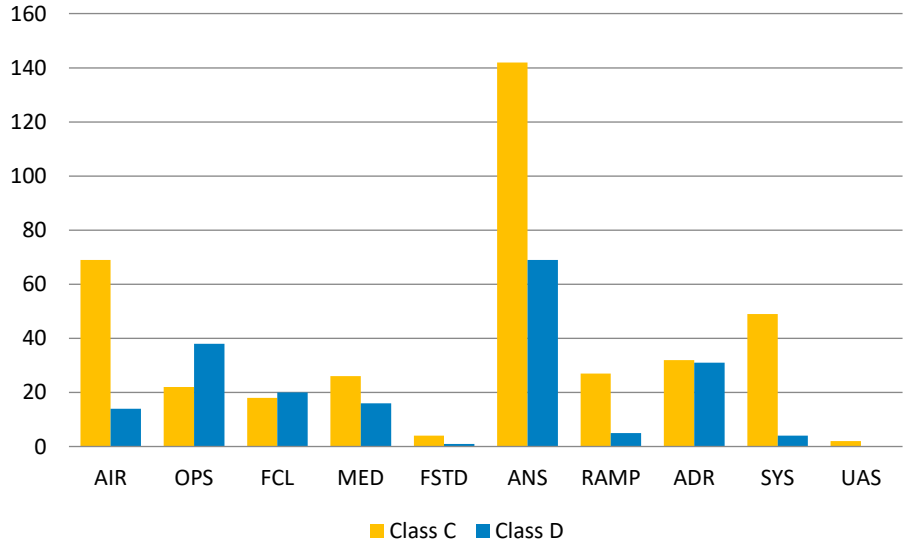


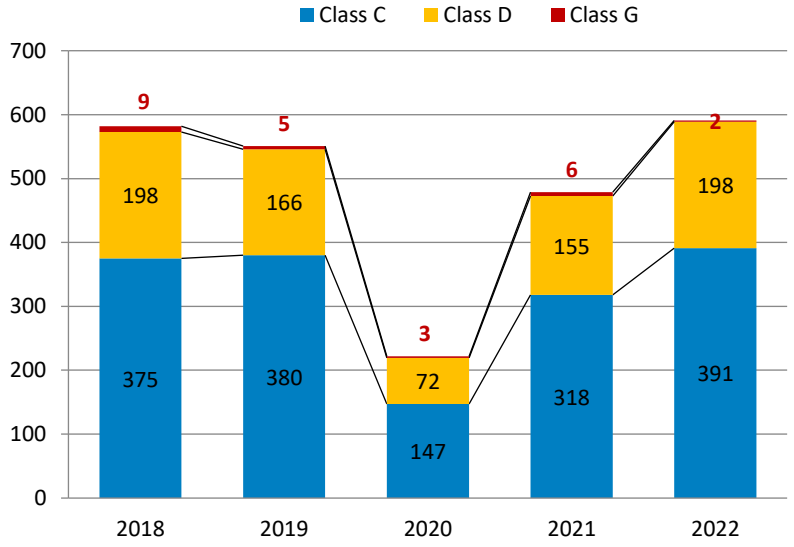
FINDINGS:

→ **Total number of findings: 479 → 591** (23% more than in 2021)

→ **Domains with higher ratio of Class D(*) findings: ANS, OPS, ADR and FCL**

→ **Most Class D findings in CE-6** (certification/licensing) and **CE-7** (oversight)



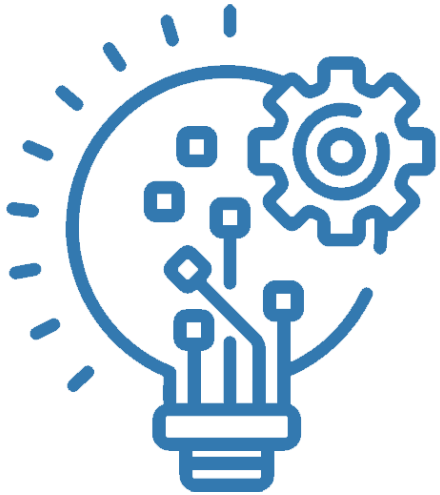


(*) ***Class 'D'**: a non-conformity raising Standardisation **and safety** concerns if not timely corrected*

Research and Innovation

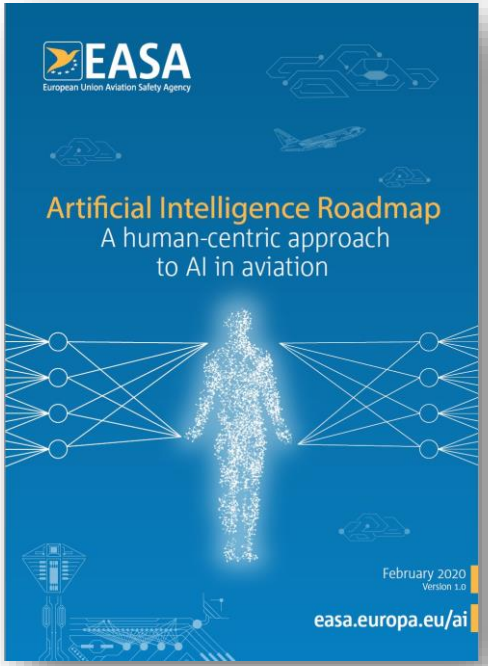
Research and Innovation

- EASA is developing in 2023 a **common EU partnership R&I agenda** with national authorities, taking into consideration the priorities of large EU Programmes (Horizon Europe, Clean Aviation, SESAR, Clean Hydrogen) and ongoing industry projects/initiatives
- Engagement in **Clean Aviation Call#1** with 16 projects; complementing involvement in Clean Aviation JU's Governing Board, its Technical Committee and Scientific Advisory Board
- Tenders for **7 new research projects** under development, addressing the actions delegated to EASA in the Horizon Europe WP 2023-2024
- EASA chairing Working Group 4 - Aviation regulation, certification and standardisation of the **Alliance Zero Emission Aviation (AZEA)**
- Framework for **supporting innovation at Industry level** (new pre-application contracts): launched on EASA website
- **European_Academia @EASA conference 2023 (23-24 March)** – 20 PhD projects presented to EASA, Industry, Authorities and other EU bodies



Artificial Intelligence

EASA AI Roadmap – Towards AI trustworthiness



https://easa.europa.eu/ai

Second deliverable of the Artificial Intelligence Roadmap:

Concept Paper for Level 2 AI sets the scene for Human-AI teaming!

→ October 2022 – The **EASA Scientific Committee** AI Task Force validated the design principles for Human-AI Teaming laid down in the EASA Concept Paper for Level 2 AI.

→ 24 February 2023 – Consultation launched of the EASA Concept Paper 'Guidance for Level 1&2 machine learning applications'.

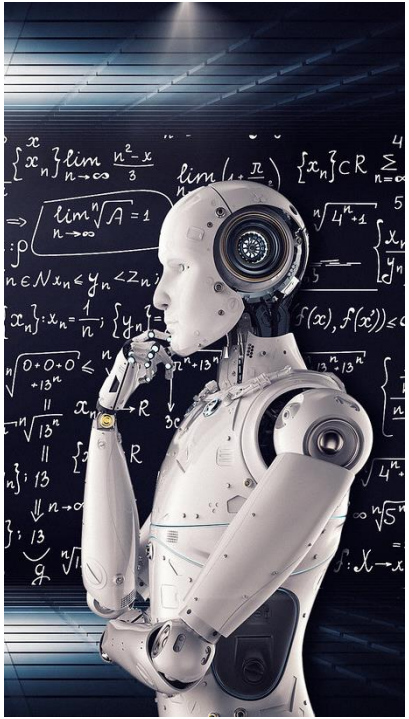
EASA AI Roadmap – Towards AI trustworthiness

On-going EASA Research and Innovation projects on AI:

Deepening the means of compliance to the W-shaped Learning Assurance concept

→ June 2022 – Launch of the **Horizon Europe project MLEAP** 'Machine Learning Application Approval' aiming at identifying scalable methods to meet challenging objectives of generalization and robustness for ML models.

→ March 2023 – Publication of the **third EASA Innovation report on AI** 'Formal Methods use for Learning Assurance', (ForMuLA) jointly with Collins Aerospace Research Center.



EASA AI Roadmap 2.0 in preparation

Extension of technical scope:

- Symbolic AI
- Hybrid AI
- End-to-end product life cycle

Update of action plan

- Revise industry prognostic
- Add several domains timelines

Anticipate consolidation phase II

- Develop Rulemaking Plan
- Anticipate impact on all domains

Impact of climate change on aviation

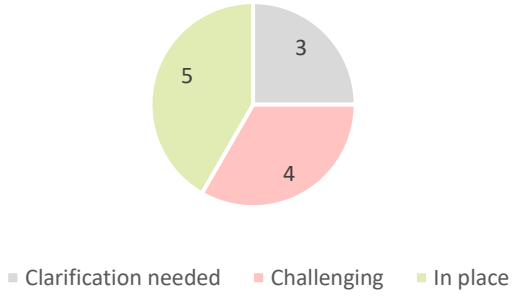
Climate Change Adaptation– launch of the EN-ICCA

- EU Legislation
  - European Climate Law (June 2021) - Requires Union institutions and MS *'to ensure continuous progress in enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change'*
- Already-launched actions
  - Added to strategic priorities in EPAS 2023-2025 Volume I.
  - EASA Scientific Committee Task Force reviewing latest research results on climate change risks and hazards
- European network on impact of climate change on aviation (EN-ICCA)
  - Will be launched **in first half of 2023** to:
    - support coordination of all aviation stakeholders by bringing together national and industry initiatives to help achieve EU strategic objectives;
    - mobilise research funding to address priority knowledge gaps;
    - produce safety-relevant information to manage EU-wide safety issues and safety strategy (EPAS, SSPs);
    - identify actions and good practice to maintain safety.
  - **Terms of reference provided for your information**.
  - **Call for participation will be issued soon.**

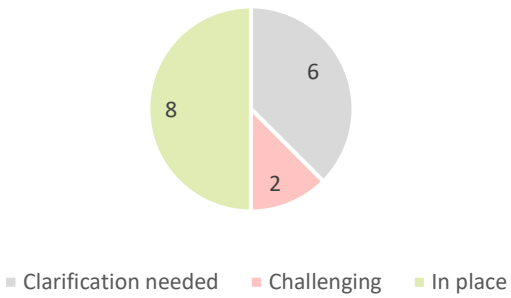
Collaborative platform

Overview Assessment of expectations from SAB.AG002

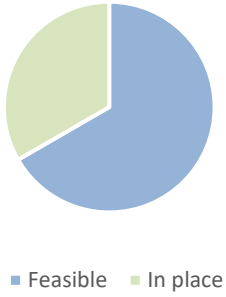
Management of groups membership



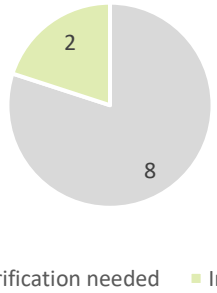
Collaboration



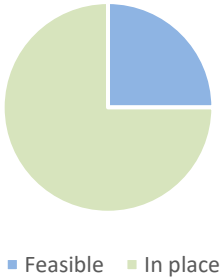
Search



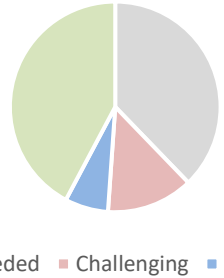
Communication



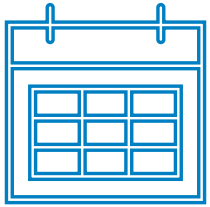
Security



Total



Events



2023 Events

- → XML format of Easy Access Rules - webinar on how to work with it

(16 March, material available on website)

- → Focused Consultation Workshop on AMC & GM to Part-IS (16 March)
- → EASA High Level Conference on Drones 2023 (21-22 March)
- → European_Academia @EASA conference 2023 (23-24 March)
- → EU-India Aviation Summit 2023 (21-22 April)
- → 2023 EASA-FAA Aviation Safety Conference (13-15 June)
- → U-space workshop – From the concept to the implementation

(22-23 June)

- → EASA Annual Safety Conference (Seville, Spain, 27-28 September)
- → EASA Rotorcraft and VTOL Symposium 2023

(13-15 December)

For more information & events visit the EASA website

EASA
European Union Aviation Safety Agency

Thank you for your attention

SAB 01-2023

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