

STANDARDS EVOLUTION WORKSHOP

The role of standards in the
evolving European airspace

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P Medal EASA Chief Engineer



Background

EASA experience with Industry Standards

Industry Standards used by NAA, JAA, then EASA for decades

- **WHY:** to support compliance as Acceptable Means of Compliance (AMC) to higher level regulatory requirements (airworthiness regulations)
 - EASA Certification Specifications contain 500 references of quotes of Industry Standards: EUROCAE, RTCA, +SAE, ASTM, ETSI and Eurocontrol, etc ...
 - ETSOs
- **What:** detailed technical specifications
 - e.g. ED 12/ DO 178 software considerations ; ED 14/DO 160 environmental conditions, ED 79/ ARP 4754 development of critical systems, etc...
- **HOW:** Acceptance Process fully under EASA control and decision

Internal International Standards Committee & ICAO

- Assess priorities,
- Set up participation,
- Review and control,
- Looking forward function

EASA involvement in standards (ATM & Others)

- **Strengthening the links between regulations and their supporting materials (Ind Stds)**
 - Bridging the 2 domains regulatory & Standards, helping filling the gaps,
 - Overseeing and steering where needed,
 - Flagging expected difficulties,
 - Giving advanced warnings to the community where possible,

Coordination of SDO actions

- Chairing EASCG, EUSCG, ECSCG
- Board/council member Eurocae, ASD-STAN, SAE, Observer ASTF (ECTL)
- Observer in ASD governance WG to identify and steer priorities w.r.t SDOs for the development of Industry Standards, & later define the principles of Industry Standards recognition by EASA
- Reviewing generic safety cases generated by Eurocontrol-B, aimed at helping ANSPs to develop their safety cases
- Participating to the Joint CNS Stakeholder Platform (JCSP) which is a combination of the EUROCONTROL CNS Team the EASA CNS Experts Group



Considerations about ATM

- Wide validation scope in “open” world (airborne & ground) missing a robust end to end operational safety assessment and validation process
- Industry engagement & support is key,
- Need EASA resources to participate in numerous WG,
- Support to SJU: Exploratory research, contributing to filling the “V4 gap” as far as possible, supporting readiness for rulemaking, (AAS,...)
- Use of standardised requirements and/or components (including COTS): some functions could be specific to aviation; others could be more standard. It depends on the intended function. However,
 - emergence of mixed traffics in UTM or ATM, with flying objects of different nature and different certification levels
 - A more consolidated approach to managing risks would be required in applying the safety and certification processes
- Full Objective based regulations (e.g. part 23) might not help because the means to achieve the objective(s) are prone to wide different interpretations, potentially leading to misunderstandings, then clear guidance needed

Conclusions

- Industry Standards are an important piece for compliance showing, widely used and promoted
- Need high involvement Industry, Regulators and stakeholders
- More flexible approach to the use of standards to be developed
- EASA is the central part of the process and will continue to adapt its processes to support the necessary evolutions