



The European Organisation for Civil Aviation Equipment

EUROPEAN STANDARDIZATION

...

AN INTERNATIONAL APPROACH

Gilbert AMATO – EUROCAE Secretary General
10th June 2009



The European Organisation for Civil Aviation Equipment

Why “International” ?





Standardization is a difficult exercise

An actual (but under reconsideration) European Standardisation context **complex, fragmented and unclear**. This is mainly due:

- to the existence of too many organizations, authorities, agencies, etc., participating in the Standardisation process in different fields (operational, technical and institutional) with various levels of effectiveness;
- to a lack of:
 - common understanding of the entire Standardisation process,
 - relationship among all these organisations.

Other relevant facts relate, in that evolving environment and in such times of rapid technological changes, to the importance of defining first and carefully:

- **the level of maturity of the addressed domains,**
- **the appropriate level and scope of Standardisation.**



The European Organisation for Civil Aviation Equipment

Standards ... what for?

In Aviation:

- **Standards are the basis of Rulemaking**
- **Standards are addressing in general:**
 - Three scopes: ***European, European/US and Global***
 - Three areas: ***Air-Air, Air-Ground and Ground-Ground***
 - Three flavours: ***Technical, Operational , Military Collaboration***
 - Interfacing between Systems and between **Operations** which depends in general on the **Operational Concept**.

i.e.: “Air Traffic Control - Airport Operations” ;

“Aircraft Operations – Air and Ground Surveillance”.

***One major concern for International standardization:
INTEROPERABILITY***



Standardization Main Objectives

- The “**Generic Objectives**” established for the Key Performance Areas (KPA) of Interoperability are *to provide* :
 - *ATM operations compliant with ICAO CNS/ATM plans and global interoperability requirements;*
 - *a seamless service to the user at all times, and operate on the basis of uniformity throughout Europe and also in other world areas.*
 - *timely standards, specifications and procedures for ATM, CNS and associated avionics requirements.*

Provided that the above criteria are for assessing the achieved Interoperability, it must be clearly stated that Interoperability is relying on Standardisation



Standards derivative

Certification : This function is a subset of the regulatory function and is therefore outside the core standardisation process. It concerns the certification of systems, components or procedures by reference to standards as a means of compliance to the certification requirement.

*e.g.: FAA TSOs and EASA ETSOs
for airborne equipment certification.*

European Community Specifications (CS) and Implementing Rules (IR): For the same reasons as above, standards are referred to in CSs and IRs as means of compliance.



The European Organisation for Civil Aviation Equipment

European stakeholders roles

- **The European Commission:**
 - is the owner and the manager of the Single European Sky initiative
 - initiates and adopts Implementing Rules through the Single Sky Committee
 - Support to Regulation and standardization
- **EASA:**
 - is responsible for safety oversight in the airworthiness sector
 - In the future, EASA will take over accountability for initiating safety rules.
 - responsibility to cover the whole ATM/ANS in 2012/2013
- **EUROCONTROL:**
 - is the main coordinator for Air Traffic Management activities in Europe;
- **SESAR JU Admin Board / Executive Director:**
 - Project Management Function and Standard Initiation Function
 - Activities Development, deployment and operations.
 - Performance Planning in the Deployment Phase and the development framework
- **ESOs** (CEN, CENELEC and ETSI) for standardization in cooperation with **EUROCAE** (as developer of technical standards) and **EUROCONTROL** for operational specifications on a global scale,



The European Organisation for Civil Aviation Equipment

The necessary International Standardization partnership

Regarding SESAR and NextGen ambitious programs, three leading standardization organizations (this is not an alternative!):

EUROCAE and **RTCA**, which are joining successfully their forces since years to develop standards required by the civil aviation community, and their **ICAO** inevitable collaboration at Global worldwide level which has been boosted over these last years.

This, obviously under the deep and directive involvement of the European Authorities (in particular the **EC**) and of the **FAA**.



The European Organisation for Civil Aviation Equipment

SESAR Standardization

- The SESAR ATM Master Plan has been endorsed on the 30th March 2009 as “**The European ATM Master Plan – Edition 1**”
- The ATM Master Plan constitutes the basis for the **SESAR JU (SJU) Work Programme**.
- The SJU Work Programme includes the **Work Package C (W-C)** “Maintenance of the Master Plan”
- The W-C includes a **Sub-Work Package 3 (SWP-C3)** “Maintain Standardization and Regulatory Roadmaps”.
- The “**SESAR Standardization Roadmap**” identifies required standards to support the implementation of the ATM Master Plan.
- The “SESAR Standardization Roadmap” development and maintenance is managed by Eurocontrol on behalf of the SJU.



The European Organisation for Civil Aviation Equipment

SESAR Standardization Roadmap

The SESAR Standardization Roadmap includes as a minimum the following:

- Timescales year-by-year from 2008 to 2030; showing starts, development durations and delivery dates
- Show of specific process being on time or delayed
- List of ATM domains subdivided into relevant activities
- A short description of standardization activities associated to each ATM domain
- A separate identification of Global and Regional activities
- Show of associated ATM Services Levels (SL) and related Implementation Packages (IP)
- The leader of each activity



The European Organisation for Civil Aviation Equipment

The European ATM Master Plan Edition 1

The Council of the European Union (abstract)

- requests the Commission to take all necessary actions to achieve **the highest level of interoperability between SESAR and the corresponding US system NEXTGEN as well as other projects in ICAO regions** and furthermore to observe and take into account the need for consistency with ICAO global concept developments;
- invites the Commission to submit a Recommendation to the Council in order **to authorize the Commission to open negotiations on a Memorandum of Cooperation with the Federal Aviation Administration** of the United States of America;
- stresses that the development of the **ATM Master Plan should take into account the neighborhood of non-EU countries** as one of the elements of the Single European Sky external dimension in order to support the Commission in progressing with the creation of the Common Aviation Area."



The European Organisation for Civil Aviation Equipment

Thank you for your attention

EUROCAE

102, rue Etienne Dolet

92240-Malakoff (France)

Phone: **+33 1 40 92 79 30**

FAX: **+33 1 46 55 62**

eurocae@eurocae.net

www.eurocae.net