EUROPEAN AVIATION SAFETY AGENCY
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE
EUROPÄISCHE AGENTUR FUR FLUGSICHERHEIT

Fourth EASA International Cooperation Forum (ICF 4)

Jussi Myllarniemi

10-11 June 2014, Cologne

Your safety is our mission.

Regulatory objectives by EASA

EASA

Founded in 2003

Built on experience from the JAA

Located in Cologne, Germany
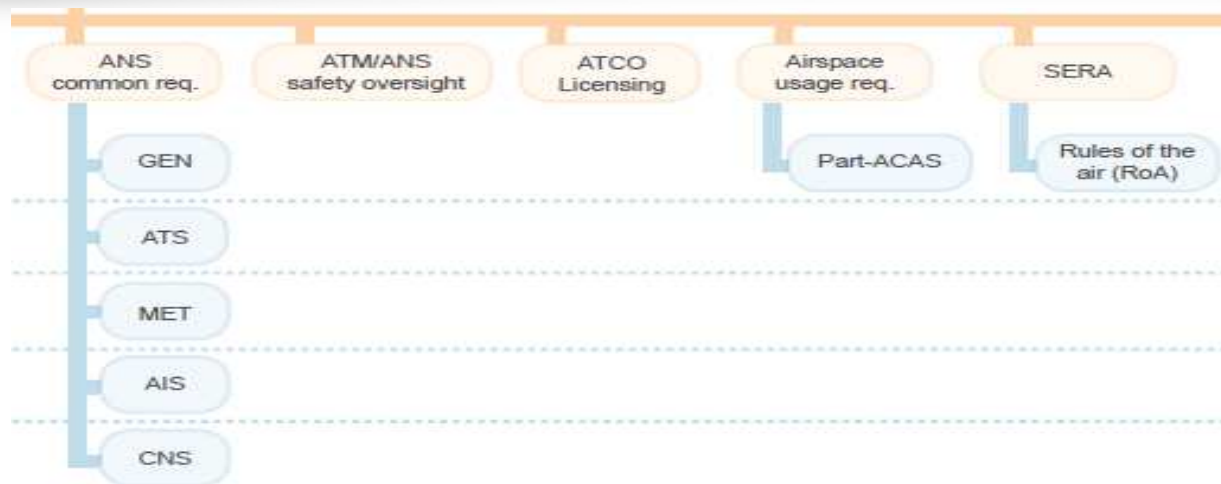
Staff of more than 700

Headed by Mr Patrick Ky

REGULATORY OBJECTIVES

- To establish & maintain high and uniform level of <u>safety</u>
- To facilitate <u>free movement</u> (= recognition)
- To promote <u>cost-efficiency in regulatory</u> processes and avoid duplication
- To assist Member States to fulfil their <u>ICAO obligations</u>
- To promote Community views on safety standards and rules with <u>3rd countries</u> and <u>international organisations</u>
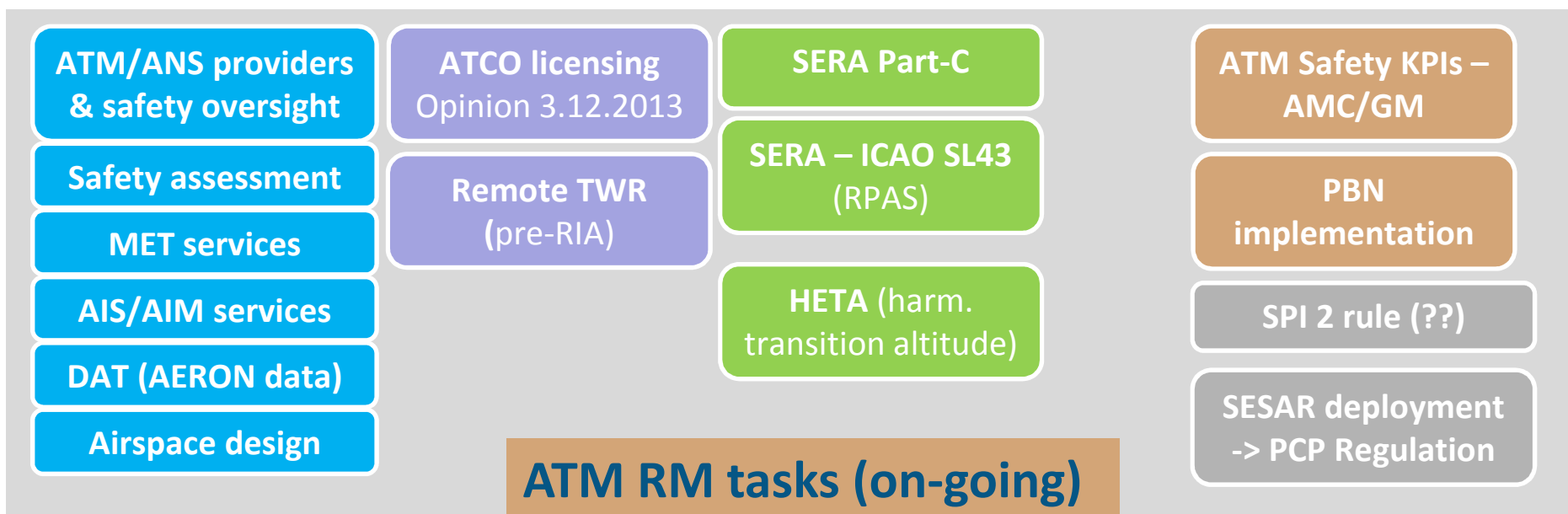- To provide a <u>level playing field</u> in internal market (= industry)
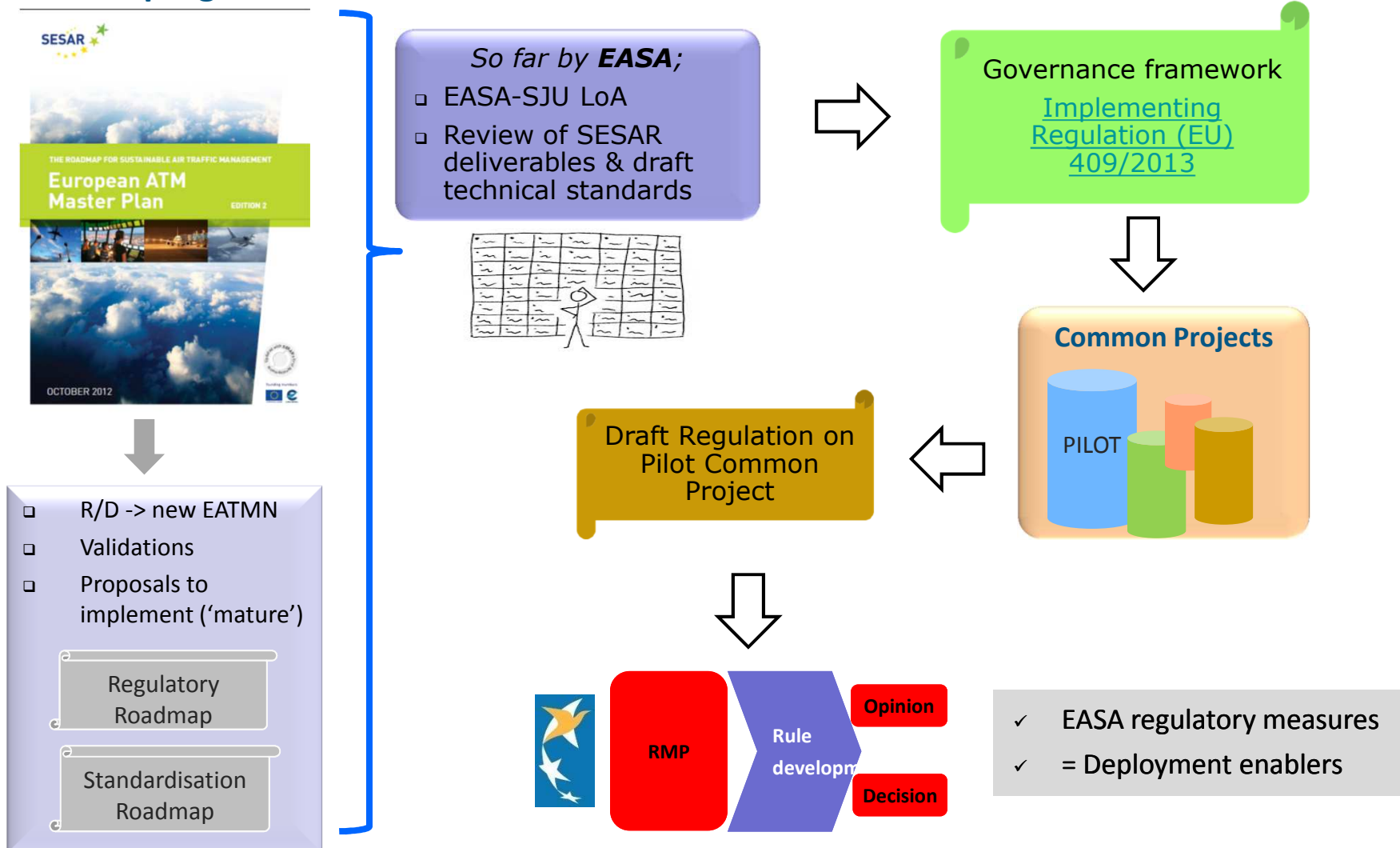
ATM RM tasks on-going

ATM/ANS providers & safety oversight

Safety assessment

MET services

AIS/AIM services

DAT (AERON data)

Airspace design

ATCO licensing Opinion 3.12.2013

Remote TWR (pre-RIA)

SERA Part-C

SERA – ICAO SL43 (RPAS)

HETA (harm. transition altitude)

ATM Safety KPIs – AMC/GM

PBN implementation

SPI 2 rule (??)

SESAR deployment -> PCP Regulation

ATM RM tasks (on-going)

SESAR deployment

SESAR programme

SESAR ★
THE ROADMAP FOR SUSTAINABLE AIR TRAFFIC MANAGEMENT
European ATM Master Plan EDITION 2
OCTOBER 2012

- ❑ R/D -> new EATMN
- ❑ Validations
- ❑ Proposals to implement ('mature')

Regulatory Roadmap

Standardisation Roadmap

*So far by **EASA**;*
- ❑ EASA-SJU LoA
- ❑ Review of SESAR deliverables & draft technical standards

Governance framework
[Implementing Regulation (EU) 409/2013](#)

Common Projects

PILOT

Draft Regulation on Pilot Common Project

RMP | Rule developm | Opinion | Decision
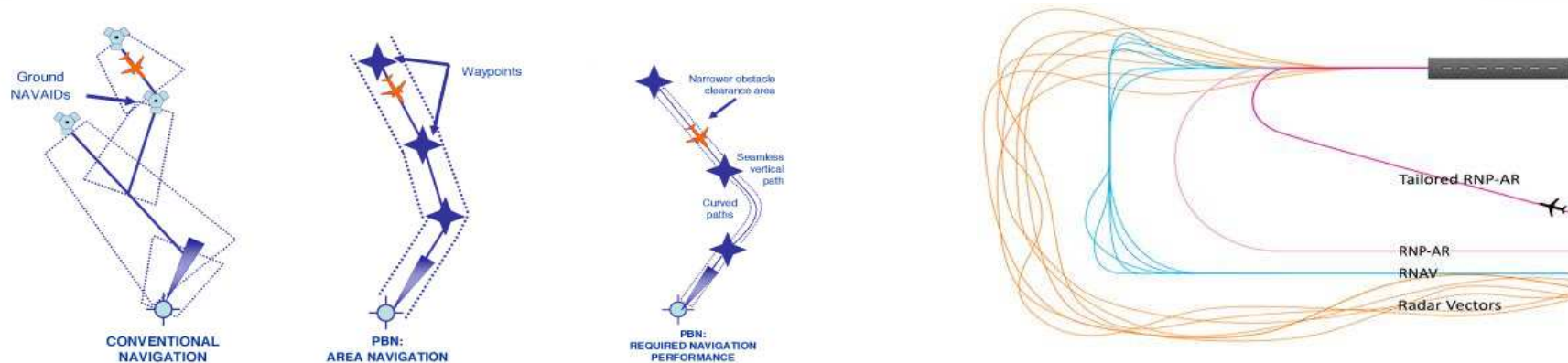
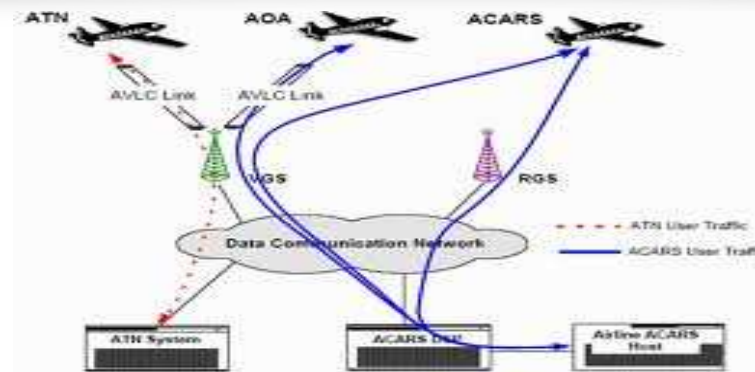- ✓ EASA regulatory measures
- ✓ = Deployment enablers

Total systems approach – "case PBN"

- ➤ **Need for harmonized and complementary set of rules**
  - ➤ aircraft with required functionality;
  - ➤ flight crew and ATC trained on PBN operations;
  - ➤ consistent and safe en-route and approach/departure procedures;
  - ➤ consistent aeronautical data (e.g., databases, charts);
  - ➤ accurate and sufficient ground and space navigation infrastructure

- ➤ **Deployment – technical regulation to define common standards & economic regulation for 'what, where and when (and by whom)'**
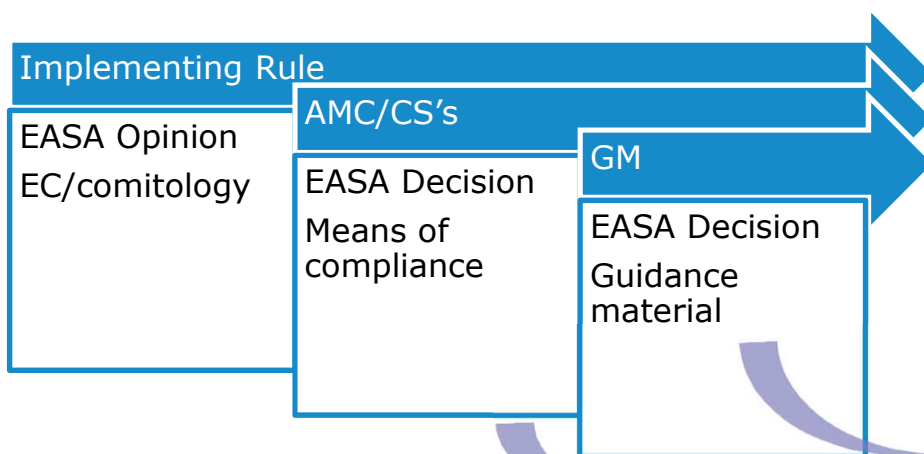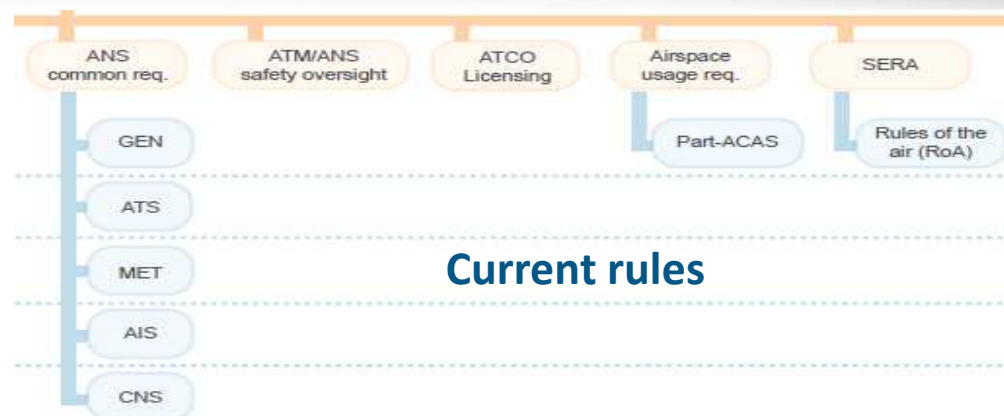
Data Link example – lessons learnt

➤ Industrialisation has to deploy both ground infrastructure and airborne systems -> enhanced global performance needs more sophisticated airborne/ground systems' interactions

➤ Common concept-of-operations in EATMN;
  ➤ 'Architect' and defined 'design' are needed
  ➤ R&D -> validation -> centralised CBA and safety case
  ➤ Local change management (ANSP/NSA) to 'credit' of centralised assessments
  ➤ Common concept -> common governance to react to problems

➤ Total system approach ...

Example – Remote TWR Services (1)

Rulemaking Programme

RM task: Remote TWR

ANS common req.	ATM/ANS safety oversight	ATCO Licensing	Airspace usage req.	SERA
GEN			Part-ACAS	Rules of the air (RoA)
ATS				
MET	**Current rules**			
AIS				
CNS				

Implementing Rule

EASA Opinion
EC/comitology

AMC/CS's

EASA Decision
Means of compliance

GM

EASA Decision
Guidance material

Rules must reflect **"state of the art"** and **best practices**
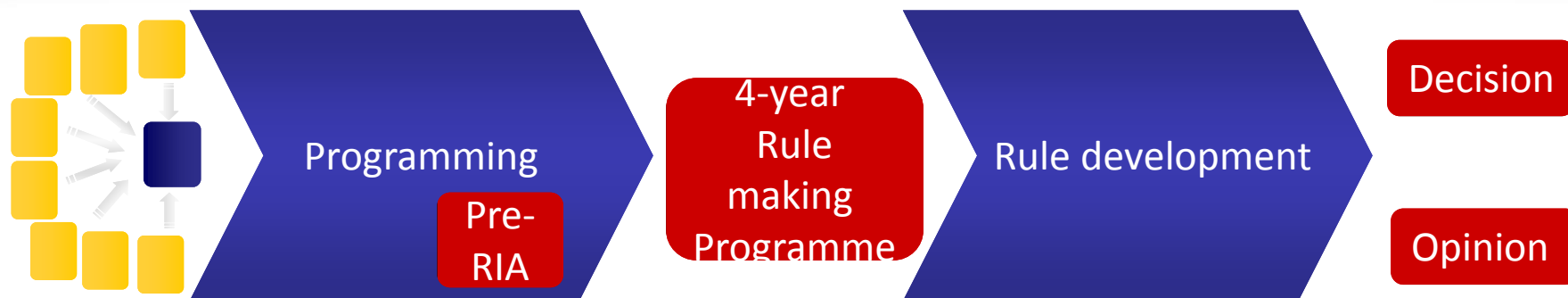
Comply with ICAO SARPS

Use of new technologies and practises

Use of **standards** = uniform application of technologies and best practices
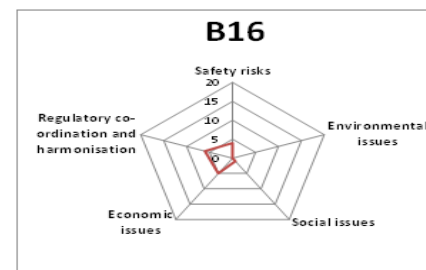
Example – Remote TWR Services (2)

Programming

Pre-RIA

4-year Rule making Programme

Rule development

Decision

Opinion

Pre-RIA = is rulemaking needed and when?

European Aviation Safety Agency — Rulemaking Directorate
Preliminary Regulatory Impact Assessment

Technical requirements for remote tower operations
RMT.0624 — 2.6.2014

B16

Safety risks

Environmental issues

Social issues

Economic issues

Regulatory co-ordination and harmonisation

For explanation on the Pre-RIA methodology, see Explanatory Note.

EXECUTIVE SUMMARY

This proposal addresses a safety and regulatory coordination issue related to the development of new technology allowing the provision of air traffic services from a remote location, following the SESAR outcome.

The specific objective is to mitigate the safety risks that could appear with the introduction of the new concept of remote tower operations and to define the appropriate regulatory framework to enable its safe implementation and to facilitate economic development.

The current safety risk level is considered to be unaffected if the identified safety risks are appropriately mitigated and an appropriate set of European safety regulations is developed.

The resulting Pre-RIA score is B16. See radar chart and Chapter 3 for the driving factors.

Based on this Pre-RIA, rulemaking is recommended.

Example – Remote TWR Services (3)

- Pre-RIA in consultation (2.6. 2014 ->)
  - RMT.0624 on Remote tower operations
  - Pre-RIA → is rulemaking necessary? If yes, what is its priority?
  - EASA advisory bodies (States, industry) supported establishing RMT
  - Options; 1 - do nothing, 2 - flexible requirements, 3 - comprehensive req.
  - Scope (focus); single small/low-density aerodromes

- Regulatory aspects addressed
  - Local safety assessment; common/minimum criteria, non-ATS tasks, status of generic SESAR Safety Assessment Report
  - Approval of new technology; minimum functional/performance requirements
  - ATS and operational requirements
  - ATCO & AFISO HF and competence aspects, training requirements
  - "Interface" aspects; oversight authority, airspace users, aerodrome operator
  - Other aspects exist; e.g. societal

- EASA proposal
  - Rulemaking recommended; task complex, not controversial