



EASA
European Aviation Safety Agency

European aviation policy and space developments

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Your safety is our mission.

An agency of the European Union 



Content

- Organisation of aviation safety in Europe
- Space developments
- Proposal to proceed

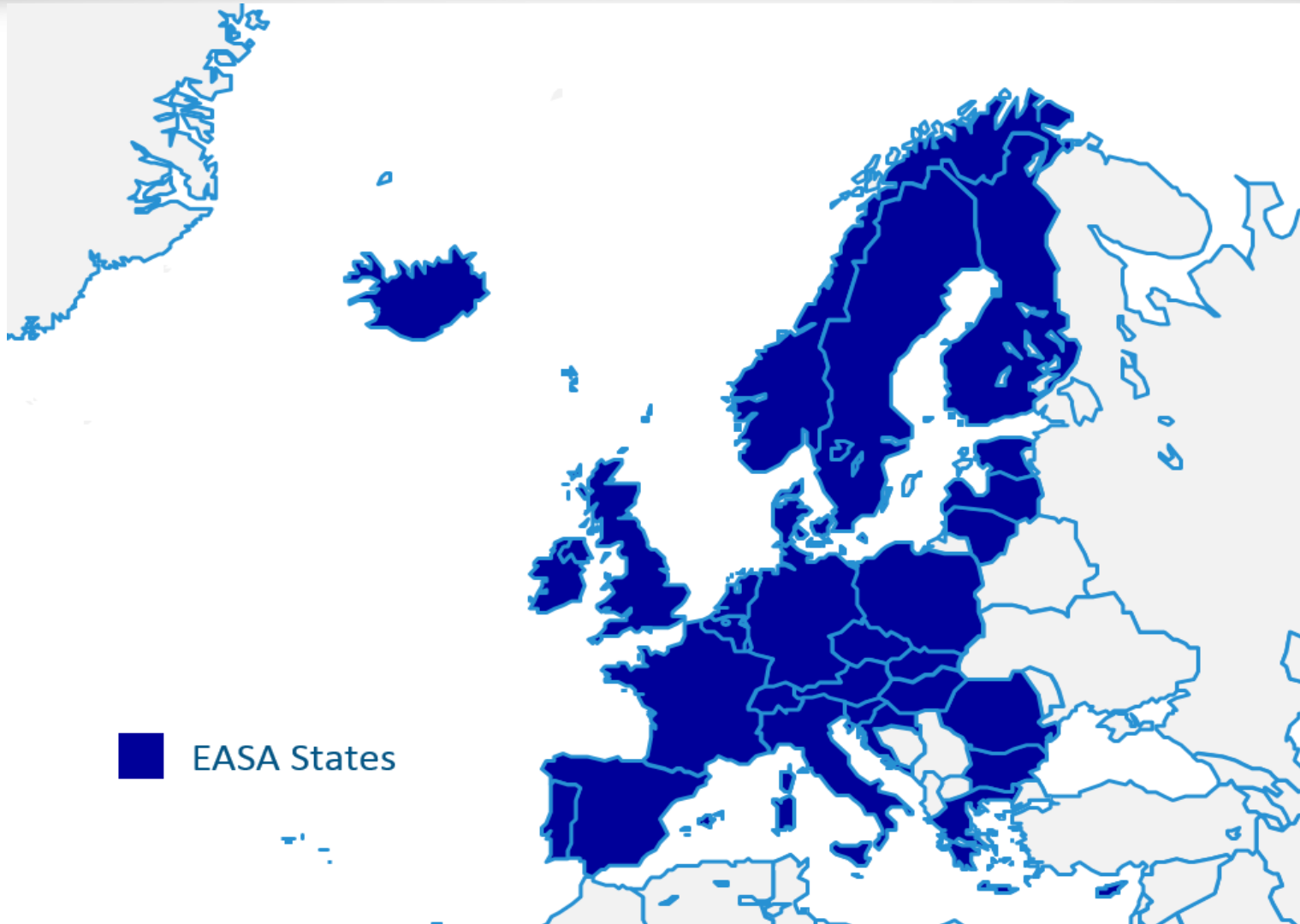


Organisation of aviation safety in Europe

- Provide for a high and uniform level of safety
- Leave flexibility for new business models and technological innovation
- Create a “State of the art” environment
- Who does what in the EU
 - European framework for efficiency
 - apply rules locally for proximity



EASA Membership





EASA is an ICAO Regional Safety Oversight Organisation

- EASA as EU Regulatory and Technical Agency
 - holistic approach and cross domain expertise
 - prepares rules, sets technical standards and issues certificates
 - oversees implementation
 - supports the European Commission (DG MOVE and DG GROW)
 - works in partnership with its Member States
 - cooperates with industry Standard bodies (e.g. EUROCAE)



Space developments

➤ (1) **Satellite based services for aviation**

- Navigation and positioning
- Communication

➤ (2) **Impact of space weather on aviation**

- vulnerability of systems and infrastructure
- interferences / disruptions on safety, continuity of service and punctuality





Space developments

- **(3) Commercial suborbital and air-launch operations (passengers and payload)**
 - Vehicles and spaceports
 - Systems operation and airworthiness
 - Integration in/separation from other airspace traffic (Single European Sky)
 - Frequency spectrum
 - Environment
 - Liability and insurance
 - Security concerns





Space developments

- The commercial suborbital aircraft and air-launch systems domain is an emerging industry, which is at crossroads of aviation and space, public and private and using both civil and dual-use technologies
 - > innovative, fast-changing, technically complex





The challenge for regulators

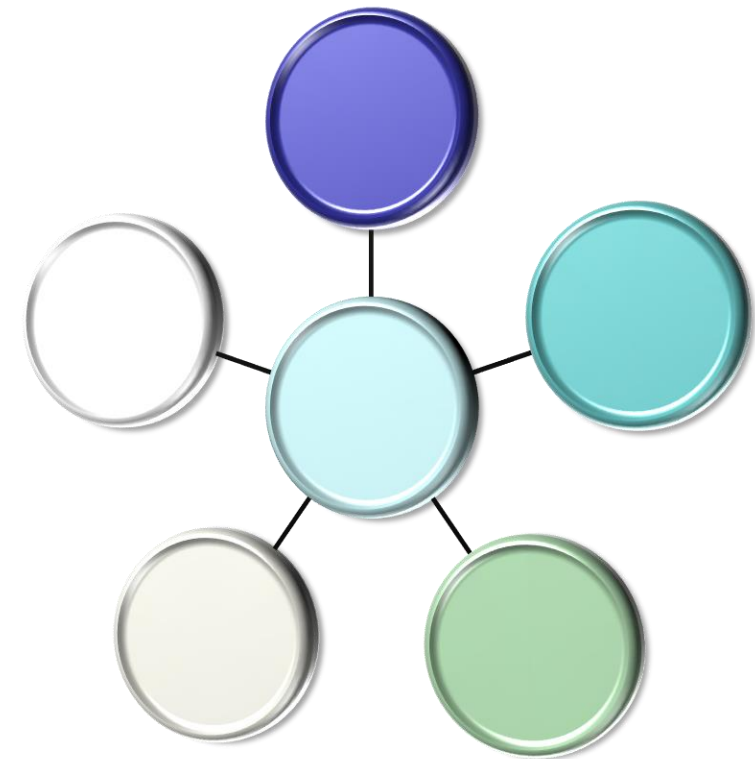
- Air or space laws? Air and space laws?
- Manage societal expectations
 - Finding the right balance between allowing innovation and defining the acceptable level of risk
 - Increased air traffic
 - Passenger protection
- Manage industry expectations
 - Regulatory framework/certification (risk-based approach)
 - Industry self-governance
 - Efficiency/cost savings
 - Flexible and quick response
 - Fair competitiveness environment





Can we use the regional approach?

- Singular approach
- Well suited to facilitate the exchange of expertise, experience, best practices > pooling of resources to build regional competence
- Commonly agree on the acceptable target levels of safety > minimise 3rd party damage
- Harmonised approach for undertakings wishing to engage in activities in the EU – A solution to facilitate cross-border activities > one certificate
- Regional framework avoiding duplication and inconsistency
- Steer centrally the deployment of new technologies
- Cost-efficiency





The regional approach in practice – satellite based services

- Harmonised rules
- Harmonised certification for cross border operations
 - Technology/safety case (e.g. AIREON)
 - Service providers (e.g. ESSP)
- Harmonised implementation
- Efficient oversight and savings
- No duplication of efforts for validation and certification



The regional approach in practice - spaceflights

➤ Vehicle

- Centralised but tailored product certification process > one certification process in the region (risk-based)
- Shared approach regarding environmental protection (emissions, noise)

➤ Integration with / separation from other airspace traffic (Single European Sky)

- Considering other airspace users, one set of high level standards > local implementation, specific provisions set at local level considering the operation and local environment



The regional approach in practice – spaceflights

- Operational management and spaceports
 - Develop locally > grow regional
 - Ideally: one-set of basic certification requirements > facilitate cross border
 - Spaceport design: know what to expect when it is open to different users; one certification process



Space operations – regional to global approach?

- Need to review and learn
- Industry involvement essential
- Industry to provide Roadmaps to the Regulators to anticipate
- Regional approach more suitable for having same level of safety for passengers, facilitate cross-border activities and be cost-efficient
- Welcome ICAO: > a sharing of information and data on a global level
 - > a need to making use of the regional added value (safety and efficiency)



EASA

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Let's stay safe

Thank you

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