Safety KPIs

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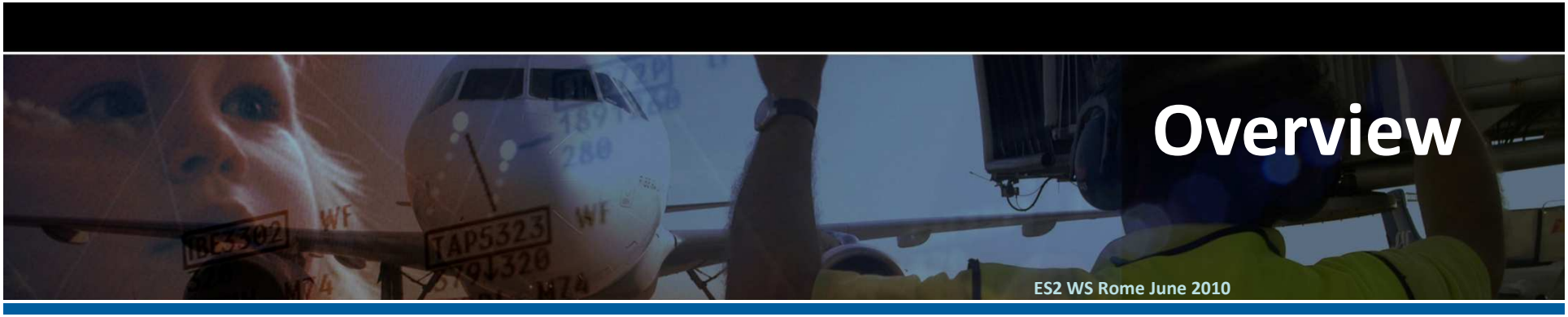


Overview

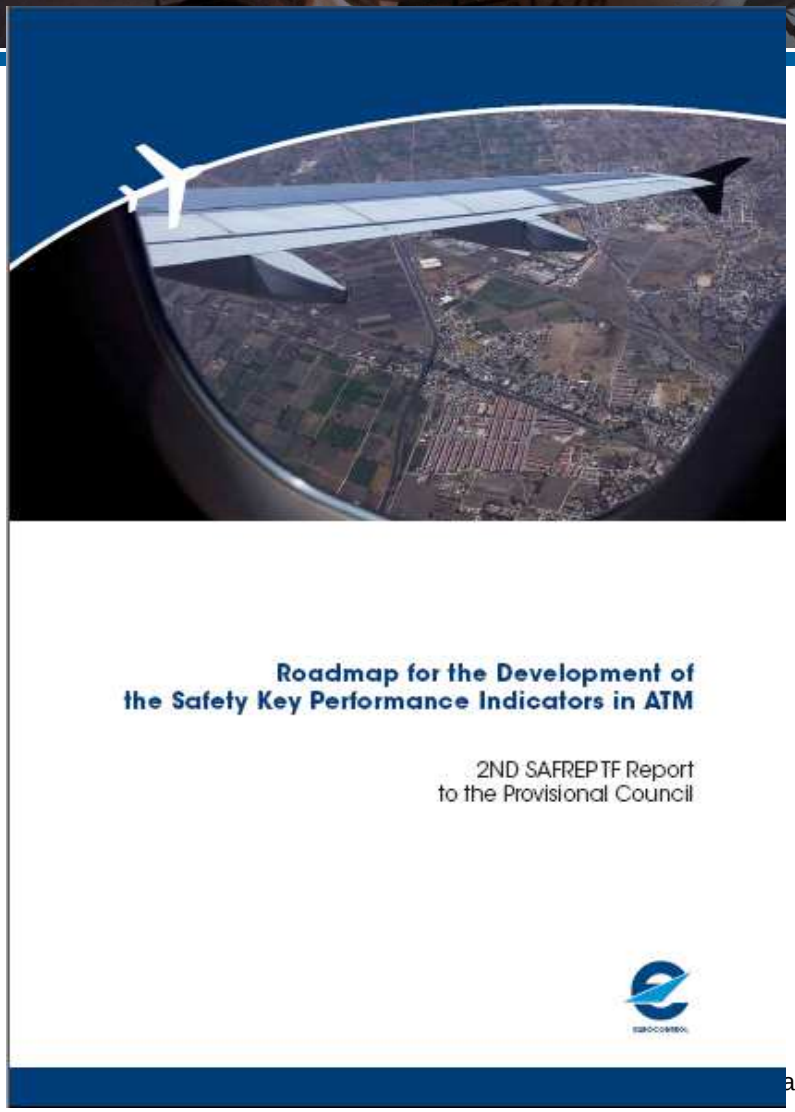
SAFREP

& ATM

Safety KPIs

- SAFREP Output on Saf KPIs
- Leading KPIs
- Lagging KPIs
- Performance IR – safety aspects

Safety KPI Roadmap
7 Recommendation



1. **Strengthen the ESARR 2 AST**
2. **Continuation of Safety Maturity beyond ESP lifetime and usage of ESIMS to derive REG KPIs**
3. **States to ensure adequate resources to populate AST**
4. **Cautious approach in adopting targets**
5. **by November 2009 SAFREP TF produce a range of key indices, which would measure the state or "health" of the ATM safety system. …make best use of existing practices, data flows, rules and regulations with the scope of minimising new approaches …to observe the roadmap described in Chapter 4 of the Roadmap Report**
6. **wide consultation with all interested stakeholders before any adoption**
7. **PC to agree on the Roadmap and stakeholders to provide adequate resources to ensure the development of Safety KPIs by 2009**

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SAFREP: Key Performance Indicators

- Leading Indicators
  - New Safety Maturity for ANSPs, developed together with CANSO & ANSPs
  - New Safety Maturity for REGs, developed together with NSAs and ICAO
- Lagging Indicators
  - New Severity and Risk assessment Mark Sheets - Risk Assessment Tool, adopted now by the FAA
  - New packaging for Lagging Indicators - Aerospace Performance Factor, developed with the FAA

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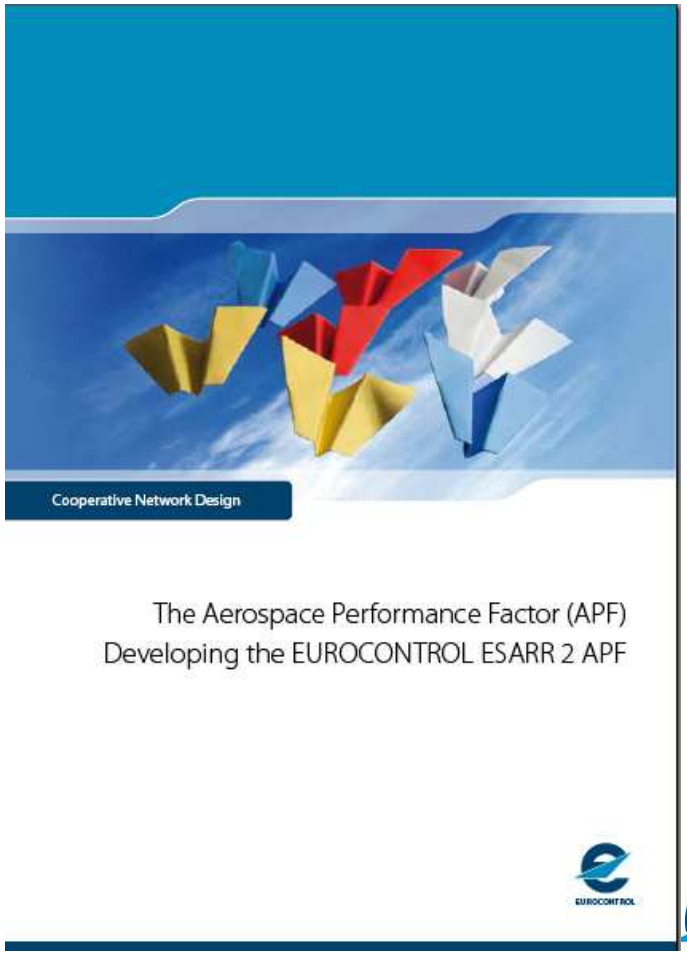
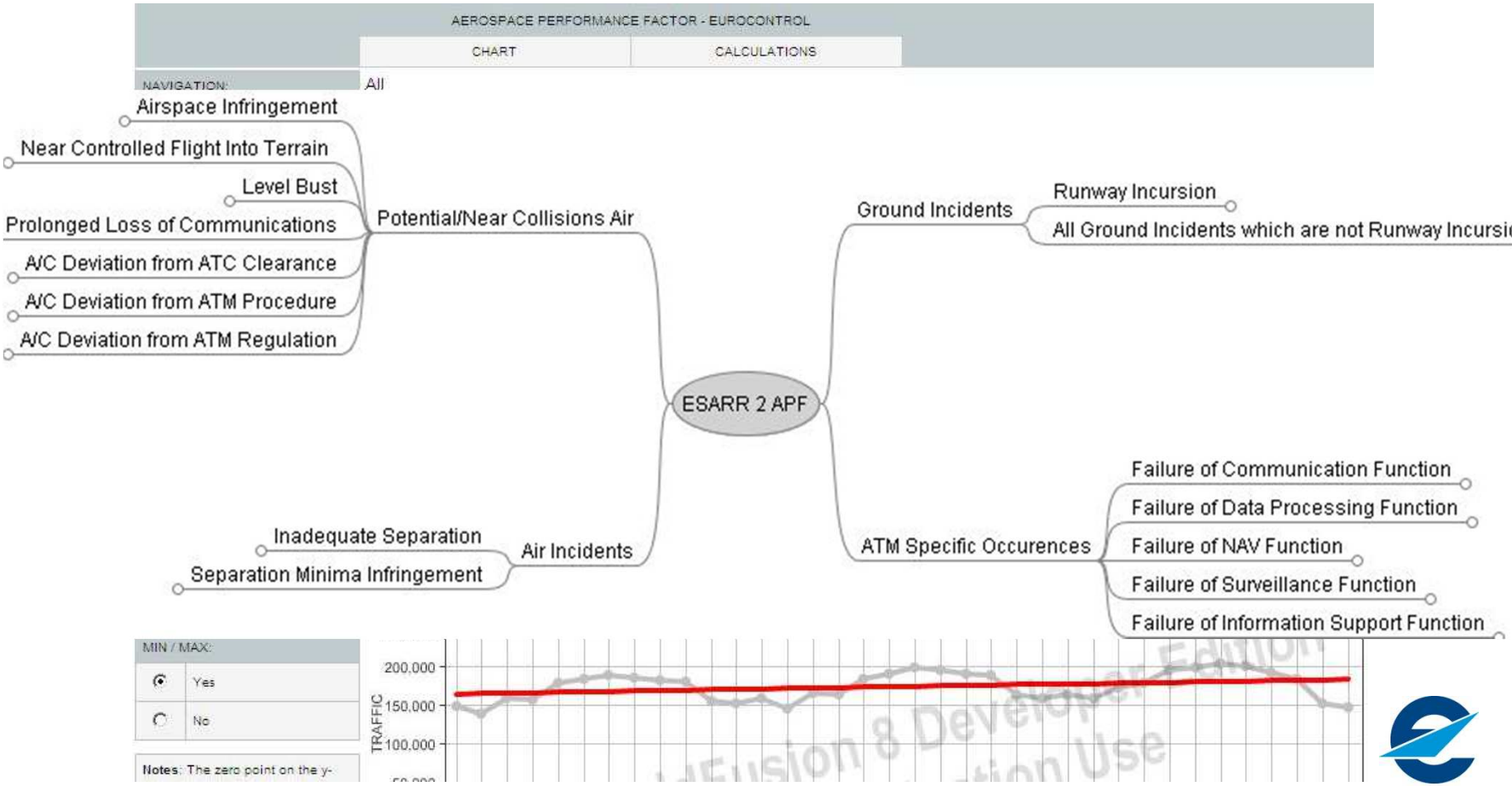
Aerospace Performance Factor – Aggregation of Lagging Indicators

- **The APF incorporates *historical indicators* from multiple databases and presents a graphical representation of performance over time.**
- **Allows organization to have a system-wide view of organizational performance then "drill down" into data to search for causal factors.**
- **Tracks organizational performance over time using safety, operational, and equipment metrics.**
- **Incorporates organizational judgment and experience of factors.**
- **Allows for analysis and search for precursors.**
- **Functions as model for decision making & is expandable is size and scope.**



EUROCONTROL Mindmap and its Aerospace Performance Factor - APF

ES2 WS Rome June 2010



APF = Another Europe-US partnership

FAA
Air Traffic Organization

Passport to the Future

Implementing Strategy 2014

Increase air transportation system safety

- Build a robust safety reporting and analysis capability within a culture that encompasses full disclosure and increased transparency
- Manage the risk associated with changes in the National Airspace System
- Standardize systematic methods to identify and mitigate operational and human factor risks in the NAS while maintaining the most efficient system possible

Optimize the air transportation system to increase efficiency, capacity, flexibility, and predictability

- Evolve the NAS to integrate current/future technologies and equipage allowing aircraft to operate with greater efficiency and flexibility in a seamless environment

15

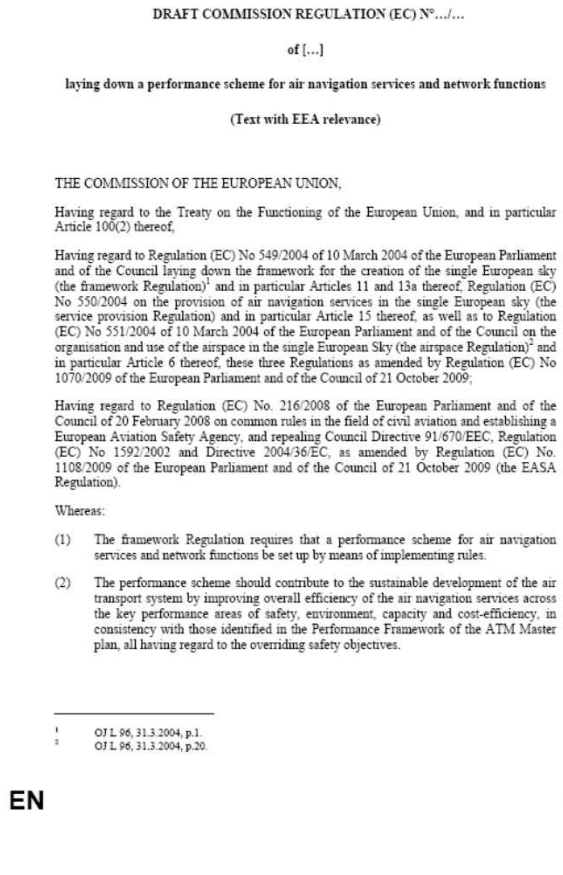
Metrics:

- Establish and evaluate aerospace performance factors for safety
- Establish and evaluate aerospace performance factors for efficiency
- Adjusted operational availability performance target

IR on Performance – safety elements

- **Safety Maturity correlated with EASA standardisation**
- **Severity part of RAT**

  (RWY Incursion, Sep Minima Infringements & ATM Specific Occurrences)
- **Just Culture**
- **Top 3 key risk areas (still to be introduced at national level and through EASA Aviation Safety Programme; already ICAO requirement)**



DRAFT COMMISSION REGULATION (EC) N°.../...

of [...]

laying down a performance scheme for air navigation services and network functions

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 100(2) thereof,

Having regard to Regulation (EC) No 549/2004 of 10 March 2004 of the European Parliament and of the Council laying down the framework for the creation of the single European sky (the framework Regulation)[1] and in particular Articles 11 and 13a thereof, Regulation (EC) No 550/2004 on the provision of air navigation services in the single European sky (the service provision Regulation) and in particular Article 15 thereof, as well as to Regulation (EC) No 551/2004 of 10 March 2004 of the European Parliament and of the Council on the organisation and use of the airspace in the single European Sky (the airspace Regulation)[2] and in particular Article 6 thereof, these three Regulations as amended by Regulation (EC) No 1070/2009 of the European Parliament and of the Council of 21 October 2009;

Having regard to Regulation (EC) No. 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC, as amended by Regulation (EC) No. 1108/2009 of the European Parliament and of the Council of 21 October 2009 (the EASA Regulation).

Whereas:

(1) The framework Regulation requires that a performance scheme for air navigation services and network functions be set up by means of implementing rules.

(2) The performance scheme should contribute to the sustainable development of the air transport system by improving overall efficiency of the air navigation services across the key performance areas of safety, environment, capacity and cost-efficiency, in consistency with those identified in the Performance Framework of the ATM Master plan, all having regard to the overriding safety objectives.

[1] OJ L 96, 31.3.2004, p.1.
[2] OJ L 96, 31.3.2004, p.20.

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Questions?