



Safety KPIs

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Overview

ES2 WS Rome June 2010

**SAFREP
& ATM
Safety KPIs**

SAFREP Output on Saf KPIs

Leading KPIs

Lagging KPIs

Performance IR – safety aspects

Safety KPI Roadmap 7 Recommendation

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Roadmap for the Development of
the Safety Key Performance Indicators in ATM

2ND SAFREP TF Report
to the Provisional Council



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**



SAFREP: Key Performance Indicators

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Improving European ATM Safety through
SMART Safety Indicators

3rd SAFREPTF Report to Provisional Council
European ATM Safety Performance Indicators



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● 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



2010+ ANSPs ATM Safety Framework Study Areas (in partnership with CANSO) & Mapping ICAO GASR

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ATM Safety Framework
Maturity Survey

Methodology for ANSPs



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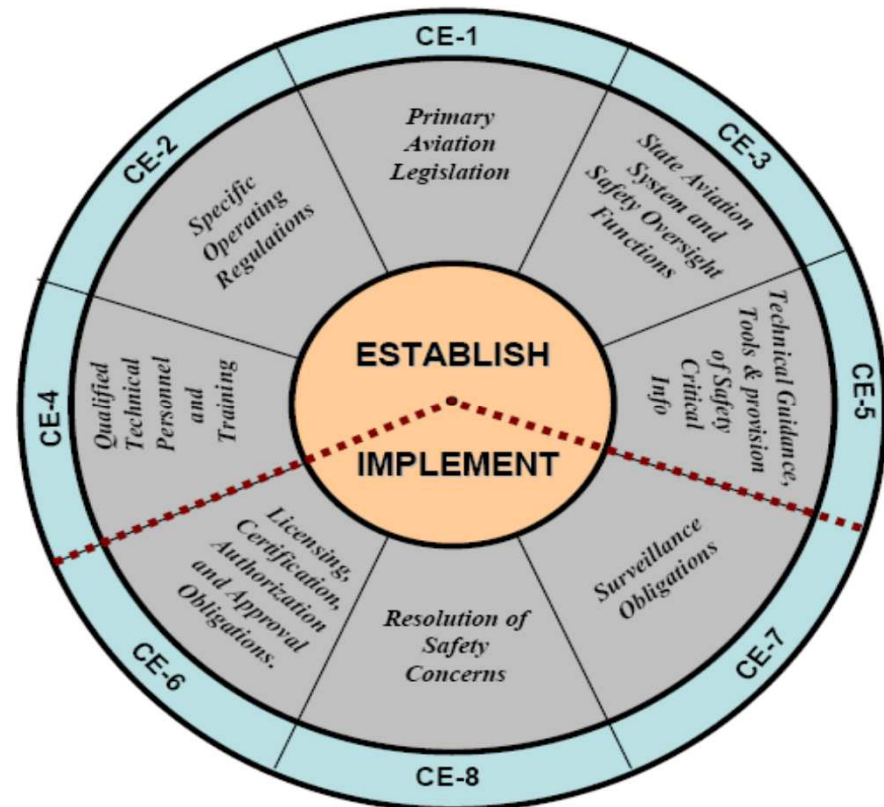
Revised REGs ATM Safety Framework Study Areas- mapping with the 8 ICAO Critical Elements

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Cooperative Network Design

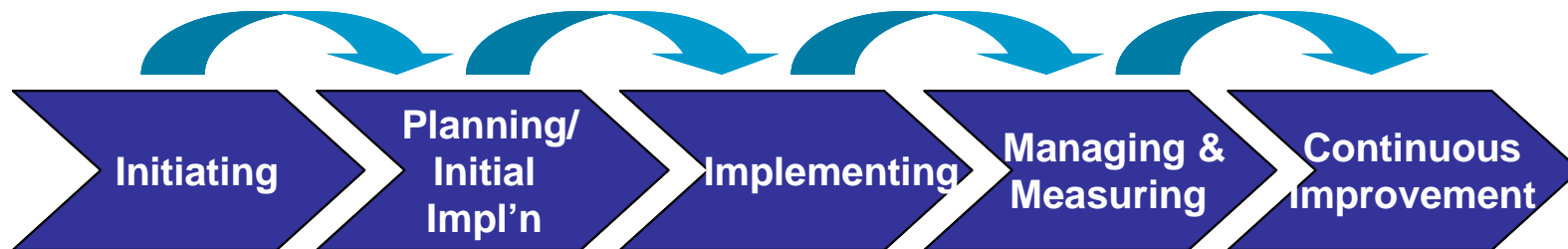
ATM Safety Framework
Maturity Survey
Methodology for ATM Regulators



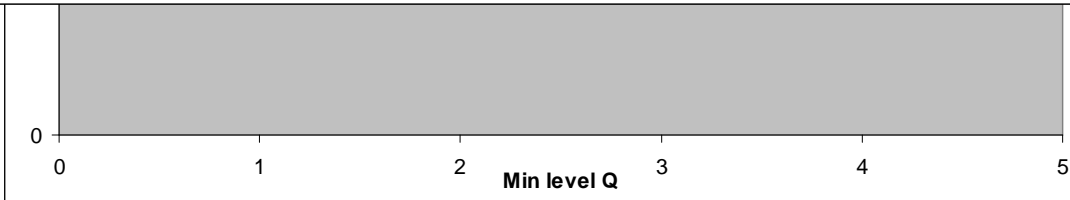
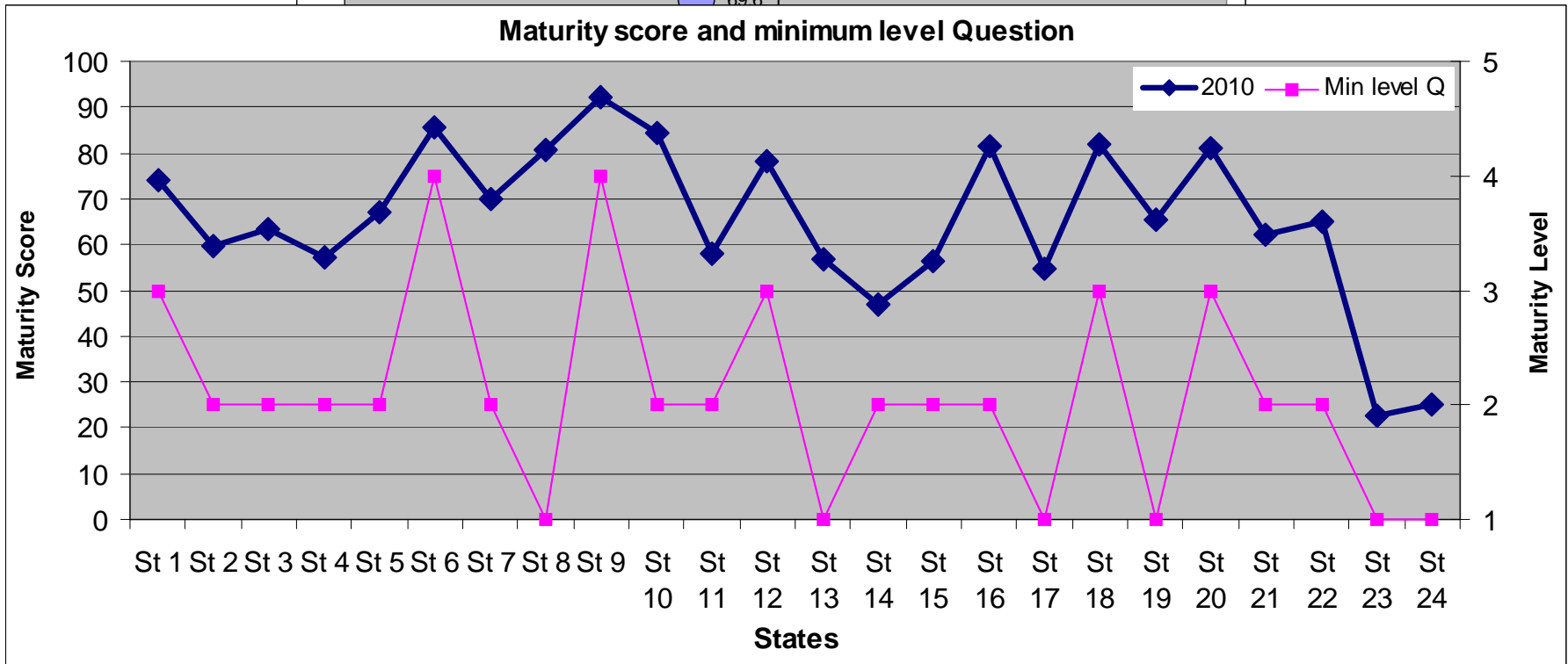
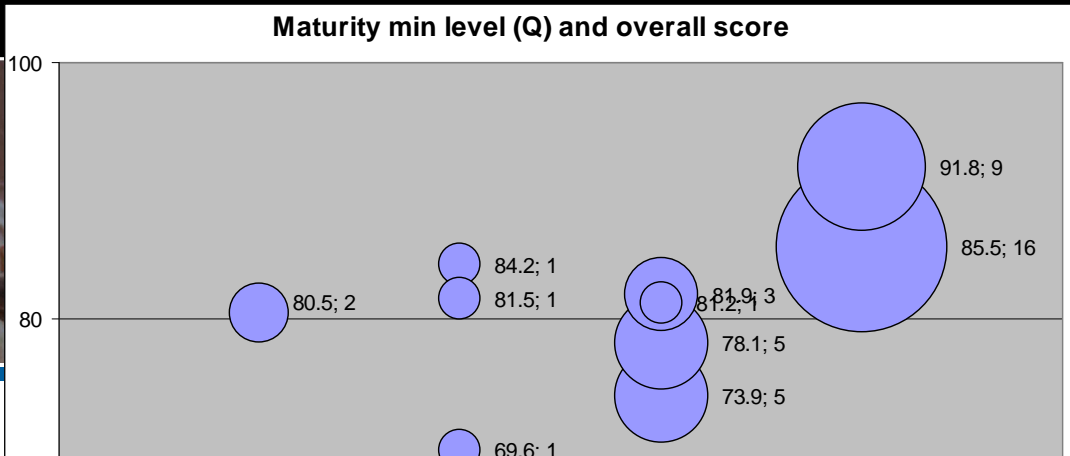
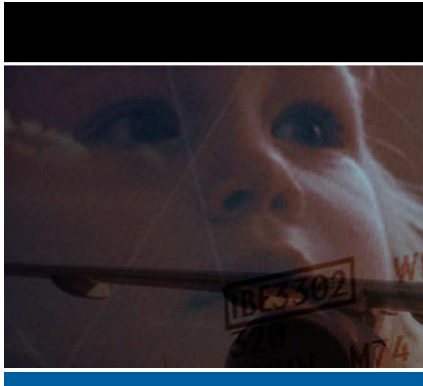
New maturity Level Flow

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State ATM Regulators & ANSPs are asked to assess their ATM Safety Framework Maturity in the following categories:



Adapted from CMMI model recognised by Industry.



IR on Performance – safety elements

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- 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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