MANAGING SAFETY FOR THE FUNCTIONAL AIRSPACE BLOCK

A SAFETY MANAGEMENT SYSTEM FOR SEVEN ANSPS.

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Standing Committee Safety
Functional Airspace Blocks
One SMS?

- Seven ANSPs
- Seven Safety Management Systems
- Seven certificates
- Seven licenses to operate
- No formal FABEC SMS
The organisation

ASB
- CEOs of the ANSPs

AFG
- Support staff

SC OPS
- The main driver

SC SAF
- Safety business

SC Other
- All other activities…
Principal Elements of SMS

- Safety Policy
- Safety Risk Assessment Process
- Safety Occurrences Management
- Safety Performance Management

Diagram:
- Input
- Primary Process
- Result
- What?
- Why?
- How do we do safety business?
The organisation and tasks of SC SAF
OSCAR

C1 Single European Sky Requirement 5502004 Article 9a

A1 Safety Regulatory Requirements in 10342011 and 10392011 are adequate for scope of ‘safely implemented’

A3 This safety case will be maintained beyond 2012

Q0 FABEC is safe to implement and will remain safe

S1 Argument by appeal to regulatory framework

Go to Figure 6-1

S2 Argument by appeal to safety oversight

Go to Figure 6-4

S3 Argument by appeal to safety of service provision

Go to Figure 6-6

C2 FABEC description is provided in chapter 3. It includes arrangements for Regulation, EASA, NSA, ANSPs, Mil & interfaces intra and inter. FABEC = Airspace over B, F, NL, D, CH, L. Enroute, Approach and Airports

A2 FABEC is established in November 2012

C3 Remains safe = organisations and processes are in place to oversee and manage safety

C4 Each ANSP in FABEC is currently certified under EC 20992005 (replaced by 10352011)
Safety Performance Management

I. Leading indicators
   I. 1. EoSMS – part 1/3
      (Effectiveness of Safety Management System)

Level 1 => level 2 => level 3 => level 4 => level 5

<table>
<thead>
<tr>
<th>EoSMS 2010 FABEC</th>
<th>EoSMS 2011 FABEC</th>
<th>EoSMS 2012 FABEC</th>
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<tr>
<td><img src="image1" alt="Graph" /></td>
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- Level 1
- Level 2
- Level 3
- Level 4
- Level 5
II. Lagging indicators

II. 1. Separation Minima Infringements (SMI)

FABEC "SMI" Per month

- SMI "reported"
- SMI with ATM ground contribution
- Linear (SMI "reported")
- Linear (SMI with ATM ground contribution)
Safety Performance Management (3)

II. Lagging indicators
II. 2. Runway Incursions (RI)

FABEC "RI" Per month
Safety Analysis and Improvement
Safety Risk Assessment process

SRAP Option 1: All ANSPs use the methodology of one of the ANSPs (e.g., ATFCM Live Trial)

SRAP Option 2: All ANSPs largely use the own methodology, and develop a joint part on top (e.g., AMRUFRA)
Safety Risk Assessment Process, Option 3

SRAP Option 3: One common method
Analysis types

Three types
- Approach using RCS
- Relative approach
- Proxy approach

Each type is risk-based.
- Barriers, hazards, causes, consequences, risks, use of data,...
- Well-known bow-tie as common risk model
- Proxy is a new concept.

Selection of type per change and (if desired) per hazard
- Main objectives: effectiveness and efficiency of safety risk assessment.
- Combining types within assessment is possible.
Support to SC–OPS & others

- **Achieved:**
  - CBA-Land/Central West.
  - ATFCM/ASM Live Trial
  - FINE

- **Ongoing:**
  - South-East (including SWAP and CBA22).
  - West (Dover interface) – II
  - PMS
  - LUX

- **Planned:**
  - Free Route Airspace
  - XMAN
Summary

- FABEC 2012 SMS is co-ordination layer
- Contains fundamental elements of SMS
  - What is the Safety objective?
  - What is the result?
  - Why events happen?
  - What if we change?
- Operating since 4 dec 2012
- Individual SMS’s now harmonising
- New risk assessment process developed