



MANAGING SAFETY FOR THE FUNCTIONAL AIRSPACE BLOCK

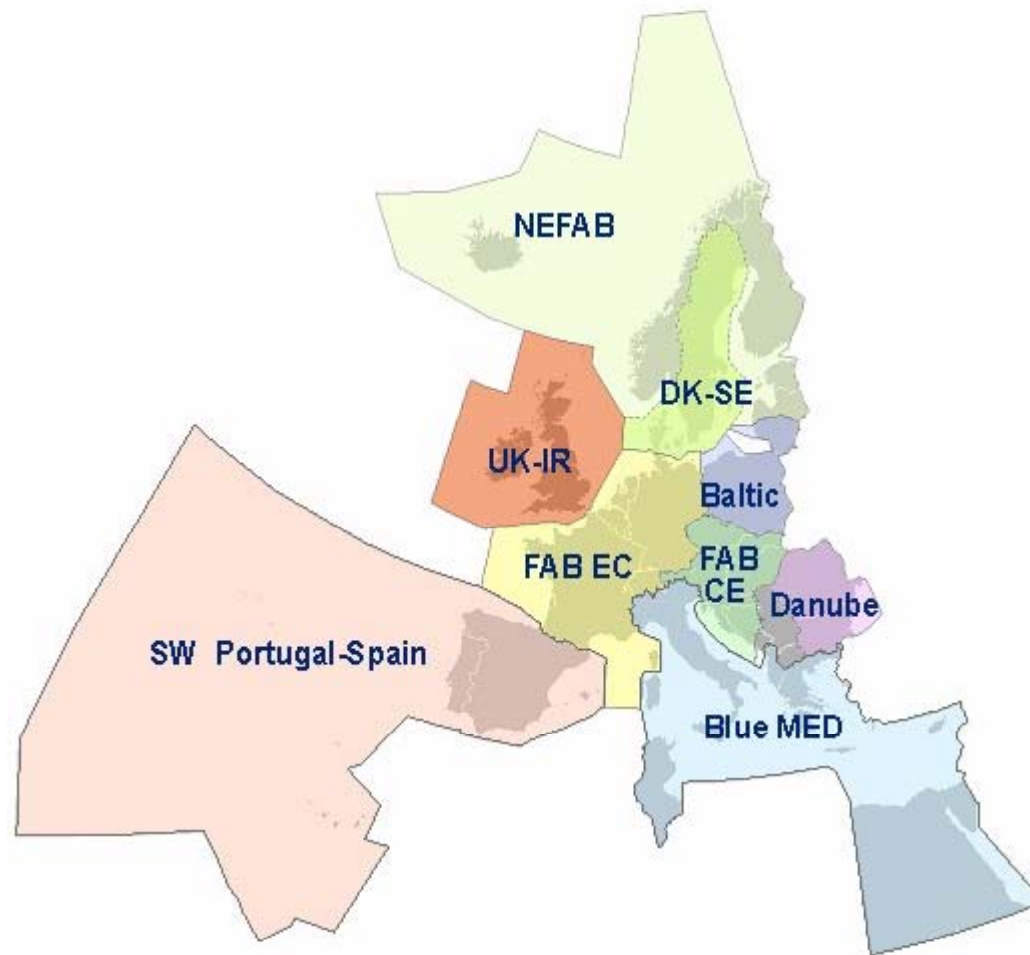
**A SAFETY MANAGEMENT SYSTEM
FOR SEVEN ANSPs.**

ir. Job Brüggem
Chairman FABEC
Standing Committee Safety

making the difference ...



Functional Airspace Blocks



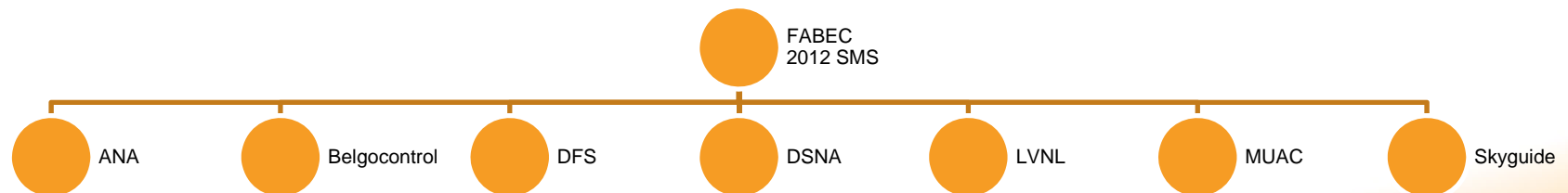
FABEC



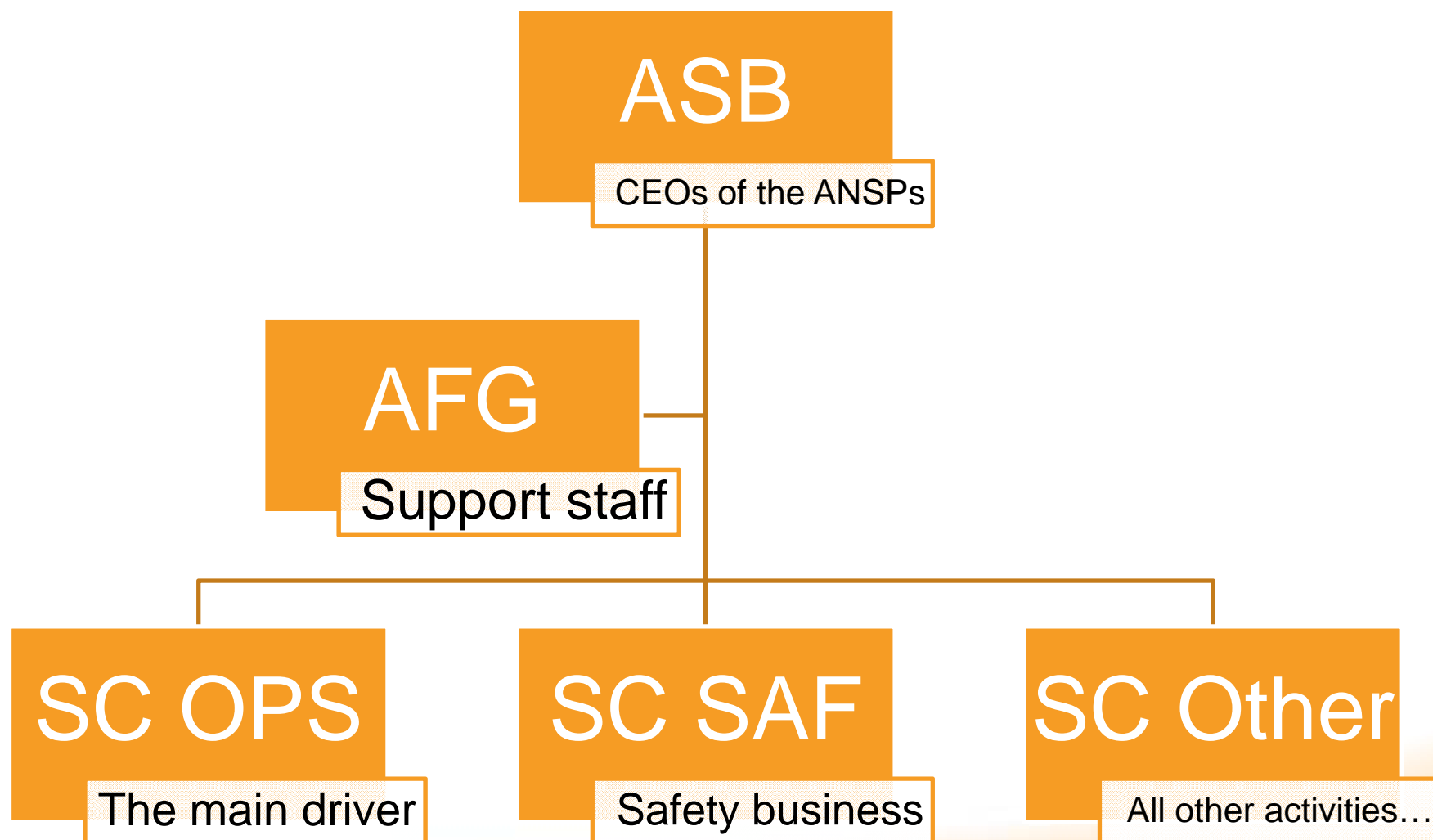
One SMS?



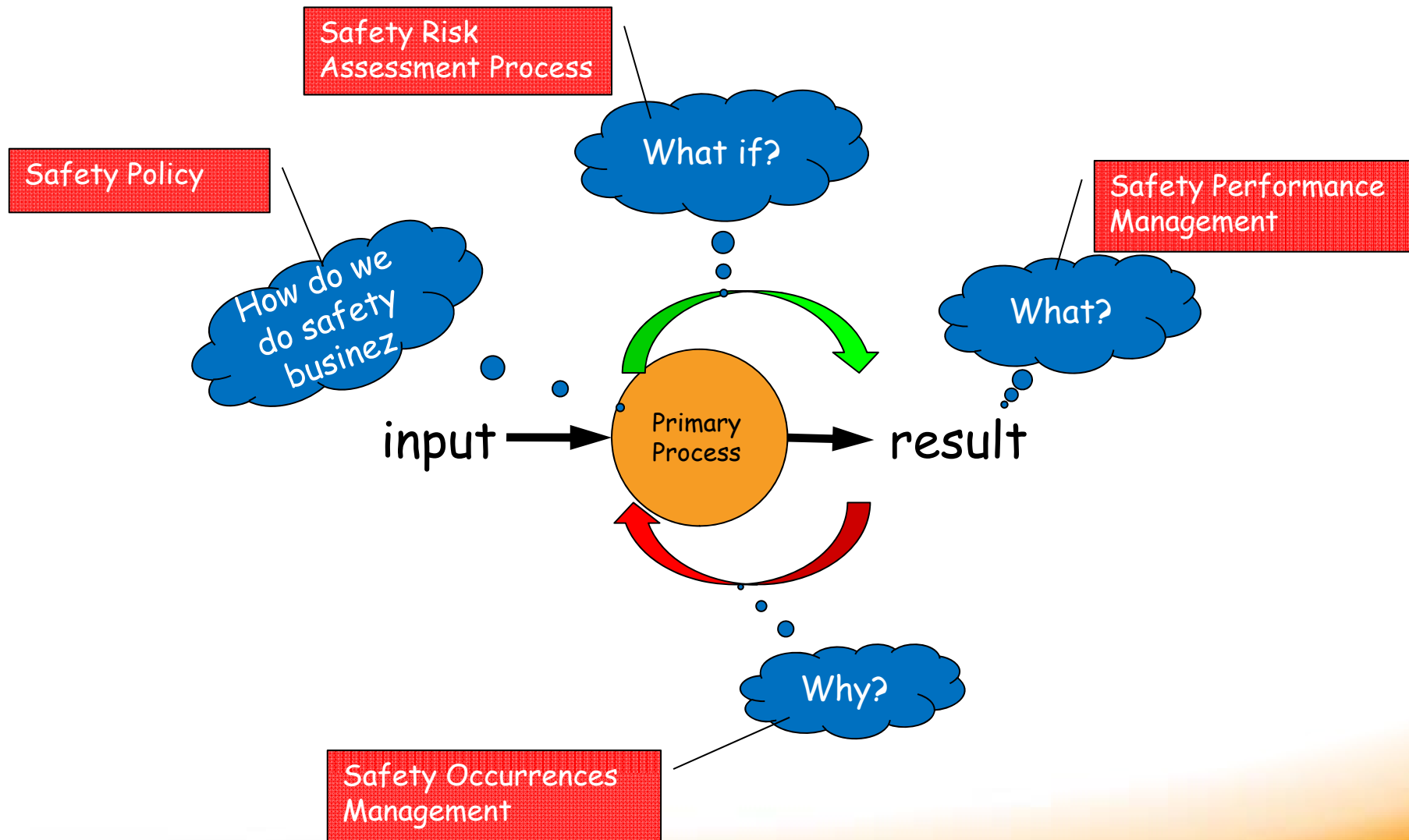
- Seven ANSPs
- Seven Safety Management Systems
- Seven certificates
- Seven licenses to operate
- No formal FABEC SMS



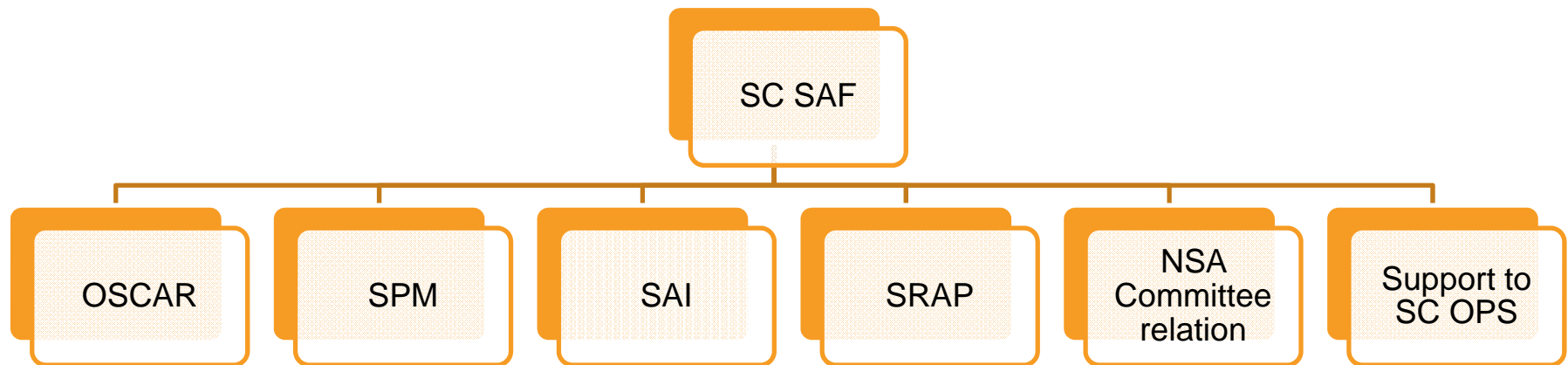
The organisation



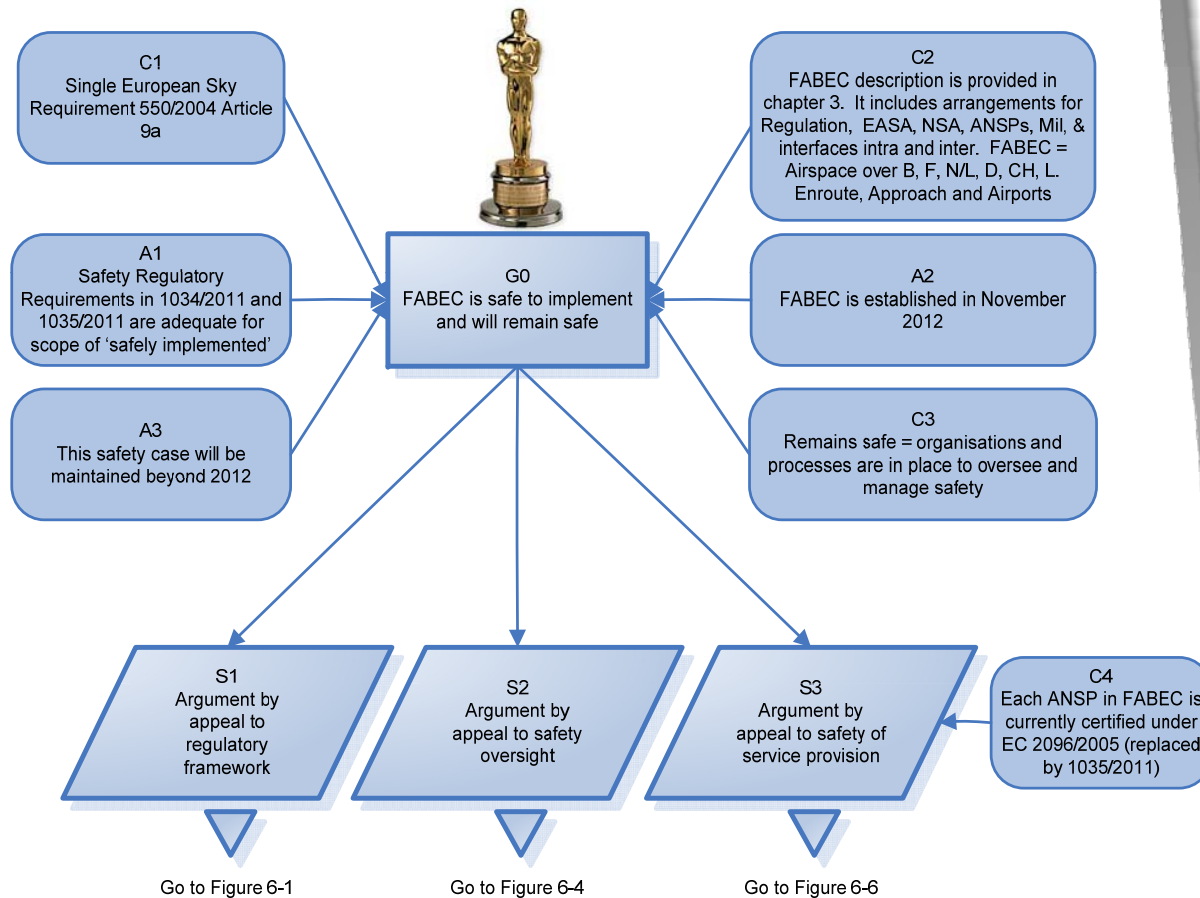
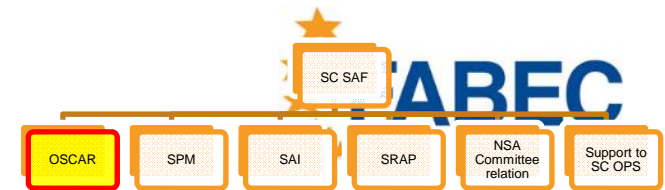
Principal Elements of SMS



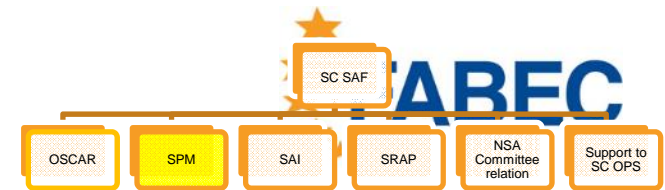
The organisation and tasks of SC SAF



OSCAR



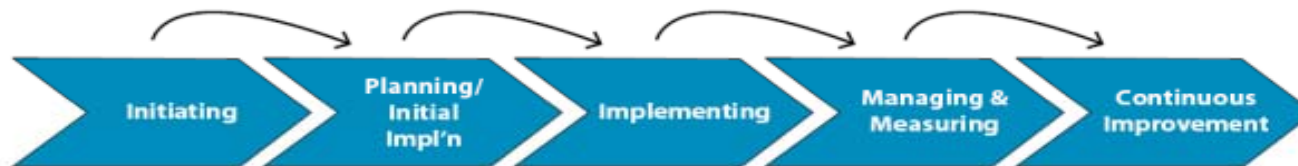
Safety Performance Management



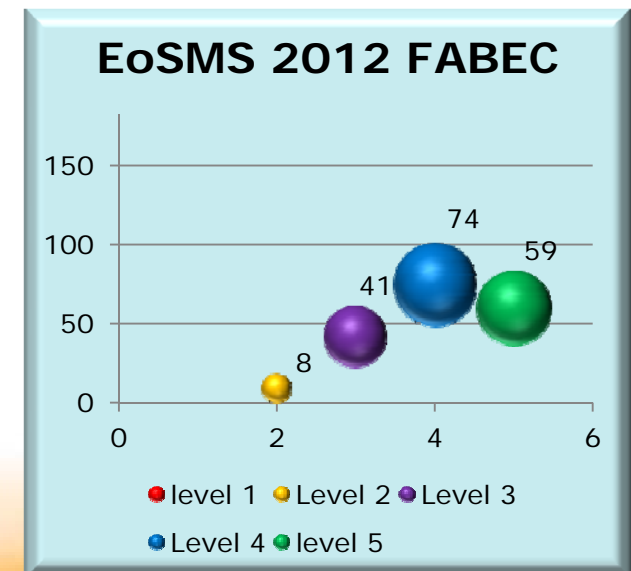
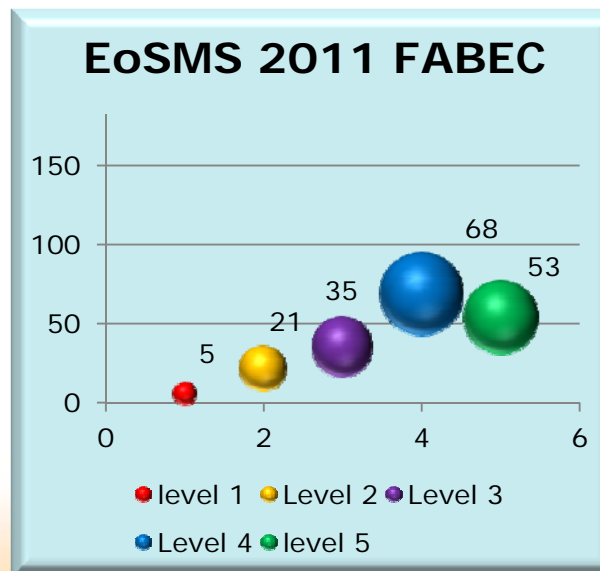
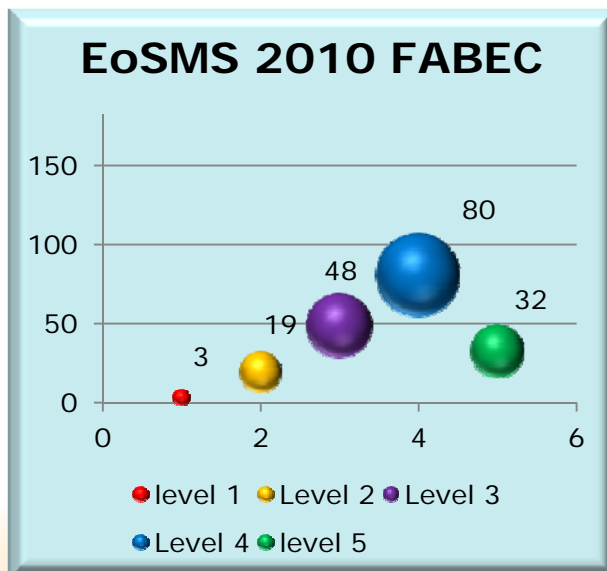
I. Leading indicators

I. 1. EoSMS – part 1/3

(Effectiveness of Safety Management System)



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



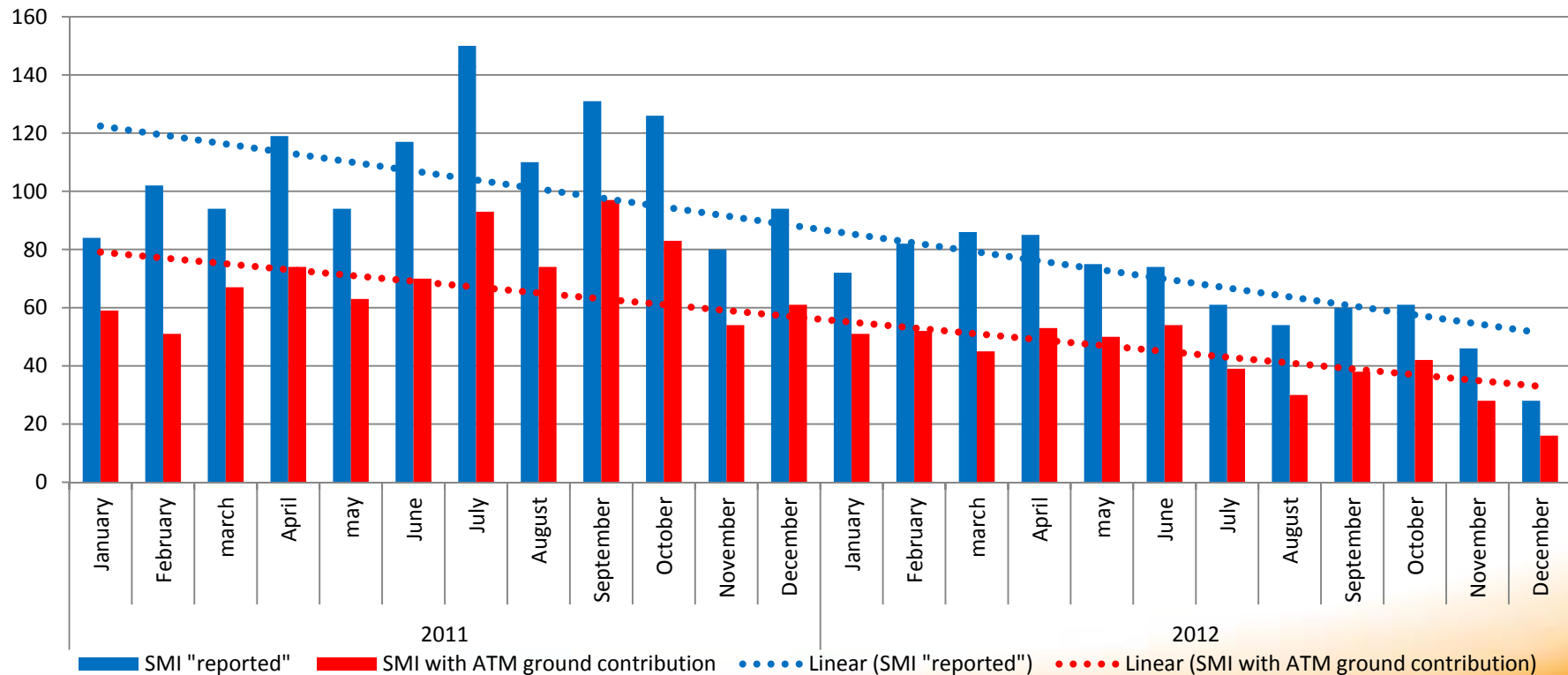
Safety Performance Management (2)



II. Lagging indicators

II. 1. Separation Minima Infringements (SMI)

FABEC "SMI" Per month

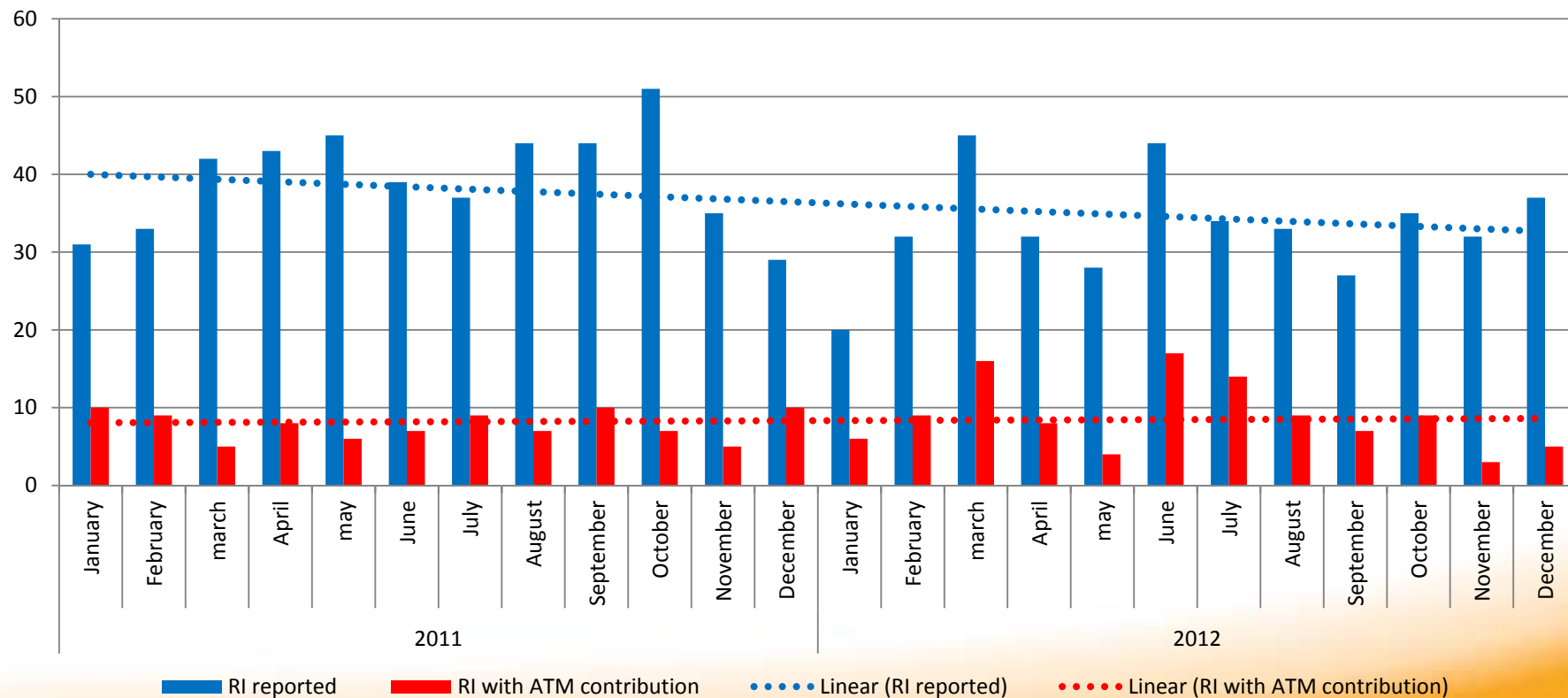


Safety Performance Management (3)

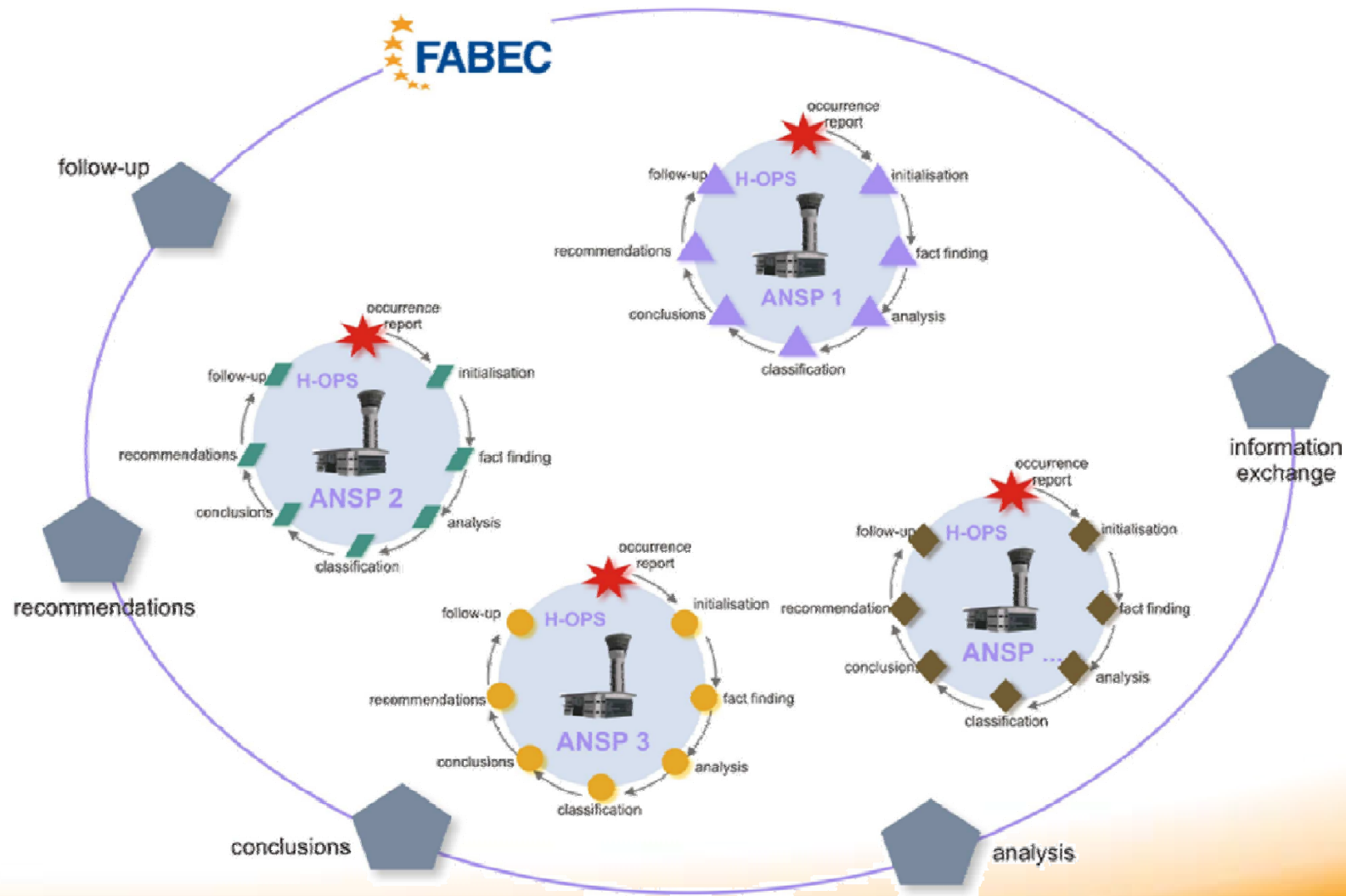
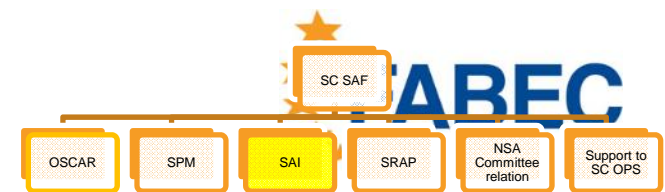


II. Lagging indicators II. 2. Runway Incursions (RI)

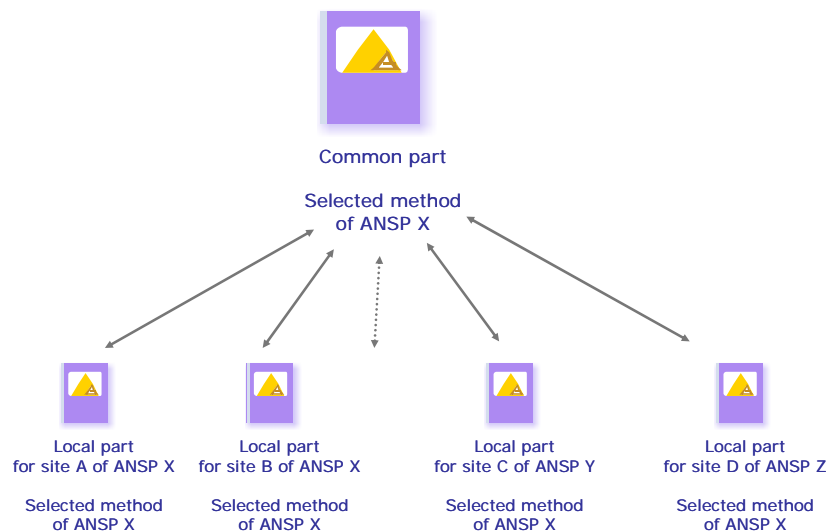
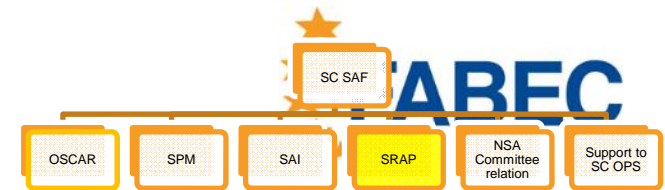
FABEC "RI" Per month



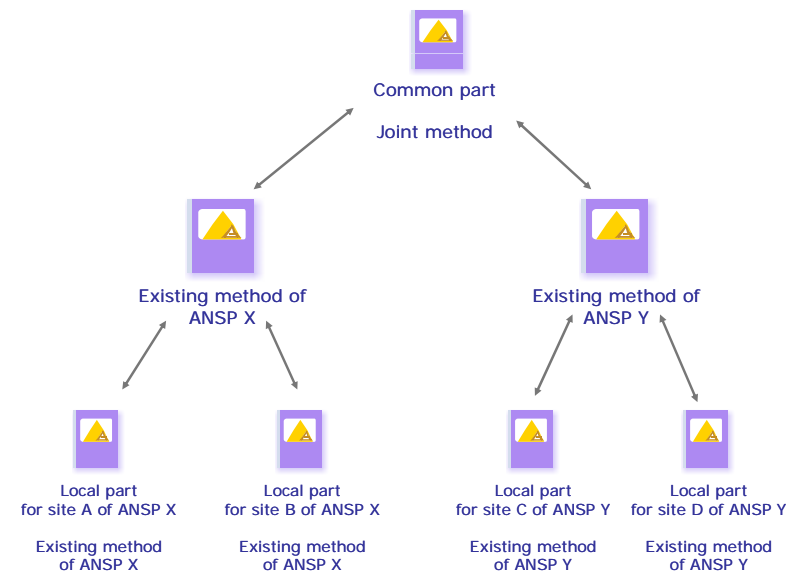
Safety Analysis and Improvement



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

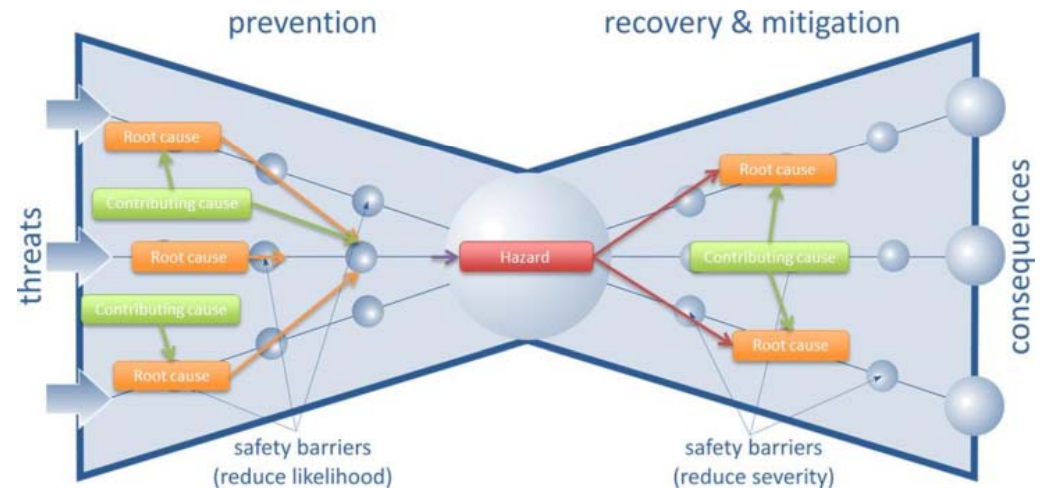
Analysis types

Three types

- Approach using RCS
- Relative approach
- Proxy approach

Each type is risk-based.

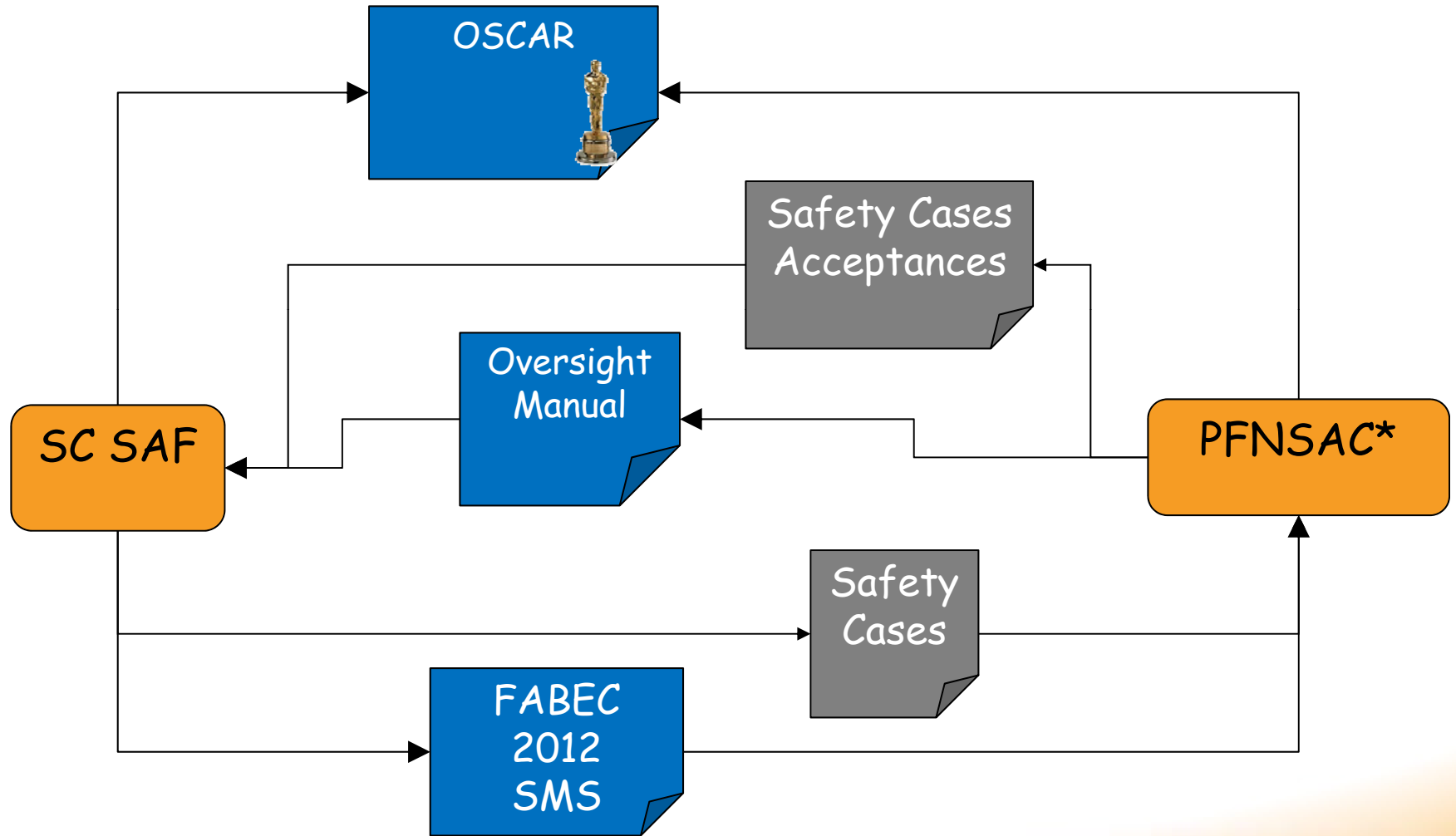
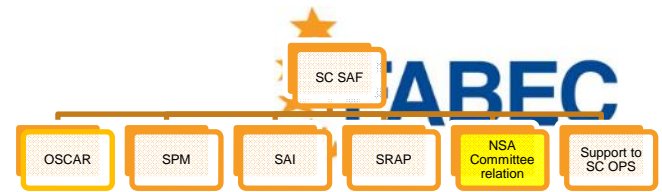
- Barriers, hazards, causes, consequences, risks, use of data,...
- Well-known bow-tie as common risk model
- Proxy is a new concept.



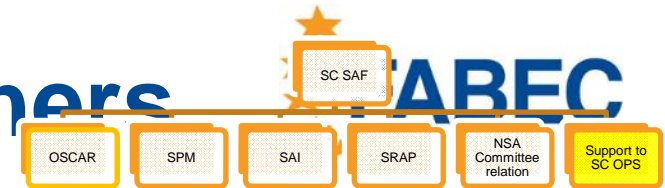
Selection of type per change and (if desired) per hazard

- Main objectives: effectiveness and efficiency of safety risk assessment.
- Combining types within assessment is possible.

Interaction with NSA Committee



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