

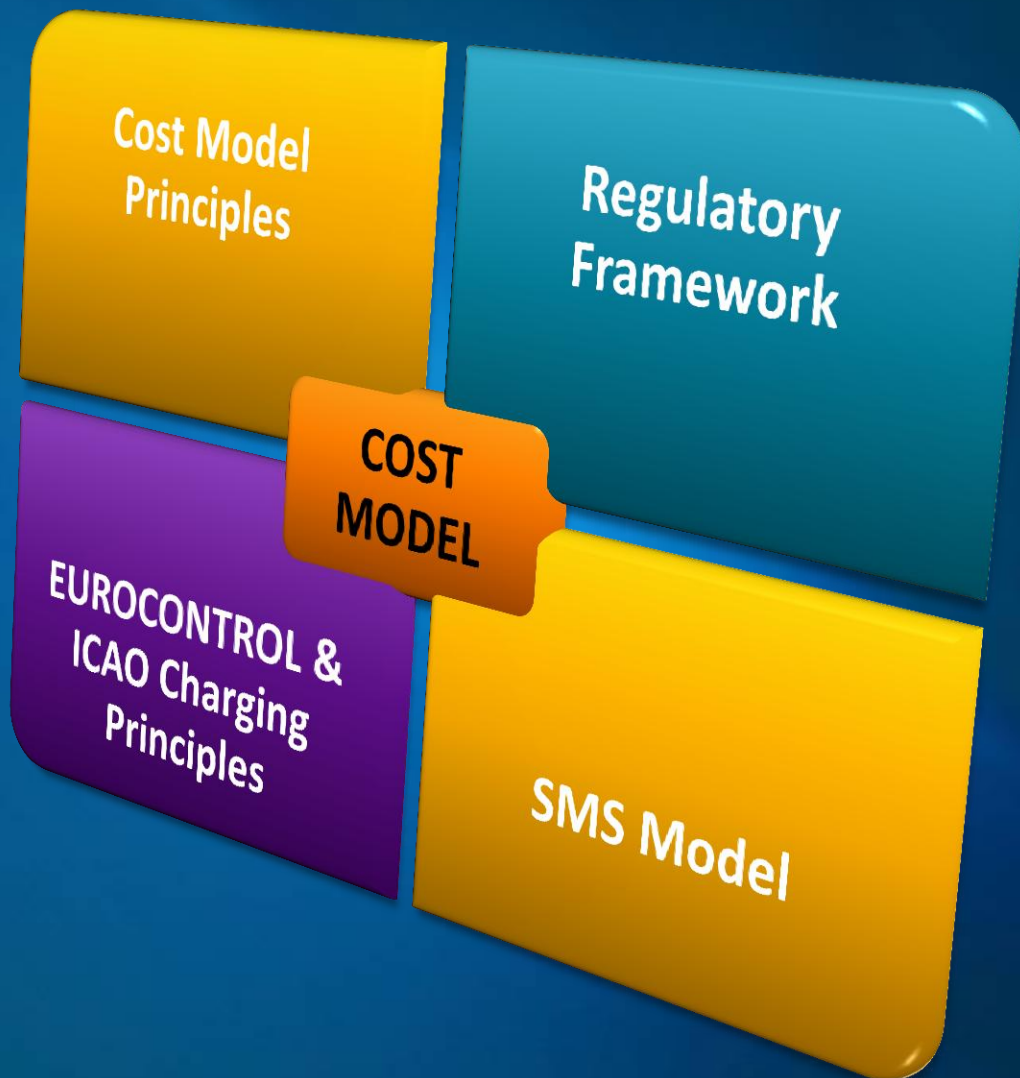
SMS Cost Model & link to Safety Maturity

Compass Innovative Solutions Ltd.

Brussels, 15-16 March, 2011



Approach

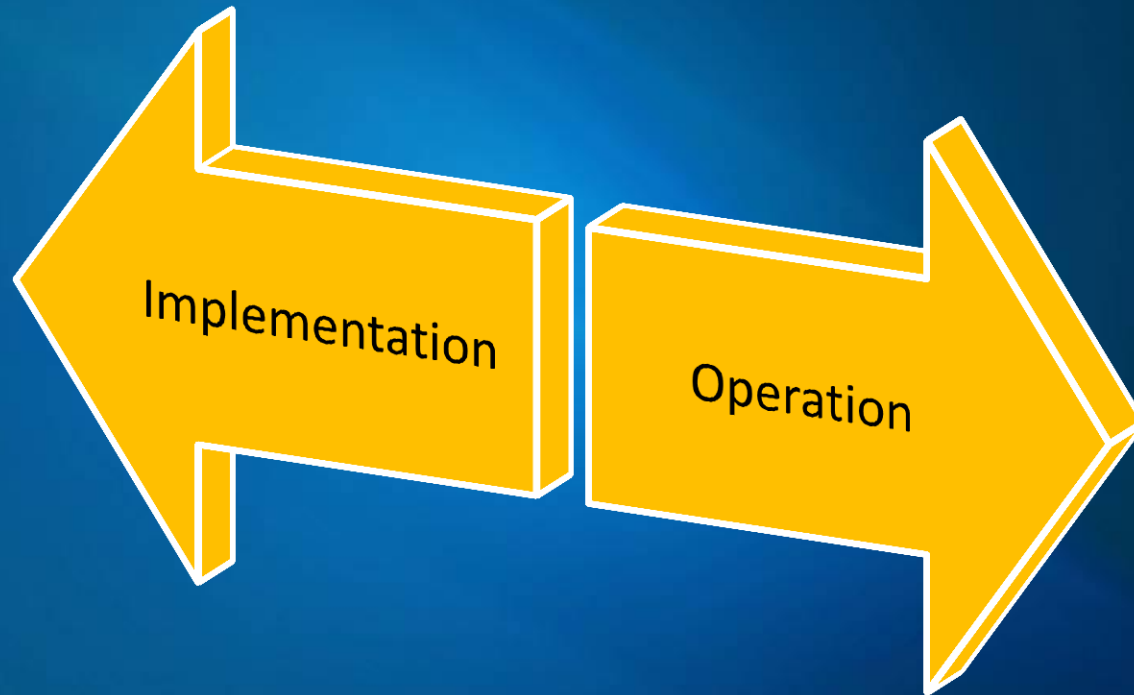


Cost Model Principles

- Activity based model
- Two cost cards per procedure (I & O)
- Procedure broken down into four cost components
- Components decomposed by tasks (activities)
- Equipment cost calculated adhering to strict accounting principles

Cost Model Principles

- Two cost cards per procedure:

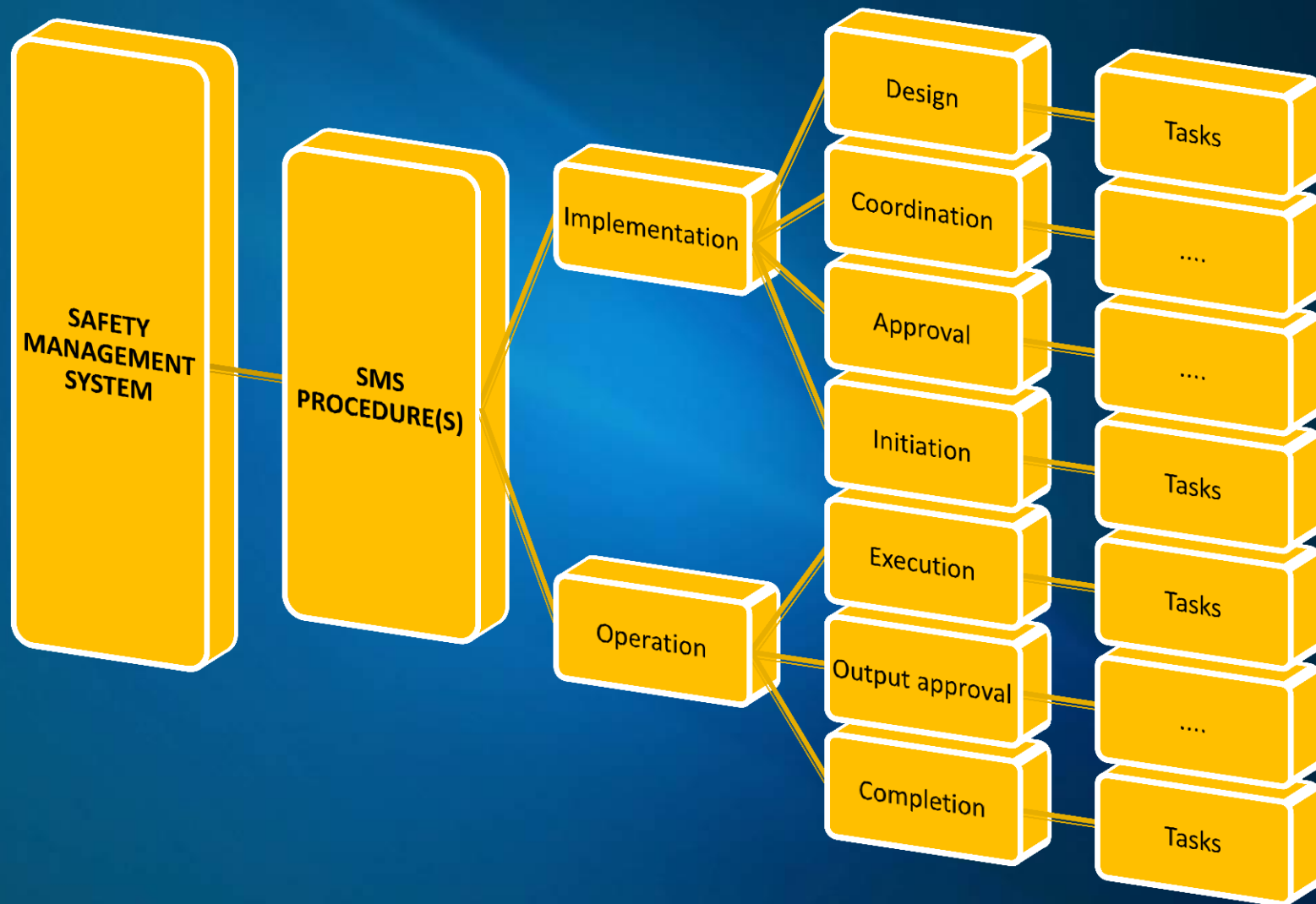


Cost Model Principles

- Four cost components in each procedure:



Human Effort Principles



SMS Cost Model - Excel

- Spreadsheet version of SMS Cost Model
- Scope of SMS Model
- Scope of SMS Components
- 4 ANSPs & 1 Airline participated in validation
 - 1 Large ANSP
 - 2 Medium ANSPs
 - 1 Small ANSP

Validation Results - Excel

- ANSP Implementation cost % from the total cost base:
 - 1.7 %
 - 0.7 %
 - 0.8 %
 - X

Average: 1.06 %

- ANSP Operation cost % from the total cost base:
 - 1.4 %
 - 0.8 %
 - 0.7 %
 - X

Average: 0.96 %

Validation Results - Excel

Implementation – Human effort % from total SMS cost

ANSP 1	ANSP 2	ANSP 3	ANSP 4
75 %	24 %	60 %	X

Operation – Human effort % from total SMS cost

ANSP 1	ANSP 2	ANSP 3	ANSP 4
84 %	78 %	63 %	X

Validation Results - Excel

Implementation – Training % from total SMS cost

ANSP 1	ANSP 2	ANSP 3	ANSP 4
22 %	52 %	34 %	X

Operation – Training % from total SMS cost

ANSP 1	ANSP 2	ANSP 3	ANSP 4
12 %	2 %	32 %	X

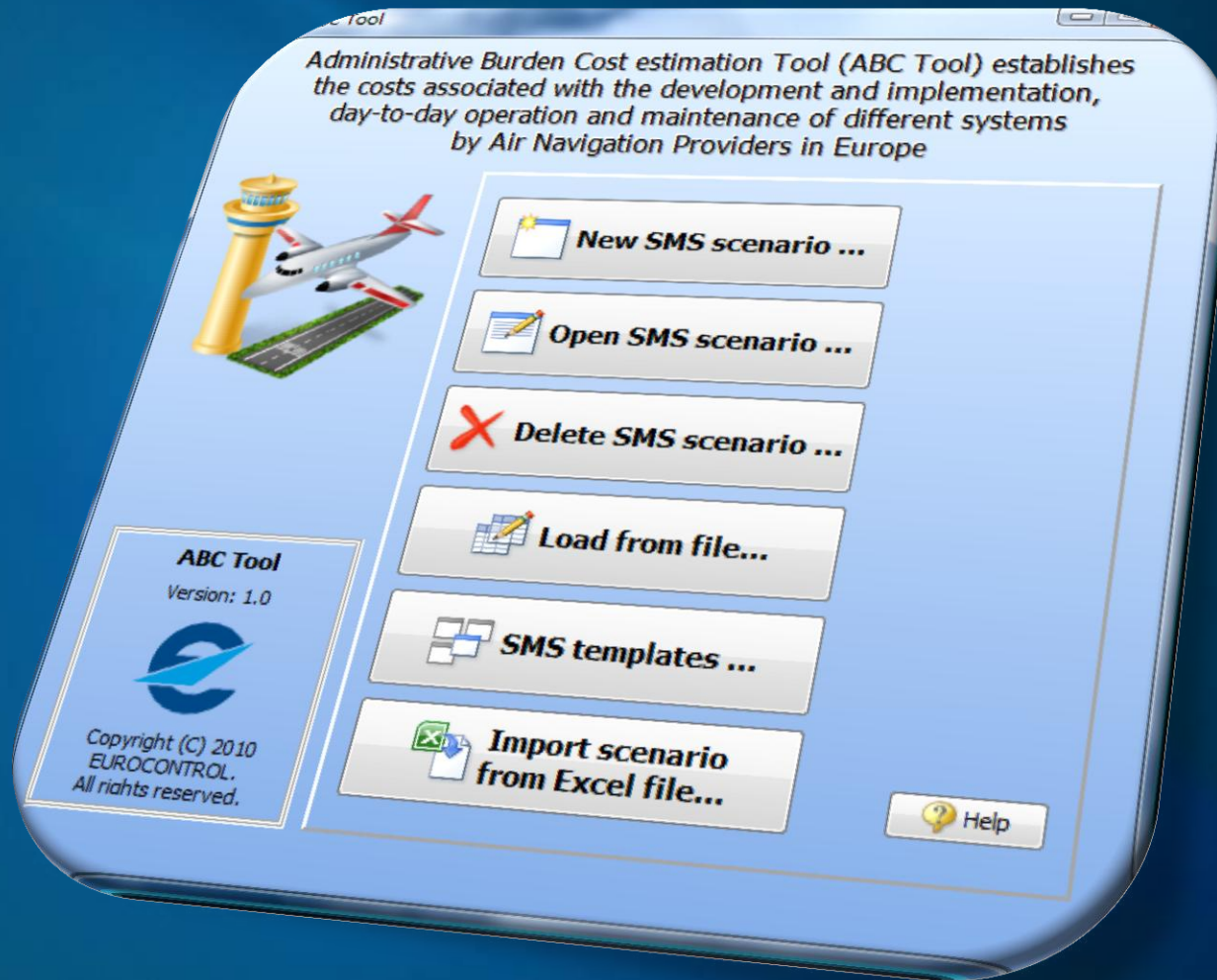
Validation Results - Excel

- The most expensive SMS procedures - Implementation:
 - ANSP 1:
 - SMS documentation;
 - Investigation of safety occurrences;
 - SMS organisational structure;
 - ANSP 2:
 - Management of Safety Related Changes;
 - SMS Development and Implementation Plan;
 - Investigation of Safety Occurrences;
 - ANSP 3:
 - Investigation of Safety Occurrences;
 - Competency Assurance;
 - SMS Documentation;

Validation Results - Excel

- The most expensive SMS procedures - Operation:
 - ANSP 1:
 - Lessons dissemination and safety awareness;
 - Management of safety related changes;
 - Mandatory reporting system;
 - ANSP 2:
 - Competency Assurance;
 - Mandatory Reporting System;
 - Safety of External Services;
 - ANSP 3:
 - Competency Assurance;
 - Investigation of Safety Occurrences;
 - Safety Monitoring;

Demo - ABC Tool



Demo - ABC Tool

ABC Tool is available for download at:

<http://extranet.eurocontrol.int/>

One Sky Online
Safety Team
Folder ABC Tool

USB installation is also available

ABC Tool – Summary



- Templates
- New Scenario
- Open Scenario
- Delete Scenario
- Copy Scenario
- Import/Export Scenario
- Import Spreadsheet Cost Model
- Export Scenario to MS Excel
- Documents folder
- Help

ABC Tool – Training examples

- Five different options to create Scenario:
 - New Scenario
 - Generic Scenario
 - Copy Scenario
 - Load Scenario
 - Import from Excel Cost Model

Link to Safety Maturity

- Safety Maturity (3 options)
 - Safety Maturity Tasks
 - Safety Maturity Tasks – unique
 - Safety Maturity Tasks – unique – simplified

- Safety Maturity Templates loaded – ABC Tool
 - Level 3  Level 4
 - Level 4  Level 5

Link to Safety Maturity - Example



Direct vs. Hidden costs

- Direct costs
 - SAF effort
- Hidden costs
 - Communication to and familiarisation of staff
 - Involvement of other staff in SMS
(OPS,ENG,ANC,MAN)
 - Venue costs
 - Investment costs
(infrastructure, equipment, software, licenses etc.)
 - Overhead costs

Questions, you can answer!

- How much costs me each particular activity?
- What will be the cost of a new procedure?
- Optimise costs – do I have the right resources?
- Can I assess the feasibility to meet the safety targets?
- May I plan manpower for my SMS?
- Can I make a strategic planning?
- Can I make a plan for some years ahead?
- What will be the cost to move from one Safety Maturity level to the next one?

Thank you!



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