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Tony Licu
Head of Safety Unit
EUROCONTROL Network Management Directorate
antonio.licu@eurocontrol.int
What is Safety Survey?
What is Safety Survey

Safety assessments → SAFETY SURVEYS

- Concept
- Design
- Construction
- Implementation
- Operations

PROACTIVE

- Errors
- Incident

REACTIVE

- Remidual actions
- Investigation
- Lesson dissemination
Surveys defined in contrast to audits (why)

Audit
(external & internal)

Accreditation/certification

Survey

Improvement

Efficiency

Cost effectiveness

✓
Surveys defined in contrast to audits (requirements)

Audit
(external & internal)
Trained/experienced Auditors

Survey
Experts of the field trained to safety survey techniques
Survey / Audit

**Objective** Absence of responsibilities in the Surveyed Unit or Department ensures an independent view.

1. **Objective efficient**
2. **Data Collection**
3. **Comprehensive (specific) Analysis**
4. **Study**
5. **Expert judgments**
6. **Examine** Suggest scrutiny in order to determine the nature, condition or quality of a thing.
7. **Review** To go over or examine critically or deliberately.
8. **Inspection** Inspect Implies scrutinizing for errors or defects.

**AUDIT**

- **Independent**
- **Systematic Methodical**
- **Documented Evidences**
- **Inspection**
- **Review**
- **Evaluation of status**

**SURVEY**

- **Non compliance / Non conformities**
- **Criteria: Established standards**
- **Examination**

**EUROCONTROL**
How much do we know

External View

Internal View

Hidden in the system!

It is about Visibility

Then How deep are Findings
Early Days of SMS requirements fulfillment
SMS Survey Protocol
Record the survey observations, results and recommendations

Observations and Results
Recommendations

Results and Observations recorded at the survey time or later at the review time for each question

Survey results automatically mapped between sessions
Record the survey observations, results and recommendations

Observations and Results

Recommendations

Recommendations recorded later at the evaluation for each Element in a distinct module

Survey questions, results and observations also included to provide consistency with scoring (Award score assignment) and follow-up actions
Surveyors trained to use the same approach in a consistent manner

Standard Definition: Tree map organisation of Components, Elements, Questions, Criteria, Scoring in a graphical manner
Surveyors trained to use the same approach in a consistent manner

Selection of a base standard to create a Survey Definition.

All attributes of the standard are inherited to enable a consistent approach to survey execution
Surveyors trained to use the same approach in a consistent manner

Standard definition
Survey Definition
Survey Execution Selection

Select Prepared not executed surveys

Review executed surveys
Surveyors trained to use the same approach in a consistent manner

**Standard definition**
**Survey Definition**
**Survey Execution Selection**

Additional data sections to be added for survey identification:
- General Data
- Target Organisation
- Surveyor identification

Multiple attributes for each section, database self recording
Surveyors trained to use the same approach in a consistent manner

Survey Execution: Survey questions and all necessary information in a single form
Surveyors trained to use the same approach in a consistent manner

Reports: Dynamic tabular off-line reports stored outside database, standard reporting language
Surveyors trained to use the same approach in a consistent manner

Reports: Web-style predefined dynamic reports stored outside database, standard reporting language, single survey detail
Surveyors trained to use the same approach in a consistent manner

Support functions Preview, Export/Import, Print, with full user customised options
Define your own survey "standard" based on what you are going to survey: SMS, OPS Room, Equipment, etc.

Flexible Standard structure to enable different Survey types and complexity in definition

- **Component**: Node containing other components or children element nodes
- **Element**: Node containing question nodes and a single element scoring node
- **Question**: Node that contains Criteria nodes
- **Global Scoring**: Node that is unique for each standard and contains global criteria
- **Global criterion**: Child node of global scoring and element scoring nodes which are used to compute the score and contain element criteria nodes
- **Element Scoring**: Unique child node of an element node that contains element criteria nodes
- **Element criterion**: Node that appears under the Global Criteria nodes
Define your own survey "standard" based on different survey structure,

Standard Definition: Graphical mapping of database objects identifying survey structure
Present the results so as to identify trends, good practices and less good practices.

Multi-survey Reports

Reports: Web-style predefined dynamic reports side-by-side surveys based on standard selection for comparison automatic scoring computation.
User requirements to Functional requirements mapping

Essential Requirements
- Flexibility
- User friendliness
- Versatility
- Adaptability
- Performance
- Cost effectiveness
- Portability

Functional Requirements
- Modularity
- Centered around a relational database
- Efficient HMI
- Open interfaces: e.g. XML Interface for easy exchange of data

CESATK Architecture
- Human Machine Interfaces: allows a human operator to interact with the business applications layer.
- Data processing layer: provides the core functionality, providing HMIs with services and data.
- Database layer: provides access through queries to the relational database.
- Hardware & Operative System: represents the physical world (not shown on the diagram).
What other tools we have

- Dashboard
- What If
- DSNA – FABEC TOOL
- DEMOs
Thank you
### End of tools presentation survey

1. Questions?  
   - YES ☐  
   - NO ☑

2. If YES above, were questions interesting?  
   - YES ☐  
   - NO ☑

3. If YES in 1 and NO in 2 above were the ANSWERS interesting?  
   - YES ☑  
   - NO ☐

4. If NO in 1 above does this mean the presentation was NOT interesting?  
   - YES ☐  
   - NO ☑

5. If NO in 1 above does this mean the presentation was *very clear and complete*?  
   - YES ☑  
   - NO ☐