



PRESENTATION  
FSFI Conference  
May 2012



## SMS and language

A safety programme is an integrated set of regulations and activities aimed at improving safety.

A safety management system is an organised approach to managing safety, including the necessary organisational structures, accountabilities, policies and procedures.



## Language Proficiency and SMS

SMS is needed to help facilitate the proactive identification of hazards and maximize the development of a better safety culture. Language issues should be a major consideration for all aviation sectors.....

- The identification of language issues
- The procedure to find corrective solutions
- The process of correction
- Continuous evaluation of effectiveness



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## 15.8-Written communications

- simplicity of language
- relevance of words and ideas

Training needed.....



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## Appendix 1 to Chapter 17

### **HUMAN FACTORS ISSUES AFFECTING HUMAN PERFORMANCE IN AIR TRAFFIC SERVICES**

- hearing — the ability to discriminate different speech patterns in a noisy environment
- different languages and behavioural patterns

#### ***Information transfer problems:***

- language comprehension and accent; and use of non-standard phraseology;
- Training needed.....



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## ***Adjacent units***

- There may be language difficulties between controllers from different countries.

## **Airborne threats**

- Communications between pilots and controllers may be compromised by language issues.

Training needed.....



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## Chapter 18 Aerodrome Operations

- ground and apron control (sometimes compromised by frequency congestion, use of non-standard phraseology, language difficulties, mistaken call signs, etc.);

Training needed.....





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## **Appendix 2 to Chapter 19**

### Maintenance Error Decision Aid (MEDA)

- 1) understandability (including format, level of detail, use of language, clarity of illustrations and completeness);
- Training needed.....





# EASA

- Article 2 EASA Basic Regulation EC No. 1592/2002
- EU-OPS 1.037 (appendix 1 to OPS 1.1005, OPS 1.1195, OPS 1.025)
- Some differences but both require SMS procedures to be robust and realistic.
- Language is a real issue and training to meet SMS standards is necessary for:
  - **Aircraft Operations**
  - **Aerodrome Operations**
  - **Air Traffic Services**
  - **Aircraft maintenance**



## The identification of Language issues

- Experience feedback (*Accident reports, event statistics etc.*)



## What are the norms to refer to?

- ICAO language proficiency levels-(1-6)
- Common European Framework of Reference for language and testing (CEFR)
- Internationally recognised tests (IELTS, TOEFL, Cambridge tests etc.)
- The ability of staff to communicate effectively in the English language



## Transfer from “identification” toward “solution”

- Initial assessment should be analysed further
- identified problems have to be “solved”
  - eliminated by changing organisational or technological arrangements
  - Increasing training, better instruction, more effective control



## Language Training Choices

- Depends of information gathered
- “More training more Instruction” solution has great dangers for identified deficiencies in language proficiency
- Solution should be based on sound empirical foundations



# What should organisations look for in language Training Solutions?

- A knowledge of the target language situation
- A sound theoretical foundation for instructional solutions
- Involvement all stakeholders in the solution



# The Process

- Needs analysis (with stakeholders)
- Problem identification analysis (with stakeholders)
- Solution identification (with stakeholders)
- Solution implementation
- Constant analysis of solution effectiveness





## What about you?

- Can an organisations SMS systems Identify and solve language proficiency issues?
- Is knowledge and expertise required in all stages of the process?
- Have organisations viewed language proficiency issues as outside standard SMS rigour?
- Are your language training solutions working?
- How do you know?
- Do you understand the criteria that denotes success?
- Who set this criteria? and is it actually saying anything?