



EHEST

Component of ESSI

European Helicopter Safety Team

Symposium Helipower India

EHEST Update

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Prepared by Michel MASSON and Clément AUDARD, EASA

1. SETTING THE SCENE

2. METHODOLOGY

3. INTERIM RESULTS

4. CONCLUDING REMARKS



Photo Vasco Morao

ESSI

The European Strategic Safety Initiative

- **10 year programme (2006-2016) aimed at improving aviation safety in Europe, and for the European citizen worldwide**
- **Partnership, with more than 150 organisations**
- **Powered by industry and facilitated by EASA**



Welcome to the minisite of the European Strategic Safety Initiative!

The European Strategic Safety Initiative (ESSI) is an aviation safety partnership between EASA, other regulators and the industry. The initiative's objective is to further enhance safety for citizens in Europe and worldwide through safety analysis, implementation of cost effective action plans, and coordination with other safety initiatives worldwide. Participants are drawn from the EASA Member States, the ECAC countries, manufacturers, operators and professional unions, research organisations, the EAA and international organisations such as EUROCONTROL and ICAO.

ESSI was launched by EASA as a ten year programme on 29 June 2006 and has three components:

- **ECAST:** European Commercial Aviation Safety Team
- **EHEST:** European Helicopter Safety Team
- **EGAST:** European General Aviation Safety Team

In total, more than one hundred fifty civil and military organisations are participating to date in the [ESSI](#).

More detailed information can be found in the [ESSI presentation](#) attached, and in the [ICAO Information Paper A36-WP/195-TE/59](#) and the [EASA Annual Safety Review 2006](#) published in 2007.

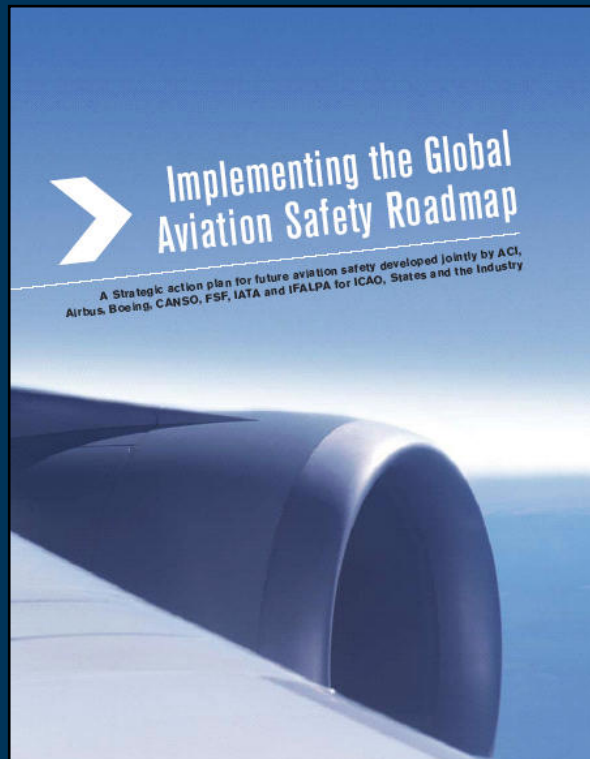
For further information, or if your organisation wishes to join the ESSI, please contact Michel Masson, ESSI Secretary, at the following email address: essi@easa.europa.eu

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www.easa.europa.eu/essi

ESSI

In line with the Global Aviation Safety Roadmap



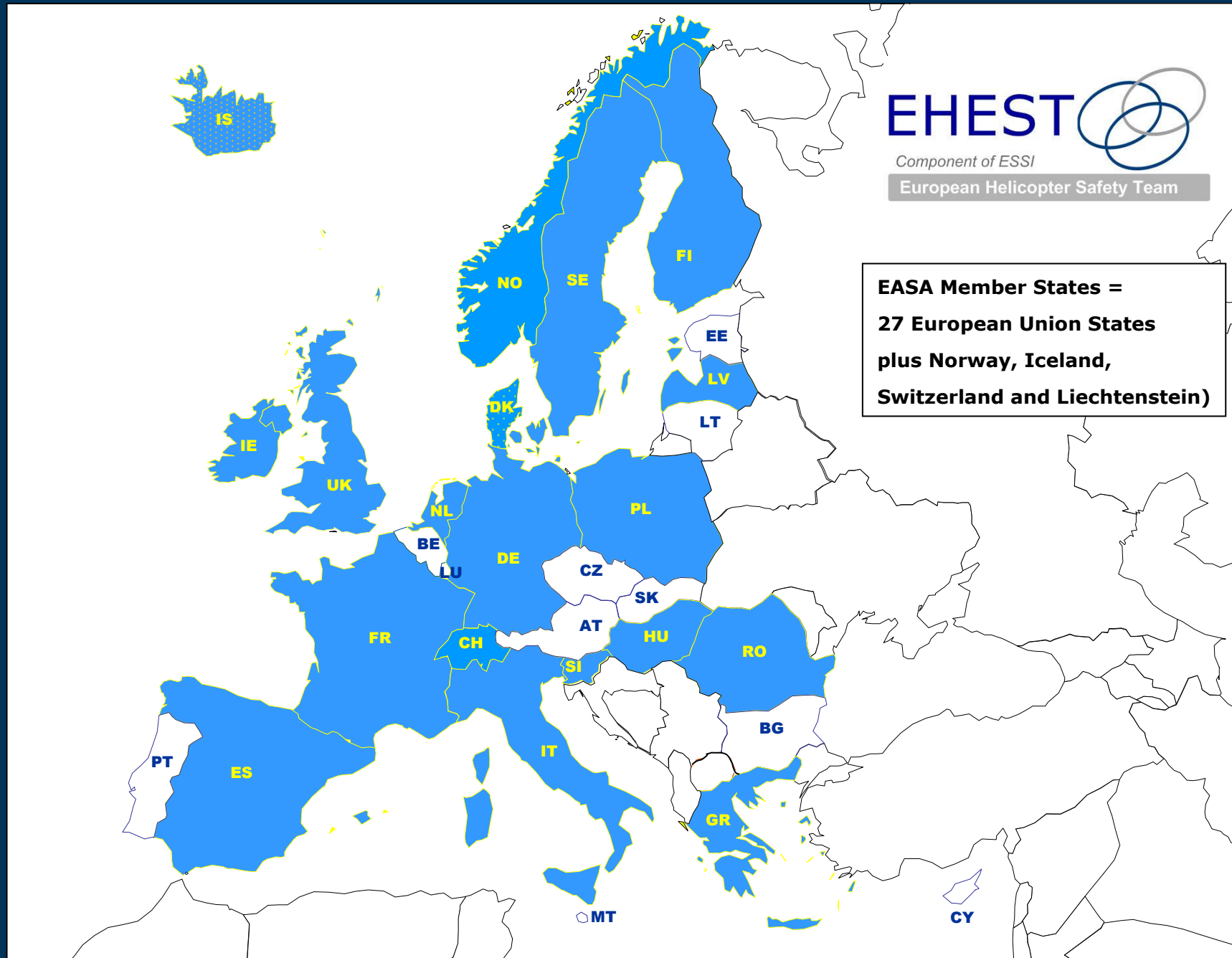
➤ ICAO GASRM - 2006

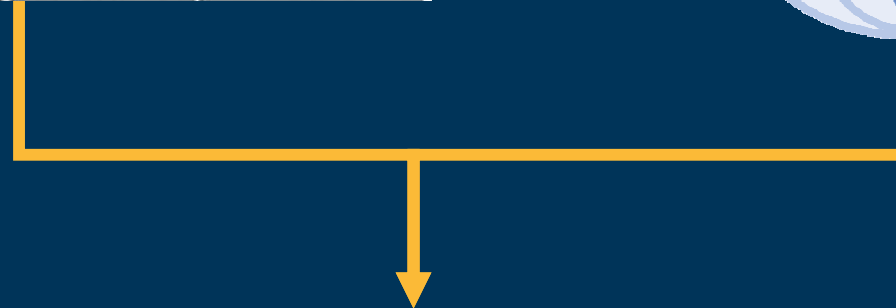
- ✦ Frame of reference for stakeholders, including States, regulators, airline operators, airports, aircraft manufacturers, pilot associations, safety organisations and air traffic service providers
- ✦ To improve coordination and sharing
- ✦ To minimise duplication

ESSI in the world

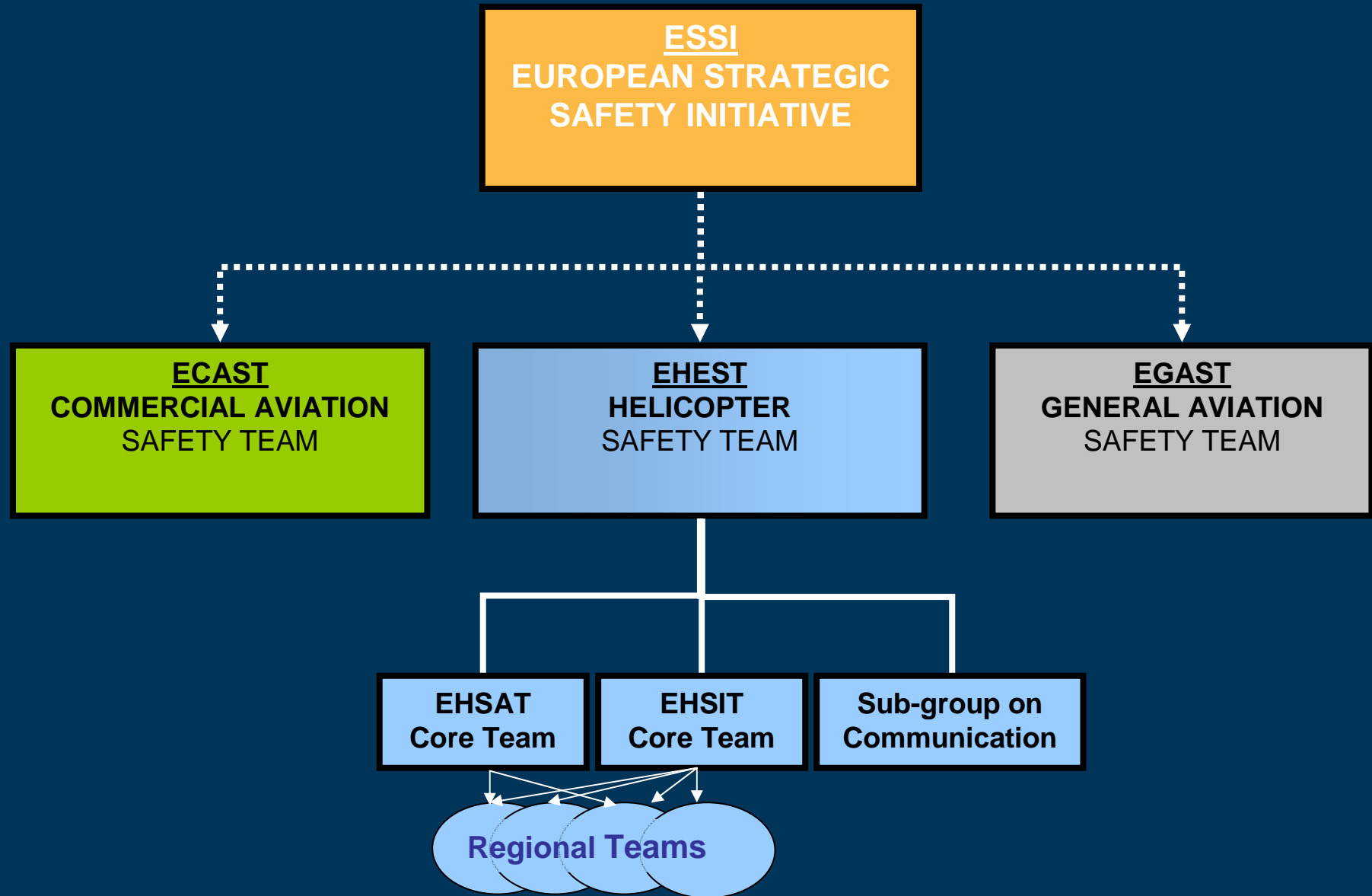


**EASA Member States =
27 European Union States
plus Norway, Iceland,
Switzerland and Liechtenstein)**





EHEST is the helicopter component of ESSI
and the European branch of IHST



Why regional analysis teams?

- Maximise usage of resources
- Relations between partners already established
- Team aware of local context
- Implementations/action plans also have to be implemented on regional level
- Languages used in accident investigation reports

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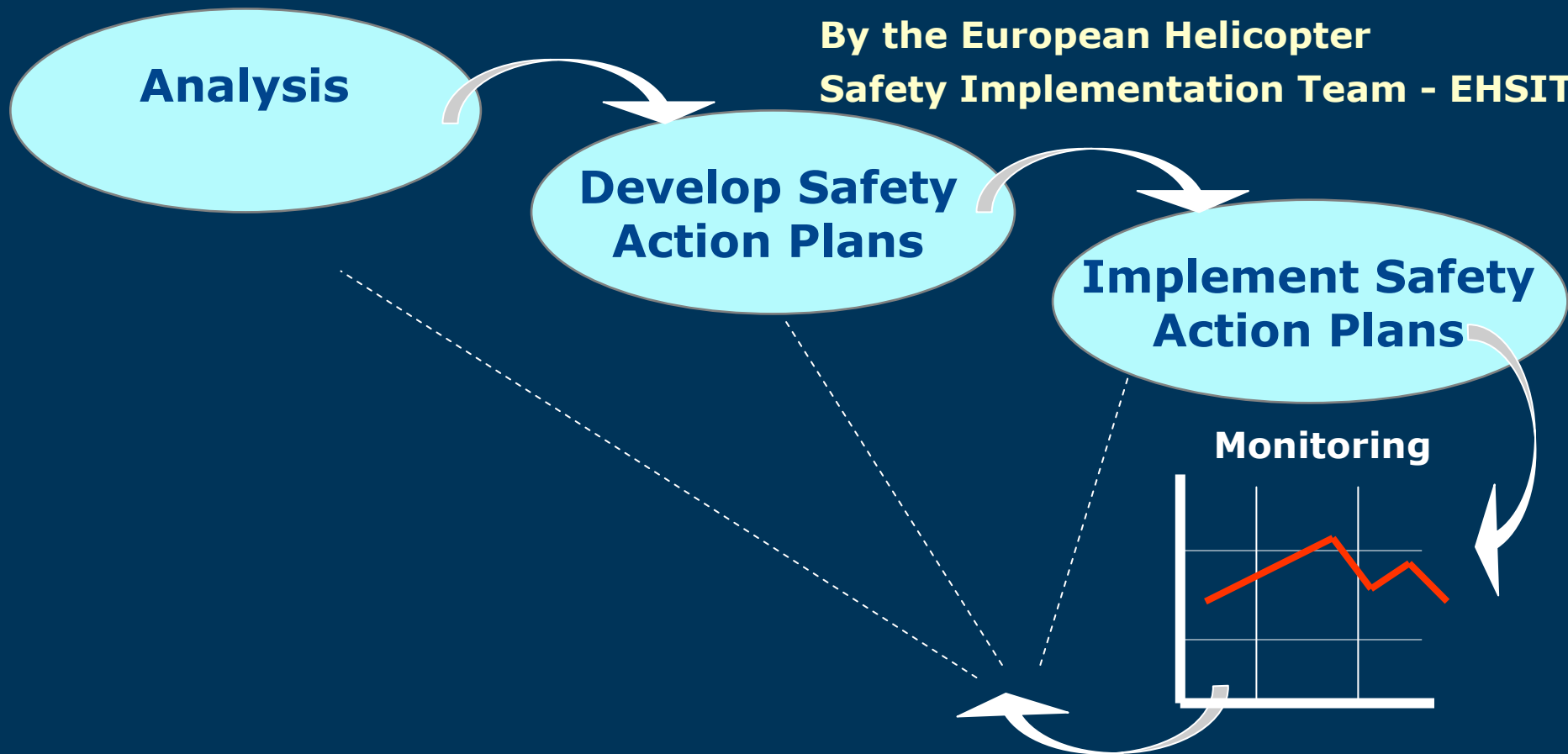


Photo Eurocopter

General Process

By the European Helicopter Safety Analysis Team - EHSAT

By the European Helicopter
Safety Implementation Team - EHSIT



Scope of analysis

- Helicopter Accidents (definition ICAO Annex 13)
- Date of occurrence period 2000 - 2005
- State of occurrence located in Europe
- Where an Accident Investigation Board final report is available

Approach

- Data driven approach
- Maintain international compatibility
 - ★ Reviewing accidents using a standard method adapted from IHST
 - ★ Added specific analysis on human factors (HFACS)
- Format allows comparison with data from other regions

Analysis Methodology EHSAT

1. Collect general occurrence information



2. Describe and analyse the accident



3. Assign standard codes to factors

***Standard Problem Statements (SPS) and
Human Factors Analysis and Classification System (HFACS)***



4. Produce Intervention Recommendations (IR)

1. SETTING THE SCENE

2. METHODOLOGY

3. INTERIM RESULTS

General Data

SPS and HFACS Analysis

Intervention Recommendations

4. CONCLUDING REMARKS



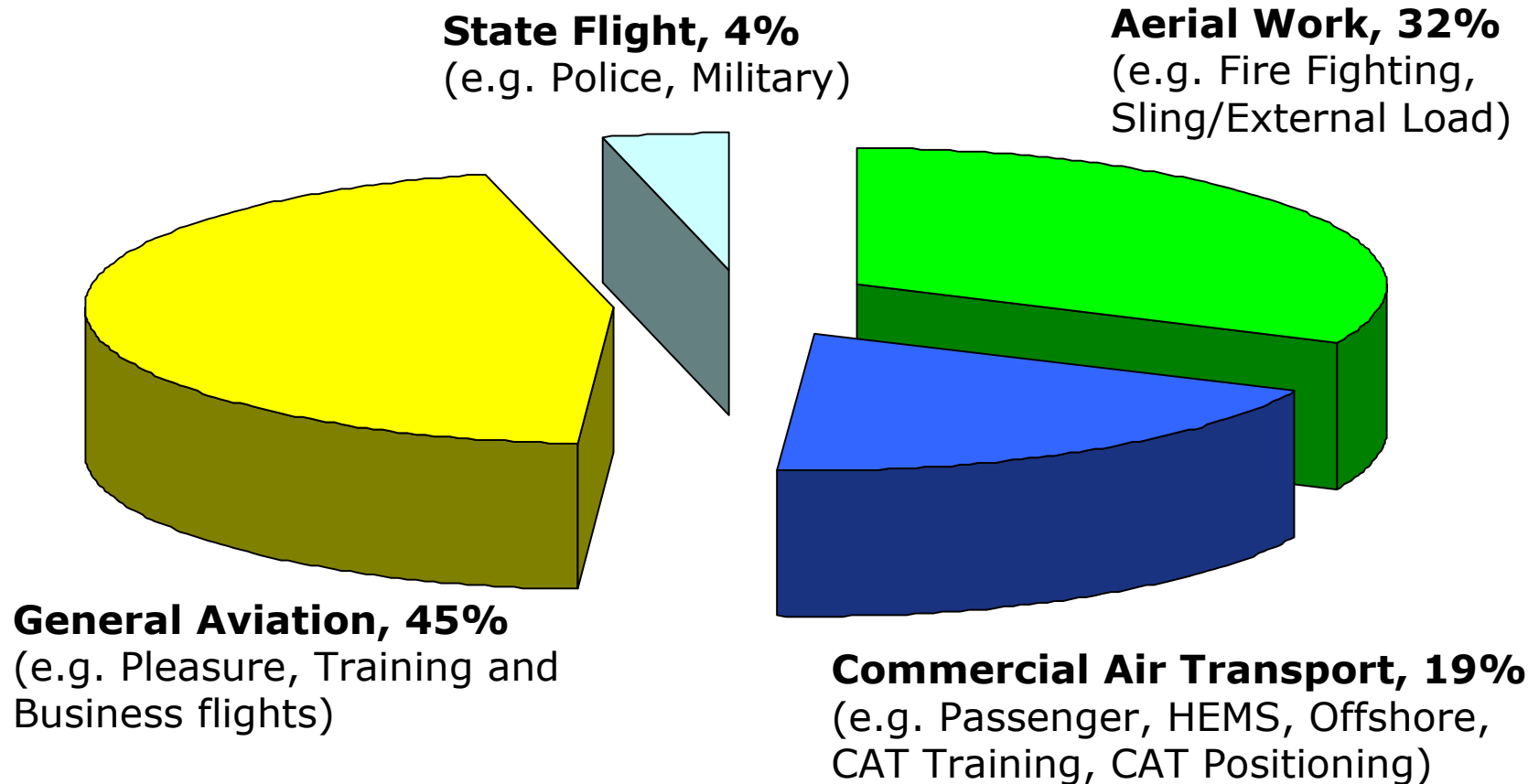
Photo AgustaWestland

Scope of interim dataset

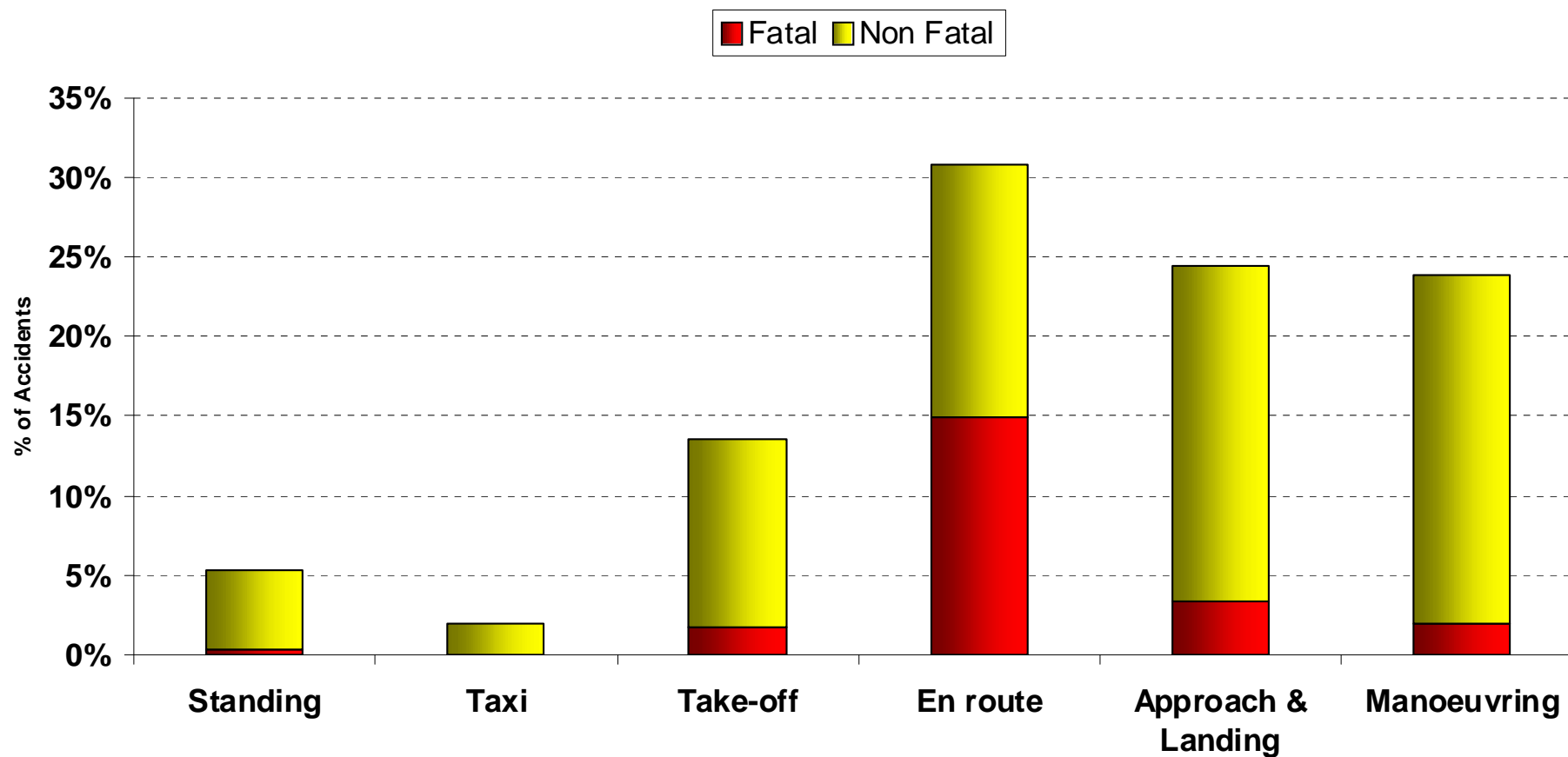
- Total of 303 accidents within timeframe 2000-2005 have been analysed (as of Aug 09)
 - ✦ Covers work from 11 Regional Teams across Europe
 - ✦ Estimated to be some 75% of the published reports available
- Standard Problem Statements
 - ✦ In total 1775 statements recorded
- HFACS
 - ✦ In total 818 factors recorded

Accident Distribution over Type of Operation

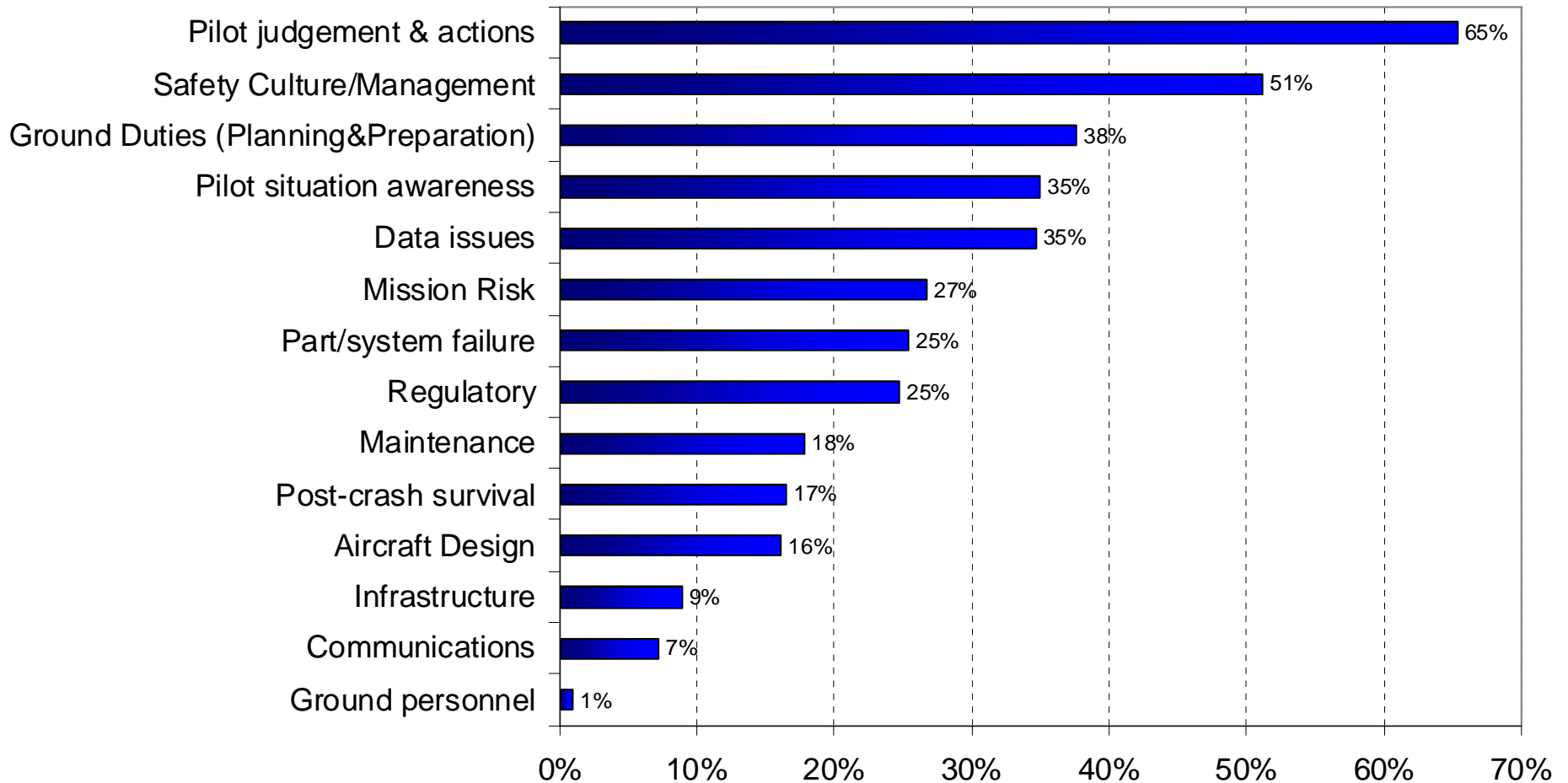
EHSAT Dataset



Accident Distribution over Phase of Flight EHSAT Dataset

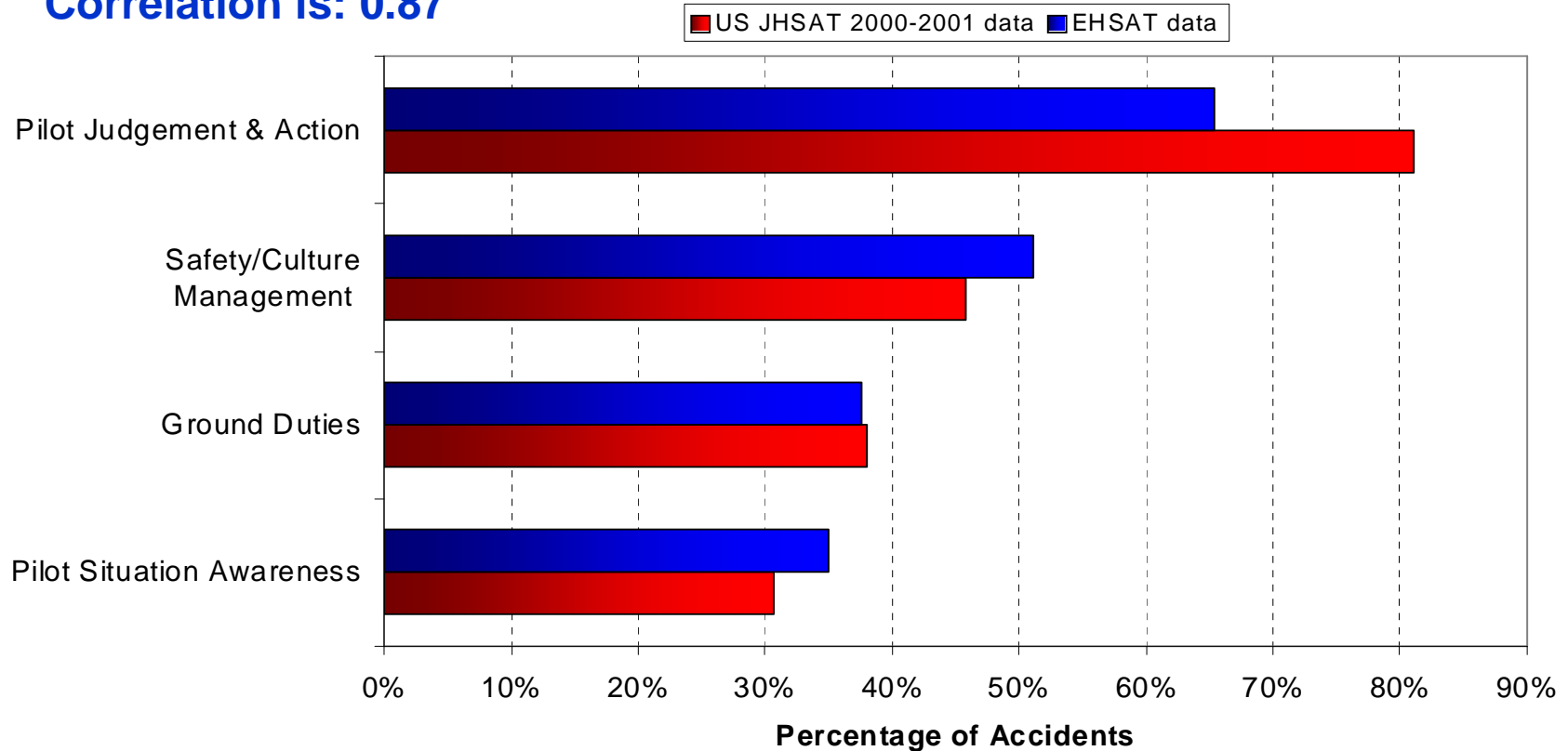


% of Accidents where SPS level 1 has been identified at least once EHSAT Dataset



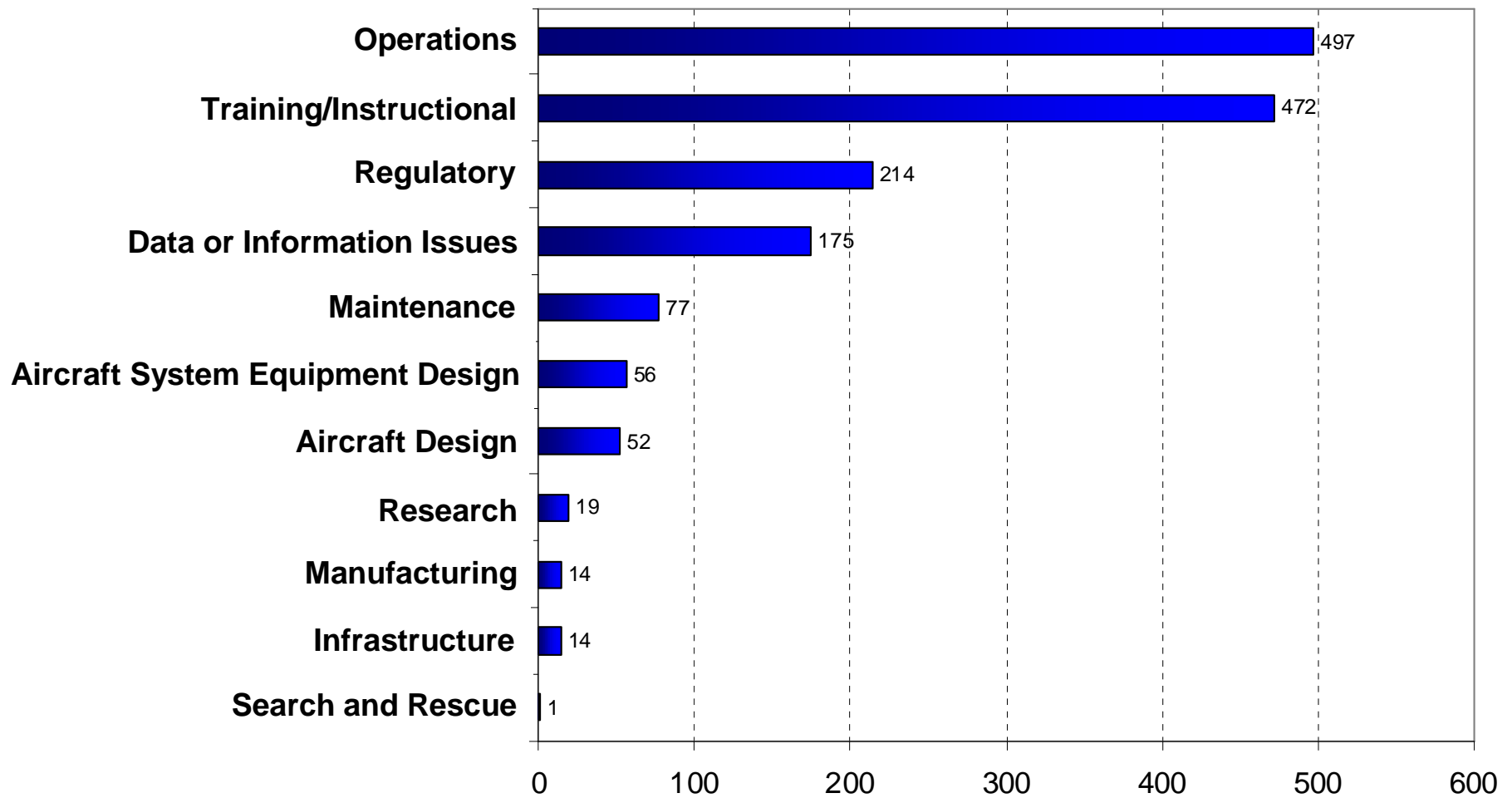
Comparison of EHSAT data with US JHSAT data SPS level 1, Top 4

Correlation is: **0.87**



- High correlation with US results on SPS level 1
- Lower levels SPS show some differences

Total number of Intervention Recommendations (Level 1)



EHSIT Sub-teams

- Specialist teams launched end of 2009 on:
 - ★ SMS and Operations
 - ★ Training
 - ★ Communication
- Specialist team launched in 2010 on:
 - ★ Regulation

Deliverables 2010-2012

- **Safety actions towards organisations:** Operators and Operators Associations, FTOs, NAAs, ANSPs, DOAs, POAs, Part145, and Part M Organisations
- **Safety promotion material** targeting individual pilots and instructors and others
- **Best practice material** on Safety Management Systems (SMS), Standard Operating Procedures (SOPs), operational Risk Management, Safety Culture, and Training targeting in particular but not exclusively small operators
- **Rulemaking proposals** to be submitted to the competent authorities (ICAO, EASA, or NAAs) using standard rulemaking processes

Concluding remarks

- Final EHSAT report 2000-2005, planned to be published by mid 2010
- The top 4 identified SPS areas are:
 - ✦ Pilot judgment & actions
 - ✦ Safety culture/management
 - ✦ Ground duties/Mission preparation
 - ✦ Pilot situation awareness
- High correlation with US results
- HFACS enhances the analysis of human factor
- EHEST welcomes an enhanced international cooperation on safety topics

EHEST

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European Helicopter Safety Team



The challenge now is to develop, implement and monitor effective measures to meet the 80% accident rate reduction target

Thank you for your attention

Questions?

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