



The European Strategic Safety Initiative

The key partnership to enhance Commercial aviation, Helicopter, and General Aviation safety in Europe

The European Helicopter Safety Team (EHEST)


*First Latin American Helicopter Operations Safety Seminar
9 Oct 09, City of Guatemala, Guatemala*

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European Strategic Safety Initiative (ESSI)

- 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**
- In line with the Global Aviation Safety Road Map.

www.easa.europa.eu/essi



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 EASA and international organisations such as EUROCONTROL and ICAO.

ESSI was launched by EASA as a ten year programme on 20 June 2006 and has three components:

- ECASST: European Commercial Aviation Safety Team
- EHLSST: European Helicopter Safety Team
- EGASST: European General Aviation Safety Team

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

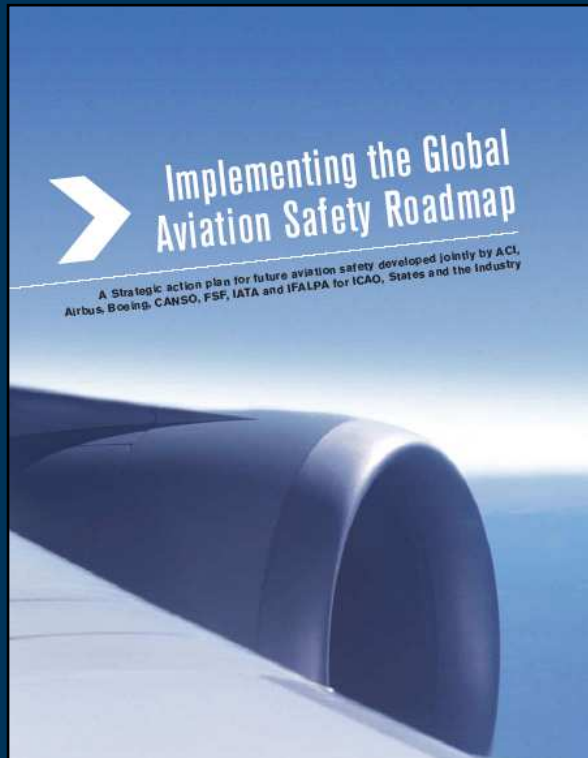
More detailed information can be found in the [ESSI presentation](#), attached, and in the [ICAO Information Paper A36-WP/195-TE25](#) and the [EASA Annual Safety Review 2006](#) published in 2007.

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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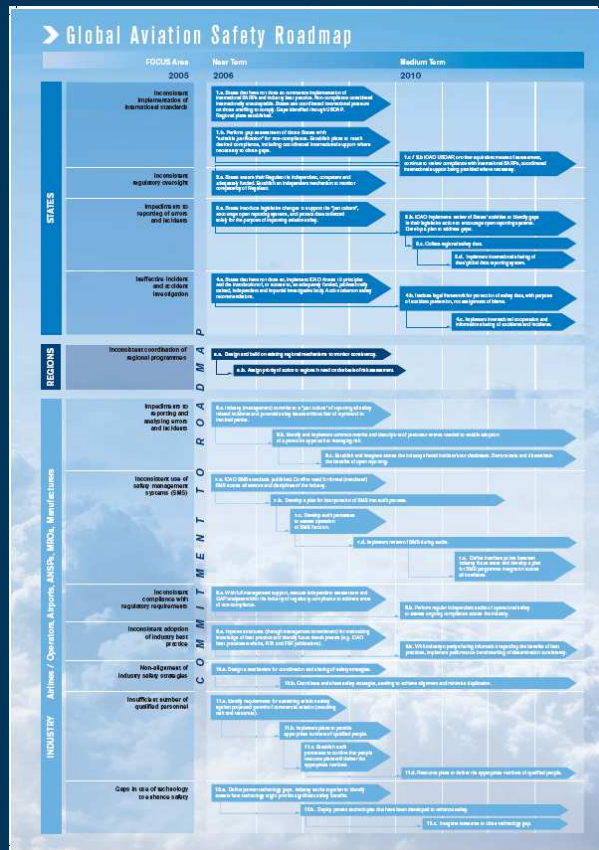
*the partnership to enhance
Commercial aviation,
Helicopter and General
Aviation safety in Europe*

ICAO Global Aviation Safety Roadmap



- developed for ICAO in 2006 by the Industry Safety Strategy Group (ISSG) under the leadership of IATA.
- Frame of reference for stakeholders, including States, regulators, airline operators, airports, aircraft manufacturers, pilot associations, safety organisations and air traffic service providers.

ICAO Global Aviation Safety Roadmap



Key messages:

- ★ A proactive approach to aviation safety requires that all concerned stakeholders are involved;
- ★ Launch Regional initiatives;
- ★ Need coordination and data-sharing;
- ★ Minimise duplication of efforts.

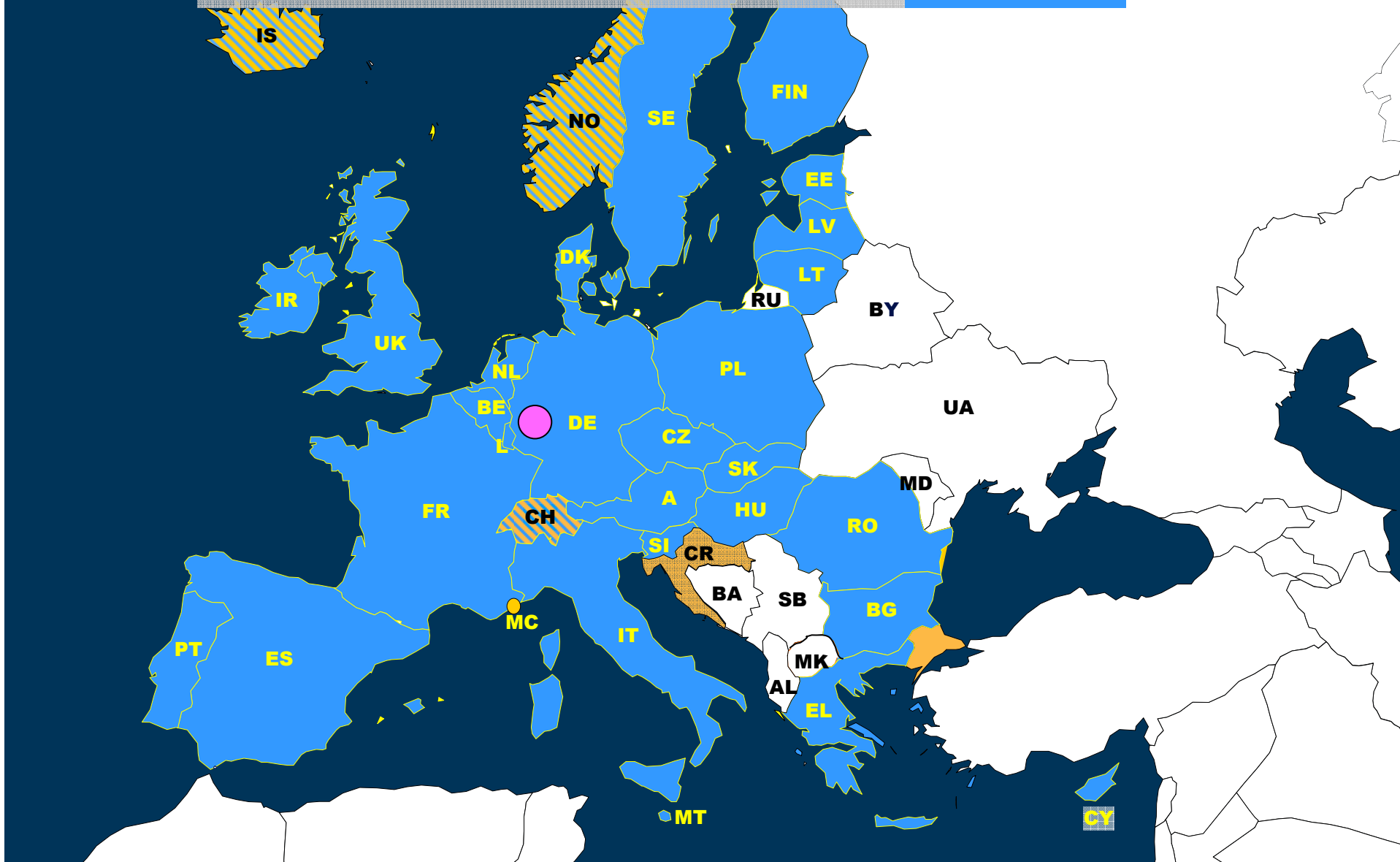
ESSI

One of the Major Safety Teams worldwide



EASA Member States

EU 27 + 4 States



EHEST

The European Helicopter Safety Team

- EHEST is an industry/regulators partnership for enhancing rotorcraft safety in Europe based on voluntary commitment
- Features representatives of OEMs, civil operators, regulators, helicopter interest groups, accident investigators, and military operators from across Europe
- Brings together around 130 participants, of which 70 are involved in the Analysis Team

ESSI
EUROPEAN STRATEGIC
SAFETY INITIATIVE

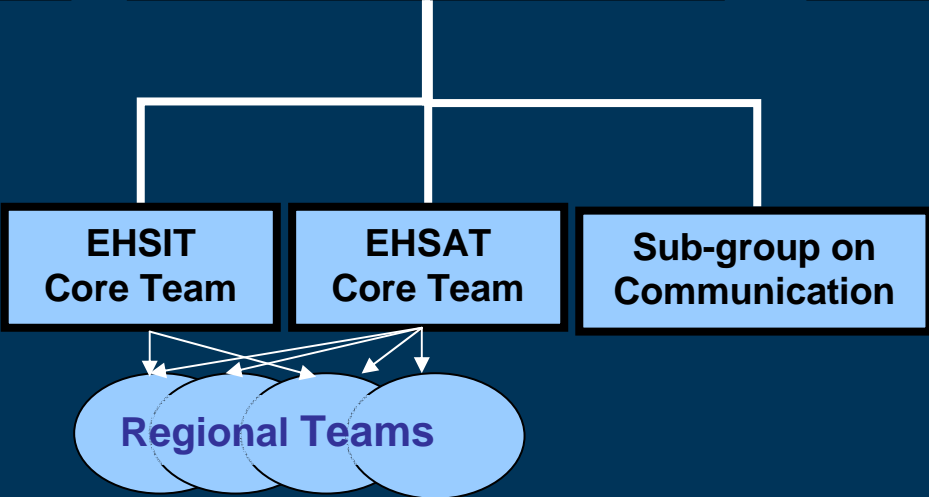
Research,
International Cooperation,
Rulemaking

ECAST
COMMERCIAL AVIATION
SAFETY TEAM

EHEST
HELICOPTER
SAFETY TEAM

EGAST
GENERAL AVIATION
SAFETY TEAM

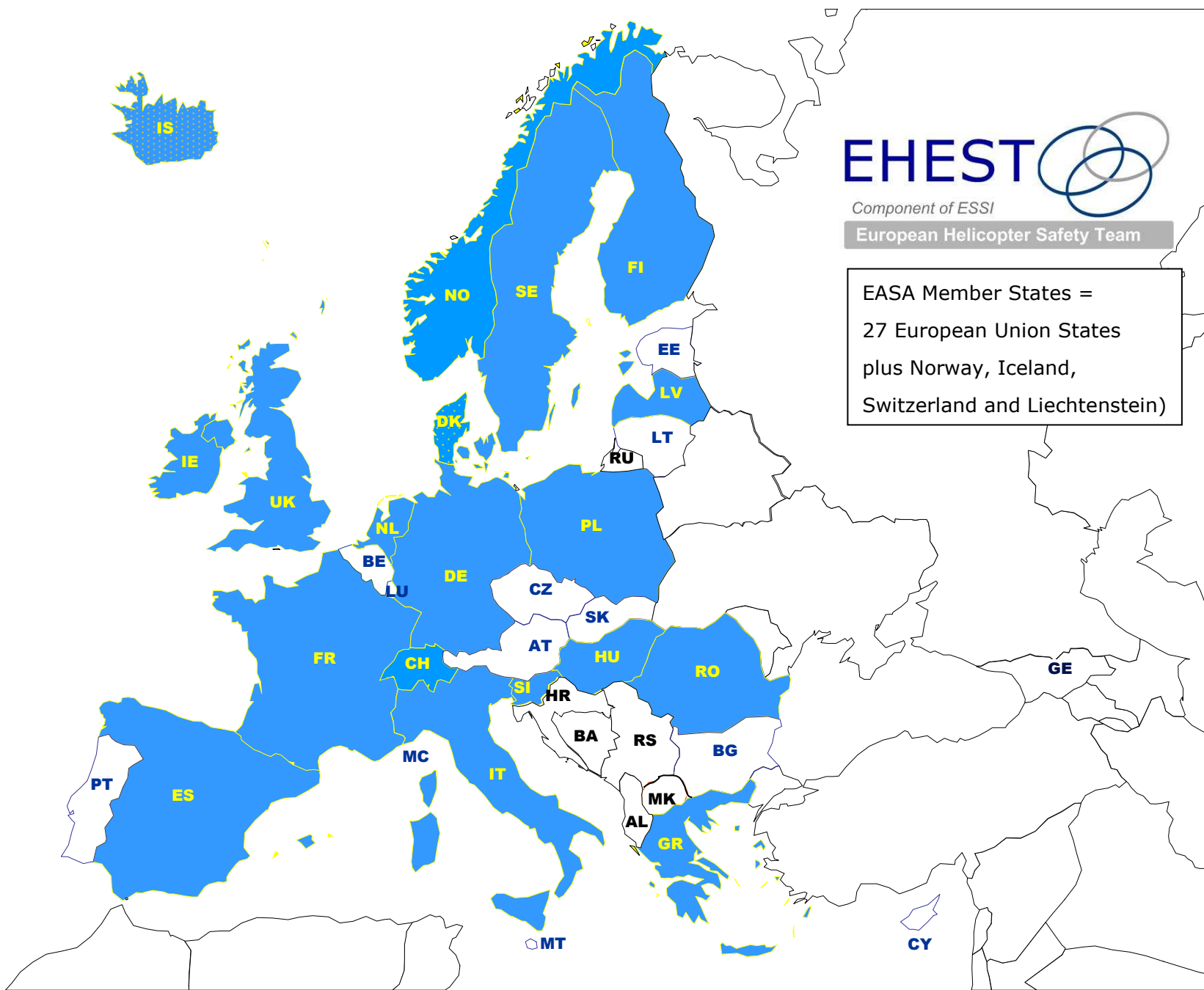
- SMS WG
Safety Management System
- Ground Safety
Will be launched in 2009
- Analysis Team
- Sub-team on Methodology



Communication
Sub-group



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



EHEST

Component of ESSI

European Helicopter Safety Team

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

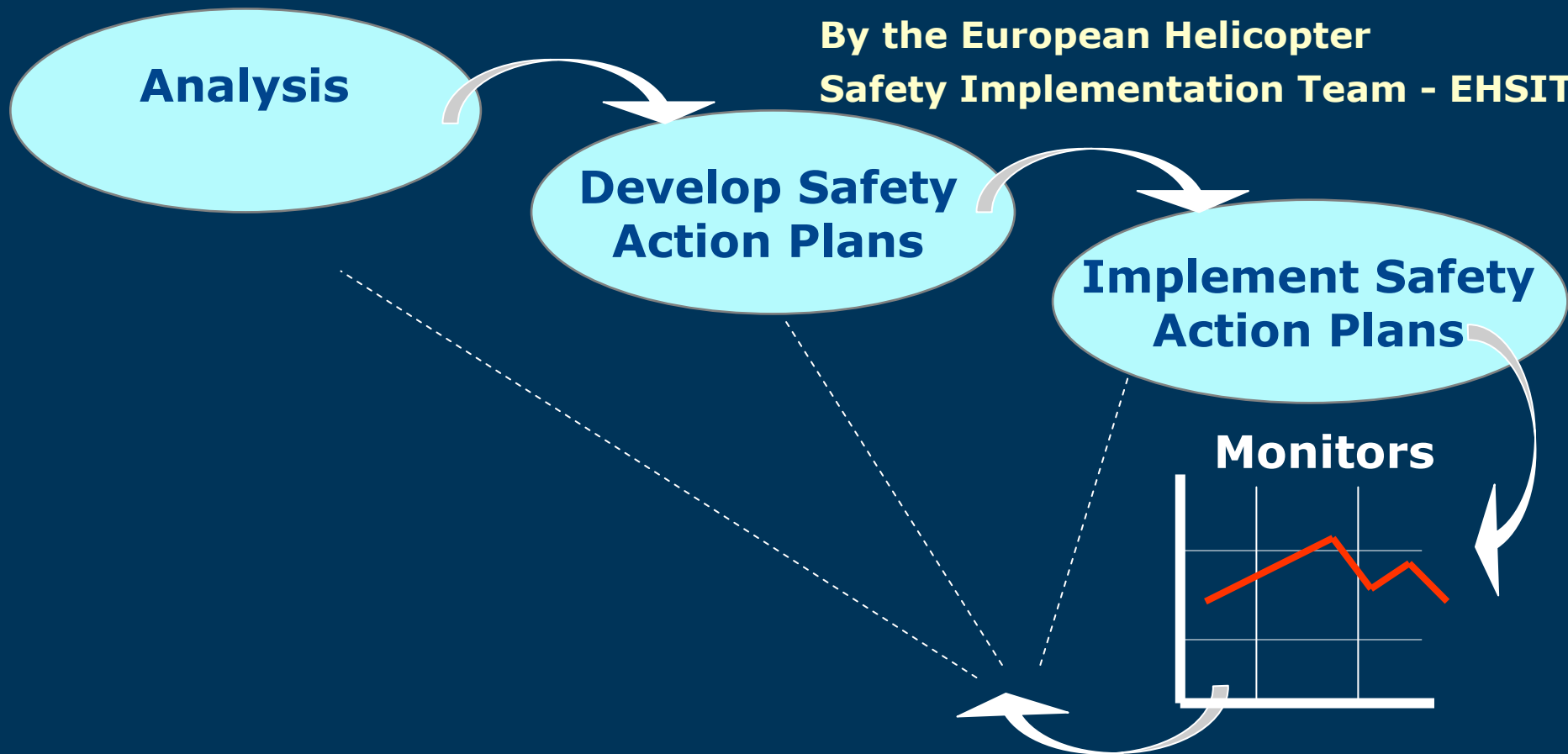
Approach

- **Data driven approach**
- **Maintain international compatibility**
 - ★ **Reviewing accidents using a standard method adapted by IHST from CAST (US Commercial Aviation Safety Team)**
- **Format allows comparison with data from other regions**

General Process

By the European Helicopter Safety Analysis Team - EHSAT

By the European Helicopter
Safety Implementation Team - EHSIT



Scope of analysis

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

Analysis Methodology

1. Collect general occurrence information



2. Describe and analyse the accident



3. Assign standard codes to factors

Standard Problem Statements (SPS)

Human Factors Analysis and Classification System (HFACS)

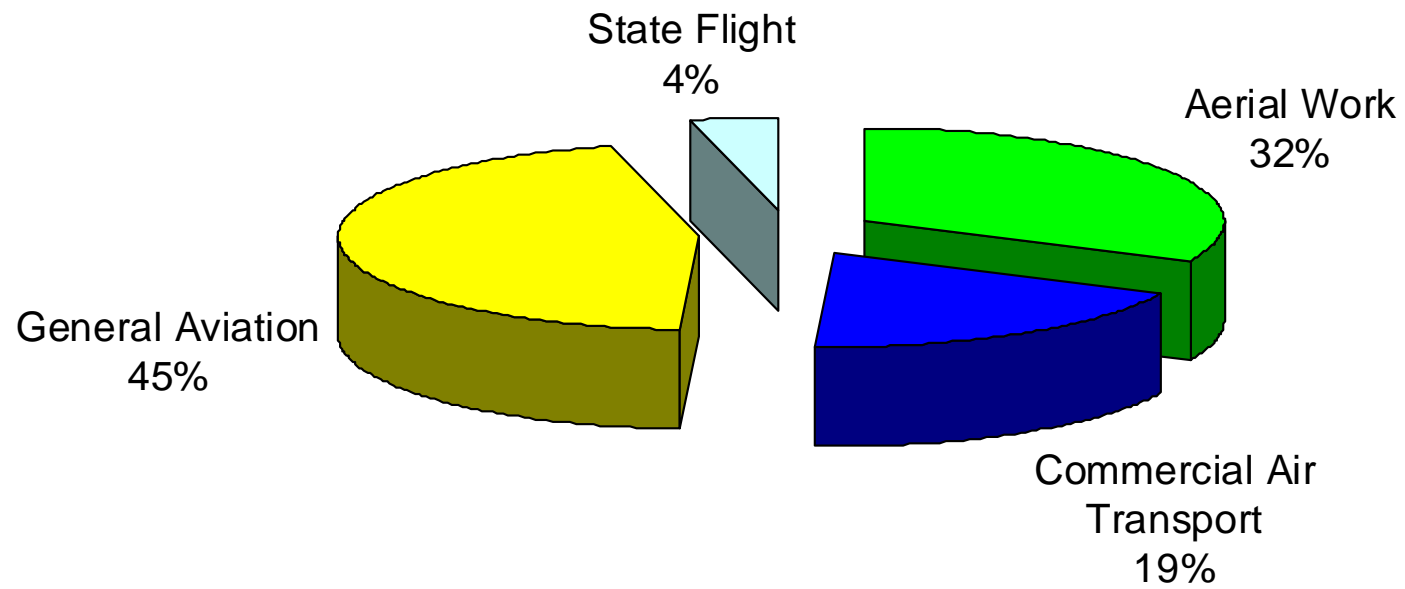


4. Produce Intervention Recommendations (IR)

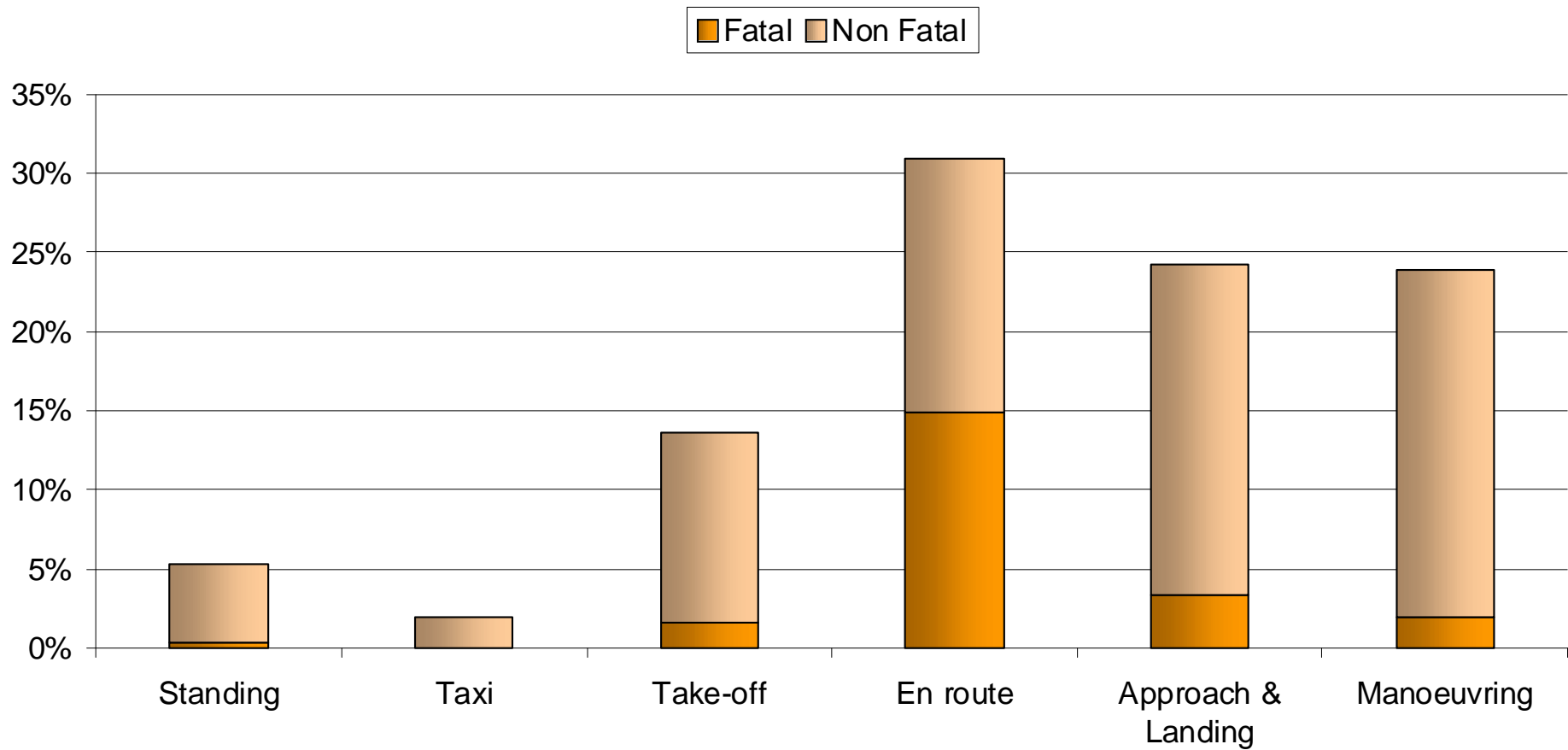
Scope of interim dataset

- **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 50% of total accidents for all EASA Member States in timeframe (change into published reports: about 86%)**
- **Standard Problem Statements**
 - ★ **In total 1775 statements recorded**
- **HFACS**
 - ★ **In total 818 factors recorded**

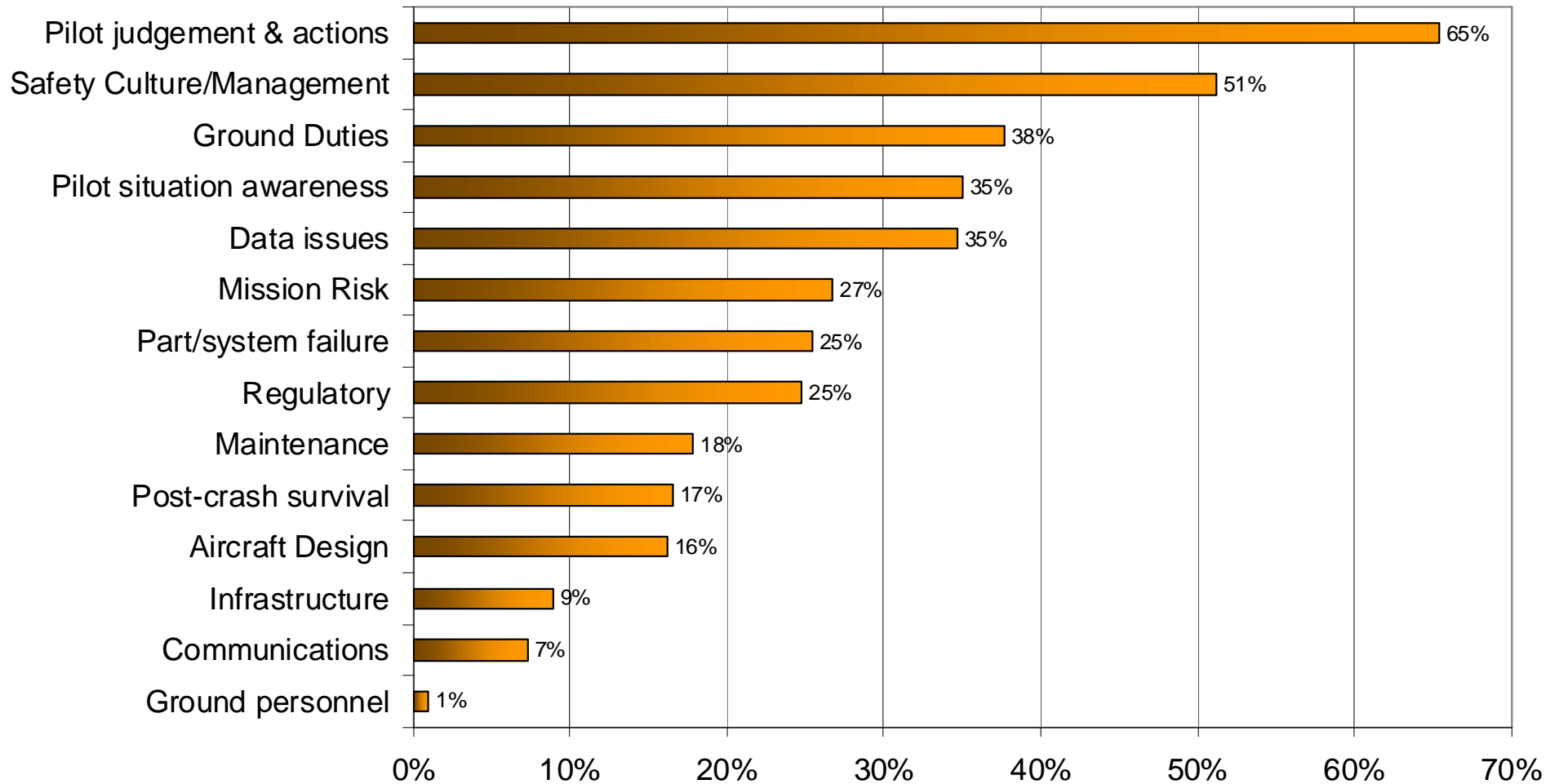
Distribution over Type of Operation EHSAT Dataset



Distribution over Phase of Flight EHSAT Dataset

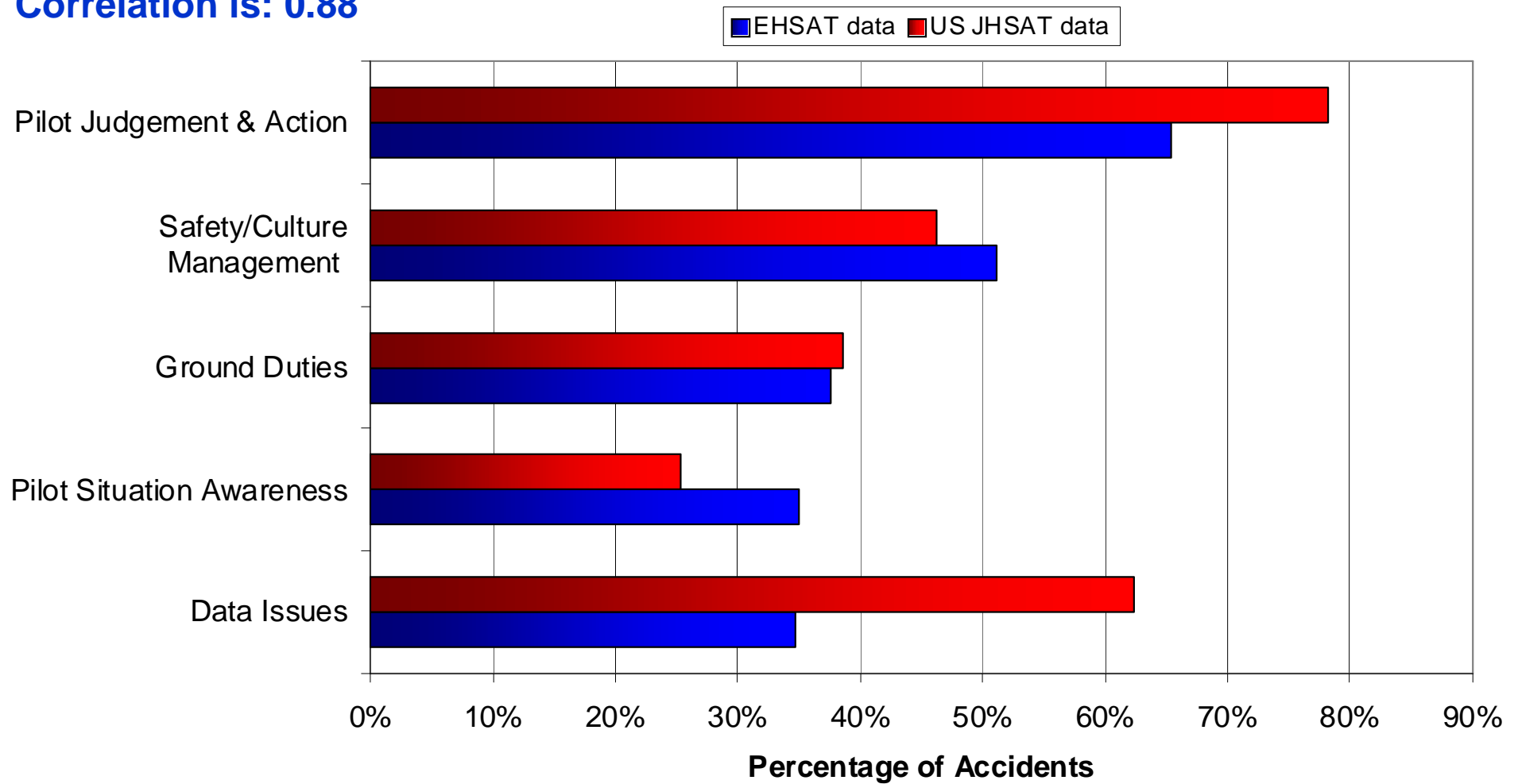


% of Accidents where SPS level 1 has been identified at least once EHSAT Dataset



Comparison of EHSAT data with US JHSAT data SPS level 1, Top 5

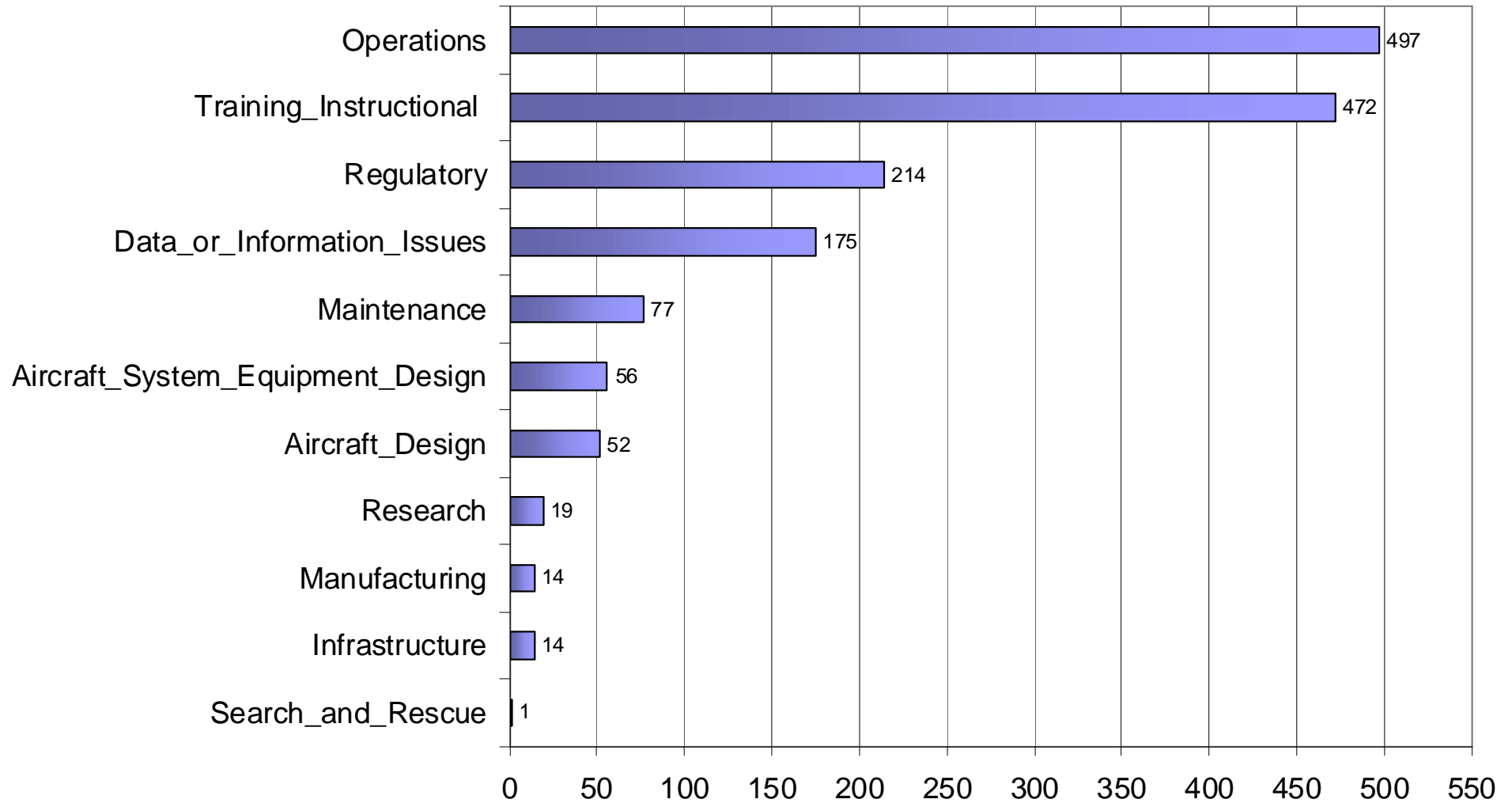
Correlation is: 0.88



Intervention Recommendations

- **In total 11 Intervention Recommendation categories identified**
- **The categories help identify areas for working groups of EHSIT**
- **Note: some categories do overlap but they do succeed in suggesting areas to focus**

Total number of Intervention Recommendations (Level 1)



Concluding remarks

- **Main accident factors are operational.**
The top 4 are:
 - ✦ **Pilot judgment & actions**
 - ✦ **Safety culture/management**
 - ✦ **Ground duties/Mission preparation**
 - ✦ **Pilot situation awareness**
- **High SPS correlation with US results**
- **HFACS enhances the analysis of HF issues**

Concluding remarks

- **Work continues within EHSIT, the first two specialist teams (SMS/Operation and Training) were launched in September 2009**
- **The challenge now is to develop, implement and monitor effective measures to meet the 80% accident rate reduction target**

European Strategic Safety Initiative



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List of abbreviations

AMC:	Acceptable Means of Compliance
CAST:	Commercial Aviation Safety Team
EASA:	European Aviation Safety Agency
ECAST:	European Commercial Aviation Safety Team
EGAST:	European General Aviation Safety Team
EHEST:	European Helicopter Safety Team
EHSAT:	European Helicopter Safety Analysis Team
EHSIT:	European Helicopter Safety Implementation Team
ESSI:	European Strategic Safety Initiative
EU:	European Union
HFACS:	Human Factors Analysis and Classification System
IATA:	International Air Transport Association
ICAO:	International Civil Aviation Organization
IHST:	International Helicopter Safety Team
IMC:	Instrument Meteorological Conditions
IR:	Implementing Rules
SMS:	Safety Management System
SPS:	Standard Problem Statements
WG:	Working Group