



**European Commercial Aviation Safety Team (ECAST)
Achievements in SMS, Safety Culture and Ground Safety
in 2009**

**John VINCENT, EASA
Head of Safety Analysis and Research, Executive Directorate
ECAST co-Chair**

IASS 09, Beijing, China, 2-5 Nov

Plan

- Brief introduction on EASA
- EASA Annual Safety Review 2008
- The European Strategic Safety Initiative
- The European Commercial Aviation Safety Team
- ECAST SMS & Safety Culture WG
- ECAST Ground Safety WG



EASA in Cologne, Germany since 2004



- **Independent legal status**
- **Operational since 28 September 2003**
- **Offices in Cologne since 1st November 2004**





EASA Extension Part II

Adopted 7 Sep 2009

**European Council
adopts regulation extending
EASA's competences to the
safety of aerodromes,
air traffic-management
and air navigation services.**

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EUROPEAN AVIATION SAFETY AGENCY
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE
EUROPÄISCHE AGENTUR FÜR FLUGSICHERHEIT

ANNUAL SAFETY REVIEW

2008

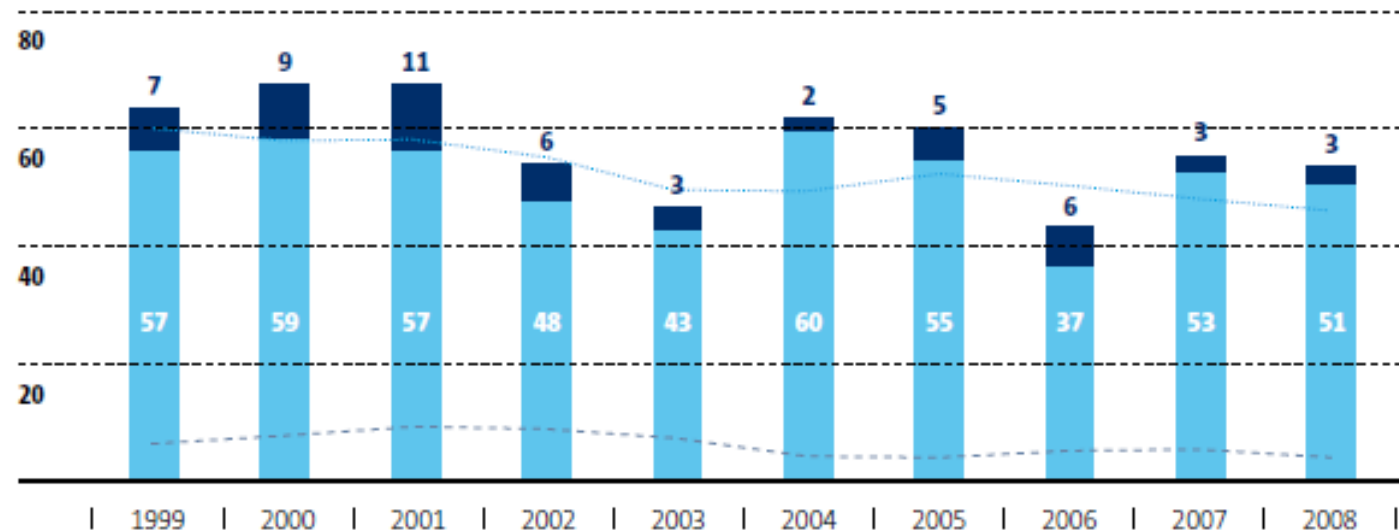
Published on
the EASA website

Commercial Air Transport Number of Fatal Accidents

FIGURE 3-1 NUMBER OF FATAL ACCIDENTS

Fatal accidents in commercial air transport — EASA MS and foreign registered aeroplanes

- Fatal accidents EASA MS registered
- Fatal accidents foreign registered
- Foreign registered 3-year average
- EASA MS registered 3-year average



Commercial Air Transport Rate of fatal accidents in scheduled passenger operations

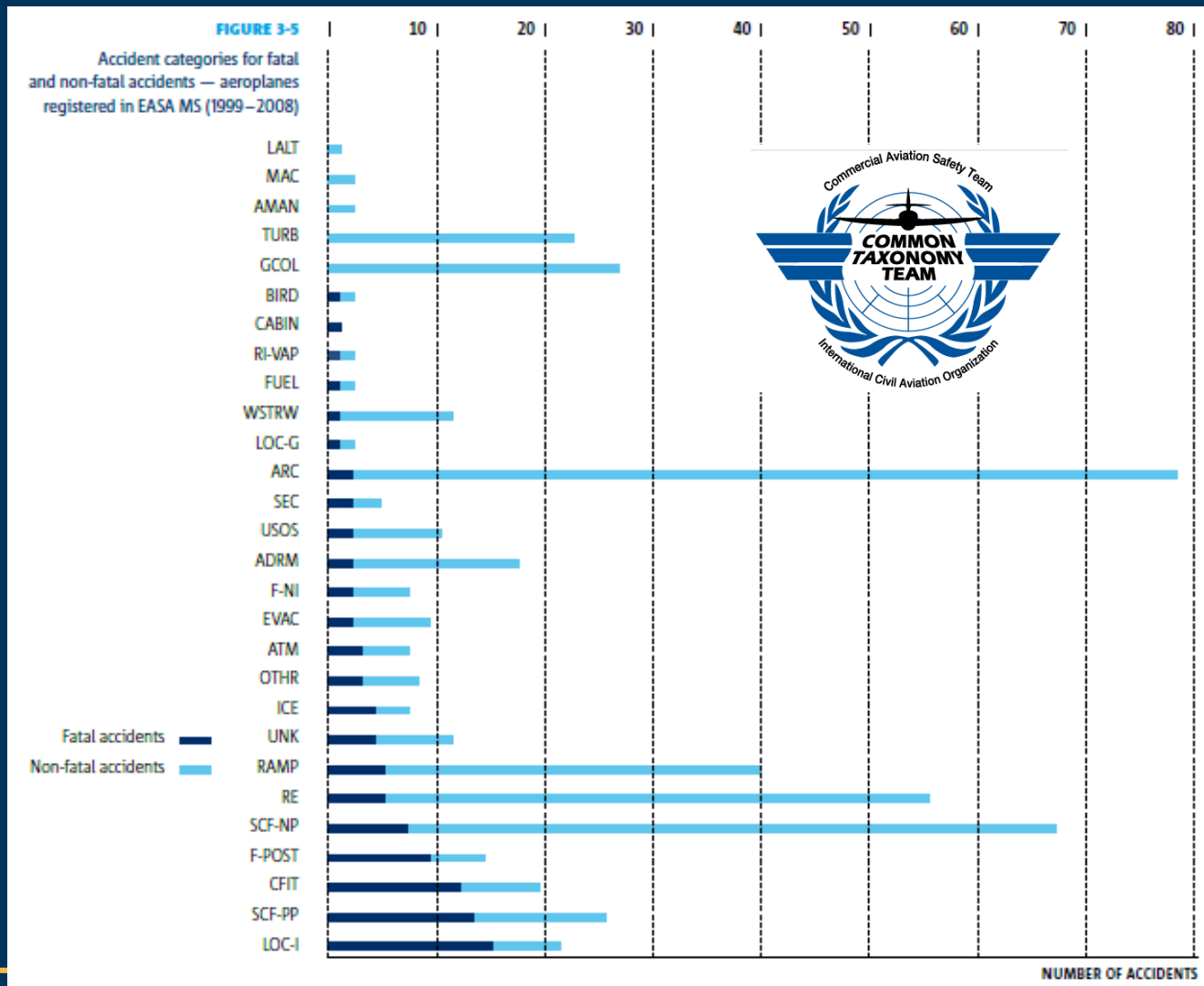
FIGURE 3-2

Rate of fatal accidents in scheduled
passenger operations — EASA MS
and foreign registered aeroplanes

- Foreign registered 3-year average
- EASA MS registered 3-year average
- Linear (EASA MS registered 3-year average)
- Linear (foreign registered 3-year average)



Commercial Air Transport Accident categories for fatal and non-fatal accidents – Aeroplanes registered in EASA Member States



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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

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 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.

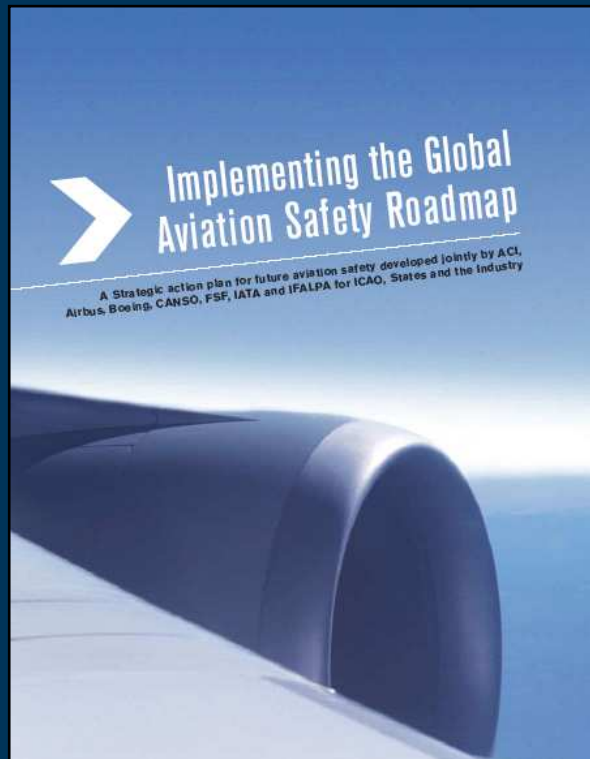
More detailed information can be found in the [ESSI presentation](#) attached, and in the [ICAO Information Paper A36-WP/195-TE/SS](#) and the [EASA Annual Safety Review 2006](#) published in 2007.

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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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

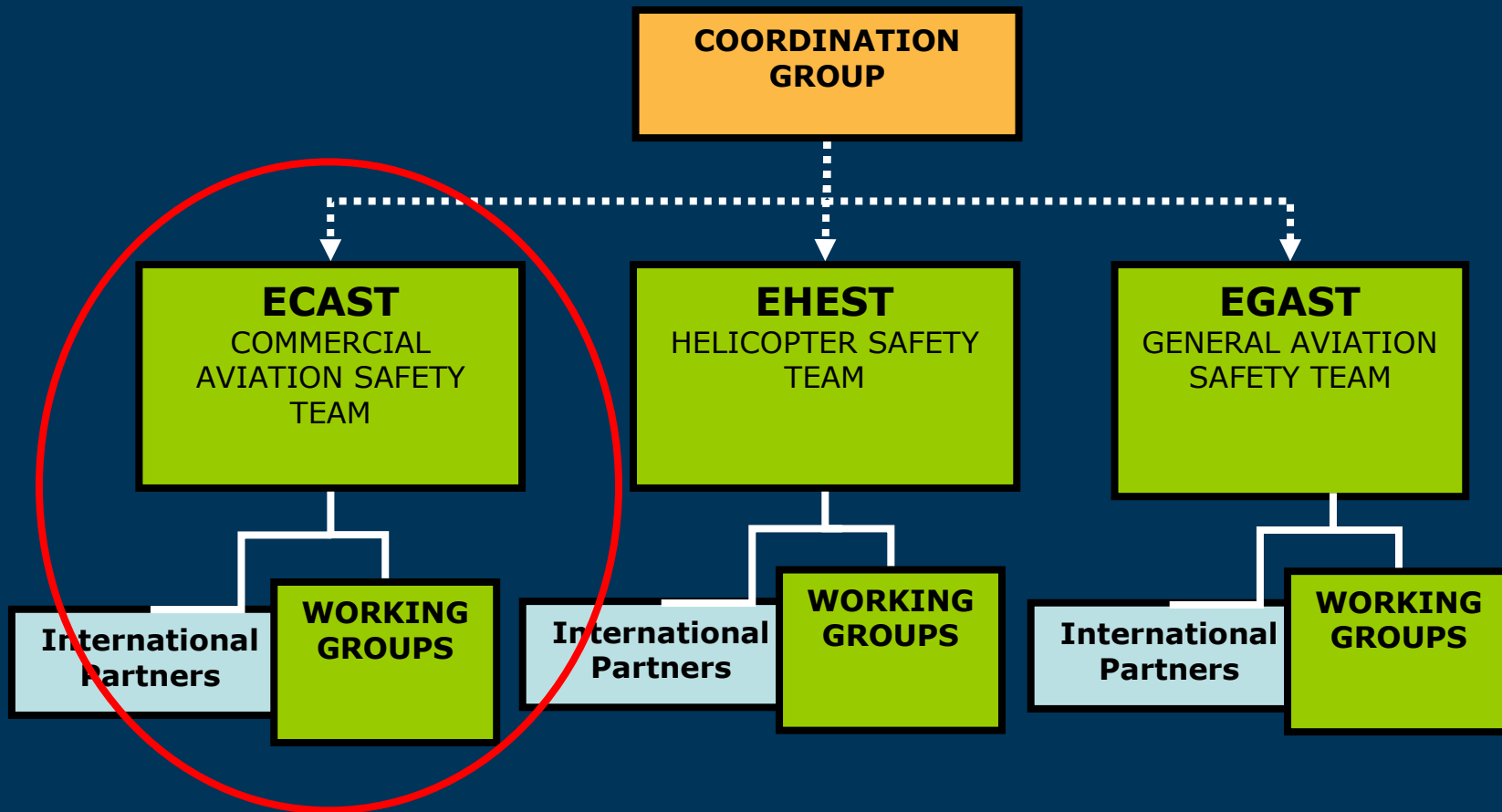
ESSI

One of the major safety teams worldwide



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ESSI/ECAST Pledge Signatories

PLEDGE OF COMMITMENT FROM ESSI MEMBERS

We the undersigned acknowledge that:

- through our positions and by means of our organisations we each have key roles to play in maintaining and enhancing the level of safety within the European aviation system, and can achieve this more effectively through joint cooperation,
- experience has shown that there is need for active, frequently reviewed and updated safety programs,
- in many areas these safety programs have common goals, and the sharing of experience and knowledge between our organisations would enhance aviation safety programs within Europe,
- a European partnership of interested, expert and affected parties guiding a coordinated European aviation safety initiative with strategic plans can be effective in identifying these common goals and coordinating the sharing of experience and knowledge,
- such a European aviation safety initiative can be used to provide recommendations, guidance and solutions on safety matters to all concerned parties,
- aviation within Europe can benefit from safety program experience and knowledge from the global aviation community,
- a common European partnership can avoid duplication and be used to coordinate European safety programs with other safety initiatives elsewhere and
- for a European Strategic Safety Initiative (ESSI) to be effective sufficient expert resources (both human and material) are required to conduct the work at both decision-making and working levels.

We the undersigned therefore agree to:

- be equal members within the ESSI;
- commit to providing, in partnership, reasonable resources to ensure that this initiative is effective and
- take reasonable actions necessary to enhance safety within our own organisations as a result of ESSI recommendations, guidance and solutions in the ESSI areas to which we participate (commercial aviation, rotorcraft and/or general aviation).

Patrick Goudou
EASA Executive Director



17 members, more than 50 members and partners

- **Airbus S.A.S.**
- **Aircraft Engineers International (AEI)**
- **Alenia Aeronautic S.p.A.**
- **Boeing Commercial Airplanes**
- **Civil Aviation Authority UK**
- **DGAC France**
- **Dutch Ministry of Transport, Public Works and Water Management**
- **Embraer - Empresa Brasileira de Aeronáutica**
- **Ente Nazionale Aviazione Civile Italy**
- **European Transport Safety Council**
- **European Aviation Safety Agency (EASA)**
- **Federal Office of Civil Aviation Switzerland**
- **Fokker**
- **International Air Transport Association (IATA)**
- **International Federation of Airworthiness (IFA)**
- **National Aerospace Laboratory (NLR)**
- **Rolls-Royce plc**

ECAST Priorities 2008-2009



1. Ground Safety

2. Runway Safety



3. SMS & Safety Culture

4. Flight Crew Performance

5. Loss of Control (General)

6. Approach & Landing

7. Aviation System Complexity

8. Fire, Smoke and Fumes

9. Air-Ground Communications

10. Mid Air Collision

11. CFIT

12. Icing

13. Bird Strike

14. Loss of Control (Weight & Balance)

15. Air Navigation

16. Airworthiness (Maintenance & Design)

17. Maintenance (HF)

18. Automation

1. ECAST Ground Safety WG

- Launched in 2009

2. Runway Safety

- Supports the Flight Safety Foundation Runway Safety Initiative (RSI)

3. ECAST SMS & Safety Culture WG

- Launched in 2008

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ECAST SMS - published

WPs and materials easa.europa.eu/essi

**Best Practice only!
(no AMC or GMD)**



ECAST
Component of ESSI
European Strategic Safety Initiative

This web site is a resource for Industries to obtain information about ECAST efforts in the area of Safety Management and to Support for organisations wishing to implement a Safety Management System.

Background on the ECAST SMS Working Group

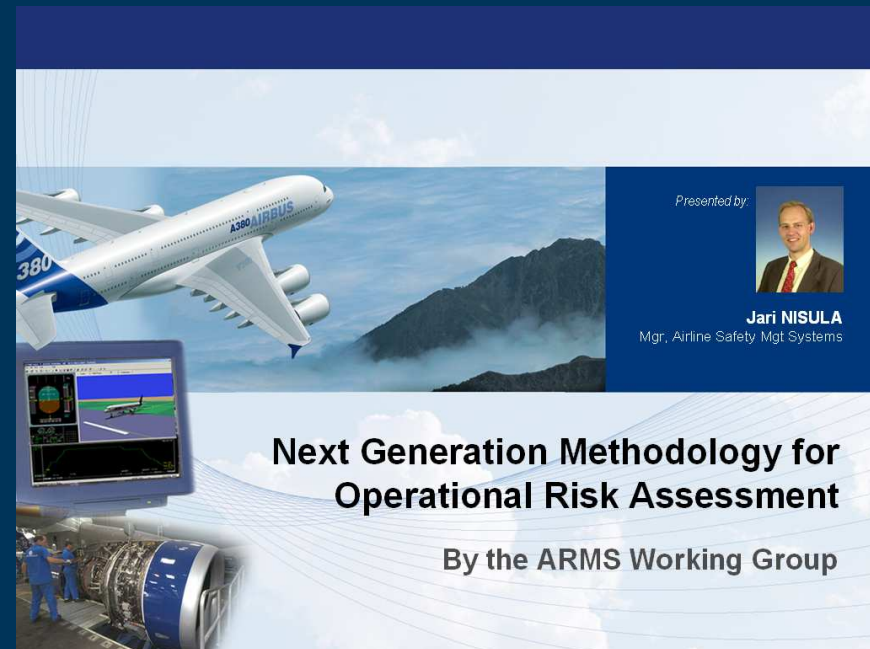
The European Strategic Safety Initiative (ESSI) is an aviation safety partnership between EASA, other regulators and the industry. The initiative objective is to further enhance safety in Europe. The ESSI has three components: the European Commercial Aviation Safety Team (ECAST), the European Helicopter Safety Team (EHEST), and the European General Aviation Safety Team (EGAST).

| | Summary | Guidance |
|---|---------|---|
| WP 1.1 - Review SMS/Safety Culture initiatives and materials | WP 1.1 |  |
| WP 1.2 - Safety Culture framework for ECAST SMS WG | WP 1.2 |  |
| WP 2 - Identify best practices and examples of organisations | WP 2 |  |
| WP 3 - Guidance on Hazard Identification | WP 3 |  |
| WP 4 - Guidance on Risk Assessment | WP 4 |  |

ECAST SMS WP 4 – Risk Assessment

Where guidance is probably most needed

- A new methodology
 - ✦ Developed by the industry
 - ✦ Compatible with ICAO
 - ✦ Publicly available



- Contact: jari.nisula@airbus.com
-

Publication on SKYbrary

1139 Articles 760 New

Safety knowledge contributed by [Login](#)

EUROCONTROL ICAO FLIGHT SAFETY FOUNDATION

SKYbrary The single point of reference in the network of aviation safety knowledge

Navigation

Join Skybrary and participate in the discussions about articles

Skybrary ICAO

Operational Issues Portal Enhancing Safety Portal Safety Regulations Portal

Air Ground Communication Airspace Infringement Bird Strike Controlled Flight Into Terrain Fire

Ground operations Human Factors Level Bust Loss of Control Loss of Separation

Runway Excursion Runway Incursion Wake Vortex Turbulence Weather General

Highlighted Article

Situational Awareness

Put simply, situation awareness (SA) means knowing what is going on around you. More specifically, in the context of complex operational environments SA is concerned with the person's knowledge of particular task-related events and phenomena.

read more

Skybrary Solutions Safety Alerts

- All clear? Toolkit
- Level Bust Toolkit
- Airspace Infringement Early Action Package

[Privacy policy](#) [About SkybraryWiki](#) [Disclaimers](#)

ECAST and ARMS material also published in SKYbrary

www.skybrary.aero/index.php/Category:Safety_Management

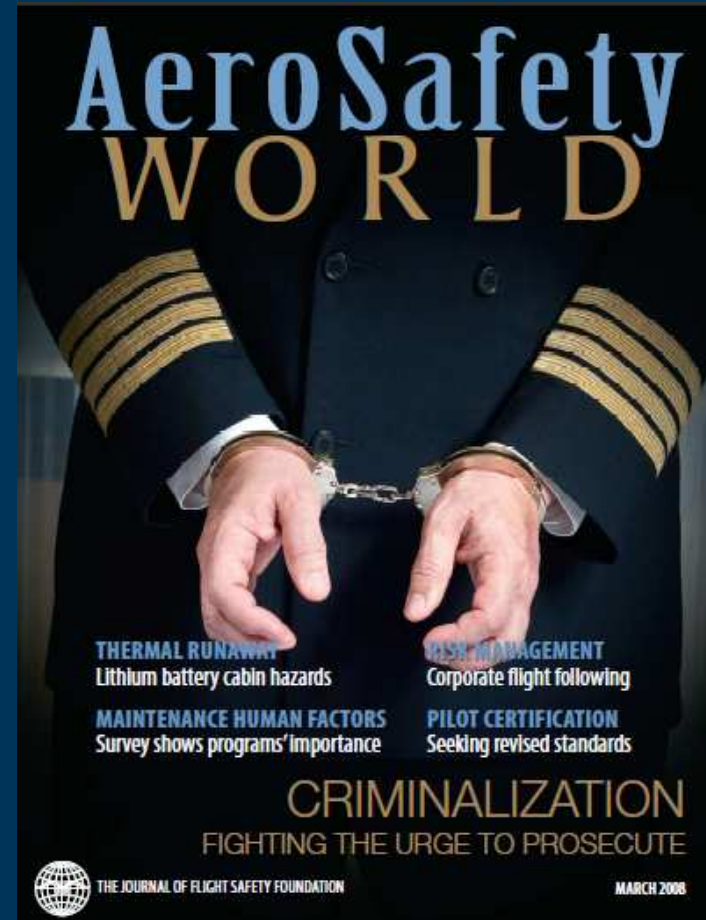
of which ESSI is a sponsor

Safety knowledge contributed by

EUROCONTROL ICAO FLIGHT SAFETY FOUNDATION UKFSC ESSI European Strategic Safety Initiative

Just Culture and Non-Criminalisation of accidents

- Should ECAST produce a public statement?
- Activity led by Rich Jones, RAeS, UK FSC
- Subject also addressed by:
 - ✦ EC - DG TREN
 - ✦ EASA and EUROCONTROL
 - ✦ ICAO
 - ✦ ECAC
 - ✦ FAA
 - ✦ FSF



International Collaboration on SMS

- **Objective: harmonization of SMS and SSP principles**
- **Participants: ICAO, FAA, TCCA, EASA**
- **Three Working Groups:**
 - ★ **Measurements**
 - ★ **Guidance Material**
 - ★ **Standard Taxonomy**

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ECAST Ground Safety WG

➤ Terms of Reference:

Coordinate with existing initiatives and promote implementation in Europe of existing safety enhancement materials and plans

➤ Timeline: 2009 – 2010

➤ Chaired by **Garth Gray, UK CAA**, chair of the UK Ground Handling Operations Safety Team (GHOST)

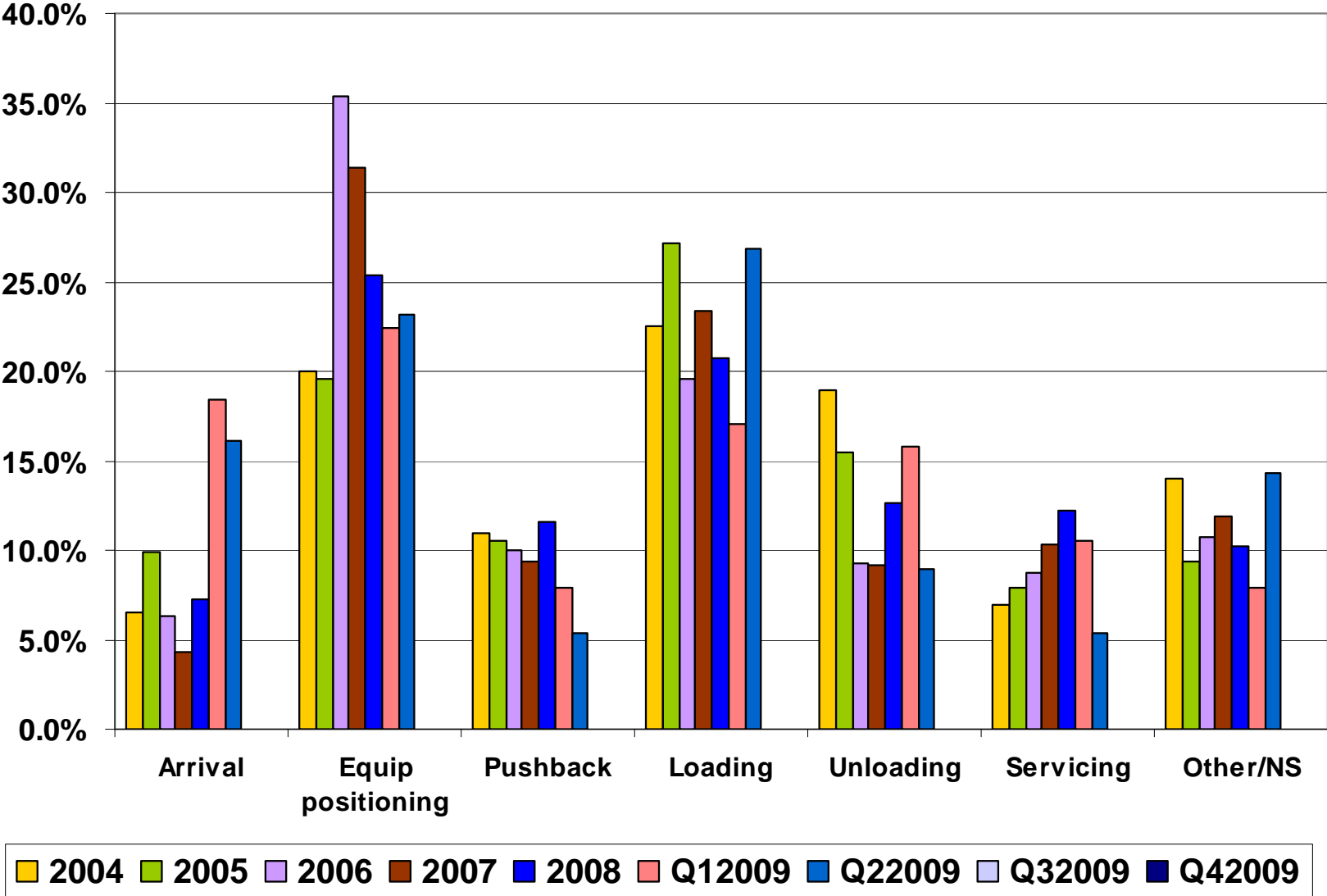
➤ **Good cross-sectorial participation: regulators, industry, associations; includes ACI and EU-OSHA**

ECAST Ground Safety Initiatives reviewed

- **FSF Ground Accident Prevention**
- **UK Ground Handling Operational Safety Team (GHOST)**
- **AGSC by UK Aviation Ground Safety Council**
- **ISAGO IATA Safety Audit of Ground Operations**
- **International Handlers' Association IAHA**
- **SAE G12 WG on de-icing fluids**
- **IACA Aircraft Ground Damage database**
- **NLR Ground Safety for CAA NL**
- **EC Directive on Ground Handling**

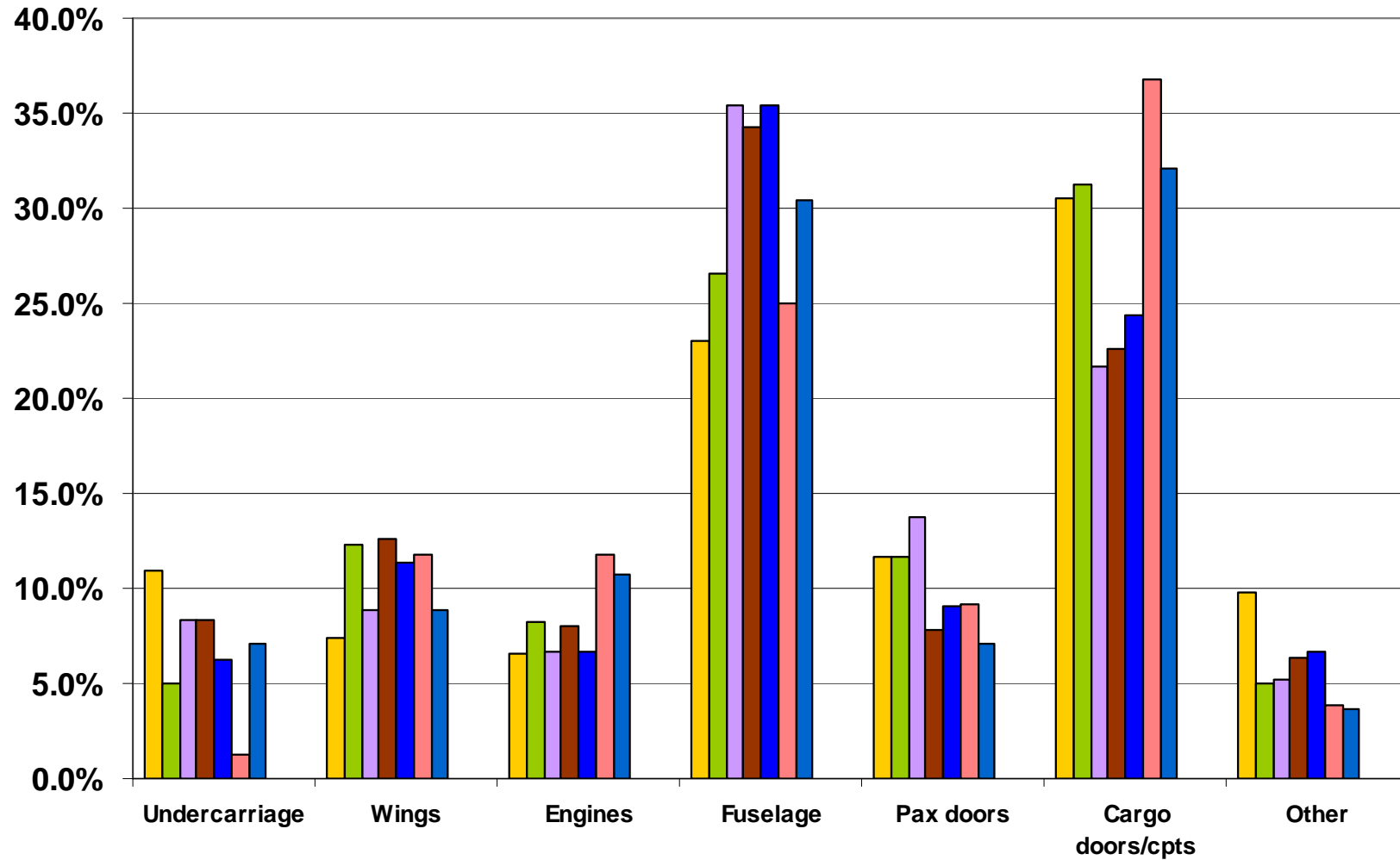
Phase of operation (Source IAHA)

AGDR



Area of damage (Source IAHA)

AGDR



Emerging issues

- **Shorter turn rounds**
- **Tighter H&S regulation to protect workers**
- **Present economic situation**
 - ✦ **Reduced numbers as costs are squeezed**
 - ✦ **Cost savings achieved by releasing the more expensive employees**
 - ✦ **“Low cost ” handling agents sometimes operating without complying with standards**
- **No equipage and staff certification, and lack of standardised procedures**

WP 1 – Training

- **WP 1 - Develop 'standardised' Ground Handling training concepts and syllabi**
Led by Steve Enright, Servisair
 - ✦ **Deliverable due Dec 09**
- **In synergy with with UK GHOST**



- **Use and promote ISAGO training approach and material by IATA**

WP 2 – Human Factors

- **Research the effect of Human Factors involved in ramp safety**

Performed by **A. Balk, NLR/ATSI**, for **J. Bossenbroek, CAA NL**



Inspectie Verkeer en Waterstaat
Ministerie van Verkeer en Waterstaat

ECAST GS WG

WP2 - Human Factors

- **Deliverable: Best practices on HF, due March 2010**
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European Commercial Aviation Safety Team



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