



COSCAP BANJUL ACCORD GROUP (COSCAP-BAG)

BANJUL ACCORD GROUP REGIONAL AVIATION SAFETY TEAM (BAGRAST)

1st meeting, 26th -27th January, 2009

NCAA Headquarter Annex , Murtala Muhammed Airport, Ikeja, Nigeria

European Strategic Safety Initiative (ESSI)

Report on 2008 achievements by ECAST

Prepared by M. MASSON, EASA, Safety Action Coordinator, ESSI Secretary

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EASA in Cologne, Germany since 2004

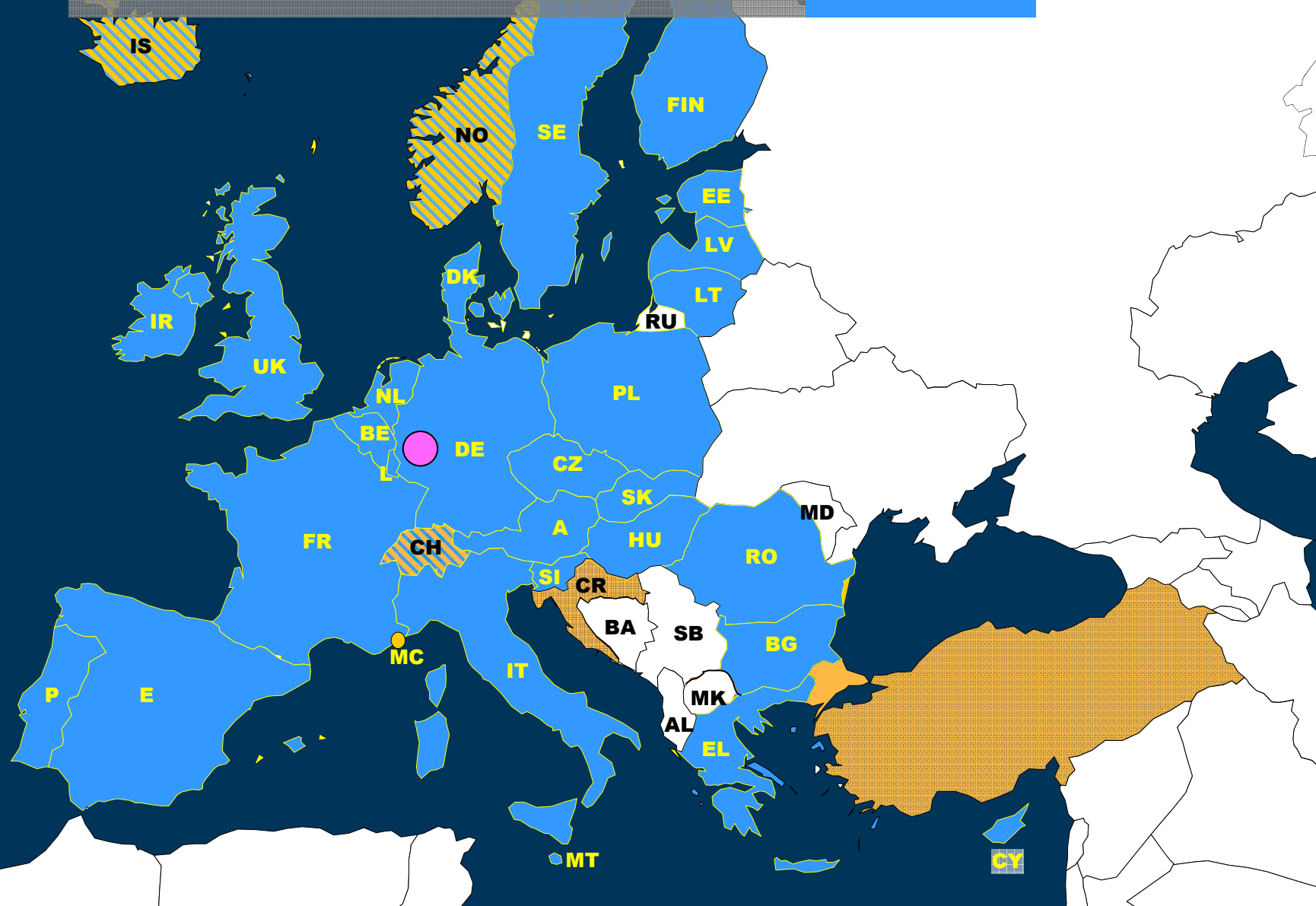


- **Independent legal status**
- **Operational since 28 September 2003**
- **Offices in Cologne since 1st November 2004**



EASA Member States

EU 27 + 4



EASA Annual Safety Review 2008

Preliminary results

The EASA Annual Safety Review 2008
will be published on: <http://easa.europa.eu/>

Preliminary results will be available by mid March 09
Contact: Reinhard.menzel@easa.europa.eu

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



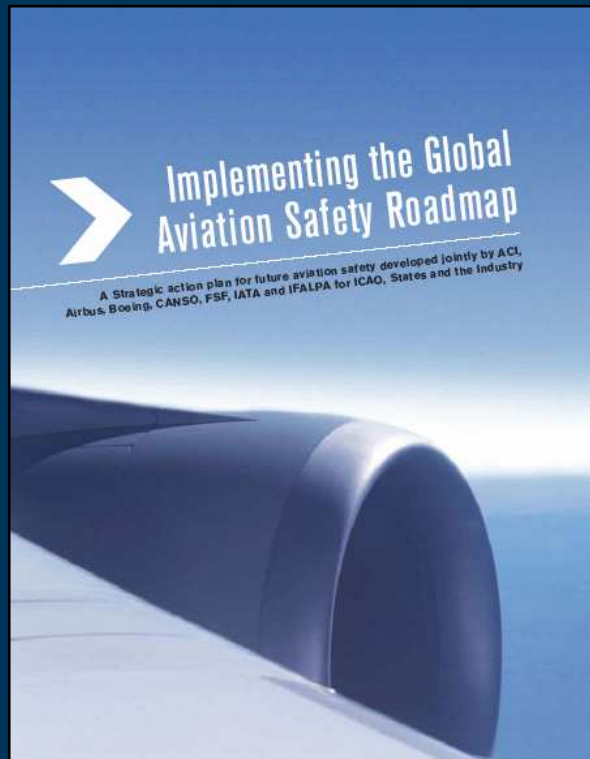
ESSI

One of the major safety teams worldwide



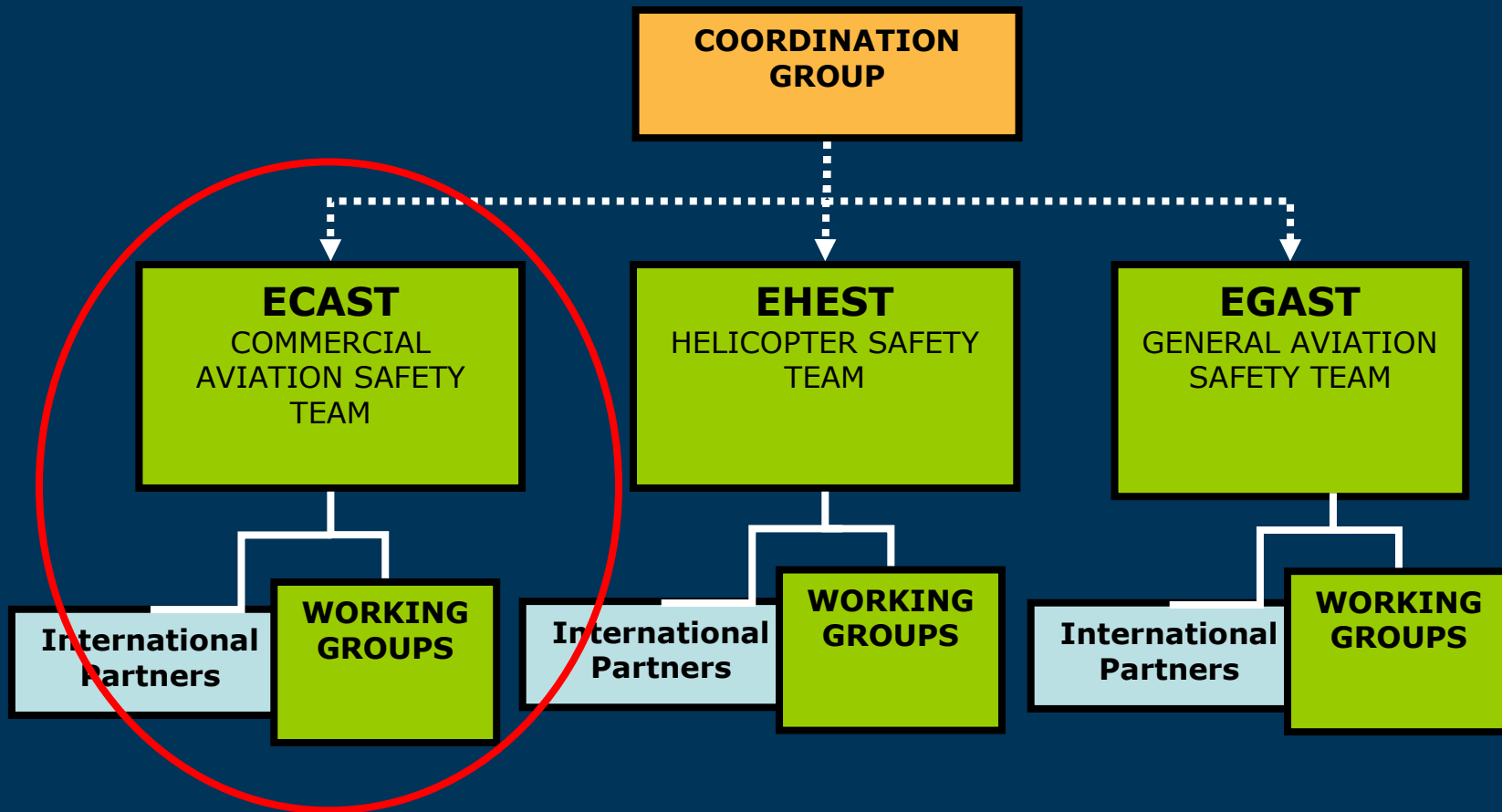
ESSI

In line with the Global Aviation Safety Roadmap

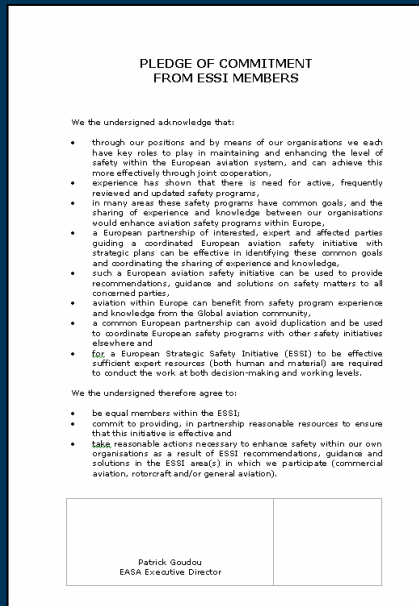


➤ ICAO GASRM - 2006

- ✦ Frame of reference for or 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/ECAST Pledge Signatories



- **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**
- *More than 50 member and partner organisations*

ECAST Process



ECAST

Prioritisation (2006-2007)

- ★ **Safety Importance**
- ★ **Coverage**
- ★ **High level Costs benefits considerations**

In line with the Global Aviation Safety Road Map, to avoid duplication priority is modified when topics are already covered.

In such case, coordination is recommended.

The ECAST priorities list therefore is not a list of major safety issues in Europe.

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

- KO meeting 10 Feb 2009

2. Runway Safety

- Through coordination with the Flight Safety Foundation Runway Safety Initiative (RSI)

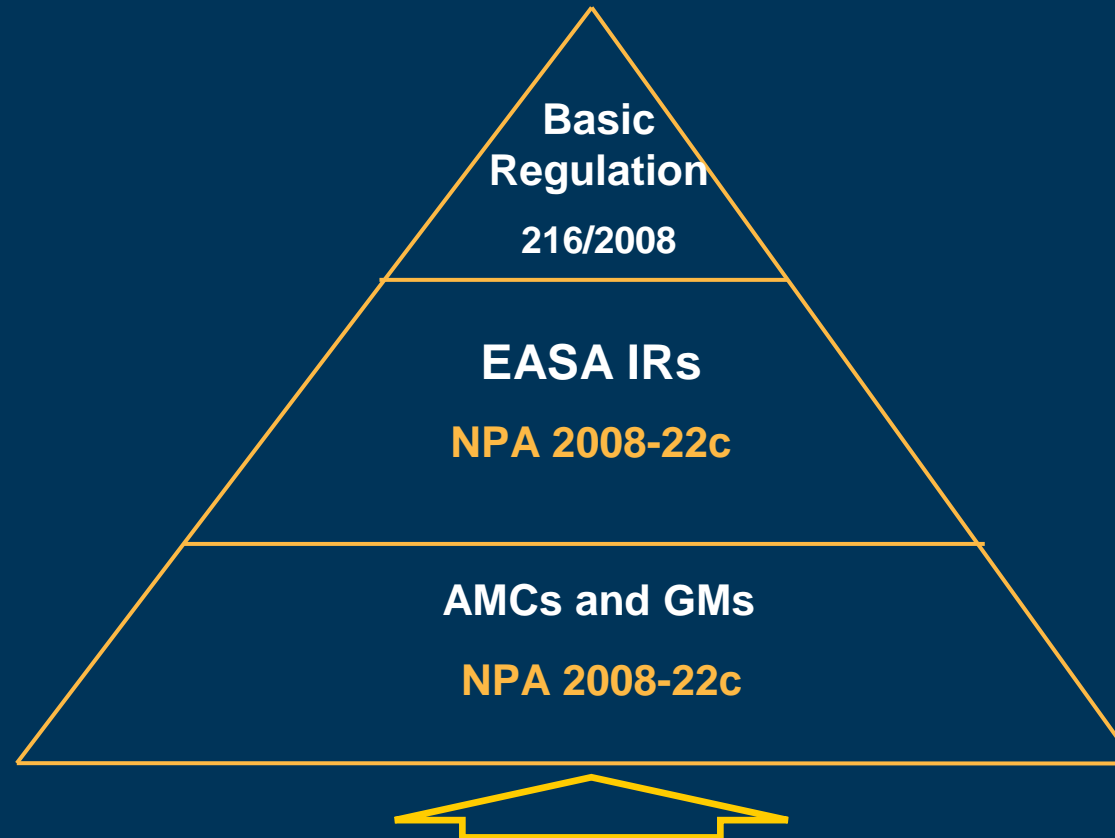
3. ECAST SMS / Safety Culture WG

- Launched in 2008
Focus of this presentation

ECAST SMS WG

And the regulatory framework

ICAO
Annex 6 amdt 30
+
States Safety
Letter
+
Safety
Management
Manual



ECAST SMS WG provides (website based) practical Guidance
mainly based on existing materials and initiatives

ECAST SMS WG - 4 Work Packages

WPs	WP Leaders
WP 1 - Review current SMS/Safety Culture initiatives and materials	J. Beaufays, EUROCONTROL, and M. Piers, NLR
WP 2 - Identify best practices and examples of organisations	S. Clark NATS, with support from P. Sorensen, IATA, and V. Gray, UK CAA
WP 3 - Hazard Identification	I. Maragakis, EASA and D. Prior, easyJet
WP 4 - Risk Assessment	J. Nisula, AIRBUS, <i>Chair of ARMS</i>

- All deliverables to be published on www.skybrary.aero and www.easa.europa.eu/essi

ECAST SMS WP 1 – Review of SMS and Safety Culture materials

➤ References to existing Regulations and Materials related to (Safety) Management Systems

➤ Safety Management Best Practices in ATM, Airline and Airport Operations

➤ Published on SKYbrary

➤ Safety Management page:

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

➤ Contact: jacques.beaufays@eurocontrol.int



ECAST SMS WP 1 – Review of SMS and Safety Culture materials

- **Consolidated Safety Culture definition and framework developed by NLR**
 - ★ **Framework of frameworks**
 - ★ **6 mutually exclusive components, expressed in measurable indicators:**

- 1. Commitment to safety**
- 2. Behaviour with respect to safety**
- 3. Awareness**
- 4. Adaptability**
- 5. Information**
- 6. Justness**

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ECAST Definition of Safety Culture

- WP1

- **Safety Culture** is the set of enduring values and attitudes regarding safety, shared by every member of every level of an organisation.
 - **Extended definition: Safety Culture** is the set of enduring values and attitudes regarding safety issues, shared by every member of every level of an organisation. Safety Culture refers to the extent to which every individual and every group of the organisation is aware of the risks and unknown hazards induced by its activities; is continuously behaving so as to preserve and enhance safety; is willing and able to adapt itself when facing safety issues; is willing to communicate safety issues; and consistently evaluates safety related behaviour.
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ECAST SMS WP 2 – Best practices and examples of organisations

- Practical guidance on organisation for safety
 - Method:
 - ✦ Questionnaire to airlines
 - ✦ Literature review
 - Deliverables:
 - ✦ Golden Rules
 - ✦ Example of organisational charts for small, medium and large organisations
 - Contacts: stephen.clark2@nats.co.uk
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Results of the questionnaire

- The role of the **Accountable Manager** as the person ultimately responsible for safety appears to be the norm. In some cases the Accountable Manager is also the Chief Operating Officer or Chief Executive Officer.
- The **Safety Departments**, where they exist, all appear to be organised to be separate from operational delivery.
- There appeared to be a general lack of any formal arrangements for **communications** between the Safety Department and the Accountable Manager.
- No respondent appeared to have a fully functional **Risk Management Programme**.

Literature review

ICAO SMM Second Edition (Draft)



Literature review

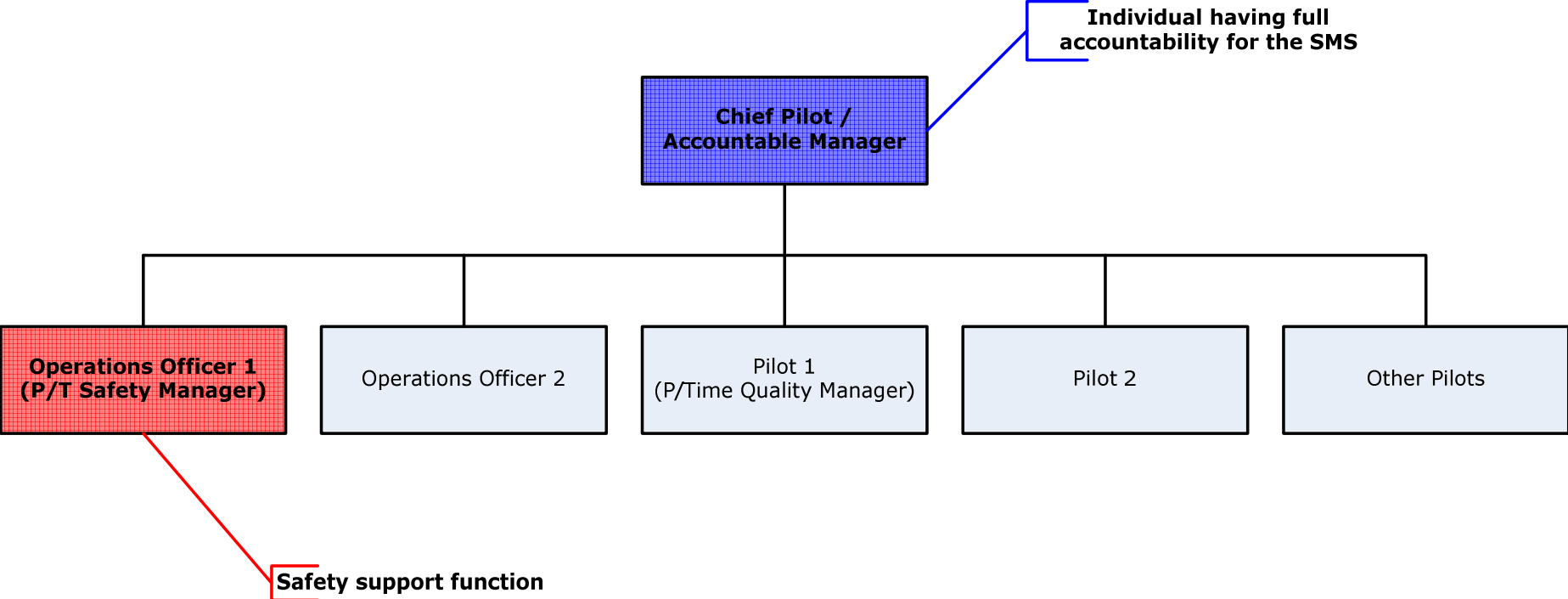
IATA Integrated Management System



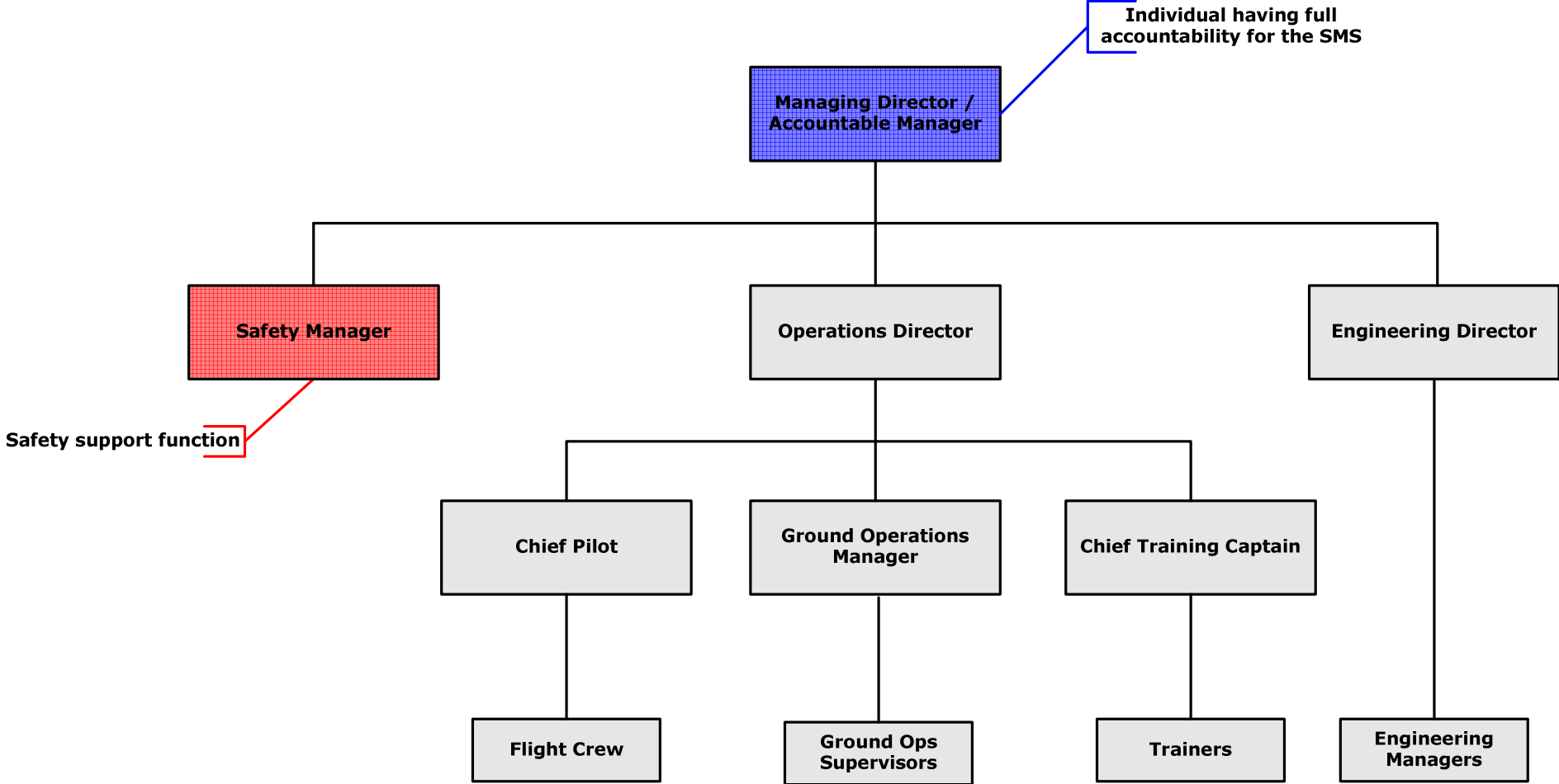
'Golden Rules'

- **1. Full Safety Accountability at the Top (the Accountable Executive – e.g. Chief Executive Officer)**
 - **2. Supported by independent Safety Support Function with full authority from the Top**
 - **3. Individuals within the Safety Support Function should have respect and influence**
 - **4. Formal communications from the Top to the Safety Support Function**
 - **5. Actions necessary to support the SMS should be managed throughout the organisation**
 - **6. Safety accountabilities and responsibilities should be documented and understood by the incumbents**
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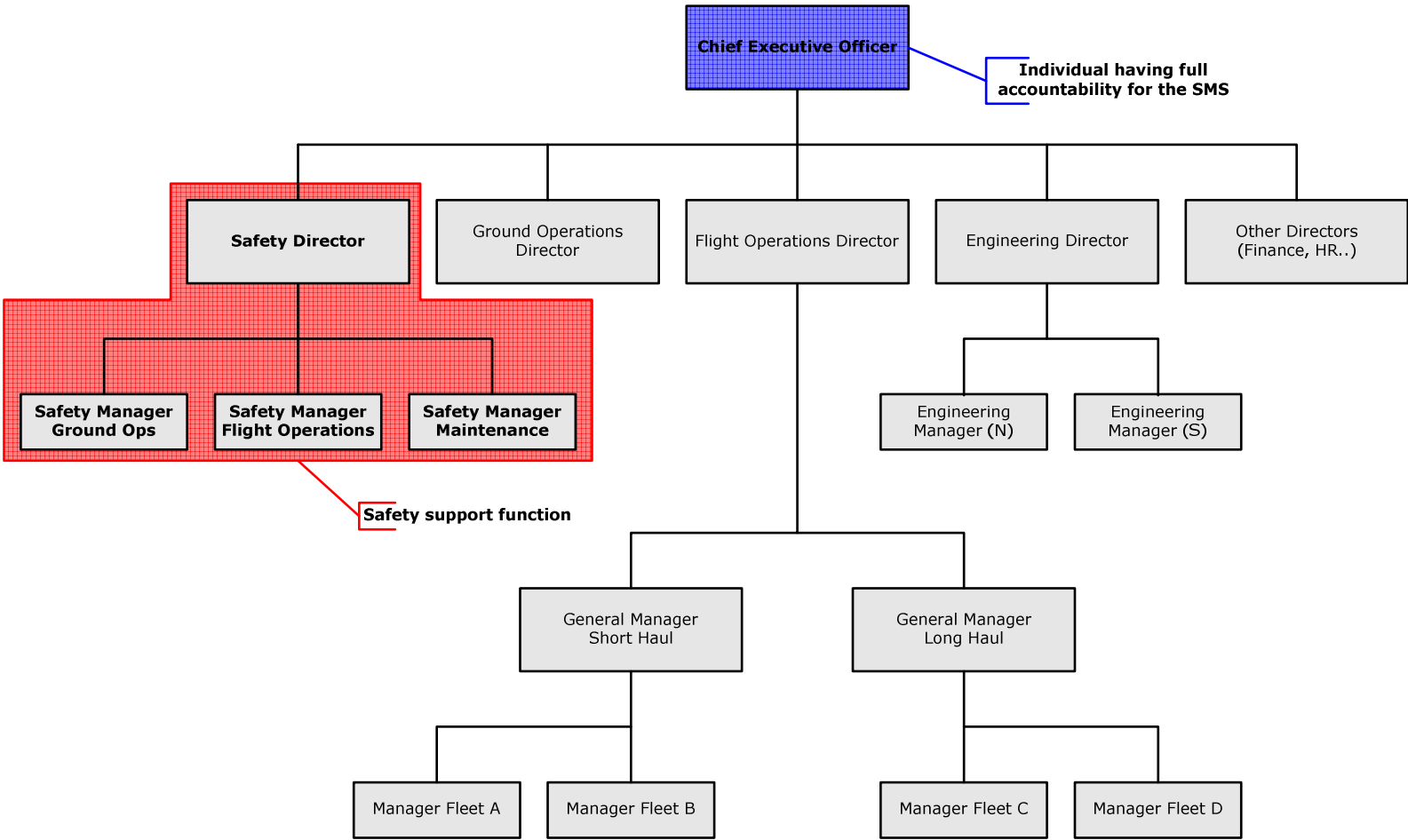
Example – Small organisation



Example – Medium organisation



Example – Large organisation

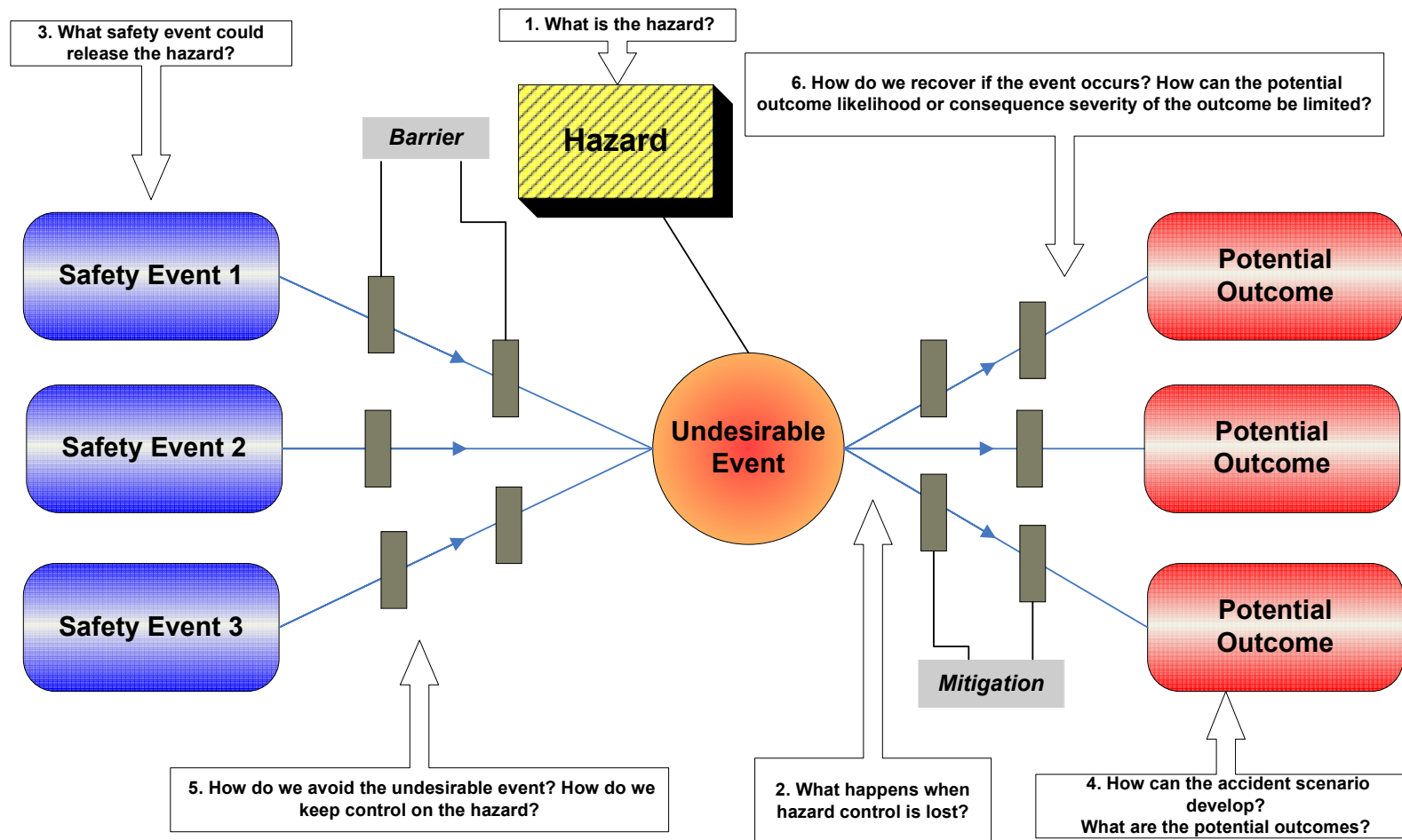


ECAST SMS WP 3 – Hazards Identification

Where guidance is probably most needed (Part 1)

- **Guidance on Hazards Identification**
 - **Simple, concise and useful material and references on:**
 - ★ **Definitions (hazard, risk, etc.);**
 - ★ **Bow Tie representation used as concepts organiser**
 - ★ **Hazards identification process**
 - ★ **Methods for hazards identification**
 - ★ **Tools and Techniques: Brainstorming, HAZOP, checklist, FMEA, SWIFT, Dynamic methods, and the FAST method for identification of future hazards**
 - ★ **Compatible with ARMS (*next slide*) and other Risk Assessment methodologies**
 - **Contact: ilias.maragakis@easa.europa.eu**
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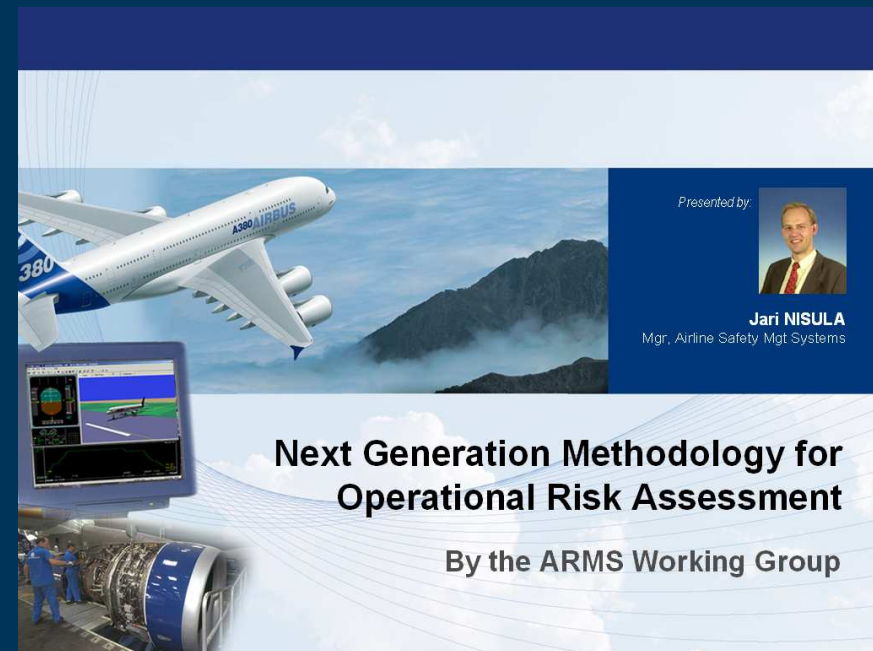
Bow Tie representation Used in WP3 as 'concepts organiser'



ECAST SMS WP 4 – Risk Assessment

Where guidance is probably most needed (Part 2)

- ECAST SMS WG adopted the work of ARMS on Risk Mgt
- New methodology
 - ✦ Developed by the industry
 - ✦ Compatible with ICAO
 - ✦ Publicly available
- Presented in EASS 09, [EASS 09 pre-agenda](#)
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European Commercial Aviation Safety Team



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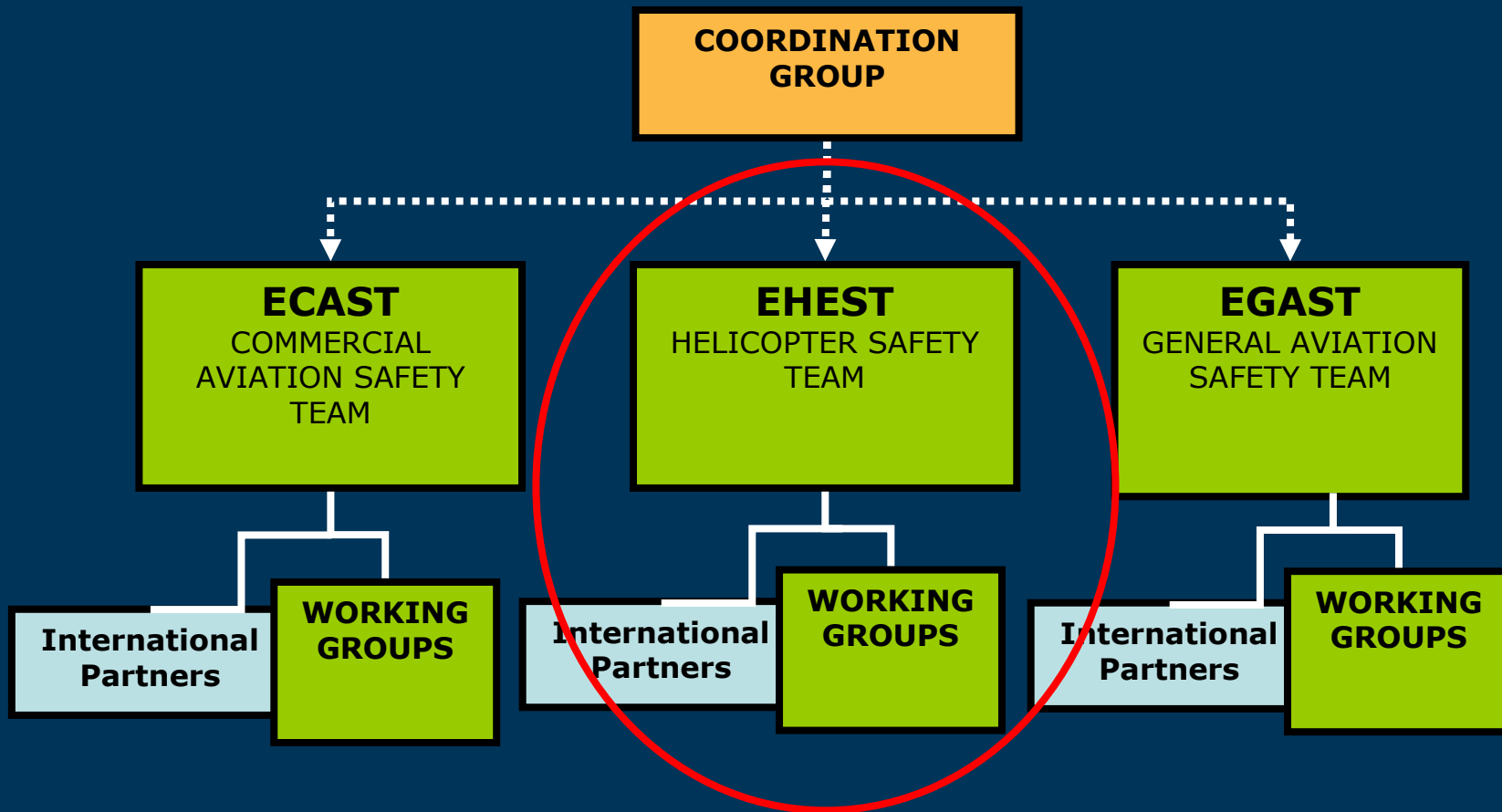
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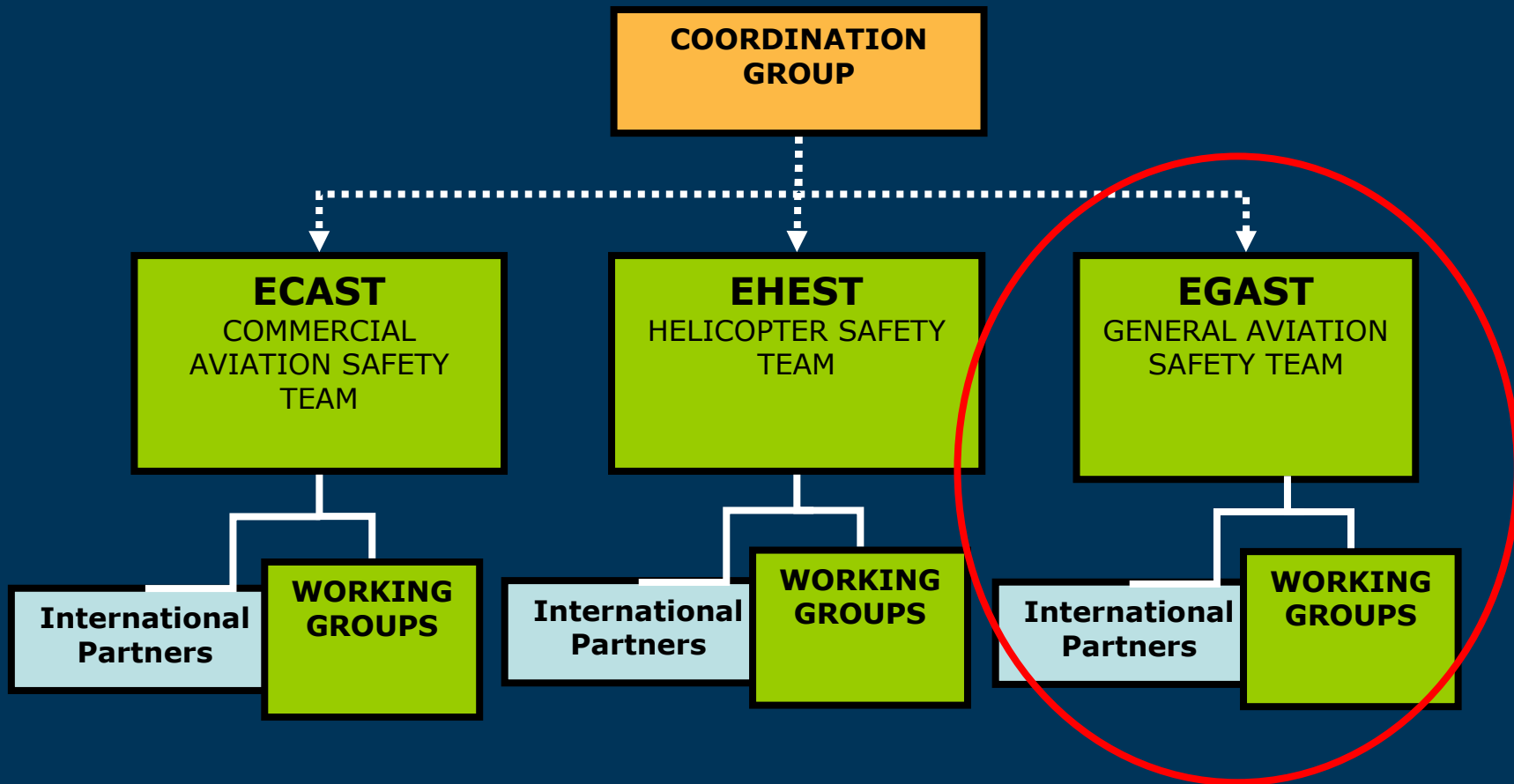
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***For briefings of EHEST and EGAST,
please refer to
<http://easa.europa.eu/essi/>***