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Agenda Item 30: Other safety matters

THE EUROPEAN STRATEGIC SAFETY INITIATIVE (ESSI)

(Presented by the European Aviation Safety Agency)

EXECUTIVE SUMMARY

The European Aviation Safety Agency (EASA) has launched the European Strategic Safety Initiative (ESSI) in 2006. The European Strategic Safety Initiative (ESSI) is an aviation safety partnership in Europe. The ESSI objective is to further enhance safety in Europe and for the European citizen worldwide in 2007-2017 through analysis of safety data, coordination with safety initiatives worldwide, and the implementation of cost effective action plans. The ESSI has three pillars: the European Commercial Aviation Safety Team (ECAST), the European Helicopter Safety Team (EHEST), and the European General Aviation Safety Team (EGAST).

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective A.
<i>Financial implications:</i>	
<i>References:</i>	

1. INTRODUCTION

1.1 REGULATION (EC) No 1592/2002 of the European Parliament and of the Council of 15 July 2002, among other points, established the European Aviation Safety Agency (EASA). It is the centrepiece of a new regulatory system in Europe and a point of reference for international cooperation. EASA promotes the highest common standards of safety in civil aviation, and closely works with European Commission, the EU National Aviation Authorities, the Federal Aviation Administration (FAA) Transport Canada and other National Aviation Authorities, Accident Investigation Bodies and the industry.

1.2 The ESSI was launched in April 2006 by EASA as the successor to the Joint Aviation Safety Initiative (JSSI) of the JAA (Joint Aviation Authorities).

1.3 The JSSI had worked closely with the United States Commercial Aviation Safety Team (CAST) and with teams running similar initiatives worldwide, in particular in Asia and South-America. Focus areas were selected for safety action plans and the implementation of safety enhancements has given benefits.

1.4 EASA started to build up ESSI in 2005 in the context of the JAA-EASA transition and the adoption of the so-called "FUJA (Future of JAA) Report". The ESSI foundation meeting took place on 27 April 2006, and the JSSI-ESSI handover was performed on 28 June 2006.

1.5 The ESSI has redefined and revitalized cooperative safety efforts in Europe with a new objective, a new regulator-industry partnership approach, and a new process. In line with its JSSI heritage, the ESSI will maintain and further develop cooperation with CAST and with other major safety initiatives worldwide under the Cooperative Development of Operational Safety and Continuing Airworthiness Programme (COSCAP) of the ICAO Technical Cooperation Programme.

2. LINK TO THE GLOBAL AVIATION SAFETY ROADMAP

2.1 The Global Aviation Safety Road Map has been developed in 2006 for ICAO by the Industry Safety Strategy Group under the leadership of IATA in cooperation with Airbus, Airports Council International (ACI), Boeing, Civil Air Navigation Services Organization (CANSO), International Federation of Air Pilots' Associations (IFALPA) and the Flight Safety Foundation (FSF).

2.2 The Safety Roadmap provides a reference framework for all stakeholders, including States, regulators, operators, airports, manufacturers, professional organizations, safety organizations and air traffic service providers, to guide and coordinate safety policies and initiatives worldwide. This framework ensures oversight of the progress towards safety standards and maximizes the use of resources by better coordinating safety strategies and avoiding duplication of efforts worldwide.

2.3 The ESSI fits naturally within this safety roadmap, as it provides a mechanism for coordinating safety initiatives within Europe and between Europe and the rest of the world, seeking for global alignment and minimising duplication of efforts across stakeholders. Both fit well, and have a similar ten to fifteen years temporal horizon.

3. **ESSI COMPOSITION**

3.1 The ESSI participants are drawn from the EASA States (27 European Union Member States plus Switzerland, Lichtenstein, Iceland and Norway) and the JAA States, from manufacturers, operators and professional unions, the FAA and international organizations such as EUROCONTROL and ICAO.

3.2 More than seventy civil and military organizations are participating in the ESSI.

4. **REGULATORS-INDUSTRY PARTNERSHIP**

4.1 ESSI is a partnership between EASA, other European regulators and the industry. Like CAST, the ESSI is based on the principle that industry can complement regulatory action by voluntary committing to costs effective safety enhancement.

4.2 The partnership is sealed by signing a pledge, by which organizations commit to be equal partners within the ESSI, provide reasonable resources to ensure that the ESSI be effective, and take reasonable actions as a result of ESSI recommendations, guidance and solutions.

4.3 Participating organizations that sign the pledge are ESSI members. Others may be ESSI partners. Members are entitled to take part in decision making, and therefore to contribute to the programme definition, monitoring and strategic oversight.

4.4 To consolidate this partnership, the ESSI terms of references state that each ESSI team shall be co-chaired by a regulator and an industry member.

5. **OBJECTIVE**

5.1 Vision: To be among the world's most successful strategic aviation safety partnerships.

5.2 Aim: To reduce the rate of accidents and the fatality risk, irrespective of the volume of air traffic within Europe, for European aviation worldwide.

5.3 Mission: Through a successful professional alliance of aviation organizations and their expert representatives, improve civil aviation safety by reducing safety risk and protecting the aviation community, passengers and the general public from harm caused by aviation related accidents and incidents.

5.4 Philosophy: Cooperate and coordinate activities with other safety initiatives world-wide; share data and results. Any information that is offered freely in return will be assessed objectively. Apply and promote safety management principles. Apply a "just culture" approach, treat all safety data and the sources of safety data in a confidential manner, and comply with international regulations and standards of proprietary information and data protection.

5.4 Method: The ESSI is a data driven and goal oriented, risk assessment and management initiative. It shall analyze safety data to determine factors causing or contributing to accidents or incidents and identify safety risks. It shall take advantage of other safety initiatives in order to avoid duplication of

resources and maximize synergy. The ESSI will also conduct prognostic studies to determine potential future hazards. The ESSI will define safety baselines, set up and publish safety objectives and balance potential for risk reduction with costs. It will develop actions plans and allocate resources to achieve these goals, and freely provide results to the aviation industry.

6. SCOPE: LARGE AIRCRAFT, HELICOPTERS AND GENERAL AVIATION

6.1 Three “pillars” constitute the ESSI: ECAST, the European Commercial Aviation Safety Team, EHEST, the European Helicopter Safety Team, and EGAST, the European General Aviation Safety Team. The helicopter activity includes commercial and general helicopter operations.

6.2 ECAST is the first ESSI pillar. It was launched in October 2006 by the team that created the ESSI. ECAST is in Europe the equivalent of CAST in the United States.

6.2.1 Safety initiatives worldwide have successfully contributed to considerably reduce the accident rate of commercial aviation. The world rate of accidents involving passenger fatalities in scheduled commercial operations excluding acts of illegal interference with aviation has dropped by about half from 1986 to 2005. The rate dropped continuously until 2003, where it reached its lowest value of 0.03 fatal accidents per 100 000 departures. After increases in 2004 and 2005, the rate dropped again in 2006 to 0.05. As safety has improved, it has become more difficult to make further improvements.

6.2.2 ECAST aims at further enhancing commercial aviation safety in Europe, and for European citizen worldwide.

6.2.3 ECAST monitors in Europe the completion of the actions plans inherited from the JSSI. These plans were adapted from the work of CAST by the JSSI. They address the reduction of the risks of Control Flight Into Terrain, Loss of Control and Approach and Landing accidents in Europe.

6.2.4 ECAST is developing a new safety work using three phase process: Phase 1 – Identification and selection of safety issues, Phase 2 – Safety issues analysis, and Phase 3 – Development, implementation and monitoring of actions plans. In Phase 1, ECAST will generate a list of safety issues that put the European public at risk and may be appropriate subjects of mitigating action. This list will be made available for further analysis, which is the object of Phase 2. For each safety issue ECAST will develop, assess, select, implement and monitor cost-efficient actions Plans in Phase 3. Using the safety performance metrics defined in Phase 2, ECAST will monitor action plans efficacy to achieve the stated safety objectives, and take corrective actions if necessary.

6.2.5 Two additional ECAST processes concern communication and coordination with other safety initiatives in Europe and worldwide, as recommended by the Global Aviation Safety Roadmap

6.3 EHEST is the second ESSI pillar, and the European component of the IHST, the International Helicopter Safety Team. It was launched in November 2006.

6.3.1 The world accident rate for civil helicopters is still much greater than the correspondent one for fixed wings aircraft.

6.3.2 The European Helicopter Safety Team (EHEST) is the helicopter component of the ESSI. EHEST features representatives of OEMs, operators, regulators, accident investigators and military from across Europe.

6.3.3 In the United States, the IHST was established in 2006 with the goal of achieving 80 per cent reduction of the accident rate by 2016 (www.ihst.org). To address the specificities of the safety of helicopter operations in Europe, the European members of the IHST have established EHEST in November 2006.

6.3.4 The European Helicopter Safety Analysis Team (EHSAT) is the safety team of EHEST. EHSAT has been formed with the purpose of developing a process for analysis of European helicopter accidents and then the performance of the analysis, similar to the function of the Joint Helicopter Safety Team (JHSAT) within the IHST. EHSAT is committed to ensuring that the analysis carried out in Europe will be compatible with the work of the JHSAT.

6.3.5 To tackle the variety of languages used in accident reports and optimize the use of resources, EHSAT has set up regional analysis teams across Europe. Consolidation of results is performed by EHSAT with the support of the EASA.

6.4 EGAST is the third ESSI pillar, to be launched in late 2007.

6.4.1 In Europe, like in other regions of the world, General Aviation is a dispersed community. Air sports and recreational aviation embrace a wide spectrum of airborne activities, ranging from powered flying, ballooning and gliding to newly-invented activities such as sky-surfing, micro light flying and paragliding.

6.4.2 EGAST will take into account the new regulatory materials developed by EASA for general aviation. Getting general aviation safety data and participation from the general aviation community is a challenge. EGAST will build on the national general aviation initiatives in Europe and create a forum for sharing safety data and best practices in Europe.