



TWELFTH AIR NAVIGATION CONFERENCE

Montréal, 19 to 30 November 2012

Agenda Item 2: Aerodrome operations – improving airport performance

2.1: Airport capacity

AIRPORT EXCELLENCE (APEX) IN SAFETY PROGRAMME

(Presented by the Airports Council International)

SUMMARY

This paper presents the Airports Council International's Airport Excellence (APEX) in Safety Programme. It discusses the benefits APEX provides as a dynamic, systematic, peer review approach to safety from the industry. It fosters regional cooperation in the aerodrome field, with the goal of improving safety by decreasing the number of runway incursions and excursions, reducing the number of fatal accidents, and decreasing the number of safety incidents.

Action: The Conference is invited to:

- a) note the information provided about the APEX in Safety Programme;
- b) support the use of the APEX in Safety Programme at airports worldwide;
- c) encourage airport operators to approach ACI for assistance through the APEX in Safety Programme; and
- d) recommend that the ICAO Council supports the implementation of the APEX in Safety Programme and asks the Secretary General to continue ICAO participation in Safety Reviews and sharing of relevant safety information, as provided for in the Memorandum of Cooperation between ACI and ICAO.

1. INTRODUCTION

1.1 The mission of Airports Council International (ACI) is to promote the collective interest of the world's airports and the communities they serve, and to promote professional excellence in airport operations and management.

1.2 ACI works closely with ICAO and airport safety will remain the top issue on the ACI-ICAO agenda. ACI signed a Memorandum of Cooperation on Safety with ICAO in June this year.

1.3 ICAO's Universal Safety Oversight Audit Program (USOAP) 2009 results revealed that of the States audited, 70% did not establish or implement a runway safety program to prevent runway incursions, 44% failed to implement the ICAO standards regarding the certification of aerodromes, and 38% did not ensure that aerodrome operators comply with the requirements related to operational services and physical facilities.

1.4 Recent ACI forecasts indicate that there will be over 10 billion passengers and 130 million aircraft movements per annum by 2029, meaning that aside from other operational measures, the existing world airport capacity would need to double over the next 15 years to be able to accommodate this added capacity demand. The cost would be at least \$1 trillion dollars for capital expenditure projects alone.

1.5 ACI, pursuing its mission of promoting safer airport operations while contributing to international cooperation between ICAO, aviation stakeholders and airports worldwide, has developed the **Airport Excellence (APEX) in Safety** Programme.

1.6 The **APEX in Safety** Programme was launched in September 2011, with a pilot Safety Review being performed in Lomé, Togo. Following this first successful mission, five other pilot Safety Reviews have been conducted, covering four regions, namely Africa, Asia-Pacific, Europe and Latin America.

1.7 The **APEX in Safety** Programme is based on ICAO standards, as well as ACI Best Practices. APEX in Safety combines the mandate for regulatory compliance with the day to day operational needs of airports to maximize operational efficiency, while enhancing the safety standards.

1.8 Moreover, **APEX in Safety** provides several elements tailored to the individual needs of airports and proposes effective solutions which will lead to improving the safety standing of the airports who participate in the Programme by decreasing the safety hazards and risks.

1.9 This paper will invite States to note the contribution of ACI to aviation safety through the **APEX in Safety** Programme and to provide support to their airports seeking to use it, and also to encourage airports to approach ACI about joining the Programme either as a peer reviewer, or as a beneficiary, or both.

2. BACKGROUND

2.1 **APEX in Safety** is based on ICAO Annex 14 Standards and Recommended Practices (SARPS) and ACI Best Practices. It takes the form of a peer review process called a Safety Review, including a self-assessment of the safety level, gap analysis, recommended solutions and design of an action plan following an on-site visit at an airport (the “Host Airport”) which has requested assistance to enhance its level of safety.

2.2 The Host Airport will directly benefit from dedicated ACI support to achieve the goals set in the action plan. Various means of assistance are available, such as access to experts, training, workshops, seminars, working groups, at local, regional and international level.

2.3 The enhanced level of safety will directly benefit the State, especially in regard to the design and implementation of the State Safety Programme (SSP). The State oversight capabilities will receive a boost, as the aerodrome participating in the **APEX in Safety** Programme will display a greater level of compliance with SARPS and the national regulations applicable. The Programme will benefit ICAO by providing a valuable insight regarding the current safety standing and the future capabilities of the visited aerodromes to close the safety gaps identified. The data collected will be used by ICAO in a de-identified form as part of the integrated global aviation safety net, with the ultimate goal of improving aviation safety worldwide.

2.4 The **APEX in Safety** Programme offers a unique opportunity for airports to assess their current level of safety in a manner which is non-punitive and all-inclusive, as well as ensuring that their safety needs are addressed and appropriate solutions are developed. The airports being reviewed benefit from ACI best practices, operational expertise from peer airports and other Programme partners, and contribution from ICAO for the regulatory and SARPS compliance perspective. The full Safety Review process is described in Annex 1 to this paper.

2.5 An important part of the **APEX in Safety** Programme is to ensure that effective assistance is provided to the Host Airport for the implementation of a Safety Management System capable of capturing and addressing safety-related hazards and risks.

2.6 As the Host Airport implements mitigating measures, a periodic evaluation of the airport's safety performance is needed and highly recommended. The Safety Review results should be updated accordingly to reflect the progress made which will also help in maintaining consistency with ICAO's continuous monitoring approach.

2.7 The results from the Safety Review will be confidential. ACI and ICAO will cooperate to ensure the protection of the data related to the Safety Review. The data will be used for the purposes of the Safety Review, and for designing mitigating measures and ensuring safety oversight under the ICAO-ACI cooperation framework.

2.8 ACI has finished the pilot phase of the programme, which has included Safety Reviews performed in Lomé, Togo; San Pedro Sula, Honduras; Maputo, Mozambique; Lusaka, Zambia; Jakarta, Indonesia; and Cluj-Napoca, Romania. The **APEX in Safety** Programme has entered into full implementation phase as of Q4, 2012.

2.9 The ACI World General Assembly held in Calgary, Canada (9-12 September 2012) launched the full **APEX in Safety** Programme for the implementation and scaling up of the operations from 2013. This will help ensure the industry works with States to improve safety at airports worldwide.

2.10 Additional information about **APEX in Safety** is at www.aci.aero/apex or contact Adrian CIORANU, Project Manager APEX – ACI World, at ACioranu@aci.aero.

3. CONCLUSION AND RECOMMENDATION

3.1 The Conference is invited to:

- a) note the information provided about the ACI APEX in Safety Programme;
- b) support the use of APEX in Safety Programme at airports worldwide;
- c) encourage the airport operators to approach ACI for assistance through the APEX in Safety Programme; and
- d) recommend that the ICAO Council supports the implementation of the APEX in Safety Programme and asks the Secretary General to continue ICAO participation in Safety Reviews and sharing of relevant safety information, as provided for in the Memorandum of Cooperation between ACI and ICAO.

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APPENDIX

APEX IN SAFETY PROCESS

The process of carrying out an on-site safety assessment at an airport, making proposals for an Action Plan, and recommending solutions to optimize the safety standing of the requesting airport, is referred to as a **Safety Review**.

The airport requesting the Safety Review is described as the **Host Airport**. The Safety Review reflects industry best practices, while maximizing the operational benefits that the Host Airport needs.

For the Host Airport, **APEX in Safety** will provide the ability to:

Ensure an enhanced level of safety by gaining appropriate knowledge of regulatory standards, best operational practices, and training needs / options;

Self-evaluate its safety performance;

Access a pool of expertise which will enable the Host Airport to mitigate any gaps in safety as required by its specific operating environment.

APEX in Safety will also provide the means to:

Offer assurance to ICAO that adequate safety measures are in place contributing to the regulator/oversight authority fulfilling its obligation to implement, and ensure compliance with, ICAO SARPS;

Acknowledge that the Host Airport is proactively taking measures towards improving its safety standing and becoming fully compliant with the applicable safety regulations;

Understand that the Host Airport would be able to provide the necessary elements to integrate into the State Safety Programme (SSP).

Under **APEX in Safety**, ACI will organize and dispatch a team of experts to the Host Airport to improve its level of safety in specific areas of interest. The Host Airport will receive an on-site visit of a specially set up team of experts – the **ACI Safety Review Team**.

The Host Airport may request areas in which the ACI Safety Review Team may provide specific assistance. The following areas are presented as an example: runway safety, SMS, aerodrome certification, wildlife hazard management, emergency response, FOD management, improvement of AIP documentation, etc.

The Safety Review should last up to one week and the ACI Safety Review Team is comprised of a variable number of safety experts, depending on the complexity of the assessment requested. The team should normally include an ACI Regional Office safety expert, an ICAO-designated safety officer, and one or more Safety Partners (*see below*), under the supervision of a team leader (which could be one of the above mentioned team members). Other experts may be included in the team if the extent of the Safety Review so demands.

The **Safety Partner** is an airport, World Business Partner or other strategic ACI associate which has the required know-how, and volunteers to provide one or more experts to the Host Airport for the purpose of performing the Safety Review.

The ACI Safety Review Team will conduct a gap analysis and assessment of the safety standing at the Host Airport, and will provide a preliminary report at the end of the visit. A Final Report with recommendations will be forwarded to the Host Airport Senior Management within a month of the end of the visit, containing the observations made by the ACI Safety Review Team. The Final Report will emphasize the short, medium and long term solutions that could be put in place by the Host Airport to enhance the level of safety, given its individual operational environment.

Based on the conclusions from the Final Report, the Host Airport will draw up an **Action Plan** which will contain its short, medium, and long term safety improvement goals, as well as the means and actions that are deemed most appropriate to achieve these results.

The overarching **APEX in Safety** goal of improving safety is reached when the Host Airport acts upon the proposed mitigating measures, as safety enhancement is an essential yet on-going activity.

An ACI support team will be ready to guide the Host Airport throughout the process of implementing the most appropriate safety measures as part of their strategy to phase in the mitigating measures.

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