International Civil Aviation Organization

Sixth Meeting of the Asia Pacific Regional Aviation Safety Team (APRAST/6)

(Bangkok, Thailand, 6 – 10 April 2015)

Agenda Item 5:   **Presentations – State / Industry / ICAO**

ESTABLISHMENT OF GO-TEAMS FOR THE ASIA PACIFIC REGION

(Presented by the APRAST Co-Chairs)

SUMMARY

This working paper briefly describes some initiatives taken by other bodies and organisations on the establishment of Go-Teams, and proposes that SEI WG develop a proposal to meet Conclusion APRAST 5/17, which calls for the formation of Go-Teams in the Asia Pacific (APAC) region for runway safety and implementation of SMS for air operators. The paper also offers some areas for SEI WG to consider in the development of the proposal.

1.   INTRODUCTION

1.1   At the APRAST/5 meeting in September 2014, the CFIT sub-group noted the work of the ICAO EUR Regional Expert Safety Team (IE-REST) of RASG-EUR in the area of flight data analysis and air operators' safety management system (SMS), which could be relevant to RASG-APAC. The Runway Safety sub-group noted there was opportunity to implement the Runway Safety Go-Team concept for the APAC region, drawing resources from existing programmes from ICAO, ACI and APEC as appropriate.

1.2   This led to Conclusion APRAST 5/17[1], that APRAST would recommend to RASG-APAC/4 to implement the Go-Team concept for the APAC region, particularly in the areas of runway safety and implementation of SMS in air operators. The RASG-APAC/4 meeting in November 2014 approved the recommendation, and the work item has been incorporated in the Proposed RASG-APAC Work Programme for 2014/2015. APRAST has been tasked to work out the modalities of the Go-Team implementation in its subsequent meetings.

2.   DISCUSSION

2.1   The following paragraphs briefly describe the development of Go-Teams in the areas of runway safety and SMS for air operators:

ICAO Go-Teams

        The ICAO Runway Safety Programme promotes the establishment of runway safety teams at airports as an effective means to reduce runway related accidents and serious incidents Airports are encouraged to establish a runway safety team, which is one of the key outcomes of the ICAO Global Runway Safety Symposium held in Montreal, Canada, in May 2011. The ICAO

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[1] Conclusion APRAST 5/17: That APRAST recommend to RASG-APAC for the ICAO GO Team concept to be implemented for the APAC region, particularly in the area of establishment of runway safety teams and implementation of SMS in air operators. APRAST will then work out the modalities of the GO-Team implementation in its subsequent meetings.

Runway Safety (RS) Go-Team aims to provide international assistance drawing resources from ICAO and partner organisations under the ICAO Runway Safety Programme for the implementation of effective runway safety teams. The RS Go-Team is a voluntary multi-disciplinary assistance visit to an airport performed by an ad-hoc group of experts from ICAO and the partner organisations; it is not an ICAO audit, validation, inspection nor certification. The RS Go-Team provides technical assistance, including training, assessments and gap analysis, expert advice and guidance based on best practice. More information on the modality of the ICAO RS Go-Team is at **Appendix A**.

Regional Aviation Safety Group – Africa (RASG-AFI)

2.2   In 2013, the RASG-AFI proposed the establishment of a Go-Team for the AFI region, which comprised members from ICAO, IATA and ACI to visit a selected number of aerodromes to assist in the establishment and training of local runway safety teams[2]. This proposal was surfaced as part of a proposed runway safety project aimed at achieving the regional safety targets (Abuja safety targets) with respect to the reduction of runway-related accidents and serious incidents. At its second teleconference on 19 March 2014, the RASG-AFI Steering Committee reviewed the implementation modalities of the runway safety project with respect to the number of Go-Teams to be established and the number of airports to be targeted in the first phase of the project. The meeting also reviewed and adopted the draft Terms of Reference (TORs) of the Go-Team. It was agreed that the Go-Team will be supported with a presentation pack, including a field handbook, presently under development by ICAO and IATA.

Regional Aviation Safety Group – Middle East (RASG-MID)

2.3   The RASG-MID/3 meeting in January 2014 agreed with the 14th Meeting of the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG/14) regarding the transfer of aerodrome safety activities from MIDANPIRG to RASG-MID, and accordingly established the Runway and Ground Safety Working Group (RGS WG) to address all aerodrome safety issues. The meeting also agreed to the establishment of a Go-Team to expedite the establishment of runway safety teams in the MID Region.

2.4   The MID Runway Safety Go-Team was officially launched at the 2nd MID Regional Runway Safety Seminar held on 2-4 June 2014 in Dubai, UAE. A guidance document for the conduct of MID Runway Safety Go-Team visits was prepared (see **Appendix B**) and the initial plan was to conduct two visits per year. The first Go-Team visit was to Khartoum, Sudan in end of 2014 and the second one would be to Muscat, Oman beginning of 2015. The Seminar noted that the following points

   a.   A runway safety team provides an effective and inexpensive tool to enhance runway safety;
   b.   Participation by all stakeholders in the local runway safety teams is paramount; and
   c.   The IATA Global Aviation Data Management (GADM) could be used by the local runway safety teams and runway safety Go-Teams to identify areas of improvement.

Regional Aviation Safety Group – Europe (RASG-EUR)

2.5   The RASG-EUR/2 meeting in February 2013 agreed to establish a group of experts, the ICAO EUR Regional Expert Safety Team (IE-REST), which comprised members from EASA, Austria, France, Finland, Latvia, the United Kingdom and the United States. Subgroups were created under IE-REST, of which the IE-REST Runway Safety Group (IE-RSG) would address issues and develop SEIs related to runway safety, including support for the establishment and operation of Local Runway Safety Teams (LRSTs), while the IE-REST Flight Data Analysis and Air Operator Safety Management System Group (IE-FDG) would address issues and develop SEIs related to flight data

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[2] APRAST/5-IP/2: RASG Activities in other regions

analysis and air operators' safety management systems (SMS). This included review of current flight data analysis and SMS guidance material for applicable best practices and risk mitigations.

ACI Airport Excellence (APEX) in Safety programme

2.6   The ACI Airport Excellence (APEX) in Safety programme helps airports identify and mitigate safety vulnerabilities through peer review missions, education, mentoring and best practice guidance[3], based on ICAO Annex 14 — Aerodromes, Annex 19 — Safety Management and ACI publications relating to operational safety.

2.7   ACI would typically assemble a team of 6 to 7 experts who systematically would review the safety components at an airport over a period of a week, or two weeks for a larger airport. ACI would then prepare a series of recommendations for the airport's consideration. The programme is positioned as a review, and not an audit, and airports have used the programme to perform a gap analysis of their certification efforts and used the resulting report to provide a road map to reach their goals of becoming certified. Some airports, particularly in the United States, have used the reviews to help them assess and develop their safety management system.

Asia Pacific Economic Cooperation (APEC) Airport Safety Evaluation Visit Program

2.8   The Transportation Working Group (TPTWG) of the APEC aims to achieve the liberalisation of transportation services and works to enhance the safety of APEC transport systems to encourage economic development in the Asia-Pacific region. Under the TPTWG's projects, the Airport Safety Evaluation Visit Program (ASEVP) aims to assist APEC economies to effectively implement all airport safety requirements in accordance with ICAO Annex 14 Volume 1 – Aerodromes. The ASEVP is focused on finding cost effective solutions to build up safety capacity at airports, and introduce the Runway Safety Action Team (RSAT) concept as the best practice for identifying, mitigating, and continuous monitoring of runway safety risks on airport grounds. A team of 3-4 airport safety experts from experienced APEC economies would visit two medium-sized regional airports per host economy. The ASEVP had handled site visits to Vietnam, Indonesia, Malaysia and the Philippines.

Considerations

2.9   Implementation of Go-Teams for runway safety and SMS of air operators in the APAC region requires in-depth consideration of the modality of the Go-Teams. The list of considerations below serves as a guide for discussion:

Establishment and Objectives

     a. The development of relevant Terms of Reference (TORs) for the respective Go-Teams
     b. The formulation of a strategy to effectively lower runway safety risks and increase implementation of air operator SMS with given resources and timelines.
     c. The development of a governance framework to ensure neutrality of the Go-Teams and competence of its personnel.

Implementation

     d. The development of a plan with clear implementation timelines for the purpose of tracking progress
     e. The development of procedures, particularly with regard to the number of teams to be deployed, number of selected airports to be assisted, selection criteria of such airports

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[3] HLSC/15-WP/92 ACI Airport Excellence (Apex) in Safety Programme

    f.   The roles and commitment of stakeholders in supporting the work of the Go-Teams, including the airports involved as well as stakeholders who may have data and information to support the Go-Team missions

    g.   Consideration on the roles of COSCAPs and Regional Aviation Safety Teams (RASTs) in supporting the establishment and implementation of Go-Teams

Sustainability

    h.   Consideration for a cost recovery approach to the implementation of the project.

    i.   Alignment with and/or partnership with existing Go-Team programmes for greater synergy and minimal duplication

2.10   It is proposed for more focused discussions to take place at APRAST, to develop a proposal for the establishment of the Go-Teams. The proposed SEI WG under APRAST has been tasked to identify and develop safety enhancement initiatives and would be well-placed to conduct further study. It is envisaged that further research on the modality should be done, along with consultations with stakeholders such as IATA, ACI, ICAO APAC Regional Office as necessary, in the development of the proposal.

2.11   Given the extensive work done by industry, international organisations and States, this paper may not have fully covered all Go-Team initiatives on aerodrome safety and SMS. It would be useful to carry out more research and discussion on Go-Teams for SMS in particular, in the course fof developing the proposal.

3.   ACTION BY THE MEETING

3.1   The Meeting is invited to:

    a)   Note the plan for the establishment of Go-Teams for the APAC region in the area of establishment of runway safety teams and the implementation of SMS by air operators; and

    b)   Request SEI WG to develop a proposal for the establishment of Go-Teams for runway safety and SMS for air operators for the APAC region.

— END —

RUNWAY SAFETY GO-TEAM METHODOLOGY

INTRODUCTION

The ICAO Runway Safety Programme (RSP) promotes the establishment of Runway Safety Teams (RSTs) at airports as an effective means to reduce runway related accidents and serious incidents. The requirement for airports to establish a Runway Safety Team (RST) establishment is one of the main outcomes of the ICAO Global Runway Safety Symposium held in Montreal, Canada, in May 2011.

The ICAO Runway Safety (RS) Go-Team is aimed to provide international assistance from ICAO and RSP partner organisations for the implementation of effective RSTs to improve runway safety. The RS Go-Team is a voluntary multi-disciplinary assistance visit to an airport performed by an ad-hoc group of experts from ICAO and RSP partner organisations; it is not an ICAO audit, validation, inspection nor certification.

The objective of a RS Go-Team is to assist a State and airport in establishing an RST, supporting the implementation stage by providing technical assistance, including training, assessments and gap analysis, expert advice and guidance based on best practice.

Runway Safety is a global safety priority. The use of coordinated and regionally deployed RS Go-Teams allows the use of existing expertise to foster the establishment and operation of RSTs.

The work of the RST, once established, will be supported by the ICAO Regional Office and the Regional Aviation Safety Group (RASG), which support implementation efforts related to the regional safety priorities and targets and the ICAO Global Aviation Safety Plan.

A RS Go-Team will be established based on a recommendation from the RASG, proposal by ICAO, or a request received from a State or airport to ICAO. RSP partner organisations will be informed of RS Go-Team plans and invited to participate.

When ICAO receives a request for a RS Go-Team from an airport, it will coordinate with ACI, particularly in relation to the Airport Excellence (APEX) in Safety programme to ensure the necessary coordination to avoid any potential duplication in the activities. The ACI APEX in Safety programme is designed to help airports identify and mitigate aviation safety vulnerabilities through peer review missions, education, mentoring and best practice guidance. These peer review missions involve 1 – 2 weeks on site depending on the complexity of the airport being visited. The visit team, which usually includes an ICAO member, works with the host airport to cover airside operations on the runways, taxiways and aprons, infrastructure including lights, markings, signage, Rescue and Fire Fighting as well as reviewing documentation and systems such as Safety Management. The output of the APEX review is a report containing recommendations, mitigation strategies and relationships with industry resources that can be called upon to provide assistance.

It is important to note that while the APEX team will address Runway Safety and Runway Safety teams, the team will focus on ensuring that a team is in place following ICAO and ACI best practice, or if not, create the framework to facilitate its creation to improve operational safety. The ICAO Runway Safety Programme Go-Team missions are built upon a complementary model, however, the focus is primarily limited in scope to Runway Safety, involving 4 days on site depending on the existence and maturity of a Runway Safety Team at, and needs of, the airport being visited. ICAO and ACI will coordinate on the complementary programmes to ensure there is synergy and no duplication in activities between the two programmes at any airport being considered for both an APEX safety review and RS Go-Team.

RS GO-TEAM MISSION PHASES

The RS Go-Team mission can be divided into the following phases:

Preparation

> The coordination of the Go-Team preparation will be led by the ICAO Regional Office.

> Phase I – Selection of candidate State and airport (at least twelve weeks prior to the mission)

>> Key actions and considerations:

>> - Criteria for the selection: State or airport request; USOAP audit results (e.g., non-existence of an RST); outcome from RASG activities (e.g., regional concerns based on data, reports), identified runway safety hazards/risks; high number of runway safety incidents/accidents; traffic volume, aerodrome layout complexity, proposal by a safety stakeholder/partner, etc.
>> - Go-Team Pre-planning: Details of the eventual Go-Team members and mission to be communicated well in advance to interested parties: airport, State and partners, meetings, mission date, time, and location

> Phase II – Data collection

> Data to be collected and assessed before a mission is agreed:

> - Identification of potential stakeholders (local and international expertise available)
> - Existing safety data and information on existing local runway safety initiatives and related implementation plans
> - Capture available airport-specific data (surface events, LOAs/SOPs, training programmers, etc.)
> - Request detailed information on hazards and risks, knowledge and experience on the airport, hot spots (request ATC Officers to update a list of

every instance of wrong turns, requests for amplified taxy instructions, vehicles in the wrong place, etc.)
- Communications with relevant partners
- Send the received information and data to the Go-Team members as far in advance as possible

Phase III – Coordination (at least three weeks before the mission)

Co-ordination with State and RS Go-Team members on the mission programme, including logistics. Mechanisms for an effective and efficient RS Go-Team mission include:

- Identification of Focal Points of Contact among the partners
- Teleconferences
- RS Go-Team Agreement (see Attachment A)
- Proposed dates
- Team logistics: tickets, hotels, meeting rooms, transportation, visas, etc.
- Roles and responsibilities
- Expected outcomes: Report, detailed implementation plan, follow-up
- PowerPoint presentations should be previously coordinated to avoid duplication of information and ensure focus on the RST's activities and expected outcomes. One presentation per topic, which can combine particular approaches from different organizations.
- Agree on agenda for the RS Go-Team
- Schedule and coordinate airport visit

At least one week prior to the RS Go-Team mission:
- Consolidate updates and information received from the team members and industry stakeholders.
- Distribute the final agenda and supporting documents to the team and the interested stakeholders (Airport, State, etc.)

On-site activities (suggested: 4 days)

The Go-Team will focus on establishing an effective RST, ensuring that its members clearly understand what they should do and how to do it, based on their roles and responsibilities. Activities will be, to the maximum extent possible, in accordance with the procedures detailed in the ICAO RST Handbook and references in the ICAO Runway Safety i-Kit.

Phase IV – RS Go-Team deployment (See Appendix B)

- Two days preparation briefing (knowledge transfer and sharing of best practices): 1- RS Go-Team on-site coordination and agreement; training, detailed data, hazard identification and risk mitigation strategies, action plan, reporting, sharing and use of safety information, stakeholders; 2- RST Terms of reference, which will include accountability, roles, duties and responsibilities.
- Two-day airport visit and de-briefing (following local RST framework and proceedings): 1- Go-Team, visit to the airport and relevant facilities, installations and equipment; 2-Go-Team review of airport operations and procedures, identification of hazards, reporting system and planned risk assessment; 3- Agreement on actions to be taken, responsibilities, de-briefing.

Phase V – Report, Action Plan and Recommendations (responsible: local RST)

Prepare a technical report, including observations and recommended mitigation actions, as well as other recommendations as may be required:

- Contents
- Hazards and risk mitigation proposals
- Areas of improvement and recommendations
- Expected outcomes
- Identified Hot Spots
- Recommendations and plan for action, including:
  - prioritized actions and associated timelines
  - Timeframe for the resolution of identified safety issues
  - Resource planning
  - Funds
  - Responsibilities
  - Potential barriers for the establishment and proper functioning of the RST
  - Stakeholder Management Plan

Implementation and follow-up

Phase VI – Implementation (responsible: local RST)
- RST meetings (frequency, format, agenda, chairmanship, quorum, etc.)
- Resolution of identified safety issues

Phase VII – Follow-up

Continuous monitoring of progress will be done by the ICAO Regional Office within the RASG framework as reported by the State, considering:

- Action plan

- Baseline measurement: comparison between pre- and post-implementation of safety improvements
- Annual performance measurement of the operational benefits achieved, to be included in the Regional Annual Safety Report
- Possible future Follow-up Go-Team missions

APPENDIX A – LIST OF NATIONAL/LOCAL AGENCIES AT AN AIRPORT EXPECTED TO PARTICIPATE IN THE RS GO-TEAM MISSION

The RS Go-Team mission activities should include the participation of representatives from the following as applicable to runway safety (users of the manoeuvring area) at the airport and as needed for the Go-Team mission objectives, expected to be the same as the existing and planned members of the airport Runway Safety Team (RST). The participants are to be invited by the RST chair and/or airport operator.

- Aerodrome operator
- Air Traffic Services provider
- Air Operators including general aviation and military
- Civil aviation authority
- Accident and Incident Investigation Authority
- Ground support services providers
- Emergency response service providers
- AVSEC services providers
- Flight crew familiar with the airport
- Subject matter experts (meteorologists, ornithologists, etc.)
- Construction contractors

Consideration may be given to periodically inviting members of other airport RSTs to enable sharing of information and lessons learned.

Day 1	Registration and Opening
	The Runway Safety Program - Perspectives
	- Global - ICAO Global Runway Safety Programme - Related ICAO SARPS, PANS and guidance material - Regional - RASG - Safety Enhancement Initiatives, Detailed Implementation Plans and Annual Safety Report - Local - Regulator - ANSP - Air Operator - Airport operator - Other Service providers at the airport
Day 2	Safety management
	- Hazard Identification - Risk Assessment - Safety Oversight
	The Runway Safety Team (RST)
	- Introduction - The ICAO RST handbook - Implementation of the RST - Terms of reference for the RST - Responsibilities - Sharing and use of safety information
	Airport's briefing
	- Identification of Hot Spots - Safety briefing (Identification, safety vests, instructions, leaders, communications, clearance, traffic, etc.)
Day 3	Airport visit – the intent of the airport visit is to identify existing and new hazards as well as to observe rectification measures that have been implemented based on previous findings.

	- ATC Control Tower - Runway and runway strips - Taxiways and taxiway strips (focusing on runway safety issues only) - Runway End Safety Areas (RESA) - Visual aids - Obstacle control - FOD control and management - Wildlife control and management - Any active construction sites Debriefing after the visit to the airport - Members present new projects, hazards, or events identified by the RST and its stakeholder's own safety management systems. - The team then: - defines the hazards, - identifies the safety risk assessments to be conducted, and - proposes recommendations for managing the safety risk - reviews arrangements to ensure the sustainability of the RST
Day 4 (half-day)	Go-Team draft report for RST Action log: Document findings and action plan Conclusions and closing

APPENDIX C – LIST OF REQUIREMENTS IN STATE/AIRPORT FOR THE GO-TEAM MISSION

- Focal point coordinator

- Administrative support staff

- Meeting room & audio-visual equipment

- Simultaneous interpretation (if required)

- Transportation to/from airport, meeting venue and hotel for team

- Refreshments/ amenities

- Invitation of local participants

- Coordinate the schedule for the meetings and mission

- Airport visit coordination, e.g. security access, transportation, facilitation, IDs, safety equipment (vests, etc.)

- Coordinate the presentations by national and local organisations

- Prepare reference documents, information and data

APPENDIX D – LIST OF KEY REFERENCES

- ICAO Runway Safety Team Handbook

- Manual on the Prevention of Runway Incursions (ICAO Doc 9870)

- Safety Management Manual (ICAO Doc 9859, 3rd edition)

- ACI Runway Safety Handbook 2014

- CANSO Runway Safety Maturity Checklist

- IATA RERR Toolkit

- European Action Plan for the Prevention of Runway Excursions (Edition 1.0)

- European Action Plan for the Prevention of Runway Incursions (Edition 2.0)

- FAA Runway Safety Action Team (RSAT) Tool Kit v2.0

The ICAO Runway Safety iKit contains available Runway Safety references and tools from the Runway Safety Programme partners:
http://www.icao.int/safety/RunwaySafety/Pages/default.aspx

The Second MID Regional Runway Safety Seminar

(MID-RRSS/2)

(Dubai, UAE, 2-4 June 2014)

GUIDANCE FOR THE CONDUCT OF MID RUNWAY SAFETY GO-TEAM VISITS

1. **Introduction:**

   The requirement of Runway Safety Team (RST) establishment is one of the main outcomes of the ICAO Global Runway Safety Symposium held in Montreal, Canada, May 2011. The first MID Regional Runway Safety Seminar (Amman, Jordan, May 2012) has also recommended the establishment of RST. Accordingly, the RASG-MID/2 meeting (Abu Dhabi, UAE, 12-14 November 2012) through Conclusion 2/4 urged MID States to establish Runway Safety Teams (RSTs) in their International Aerodromes.

   The implementation of the RASG-MID/2 Conclusion 2/4 is not up to the expectations and many of the MID States have not yet established Runway Safety Teams. Therefore, the RASG-MID/3 Meeting (Kuwait, 27-29 January 2014) agreed through Conclusion 3/2 that the mechanism of Runway Safety (RS) Go-Team be endorsed to expedite the establishment of RSTs and improve Runway Safety in the MID Region.

2. **Objectives and Scope**

   The main objective of the RS Go-Team is to provide necessary assistance to States for the establishment of Local Runway Safety Teams (RSTs) in the international aerodromes.

   Other objectives include supporting MID States to improve runway safety and the implementation of aerodrome certification as well as provision of necessary guidance to reduce the USOAP Lack of Effective Implementation (LEI).

   It is to be highlighted that the RS Go-Team will be targeting MID States (Regulators); nevertheless, the onsite visits should be attended by all stakeholders (Regulators, Aerodrome operators, ANSPs and airlines) in order to foster the collaborative approach.

   The ICAO RS Go-Team is different in term of scope and objectives from other programmes that address mainly the aerodrome operators.

   The RS Go-Team mission is not an audit, validation, inspection or certification.

   The RS Go-Team main activities include multi-disciplinary assistance missions to improve runway safety through LRST and to help States improving the implementation of aerodrome certification.

   The RS Go-Team mission will provide technical assistance, assessments and gap analysis and guidance.

The RS Go-Team will take into consideration the ICAO Runway Safety Team Handbook and the other guidance materials included in the Runway Safety i-KIT which is available at: http://www.icao.int/safety/Implementation/Pages/iKITs.aspx.

Decisions on the implementation rest with the State, airports, air operators and ANSPs. The RS Go-Team Partners have no direct control over the implementation; nevertheless, the Go-Team will follow-up on the implementation as necessary.

3. MID RS Go-Team Composition:

The ICAO MID Regional Office is the coordinator of the RS Go-Team activities.

ACI (APAC), FAA and IATA (MENA) would support the MID RS Go-Team.

Composition of the Go-Team includes members from the following volunteers: UAE, Egypt, ICAO, ACI, FAA, and IATA ensuring a multidisciplinary representation (Aerodrome Experts, ANS Experts, pilots or airline background and experience).

4. Criteria for selection of States/airports to be visited:

The following criteria will be considered for selecting the States/aerodromes to be visited:
a)   requests made by the State;
b)   volume of traffic;
c)   number of recorded incidents/accidents;
d)   complexity of aerodrome layout;
e)   USOAP-CMA Effective Implementation (EI);
f)   status of aerodrome certification; and
g)   recommendations made by safety partners (IATA to provide data on identified airports).

5. RS Go-Team visit duration

The maximum duration of the RS Go-Team visit is five days, including workshops on RST establishment and Aerodrome Certification. The exact duration (3 to 5 days) depends on the level of activities in the visited State.

6. Fund

The visited State should bear the cost of the RS Go-Team visit (cost recovery basis). For the States facing financial problems, ICAO and donor States/Organizations would explore other funding possibilities

-END-