



## 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 a RST, supporting the implementation stage by providing technical assistance, including training, assessments and gap analysis, expert advice, guidance and recommendations 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. The cost of participation by the ICAO member is normally covered by the inviting entity, while RSP partners will voluntarily contribute to the activity.

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 3 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 to the States in the Region to which it is accredited.

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, airport movement statistics 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 taxi instructions, vehicles in the wrong place, etc.)
- Airdrome control tower (TWR) and Approach control units structure (functions performed by different control or working positions)
- 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
- 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: 3 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)

- One day 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.  
*Note: A guidance material (check-list) could be used to facilitate general assessment of the main topics of the airport operations.*

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 plans for action 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
- 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.



**APPENDIX B – TEMPLATE FOR RS GO-TEAM ON-SITE MISSION PROGRAMME/AGENDA**

<p><b>Day 1</b></p>	<p>Opening and Welcome</p> <p>The Runway Safety Program - Perspectives</p> <p>Global:</p> <ul style="list-style-type: none"> <li>• ICAO Global Runway Safety Programme</li> <li>• Related ICAO SARPS, PANS and guidance material</li> </ul> <p>Regional:</p> <ul style="list-style-type: none"> <li>• RASG - Safety Enhancement Initiatives, Detailed Implementation Plans and Annual Safety Report</li> </ul> <p>Safety management</p> <ul style="list-style-type: none"> <li>• Hazard Identification</li> <li>• Risk Assessment</li> <li>• Safety Oversight</li> </ul> <p>The Runway Safety Team (RST)</p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• The ICAO RST handbook</li> <li>• Implementation of the RST</li> <li>• Terms of reference for the RST</li> <li>• Responsibilities</li> <li>• Sharing and use of safety information</li> </ul>
<p><b>Day 2</b></p>	<p>Airport's briefing</p> <ul style="list-style-type: none"> <li>• Identification of Hot Spots</li> <li>• Safety briefing (Identification, safety vests, instructions, leaders, communications, clearance, traffic, etc.)</li> </ul> <p>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.</p> <ul style="list-style-type: none"> <li>• Airdrome Control Tower and Approach control units</li> <li>• Runway and runway strips</li> <li>• Taxiways and taxiway strips (focusing on runway safety issues only)</li> <li>• Runway End Safety Areas (RESA)</li> <li>• Visual aids</li> <li>• Obstacle control</li> <li>• FOD control and management</li> <li>• Wildlife control and management</li> <li>• Rescue and firefighting unit</li> <li>• Any active construction sites</li> </ul>



<b>Day 3</b>	<p>Debriefing and Go-Team draft report for RST</p> <ul style="list-style-type: none"> <li>• Members present new projects, hazards, or events identified by the RST and its stakeholder’s own safety management systems.</li> </ul> <p>The team then:</p> <ul style="list-style-type: none"> <li>• Defines the hazards,</li> <li>• Identifies the safety risk assessments to be conducted, and</li> <li>• Proposes recommendations for managing the safety risk</li> <li>• Reviews arrangements to ensure the sustainability of the RST</li> </ul> <p>Action log: Document findings and action plan</p> <p>Conclusions and closing</p>
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## APPENDIX C – RS GO-TEAM VISIT MISSION REPORT FORMAT

### REPORT ON RUNWAY SAFETY GO-TEAM VISIT TO

*(AIRPORT NAME)*

*(Location, dates)*

#### 1. Introduction

1.1 To support the establishment of effective Runway Safety Teams (RSTs), ICAO and its Runway Safety Programme Partners conduct Runway Safety Go-Team missions at requesting airports. The objective of the Go-Team mission is to provide airports with international technical assistance for the implementation of RSTs, including training, assessments, gap analyses, expert advice and guidance, based on best practices.

1.2 A Runway Safety Go-Team mission was carried out to the *(Airport name and code)* from *(dates)*, by the following RS Go-Team members:

- a) *Member name, ICAO office*
- b) *Member name, RSP partner organization*
- c) *Member name, RSP partner organization*
- d) *Member name, RSP partner organization*

#### 2. Objectives of the mission

1.1 The main objective of the RS Go-Team visit was to provide necessary assistance to the *State CAA* and *Airport name* Runway Safety Team (RST) to:

- a) support improvement of the national runway safety program; and
- b) improve performance of the established RST.

2.1 It is to be highlighted that this mission was not an audit or a comprehensive airport inspection.

#### 3. Recommendations

3.1 The RS Go-Team concluded the following recommendations to the management of *State CAA*:

- a) *Recommendation 1*
- b) *Recommendation 2*
- c) *Recommendation 3*



3.2 The RS Go-Team concluded the following recommendations to the management of local airport Service Providers towards SMS implementation:

- a) *Recommendation 1*
- b) *Recommendation 2*
- c) *Recommendation 3*

3.3 The RS Go-Team concluded the following recommendations in the area of aerodrome operations:

- a) *Recommendation 1*
- b) *Recommendation 2*
- c) *Recommendation 3*

3.4 Additional recommendations (*may be related to ATM, airside safety, wildlife management etc.*):

- a) *Recommendation 1*
- b) *Recommendation 2*
- c) *Recommendation 3*

#### **4. RST Meeting**

4.1 The RS Go-Team participated in the *Airport name* RST meeting on *date*. The meeting included (*brief description of the meeting topics and observations*).

4.2 In order to further improve performance of the RST, the RS Go-Team concluded the following Recommendations:

- a) *Recommendation 1*
- b) *Recommendation 2*
- c) *Recommendation 3*

#### **5. Agreed outcomes and follow-up actions**

5.1 During the closing meeting, the following actions were agreed as a follow-up to the RS Go-Team:

- a) *Action 1*
- b) *Action 2*
- c) *Action 3*



## 6. Disclaimer

6.1 It should be noted that all recommendations given in the report represent the expert view of relevant experts of RS Go-Team. Before implementing the above recommendations *Airport name* RST, local service providers and *State CAA* should perform relevant risk assessment, cost-benefit analysis and ensure that proposed changes won't affect the safety of operations in other areas.

6.2 The RS Go-Team is not imposing any solutions and does not imply that all recommendations should be implemented as stated.

6.3 ICAO or other organizations whose experts participated in the RS Go-Team will bear no responsibility for any actions taken by *Airport name*, local service providers and/or *State CAA* in the implementation of the above recommendations.

## 7. Officials Contacted

7.1 The following officials were met during the Mission:

- a) *Official 1 name, position, organization*
- b) *Official 2 name, position, organization*
- c) *Official 3 name, position, organization*

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## APPENDIX D – 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 E – 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, 3<sup>rd</sup> 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>