



ICAO SAFETY



FLIGHT  
SAFETY  
FOUNDATION



IFALPA  
The Global Voice of Pilots



# Runway Safety Go Team missions

Aviation's #1 Safety Priority

<http://www.icao.int/safety/RunwaySafety>

Celso FIGUEIREDO

Regional Officer, ANS – ICAO EUR/NAT Regional Office

EAPPRI Edition 3.0 Runway Safety Seminar  
Lisbon, 18 October 2018



ICAO SAFETY



FLIGHT SAFETY FOUNDATION



# Runway Safety Programme



AIRPORTS COUNCIL  
INTERNATIONAL



ICAO



The Global Voice of Pilots



# Runway Safety Programme Mandate

The establishment of **coordinated, collaborative and multidisciplinary efforts** within ICAO and between ICAO and **Runway Safety Programme Partners** to promote the implementation of **strategies to reduce** the number and severity of **runway safety-related accidents and incidents on an on-going basis.**

## Our Mandate





# Expected Outcome



*reduce the  
number and  
severity of  
runway safety-  
related accidents  
and incidents.*

# Measuring Results

How will we know if our efforts are effective?

1. Monitor and measure the number, activities and maturity of RSTs globally. (RST survey & RS Go-Teams)
2. Monitor and measure the rate of runway-safety-related occurrences at the airport, State, regional and global levels. (RSAP-WG)



# Evolution of the Runway Safety Programme (up to 2015)

- ICAO NAM/CAR/SAM Regions Runway Safety/Incursion Conference, Mexico City, October 2002
- ICAO/ERAU Runway Safety Toolkit - 2005
- ICAO Manual on the Prevention of Runway Incursions First Edition — 2007
- ICAO/FAA Runway Incursion Severity Classification (RISC) – 2009
- ICAO Assembly Resolution 37-6 on Runway Safety - 2010
- ICAO/IATA Runway Excursion Risk Reduction Toolkit - 2011
- ICAO Global Runway Safety Symposium, Montreal, May 2011
- Establishment of ICAO Runway Safety Programme in collaboration with partners – 2011
- ICAO RSP Regional Runway Safety Seminars - 2011 – 2015
- ICAO Runway Safety Implementation Kit (I-Kit) and new web site - 2014
- ICAO Runway Safety Team Handbook - 2014
- ICAO Runway Safety Go-Team Methodology – 2014
- RASG Runway Safety SEIs, DIPs, WGs, Regional Safety Advisories/Circulars - 2015



ICAO SAFETY



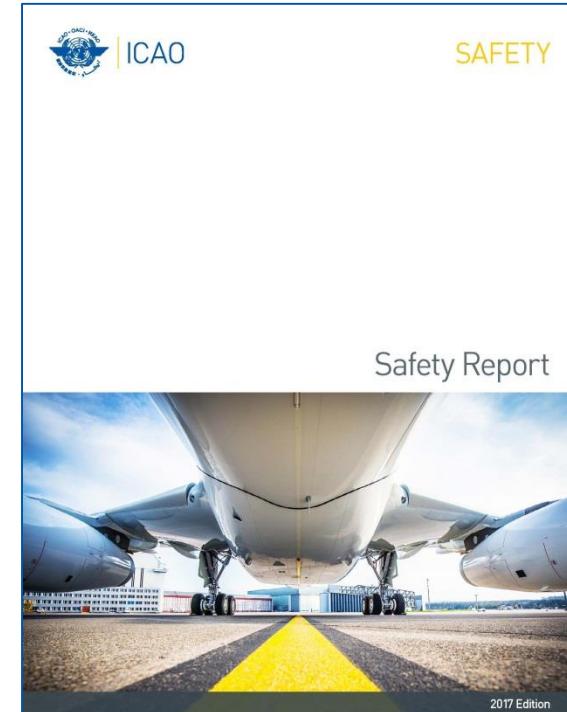
FLIGHT  
SAFETY  
FOUNDATION

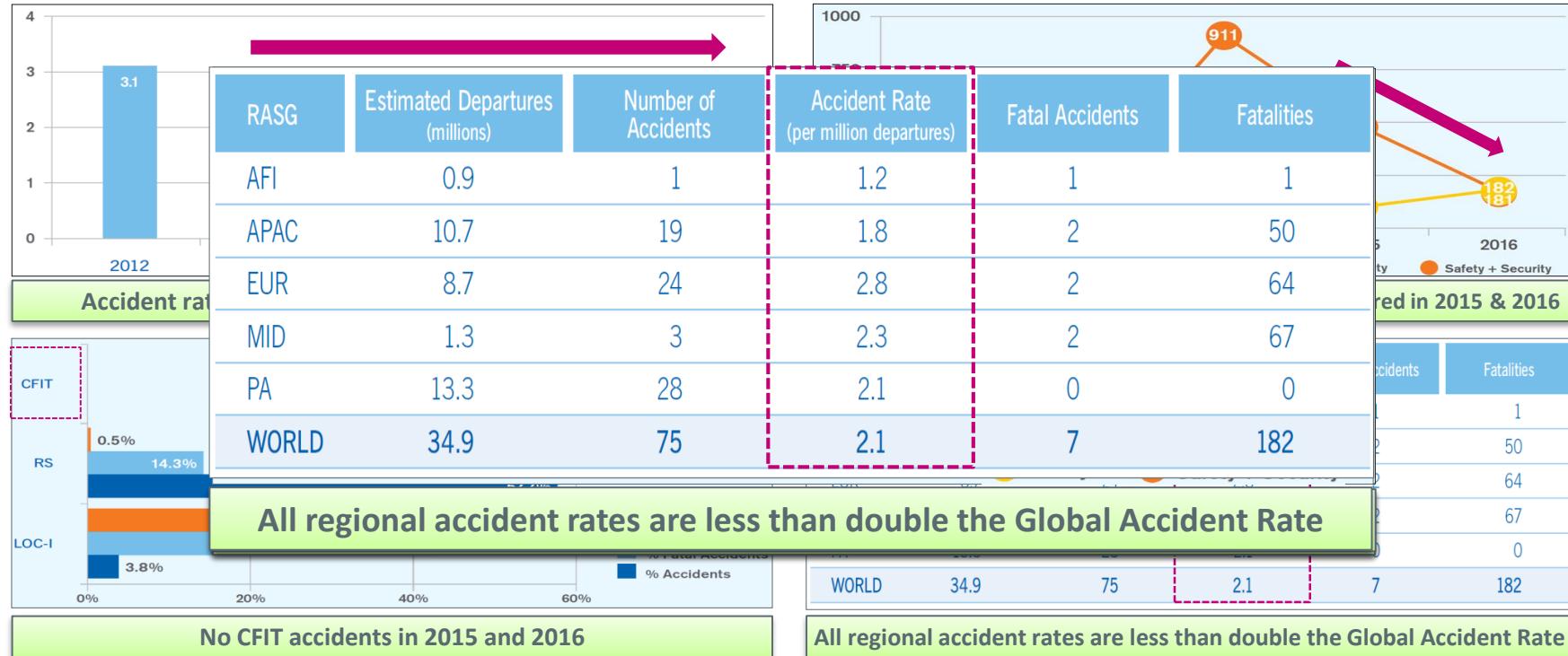


IFALPA  
The Global Voice of Pilots



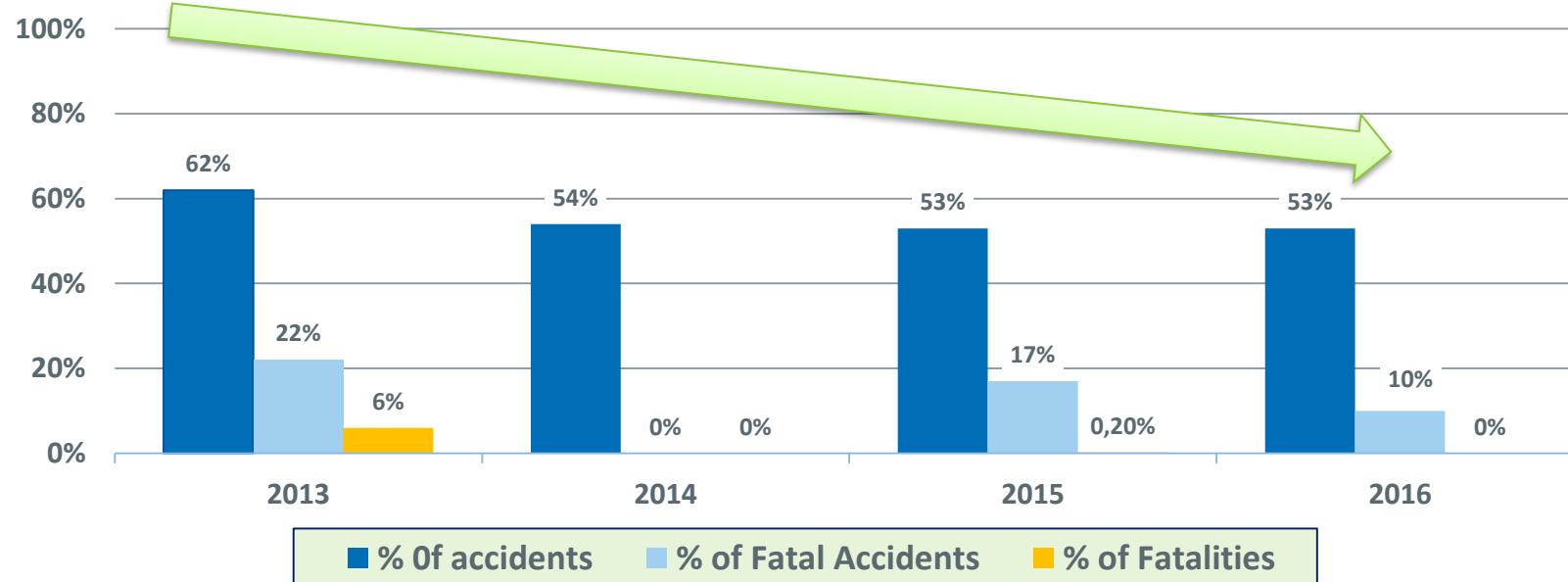
# ICAO ANNUAL SAFETY REPORT 2017 EDITION





Source: [2017 Safety Report](https://www.icao.int/safety/Pages/Safety-Report.aspx) (<https://www.icao.int/safety/Pages/Safety-Report.aspx>)

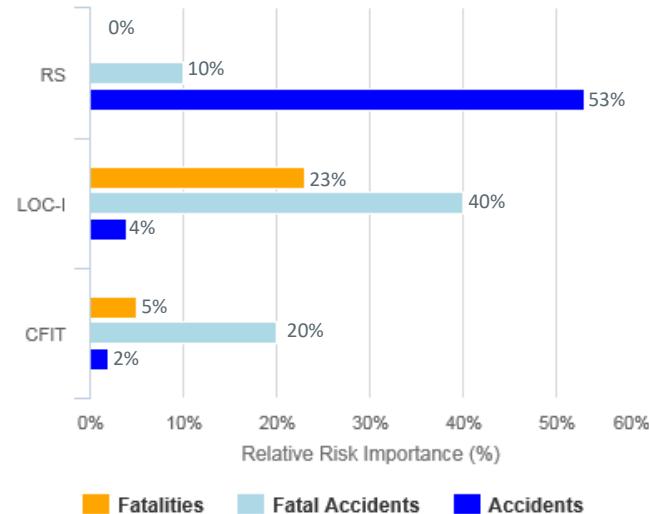
# Runway Safety related Accidents



# Risk Distribution for the Top 3 Safety Priorities

*Scheduled commercial above 5 700kg for 2012 - 2016*

EUR/NAT



Continue focus  
on the  
**Top 3 Safety Priorities**  
(RS, CFIT, LOC-I)



Source: iSTARS 3.0 – ADREP et al. (<https://portal.icao.int/space>)

# Second Global Runway Safety Symposium 2017

- Outcomes:
  - Local forum to exchange best practices in improving runway safety
  - Promoted improved runway safety worldwide through global, regional, national and airport local collaboration
  - Launched and supported the ICAO-led collaborative Runway Safety Programme – Global Runway Safety Action Plan



# Runway Safety Action Plan Working Group (RSAP-WG)

- Established February 2017
- Comprised of experts nominated by Runway Safety Programme partners
- Objectives:
  - 1) Review runway related accident and serious incident data;
  - 2) Conduct a safety risk assessment of runway safety accident occurrence categories;
  - 3) Identify the runway safety risk priorities and high risk accident categories;
  - 4) Identify appropriate global mitigation actions; and
  - 5) **Develop a Global Runway Safety Action Plan.**





ICAO SAFETY

Runway Safety Programme – Global Runway Safety Action Plan

November 2017

Global Runway Safety Action Plan

### Contents

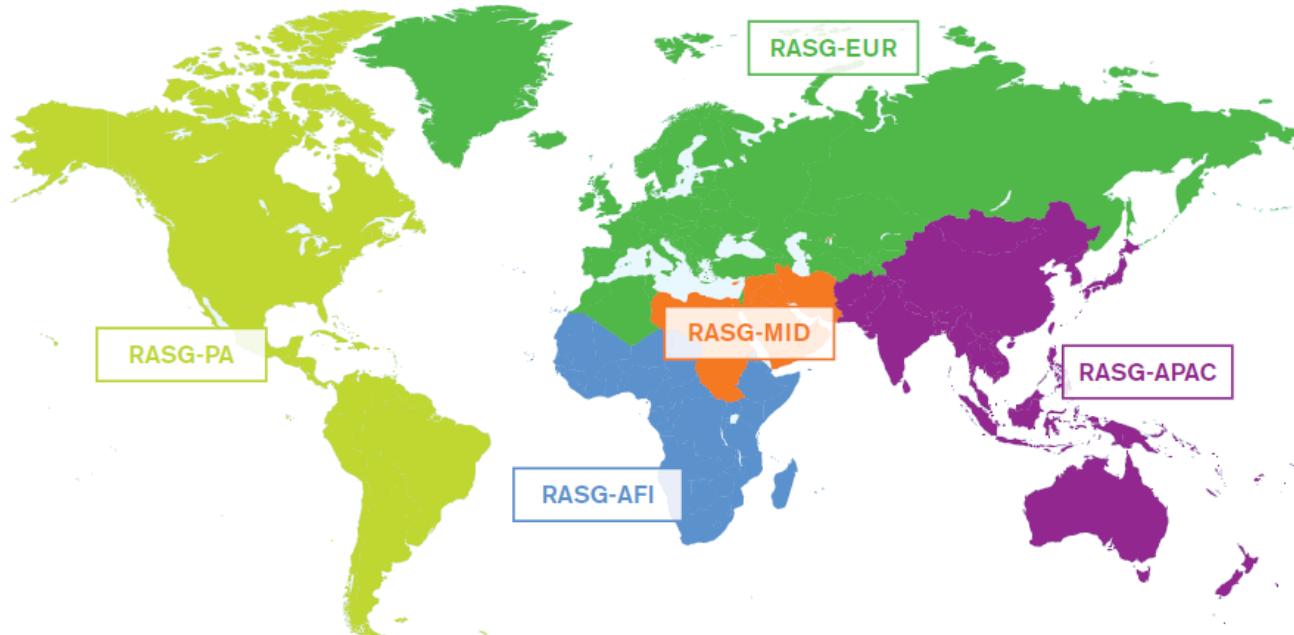
Background	2
Runway Safety Teams	2
Other ICAO Initiatives	2
Global Priorities for Runway Safety	3
Runway Excursion and Runway Incursion Top Contributing Factors	4
Runway Excursion Top Contributing Factors (2012-2016)	4
Runway Incursion Top Contributing Factors	6
Runway Safety Recommended Actions	7
ICAO	8
Runway Safety Programme Partners	9
Regional Safety Oversight Organisations (RSOs), Regional Aviation Safety Groups (RASGs)	10
State Civil Aviation Authorities, Aircraft Operators, Air Navigation Service Providers, Aerodrome Operators, Aircraft Manufacturers	11
State Civil Aviation Authorities	13
Aircraft Operators	15
Air Navigation Service Providers	18
Aerodrome Operators	21
Aircraft Manufacturers	24
Appendix 1 – ICAO Runway Safety Accident Category Definitions	26
Appendix 2 – Runway Safety Accident and Serious Incident Statistics	27
Runway Incursions	30
Runway Safety Risk Index	31
Appendix 3 – References	32



Global RSAP available at:

<https://www.icao.int/safety/RunwaySafety/Pages/default.aspx>

# Regional Implementation



## Global Airport Runway Safety Teams – 229 Teams Reported to ICAO



Please visit the following link to complete survey and see the complete list of reported Runway Safety Teams:  
<https://www.icao.int/safety/RunwaySafety/Pages/Runway%20Safety%20Team%20Register.aspx>

# Global Runway Safety Go-Team missions



## RS Go Team missions

The **ICAO Runway Safety (RS) Go-Team** is aimed to provide international assistance from **ICAO and RSP partner organizations** for the implementation of effective RSTs *to improve runway safety.*

## RS Go Team missions

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*.

## RS Go Team missions

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 organizations; *it is not an ICAO audit, validation, inspection nor certification.*

## RS Go Team missions

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.

# RS Go Team missions

## Regional initiatives:

EUR/NAT Runway Safety 16003 Phase I/II

RUNWAY SAFETY (RS) Go-Team Missions

This Project is implemented under NCLB EUR/NAT Technical Assistance Programme (EUR/NAT TAP) as a capacity building activity.



## RS Go Team missions

### Successful history, ICAO EUR Region

This Project is part of the *Safety Enhancement Initiative IE-REST/RSG/02* related to runway safety team guidance and implementation adopted by the third meeting of the ICAO European Regional Aviation Safety Group (RASG-EUR/03).

## RS Go Team missions

### Successful history, ICAO EUR Region

The ICAO EUR/NAT Office identified 6 beneficiary States that complied with the criteria for the selection to be visited by the RS Go-Team:

*Israel, Turkey, Kyrgyzstan, Montenegro, Tunisia and Malta.*

## RS Go Team missions

### Successful history, ICAO EUR Region

Implement Runway Safety Go-team missions within EUR Region	<ul style="list-style-type: none"><li>Perform a Go-team visit to <b>Tel-Aviv</b> Ben-Gurion International Airport (LLBG)</li><li>Perform a Go-team visit to <b>Ankara</b> Esenboga International Airport (LTAC)</li><li>Perform a Go-team visit to <b>Bishkek</b> International Airport (UCFM)</li><li>Perform a Go-team visit to <b>Podgorica</b> International Airport (LYPG))</li><li>Perform a Go-team visit to <b>Enfidha-Hammamet</b> International Airport (DTNH)</li><li>Perform a Go-team visit to <b>Malta</b> Luqa Airport International Airport (LMML)</li></ul>	<b>Completed</b> 06.11.2016- 11.11.2016 <b>Completed</b> 07.03.2017- 09.03.2017 <b>Completed</b> 31.07.2017- 05.08.2017 <b>Completed</b> 13.11.2017- 17.11.2017 <b>Completed</b> 11.12.2017- 14.12.2017 <b>Completed</b> 12.06.2018- 14.06.2018
--	--	--

# RS Go Team missions

This Project is implemented under NCLB EUR/NAT Technical Assistance Programme (EUR/NAT TAP) as a *capacity building activity*.

## RS Go Team missions

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.

## RS Go Team missions

During the missions, the experts *identified several hazards* in the area of runway safety and *relevant risk mitigation measures* and *proposals for improving the performance* of Runway Safety Team were proposed.

## RS Go Team missions

In order to further improve the situation, *the RS Go-Team provided several recommendations* to the local management and, as examples...

...we have:

# RS Go Team missions

- Amend the regulatory documents to require the establishment of RSTs, describing their roles, responsibilities, composition and reporting requirements;
- Amend the AIP to include (Annex 15, Appendix 1, Part III):
  - *HOT SPOTS map with practical guidance to pilots; and*
  - *Low Visibility Procedures (LVP) charts including critical and sensitive areas for ILS operations.*
- Finish development of PBN approach procedures for all the runways, promote the PBN usage;
- Consider the provision of enhanced taxiway centre line markings as part of the runway incursion prevention measures. (Annex 14 Vol. 1 – 5.2.8.4); ...

# RS Go Team missions

- Ensure consistent implementation of low visibility procedures (LVP) by ATCOs through proper documentation and training, ensure pilots awareness through publication of LVPs in AIP;
- Perform a safety review for aircraft backtracking procedure;
- Consider usage of additional marking (runway numbers in red and white at holding positions);
- Consider installation of additional signage (CAT I signs for holding points, take-off distance available for all intersection take-offs); and
- Improve the system of breaking action measurement and reporting...

*(Not exhaustive)*

# RS Go Team missions

## *Donor States and in-kind Donations*

The project was coordinated within ICAO EUR/NAT Office, with the concerned *State authorities, external donors* (CAAs, international and regional organizations and service providers), as well as with *other relevant stakeholders* to ensure optimum use of all available resources.

## RS Go Team missions

Recognizing the excellent results of the RS Go Team mission, the ICAO EUR/NAT Office renewed the offer to the States (*SL EUR/NAT 18-0404.TEC (FIC/SUL), 01 August 2018*) to request an ICAO Runway Safety Go-team mission. At the moment, the EUR/NAT Office received two requests, *Morocco and Azerbaijan*

## RS Go Team missions

Based on the results, *the project allowed to improve the level of runway safety* related prevention mechanisms by the project beneficiary States and service providers, therefore, *produced a positive impact on improving civil aviation Safety*.

## RS Go Team missions

Finally, the *project has produced concrete, tangible results regarding the improvement of local Runway Safety Teams (RSTs) activities*. Its sustainability is demonstrated by the high level of participation from the beneficiary States and service providers, the support provided by the external donors/partners and the interest indicated by other States to continue this activity.





North American  
Central American  
and Caribbean  
(NACC) Office  
Mexico City

South American  
(SAM) Office  
Lima

ICAO  
Headquarters  
Montréal

Western and  
Central African  
(WACAF) Office  
Dakar

European and  
North Atlantic  
(EUR/NAT) Office  
Paris

Middle East  
(MID) Office  
Cairo

Eastern and  
Southern African  
(ESAF) Office  
Nairobi

Asia and Pacific  
(APAC) Sub-office  
Beijing

Asia and Pacific  
(APAC) Office  
Bangkok

