

A wide-angle photograph of Changi Airport under a blue sky with scattered white clouds. In the foreground, a dark asphalt runway or taxiway with yellow markings is visible. In the middle ground, a Singapore Airlines aircraft is parked at a gate. Behind it, the airport terminal and the iconic air traffic control tower are visible. To the left, a large, curved, translucent structure, likely the Jewel Changi Airport, is partially seen. The overall scene is bright and clear.

Singapore's Collaborative Approach to Enhancing Runway Safety through the Changi Runway Safety Team (CRST)

Ninth Meeting of the Aerodromes Operations and Planning Sub-Group (AOP/SG/9)

30 June – 4 July 2025

Singapore's Changi Airport Runway Safety Team (CRST)

- Established in 2010
- Consists of Aerodrome Operator, Air Navigation Service Provider, Airline Operators and Relevant Stakeholders
- Convenes once every two months
- Core functions include:
 - Recommend strategies for hazard removal and mitigation of residual risks
 - Identify, review and monitor relevant runway safety indicators
 - Platform for inter-organisation decisions





CRST's Terms of Reference

- Monitor runway incidents by type, severity, and frequency of occurrence
- Identify, review and track runway related safety indicators to determine the effectiveness of the control measures
- Conduct of inter-organisational consultation, decision making and conflict resolution processes
- Develop and implement a Runway Safety Action Plan
- Review the effectiveness of the Runway Safety Action Plan annually
- Review the Runway Safety Team Set-Up Checklist annually

Addressing Challenges through Changi Runway Safety Action Plan (CRSAP)

Framework of the Changi Runway Safety Action Plan

Identify Priority Areas

Develop strategies & Implement Initiatives

Ensure Accountability & Progress

Priority Areas

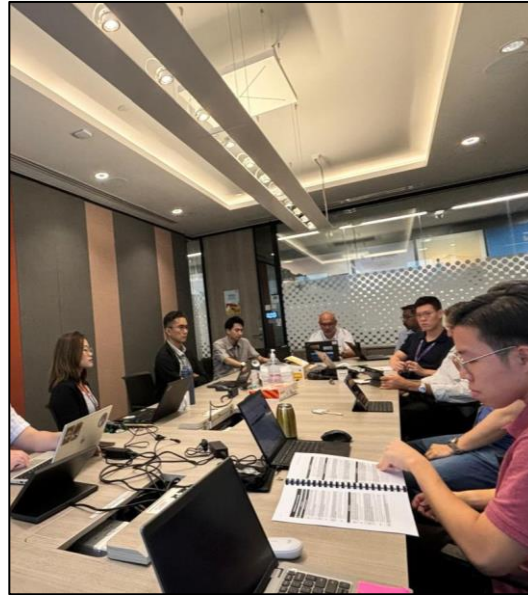
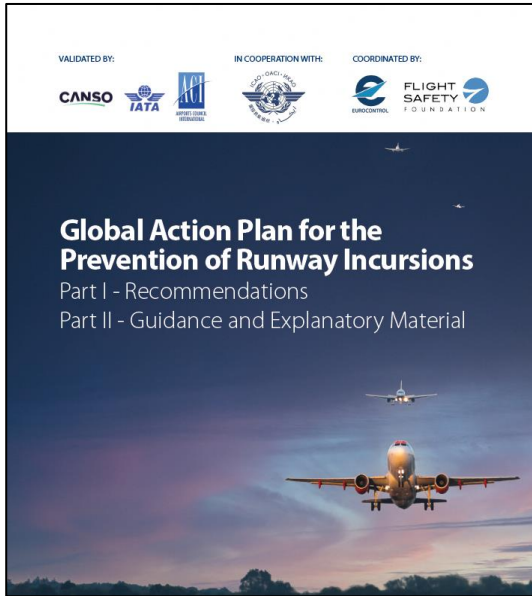
Runway Incursion

Runway Excursion

Runway Confusion

Foreign Object Debris (FOD)

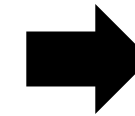
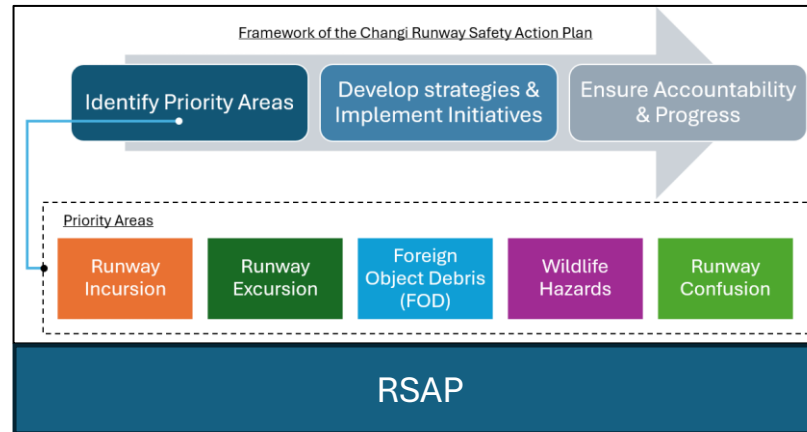
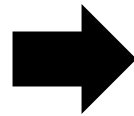
Wildlife Hazards



Integration of Global Action Plan in Singapore's Runway Safety Initiatives

- Active participation in the Global Action Plan for the Prevention of Runway Incursions (GAPPRI)
 - Comprehensive roadmap to mitigate runway incursion risks
- The CRST established a sub-working group to review and assess key recommendations for integration into the CRSAP

Continuous Improvement



Item	Question	Response	Comments
1. Hazard Identification			
1.1	Does the RST have a formal safety data collection and processing system for documenting operational hazards?	Yes / No	
1.2	Do all RST members contribute to the formal safety data collection and processing system by sharing identified operational hazards?	Yes / No	
1.3	Does the RST define and document specific consequences for the operational hazards?	Yes / No	
2. Safety Risk Management			
2.1	Does the RST have a formal process to manage the operational risk?	Yes / No	
2.2	As part of the risk management process, are the consequences of the operational hazards assessed in terms of probability and severity?	Yes / No	
2.3	Is there a formalised process to determine the level of risk the RST is willing to accept?	Yes / No	
2.4	Does the RST develop risk mitigation strategies to control the level of risk within the operational environment?	Yes / No	
2.5	Is there a formalised process for the RST to	Yes / No	

RST Set Up Checklist
Constant Reviews



Continuous Improvement



**Look Out!
Runway Ahead!**

Know when you are approaching a runway!
Do you recognise the following features?

- Mandatory Signs**
White-on-red mandatory signs indicate that a runway is ahead.
- Enhanced Runway Ahead Markings**
Additional dashed yellow lines on each side of the regular solid yellow taxiway centreline.
- Runway Designator Marking**
Displays the designation of the runway ahead.
- Runway Holding Position Markings**
Solid lines are closer to the



Changi Runway Safety Team

CRST Safety Awareness Campaigns



Action by the Meeting

- The meeting is invited to:
 - a) Note the information contained in this paper.
 - b) Discuss any relevant matters as appropriate; and
 - c) Encourage member States to collaborate by sharing and exchanging their best practices and challenges encountered in their Runway Safety Programme



The End

