

Applying Recommendations from GAPPRI for ANSPs

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VALIDATED BY:

CANSO



IN COOPERATION WITH:



COORDINATED BY:



CANSO

Global Action Plan for the Prevention of Runway Incursions

Part I - Recommendations

Part II - Guidance and Explanatory Material



EDITION DATE: AUGUST 2024

Global Action Plan for the Prevention Of Runway Incursions (GAPPRI)

Today's presentation

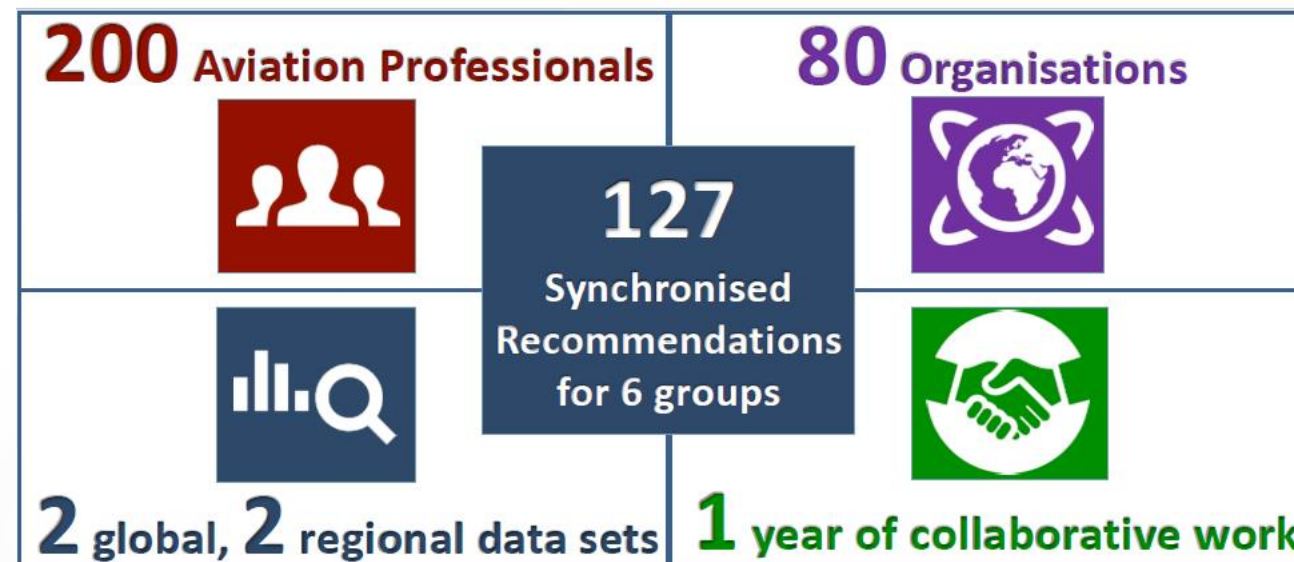
- Background of development of GAPPRI
- Overview of recommendations applicable to ANSPs
- Making use of GAPPRI
- Next steps
- Questions



Background to GAPPRI

GAPPRI Background

- ❑ Multifaceted group of stakeholders and subject matter experts
- ❑ Worked for a year collaborating and comparing best practices
- ❑ 127 Recommendations across six groups
- ❑ 33 focused on ANSPs



GAPPRI Background

127 Recommendations across six groups
33 focused on ANSPs



GAPPRI Background

GAPPRI Volume I

- Published in December 2023.
- A set of **synchronised, consensus-based** recommendations.
- Best practices and interventions **beyond simple regulatory compliance**.
- **Addressing both the risk and the resilience**.
- A robust roadmap **for different time horizons**.
- It drew on existing recommendations and best practices
- Utilized both regional and global datasets

GAPPRI Volume II

- Published in August 2024
- Guidance and Explanatory Materials (GEMs)
- Gives **practical information** on how to implement best practices and interventions
- **Provides resources and additional information**.

GAPPRI ANSP Recommendations

ANSP Categories

[ANSP 1-9] - Safety management and support for runway safety teams

[ANSP 10-16] - Safe runway operations communications

[ANSP 17] - Aeronautical information

[ANSP 18-26] - Supporting pilot workload and pressures management

[ANSP 27-31] - Enhanced procedures for safe runway operations

[ANSP 32-33] - Enhanced technology for safe runway operations

Example Recommendations

ANSP 4

Ensure that information is provided to, and requested from, all participating parties in an incident, so that a complete picture of causal and contributory factors can be built, lessons learned and actions taken.

ANSP 5

Share at local, national and international level the lessons learned and salient safety information from occurrence investigation reports and runway safety analyses.

ANSP 7

Periodically (initially and upon change) review runway capacity-enhancing procedures when used either individually or in combination (intersection departures, multiple line-ups, conditional clearances etc.) to identify any potential hazards and, if necessary, develop appropriate mitigation strategies.

Example Recommendations

ANSP 11

Periodically evaluate radio telephony practices, assessing elements such as frequency loading and use of ICAO-compliant phraseology. Promote wherever practical ATC teamwork in crosschecking communication messages and read backs.

Aircraft Operator (AO) 6

Aircraft operators should, through their initial and recurrent training programmes, ensure pilots use standard RT phraseology, in the English language, and are aware of the runway incursion risks of non-standard RT procedures.

Flight crews should be trained to recognise and increase own vigilance when local ATC procedures are non-standard, when ATCOs speak too quickly or when frequencies are congested.

GAPPRI broader attention

Recommendations in the other sections, i.e. aerodrome or R&D, that ANSPs should pay attention to:

- **ADR11** - Establish leading and lagging runway safety performance indicators
- **ADR13** - Define driver training program requirements. Periodically assess formal manoeuvring area driver permits, training and refresher programmes (including practical training and proficiency checks) against driver training requirements.
- **REG3** - Ensure that the content of training materials for pilots, air traffic controllers and drivers working in the manoeuvring area includes runway incursion prevention measures and awareness.
- **REG4 b.** - Conduct periodic reviews of the effectiveness of methods whereby temporary closures or repairs to runways and taxiways, and associated safety-critical infrastructure (e.g., lighting and signage) are promulgated to aircraft operators.
- **R&D7** - Research visual aids on the airport surface regarding ATC clearance or impediments.

Making use of GAPPRI

Detailed GAPPRI Gap Analysis

Based on Level of Conformance and Status of Action

Fully conform

Partially conform
No further action (not applicable)

Do not conform
No further action (not applicable)

Partially conform
No further action (not agreed)

Do not conform
No further action (not agreed)

Partially conform
Further action in progress

Do not conform
Further action in progress

Partially conform
Further action to be taken

Do not conform
Further action to be taken

Detailed GAPPRI Gap Analysis

	Fully Conform	Partially conform No further action (not applicable)	Partially conform No further action (not agreed)	Partially conform Further action in progress	Partially conform Further action to be taken	Do not conform No further action (not applicable)	Do not conform No further action (not agreed)	Do not conform Further action in progress	Do not conform Further action to be taken
SAFETY MANAGEMENT AND SUPPORT FOR RUNWAY SAFETY TEAMS									
ANSP1	X								
ANSP2		X							
ANSP3					X				
ANSP4			X						
ANSP5								X	
ANSP6							X		
ANSP7				X					
ANSP8		X							
ANSP9		X							
SAFE RUNWAY OPERATIONS COMMUNICATIONS									
ANSP10					X				
ANSP11				X					
ANSP12		X							
ANSP13	X								
ANSP14	X								
ANSP15		X							
ANSP16	X								
AERONAUTICAL INFORMATION									
ANSP17			X						

	Fully Conform	Partially conform No further action (not applicable)	Partially conform No further action (not agreed)	Partially conform Further action in progress	Partially conform Further action to be taken	Do not conform No further action (not applicable)	Do not conform No further action (not agreed)	Do not conform Further action in progress	Do not conform Further action to be taken
SUPPORTING PILOT WORKLOAD AND PRESSURES MANAGEMENT									
ANSP18		X							
ANSP19								X	
ANSP20					X				
ANSP21				X					
ANSP22			X						
ANSP23	X								
ANSP24	X								
ANSP25		X							
ANSP26	X								
ENHANCED PROCEDURES FOR SAFE RUNWAY OPERATIONS									
ANSP27						X			
ANSP28					X				
ANSP29									X
ANSP30							X		
ANSP31		X							
ENHANCED TECHNOLOGY FOR SAFE RUNWAY OPERATIONS									
ANSP32		X							
ANSP33		X							

How to make use of GAPPRI



Perform a Gap Analysis

- With the release of GAPPRI volumes I & II now is the perfect time to conduct a Gap Analysis of the recommendations to your operations.
- First engage with the other relevant stakeholders at your airports. **Don't try to do things alone!**
- Encourage each organization to conduct their own gap analysis
- Then re-group to discuss findings.
- If your airport has a runway safety team then this forum could be suitable to discuss the outputs.



Next steps

CANSO/ACI Runway Safety Checklist

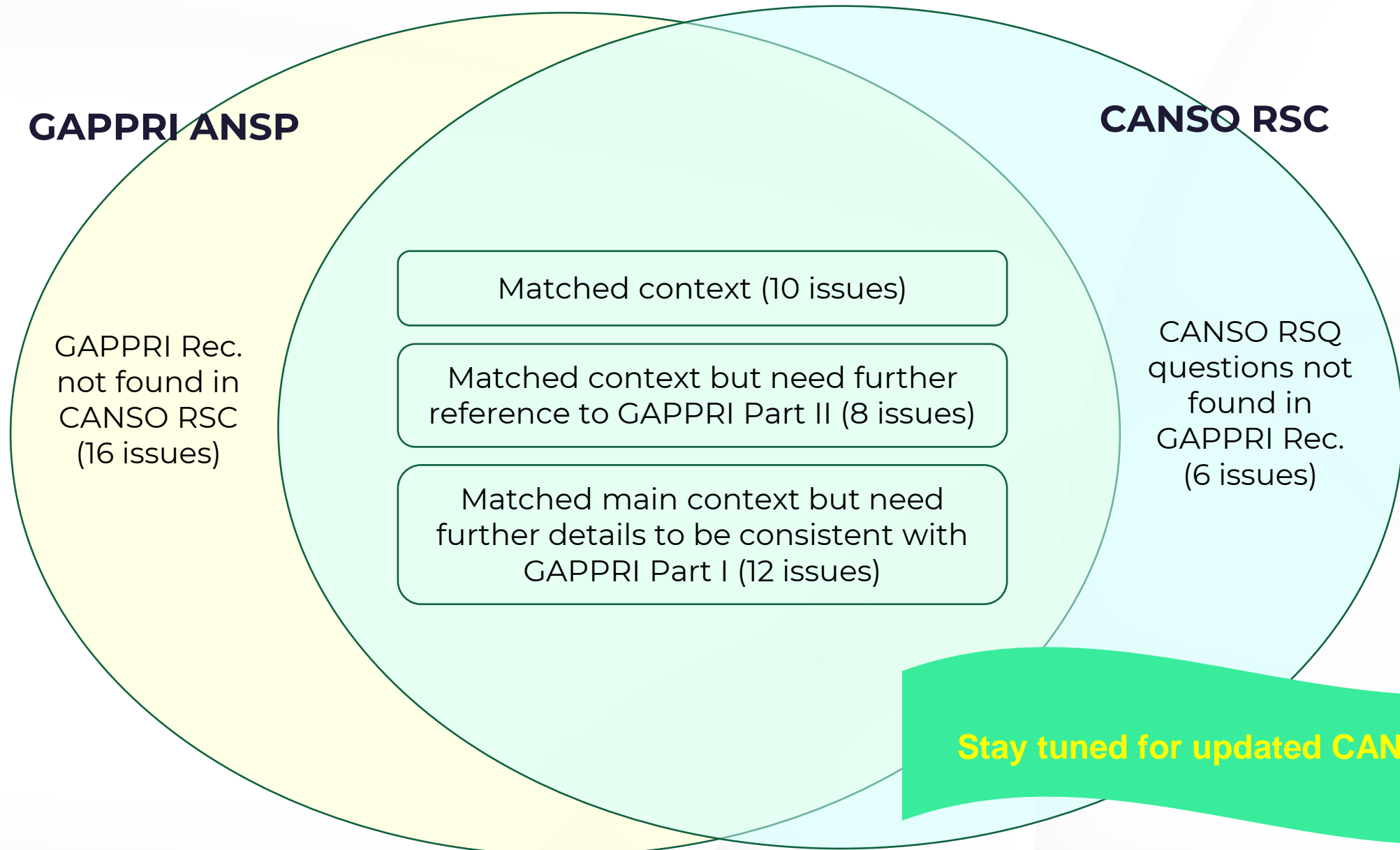
Making use of the RSQ

- The CANSO runway safety questionnaire (RSQ) was created to be a tool for ANSPs and airports to review their runway safety.
- It covers wider aspects in runway safety than just runway incursions
- The format is a set of questions that can ideally be used as part of collaborative engagement between stakeholders at a specific airport (e.g. Local Runway Safety Team).
- In the development of GAPPRI, CANSO reviewed the checklist to see if there were insights that could be fed into GAPPRI recommendations.
- Following the release of GAPPRI, we have now reversed the process to see if there are additional questions that should be added to the checklist.

CANSO

Questions	Y/N/NA	How can you improve this?
LOCAL RUNWAY SAFETY TEAM		
1a	Is there a Local Runway Safety Team (LRST) at your location?	
1b	If No for 1a, is runway safety formally included in the aerodrome safety management system?	
1c	Which stakeholders and roles participate in the LRST or similar forum?	
1d	How frequently does the LRST or similar forum meet to discuss runway safety issues? (e.g. monthly, quarterly, ad-hoc)	
2a	Does the LRST (or equivalent forum) have the following responsibilities?	
i	Local runway safety occurrences	
ii	Airport works (Planned/Ongoing)	
iii	Aerodrome signage, markings and lights	
iv	Low visibility operations	
v	FOD management	
RUNWAY INCURSION		
33	Do you use any procedures that may lead to pilot/driver confusion or expectation and a subsequent runway safety occurrence? For example do you regularly use runways for taxi?	
34	Do you have control of/use of/procedures for ground lighting that may influence runway safety? (E.g. Stop bars, crossing lit stop bars, lit versus unlit runways and taxiways)	
35a	Do you use Capacity Enhancing Procedures at your aerodrome?	
i	Conditional clearances	
ii	Intersection departures	
iii	Multiple line-ups	
iv	Other Procedures	
35b	If Yes to Q35a, have you considered any potential hazards associated with these procedures when used individually or in combination and developed appropriate mitigation strategies?	
36	If there are Low Visibility Operational procedures at your aerodrome, was your ANSP involved in their development and/or in the regular review of the procedures? Have the procedures been reviewed recently?	

CANSO RSC with GAPPRI Comparison



Acknowledgements & Questions



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THANK YOU