

International Civil Aviation Organization

Third Meeting of the RASG-MID Steering Committee (RSC/3)

(Cairo, Egypt, 9-11 December 2014)

Agenda Item 3: Regional Performance Framework for Safety

UPDATE ON DEVELOPMENT AND IMPLEMENTATION OF SEIs & DIPS RELATED TO RGS

(Presented by RGS Coordinator)

SUMMARY

The paper provides an update of initiatives made by MID-RAST through the Runway and Ground Safety Working Group (RGS WG) in the area of Runway and Ground Safety (RGS) including updates on the Safety Enhancement Initiatives' (SEI) Detailed Implementation Plans (DIPs).

Action by the meeting is at paragraph 4.

1. Introduction

- 1.1 Further to initiatives of the MID-RAST RGS Focus Area, the RASG-MID/3 (Kuwait, 27 29 January 2014) endorsed SEIs and DIPs for RGS under the RASG-MID framework. RASG-MID/3 also agreed to consolidate activities related to aerodrome safety under RASG-MID and created the RGS WG to address the related initiatives.
- 1.2 The data between 2008 and 2012 in the ICAO-iSTARs system indicates that the Risk Category of Runway Safety (RS) has contributed to 52% of worldwide accidents related to schedule commercial air transport on aircraft above 2250 kg and 50% of accidents in the MID Region during the same period. The average of RS accidents per million departures between 2008 and 2012 for the World is 2.1 and in the MID Region it is 4.1.
- 1.3 The Draft MID Regional Annual Safety Report indicates the 2013 accident rate for RS is 1.8 for both the MID Region and the World. There were 11 fatal accidents for the World related to RS in 2013 however there were none reported in the MID Region. Runway Excursions were classified against 36.8% of RS related accidents in the MID Region.

2. DISCUSSION

2.1 RASG-MID/3 agreed to establish a Working Group for Runway and Ground Safety (RGS WG) under the MID Regional Aviation Safety Team (MID RAST) to address all aerodrome safety issues. Accordingly, the meeting endorsed Decision 3/1: Establishment of Runway and Ground Safety Working Group (RGS WG).

- 2.2 During RGS WG/1 (Cairo, Egypt, 7 9 April 2014) additional RS SEIs were proposed as follow:
 - a) RGS/4 on Aerodrome Safeguarding with Egypt as Champion supported by Sudan;
 - b) RGS/5 on Wildlife Control with Sudan as Champion supported by Egypt and UAE; and
 - c) RGS/6 on Laser-attacks with Egypt as Champion supported by UAE.
- 2.3 Further details and RGS WG/1 Draft Conclusion 1/2: Additional RGS SEIs are included for endorsement as part of RSC/3 WP/6 Runway Safety Related Issues.

3. UPDATES ON DIPS FOR RGS SEIS

3.1 The RGS SEIs and DIPs may be found at **Appendix A**.

3.2 **Update on MID-RAST/RGS/1**

- 3.2.1 The meeting is invited to recall that IATA agreed to champion of the MID-RAST/RGS/1 related to specific training for pilots and air traffic controllers to avoid unstabilized approaches and promotion of pilot adherence to Standard Operating Procedures for approaches.
- 3.2.2 IATA under took to coordinate with CANSO in order to provide the DIP milestones taking into consideration the following:
 - 3.2.2.1 During the PBN/SG/1 meeting PBN Sub-Group meeting (Cairo, Egypt, 1-3 April 2014), it was decided that States would provide information on runway ends that have reported Un-Stabilized approaches as to determine causal factors and trend. IATA will distribute an information request to Airlines as to identify specific Aerodrome runway ends with Un-Stabilized approaches.
 - 3.2.2.2 Data received from the States and IATA will be reviewed by the RGS Working Group as to align with Aerodrome Technical visits to address UnStable approaches.
- 3.2.3 The RGS Coordinator has yet received further updates on the actions associated with this DIP from IATA.

3.3 **Update on MID-RAST/RGS/2**

- 3.3.1 The meeting is invited to recall the UAE is the Champion of MID-RAST/RGS/2 which focuses on development guidance material and training programmes to support the creation of action plans by local aerodrome Runway Safety Teams (RST).
- 3.3.2 The UAE has completed 75% of the DIP actions and will conclude the remaining deliverables by end December 2014. See **Appendix B** for a summary of actions related to the MID-RAST/RGS/2 DIP. The below paragraphs highlight the significant successes related to this SEI.
- 3.4 ICAO MID promulgated the first RASG MID Safety Advisory (RSA-01) in November 2014 regarding *Guidance for Harmonising the Use & Management of Stop Bars at Airports*. The document was developed by the UAE in consultation with the UAE National Runway Safety Team (NRST) which is a body representing runway safety stakeholders including aerodromes, air operators, air service providers and the regulator. The RGS WG adapted and regionalised the

document with an aim to improve civil aviation safety and efficiency in the Middle East by applying ICAO Global Aviation Safety Plan (GASP) principles through a collaborative and coordinated approach in partnership with all aviation stakeholders.

- 3.4.1 In June 2014, the UAE General Civil Aviation Authority (GCAA) hosted the ICAO 2nd Middle East Regional Runway Safety Seminar (RRSS/2) in Dubai, UAE. The event was sponsored by Dubai Airports and supported by Emirates Airline and Etihad Airways and was attended by approximately 200 representatives from the UAE; the MID States of Egypt, Iran, Oman, Saudi Arabia and Sudan; and organizations including ACI, Airbus, Boeing, COSCAP-GS, Eurocontrol, FAA, IATA and IFATCA. Participants included civil aviation authorities, air navigation service providers, airports, airlines and government agencies. Further details are provided in RSC/3 WP5 Outcome of MID-RRSS/2.
- 3.4.2 In September 2014, the RGS WG provided ICAO MID a draft circular regarding *Guidance on Regulatory Framework Supporting Establishment of Local Runway Safety Teams*. This document was developed by the UAE in consultation with the UAE NRST and then adapted for use by MID States. The circular was distributed for review on 28 September 2014 and is awaiting formal distribution by ICAO-MID.

3.5 Update on MID-RAST/RGS/3

- 3.5.1 The meeting is invited to recall that UAE is the Champion of MID-RAST/RGS/3 which focuses on *development guidance material and training programmes to support Aerodrome Infrastructure and Maintenance Management*.
- 3.5.2 The UAE has completed 40% of the DIP actions and will conclude the remaining deliverables by end June 2015. See **Appendix C** for a summary of actions related to the MID-RAST/RGS/3 DIP. The below paragraphs highlight the significant successes related to this SEI.
- 3.5.3 RRSS/2 also included a one day session for an interactive *Workshop on Aerodrome Certification*. The session was moderated by the UAE GCAA and was attended by approximately 100 participants from the RRSS/2. The Workshop included the following Sub-sessions:
 - a) Status of Aerodrome Certification in the MID Region see *RSC/3 WP6* Runway Safety Related Issues for details;
 - b) Aerodrome Certification Process & Guidance Material;
 - c) Application & Initial Assessment of Aerodrome Certification Application;
 - d) Certification Verification Actives; and
 - e) Issue of Aerodrome Certificate & Oversight.

4. ACTION BY THE MEETING

- 4.1 The meeting is invited to:
 - a) note the progress of the DIPs related to MID-RASG RGS SEIs through the MID-RAST and RGS WG further to the coordinating activities of the UAE; and
 - b) consider approaches to progress SEI MID-RAST/RGS/1 regarding specific training for pilots and air traffic controllers to avoid unstabilized approaches and promotion of pilot adherence to Standard Operating Procedures for approaches.

APPENDIX A

Runway Ground Safety (RGS) SEIs - Mohammad Al Dossari - UAE General Civil Aviation Authority

No	Safety Enhancement Action	GASP Safety Initiative (ICAO Doc 10004)	Best Practices Supporting GASP Safety Initiative (ICAO Doc 10004, Appendix 2)	Safety Impact	Changeability	IC Indicator	Priority	Possible Champion	Time Frame	Notes
MID-RAST/RGS/1	Specific training for pilots and air traffic controllers to avoid unstabilized approaches and promotion of pilot adherence to Standard Operating Procedures for approaches including goaround decision making	Safety Management Standardisation: Consistent Implementation of Safety Management Systems Implementation of Risk-Based Standardization Initiatives Safety Oversight Standardization: Compliance with National Regulations and Adoption of Industry Best Practices	BP-GEN-1 BP-GEN-2 BP-GEN-4 BP-STD-I-1 BP-STD-I-4	High	Moderate	P2	1	IATA	Short Term	Pilot training is top priority of RAST-PA and RAST-AP. DIP may be coordinated on global level - or benchmarked against other regions. ASR Comment: 4.1.3.2.1 - RE Accidents - 83% occur during landing and 67% during daytime - 'Flight Crew Procedures' meaning non-compliance with SOPS was present in 59 accidents See 4.1.2.4.1 and 2 - Top Common incidents/occurrences from MID reports - "Unstable Approach" with Root Cause airport/airline of SOP Compliance and Training.
MID-RAST/RGS/2	Develop guidance material and training programs to support creation of action plans by local aerodrome runway safety teams.	Safety Management Collaboration: Promotion of a Multi-Disciplinary Risk Management Approach Safety Information Exchange: Support of Safety Management Implementation	BP-GEN-1 BP-GEN-2 BP-GEN-4 BP-GEN-6 BP-STD-I-4 BP-SIE-I-3	High	Easy	P1	· ')	United Arab Emirates	Mid-Term	ASR Comment: 4.1.3.2.1 - RE Accidents - 83% occur during landing and 67% during daytime - weather is contributing in 47% (1st rain/2nd windsheer) Runway Incursion data not included in RASG-MID ASR - First Edition - however acknowledged by RSC/01 Agenda Item 2 paragraph 2.14

No	Safety Enhancement Action	GASP Safety Initiative (ICAO Doc 10004)	Best Practices Supporting GASP Safety Initiative (ICAO Doc 10004, Appendix 2)	Safety Impact	Changeability	IC Indicator	Priority	Possible Champion	Time Frame	Notes
MID-RAST/RGS/3	given to the following: - Promote /monitor Implementation RESA including other means such as arresting systems; - Regulation, guidance and specific training in relation to maintaining aerodrome runway/taxiway related markings; and Regulation, guidance and specific	Safety Management Standardization: Consistent Implementation of Safety Management Systems Safety Oversight Standardization: Consistent Implementation of International Standards Compliance with National Regulations and Adoption of Industry Best Practices	BP-STD-S-11 BP-STD-I-2 BP-STD-I-4	High	Difficult	Р3	3	United Arab Emirates	Long Term	ASR Comments: 4.1.3.2.1 - Ground damage in 33% of accidents related to inadequate markings or signage or inadequate RESA. 4.1.3.2.1 - bar chart of contributing factors

	Detailed Implementation Plan Template							
Rast No	Safety Enhancement Action	GASP Safety Initiative (ICAO Doc 10004)	Best Practices Supporting GASP Safety Initiative (ICAO Doc 10004, Appendix 2)	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/RGS/1	Specific training for pilots and air traffic controllers to avoid unstabilized approaches and promotion of pilot adherence to Standard Operating Procedures for approaches including go-around decision making	Safety Management Standardisation: Consistent Implementation of Safety Management Systems Implementation of Risk-Based Standardisation Initiatives Safety Oversight Standardisation: Compliance with National Regulations and Adoption of Industry Best Practices	BP-GEN-1 BP-GEN-2 BP-GEN-4 BP-STD-I-1 BP-STD-I-4	High	Moderate	P2	1	Short Term

	Promote specific training for pilots and air traffic controllers to avoid unstabilized approaches and pilot adherence to Standard Operating Procedures for approaches including go-around decision
Safety Enhancement Action (expanded)	making through ICAO guidance, States' oversight and guidance, Operators' SMS and industry lead awareness and training initiatives. The initiatives seeks to leverage existing regulatory framework and industry events.
	IATA under took to coordinate with CANSO in order to provide the DIP milestones taking into consideration the following:
Statement of Work	1. During the PBN/SG/1 meeting PBN Sub-Group meeting (Cairo, Egypt, 1-3 April 2014), it was decided that States would provide information on runway ends that have reported Un-Stabilized approaches as to determine causal factors and trend. IATA will distribute an information request to Airlines as to identify specific Aerodrome runway ends with Un-Stabilized approaches.
	2. Data received from the States and IATA will be reviewed by the RGS Working Group as to align with Aerodrome Technical visits to address Un-Stable approaches.
Champion Organization	IATA
Human Resources	ICAO - International Civil Aviation Organisation (MID and HQ) IATA - International Air Transport Association (MENA and HQ) IFALPA - International Federation of Airline Pilot's Association CANSO - Civil Air Navigation Services Organisation States Aircraft Operators
Financial Resources	- Medit operators
	ICAO Runway Safety Program
Relation with Current Aviation Community Initiative	ICAO/IATA Runway Excursion Risk Reduction Toolkit FSF Approach and Landing Accident Reduction (ALAR) Toolkit (version June 2010) FSF Runway Safety Initiative (RSI) - "Reducing the Risk of Runway Excursions" FSF Operators Guide to Human Factors in Aviation (FSF European Advisory Committee) FSF Annual Flight Safety Conference (most recent in September 2012) France Directorate General of Civil Aviation - Unstabilized Approaches
	France Directorate General of Civil Aviation - Stabilised Approaches Good Practice Guide France Directorate General of Civil Aviation - Synthesis on Unstable Approaches EWGRS - European Action Plan for the Prevention of Runway Excursions Airbus - Safety Library - Flight Operations Briefing Notes - Approach Techniques
Performance Goal	Reduce relative number of runway excursions. MID-Regional Safety Strategy: Reduce Runway Excursions related accidents by 50% by the end of 2017.
Indicators	Reduction of runway excursions resulting from unstable approaches, as a percentage of total movements, for 2013 and 2014.
Key Milestones (Deliverables)	To be advised by IATA
Potential Blockers	Availability of required human resources from identified organisations Availability of financial resources
Responsible	ICAO - International Civil Aviation Organisation (MID and HQ) IATA - International Air Transport Association (MENA and HQ) IFALPA - International Federation of Airline Pilot's Association CANSO - Civil Air Navigation Services Organisation Mid-Region States Mid-Region Aircraft Operators
DIP Notes	Pilot training is top priority of RAST-PA and RAST-AP. DIP may be coordinated on global level - or benchmarked against other regions. ASR V1 Comment: 4.1.3.2.1 - RE Accidents - 83% occur during landing and 67% during daytime - 'Flight Crew Procedures' meaning non-compliance with SOPS was present in 59 accidents See 4.1.2.4.1 and 2 - Top Common incidents/occurrences from MID reports - "Unstable Approach" with Root Cause airport/airline of SOP Compliance and Training.

	Detailed Implementation Plan Template							
Rast No	Safety Enhancement Action	GASP Safety Initiative (ICAO Doc 10004)	Best Practices Supporting GASP Safety Initiative (ICAO Doc 10004, Appendix 2)	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/RGS/2	and training programs to support creation of action plans by local aerodrome runway safety teams.	Safety Management Collaboration: Promotion of a Multi-Disciplinary Risk Management Approach Safety Information Exchange: Support of Safety Management Implementation	BP-GEN-1 BP-GEN-2 BP-GEN-4 BP-GEN-6 BP-STD-1-4 BP-SIE-1-3	High	Easy	P1	2	Mid-Term

Safety Enhancement Action (expanded)	Develop guidance material and training programs to support creation of action plans by local aerodrome runway safety teams with immediate emphasis on dentification and publication of aerodrome Hot Spots and timely; and accurate notification regarding runway conditions and weather by AIS and ATS units.						
Statement of Work	L. Establishment of Regional RST Go-Teams 2. Conduct regional Runway Safety Seminars/Workshops 3. Promote Establishment of Local Runway Safety Teams 4. Publish supporting guidance materials for LRSTs						
Champion Organization	UAE						
Human Resources	CAO - International Civil Aviation Organisation (MID) JAE General Civil Aviation Authority JAE National Runway Safety Team						
Financial Resources							
Relation with Current Aviation Community Initiative	ICAO Runway Safety Program and RST Handbook ICAO/IATA Runway Excursion Risk Reduction Toolkit FSF Approach and Landing Accident Reduction (ALAR) Toolkit (version June 2010) FSF Runway Safety Initiative (RSI) - "Reducing the Risk of Runway Excursions" FSF Operators Guide to Human Factors in Aviation (FSF European Advisory Committee) FSF Annual Flight Safety Conference (most recent in September 2012) European Action Plan for the Prevention of Runway Excursions European Action Plan for the Prevention of Runway Incursions Airbus - Safety Library - Flight Operations Briefing Notes - Approach Techniques						
Performance Goal	Reduce relative number of runway excursions. MID-Regional Safety Strategy: Reduce Runway Excursions related accidents by 50% by the end of 2017. MID-Regional Safety Strategy: Reduce Runway Incursions related accidents by 50% by the end of 2017.						
Indicators	See above/below						
Key Milestones (Deliverables)	 Arrange a Workshop for Regional RST Go-Teams - June 2014 Develop and issue regulatory framework supporting establishment of LRSTs - September 2014 Develop and issue Stop Bar guidance documentation for consideration of LRSTs - April 2014 Develop and issue a model checklist for LRSTs - December 2014 						
Potential Blockers	Availability of required human resources from identified organisations						
Responsible	UAE ICAO - International Civil Aviation Organisation (MID)						
DIP Notes	Noting SEIs from other regions it is worthwhile RSTs consider the following: - Air traffic Control Training - general and scenario based - Review of Aerodrome and ATC Standard Operating Procedures including RT Phraseology and Clearance Procedures - Pilot Training - general and scenario based - Scenario Based Training for Tower Controller - Scenario Based Training for Pilots - Note the various ICAO Global and Regional Runway Safety Initiatives related to Runway Safety and RSTs. IFALPA and CANSO may be training resources (see AP SEIs).						

		Detailed Im	plement	ation Pl	an Te	empla	te	
Rast No	Safety Enhancement Action	GASP Safety Initiative (ICAO Doc 10004)	Best Practices Supporting GASP Safety Initiative (ICAO Doc 10004, Appendix 2)	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/RGS/3	- Promote /monitor Implementation RESA including other means such as arresting systems;	Safety Management Standardisation: Consistent Implementation of Safety Management Systems Safety Oversight Standardisation: Consistent Implementation of International Standards Compliance with National Regulations and Adoption of Industry Best Practices	BP-STD-S-11 BP-STD-I-2 BP-STD-I-4	High	Easy	P3	3	Long Term

Fegulatine, goldance and specific training in relation to maintaining accordance with Annex 14		
Superior secutions extraction in the Mit-Region Description Organization LAF	Safety Enhancement Action (expanded)	 Promote /monitor Implementation RESA including other means such as arresting systems; Regulation, guidance and specific training in relation to maintaining aerodrome runway/taxiway related markings; and
Human Resources CAO - International Chill Aviation Organisation (MID) UAE General Chill Aviation Authority To be completed 1. Conduct a MID-Regional Bunway Safety Seminar - Anne 2014 2. Arrange a regional serforceme cardification workshop - June 2014 2. Arrange a regional serforceme cardification workshop - June 2014 2. Arrange a regional serforceme cardification workshop - June 2014 2. Develop MiD-Region and enforceme cardification workshop - June 2014 2. Develop MiD-Region and enforceme cardification workshop - June 2014 2. Develop MiD-Region and enforceme cardification workshop - June 2014 2. Develop MiD-Region and enforceme cardification workshop - June 2014 2. Develop MiD-Region and enforceme cardification workshop - June 2014 2. Develop MiD-Region and enforceme cardification workshop - June 2014 2. Develop MiD-Region and enforceme cardification workshop - June 2014 2. Develop MiD-Region and enforceme cardification workshop - June 2014 2. Develop MiD-Region and enforceme cardification workshop - June 2014 2. Develop MiD-Region and enforceme cardification workshop - June 2014 2. Develop MiD-Region and enforceme cardification workshop - June 2014 2. Develop MiD-Region and enforceme cardification workshop - June 2014 2. Develop MiD-Region and enforceme cardification workshop - June 2015 2. Develop and issue goldance material on proactive oversight of annodrome infrastructure development - June 2015 2. Develop and issue goldance material on proactive oversight of annodrome infrastructure development - June 2015 3. Develop and issue goldance material on proactive oversight of annodrome infrastructure development - June 2015 3. Develop and issue goldance material on proactive oversight of annodrome infrastructure development - June 2015 3. Develop and issue goldance material on proactive oversight of annodrome infrastructure development - June 2015 3. Develop and issue goldance material on proactive oversight of annodro	Statement of Work	2. Support aerodrome certification in the MID-Region
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To be completed	Financial Resources	
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1. Conduct a MID-Regional Runway Safety Seminar - June 2014 2. Arrange a regional aerodrome certification workshop - June 2014 3. Develop MID-Region aerodrome certification toolkist for States including core items of Certification Documentation, Safety Management Systems, Physical Characteristics, Runway Surface Friction, Wildlife Nazard Control & National Runway & Movement Aerodrome Ground Lighting, Aerodrome Safeguarding, Runway/Tariawiay Incursion Prevention, Aerodrome Infrastructure Projects and Runway & Movement Areas - January 2015 4. Develop and issue guidance material on periodic surveillance audits of aerodrome infrastructure and maintenance - April 2015 5. Develop and issue guidance material on proactive oversight of aerodrome infrastructure development - June 2015 Potential Blockers Availability of required human resources from identified organisations * UAE * ICAO - International Civil Aviation Organisation (MID) DIP will include establishment of supporting regulation and guidance material. Note this will include assessment of physical space as well as technologies adopted into Annex 14 in November 2012 proposed amendment (arresting systems). This Sti will not prevent runway excursions but reduce the consequences of such events. Note process of assessing surface condition and reporting through ATS to flight crew. Adhere to ICAO standard phraseology regarding condition (updated in proposed November 2012 amendments). Ensure reports vetted through ATC based on Aerodrome reporting information and meteorological analysis - and not only repetition of report from previous aircraft. Note EASA maybe working with APAC to develop of supporting survey format. DIP will include development of national regulation, guidance materials and training/awareness initiatives. Note additional SARPs in the recently proposed amendment to Annex 14 (November 2012). May include development of necessary publications including national regulation based on ICAO SARPS and guidance material regarding inspection regimes and	Performance Goal	To be completed
2. Arrange a regional aerodrome certification workshop - June 2014 3. Develop MIN-Begion aerodrome certification to filt for States including core items of Certification Documentation, Safety Management Systems, Physical Characteristics, Runway Surface Friction, Wildlife Hazard Control & Habitat Management, Apron Management, Aerodrome Ground Lighting, Aerodrome Safeguarding, Runway/Taxiway Incursion Prevention, Aerodrome Infrastructure Protest and Runway & Movement Areas - January 2015 4. Develop and issue guidance material on proactive oversight of aerodrome infrastructure and maintenance - April 2015 5. Develop and issue guidance material on proactive oversight of aerodrome infrastructure development - June 2015 Availability of required human resources from identified organisations **UAE** **ICAO - International Civil Aviation Organisation (MID)* DIP will Include establishment of supporting regulation and guidance material. Note this will include assessment of physical space as well as technologies adopted into Annex 14 in November 2012 proposed amendment (arresting systems). This SEI will not prevent runway excursions but reduce the consequences of such events. Note process of assessing surface condition and reporting through ATS to flight crew. Adhere to ICAO standard phraseology regarding condition (updated in proposed November 2012 amendments). Ensure reports vetted through ATC based on Aerodrome reporting information and meteorological analysis - and not only repetition of report from previous aircraft. Note EASA maybe working with APAC to develop of supporting survey format. DIP will include development of national regulation, guidance materials and training/awareness initiatives. Note additional SARPs in the recently proposed amendment to Annex 14 (November 2012). May include development of necessary publications including national regulation based on ICAO SARPS and guidance material regarding inspection regimes and surface assessments (i.e. friction) - as well as national or local training and	Indicators	See above/below
DIP will include establishment of supporting regulation and guidance material. Note this will include assessment of physical space as well as technologies adopted into Annex 14 in November 2012 proposed amendment (arresting systems). This SEI will not prevent runway excursions but reduce the consequences of such events. Note process of assessing surface condition and reporting through ATS to flight crew. Adhere to ICAO standard phraseology regarding condition (updated in proposed November 2012 amendments). Ensure reports vetted through ATC based on Aerodrome reporting information and meteorological analysis - and not only repetition of report from previous aircraft. Note EASA maybe working with APAC to develop of supporting survey format. DIP will include development of national regulation, guidance materials and training/awareness initiatives. Note additional SARPs in the recently proposed amendment to Annex 14 (November 2012). May include development of necessary publications including national regulation based on ICAO SARPS and guidance material regarding inspection regimes and surface assessments (i.e. friction) - as well as national or local training and safety awareness initiatives.	Key Milestones (Deliverables)	 Arrange a regional aerodrome certification workshop - June 2014 Develop MID-Region aerodrome certification toolkit for States including core items of Certification Documentation, Safety Management Systems, Physical Characteristics, Runway Surface Friction, Wildlife Hazard Control & Habitat Management, Apron Management, Aerodrome Ground Lighting, Aerodrome Safeguarding, Runway/Taxiway Incursion Prevention, Aerodrome Infrastructure Projects and Runway & Movement Areas - January 2015 Develop and issue guidance material on periodic surveillance audits of aerodrome infrastructure and maintenance - April 2015
DIP will include establishment of supporting regulation and guidance material. Note this will include assessment of physical space as well as technologies adopted into Annex 14 in November 2012 proposed amendment (arresting systems). This SEI will not prevent runway excursions but reduce the consequences of such events. Note process of assessing surface condition and reporting through ATS to flight crew. Adhere to ICAO standard phraseology regarding condition (updated in proposed November 2012 amendments). Ensure reports vetted through ATC based on Aerodrome reporting information and meteorological analysis - and not only repetition of report from previous aircraft. Note EASA maybe working with APAC to develop of supporting survey format. DIP will include development of national regulation, guidance materials and training/awareness initiatives. Note additional SARPs in the recently proposed amendment to Annex 14 (November 2012). May include development of necessary publications including national regulation based on ICAO SARPS and guidance material regarding inspection regimes and surface assessments (i.e. friction) - as well as national or local training and safety awareness initiatives.	Potential Blockers	Availability of required human resources from identified organisations
Annex 14 in November 2012 proposed amendment (arresting systems). This SEI will not prevent runway excursions but reduce the consequences of such events. Note process of assessing surface condition and reporting through ATS to flight crew. Adhere to ICAO standard phraseology regarding condition (updated in proposed November 2012 amendments). Ensure reports vetted through ATC based on Aerodrome reporting information and meteorological analysis - and not only repetition of report from previous aircraft. Note EASA maybe working with APAC to develop of supporting survey format. DIP will include development of national regulation, guidance materials and training/awareness initiatives. Note additional SARPs in the recently proposed amendment to Annex 14 (November 2012). May include development of necessary publications including national regulation based on ICAO SARPS and guidance material regarding inspection regimes and surface assessments (i.e. friction) - as well as national or local training and safety awareness initiatives.	Responsible	
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		May include development of necessary publications including national regulation based on ICAO SARPS and guidance material regarding inspection regimes and surface

APPENDIX B

DIP Tracking for MID-RAST/RGS/2

Development Guidance Material and Training Programmes to Support the Creation of Action Plans by Local Aerodrome Runway Safety Teams (RST)

RGS/2 DIP Deliverable	Target Date	Status	Comments
✓ Develop and issue Stop Bar guidance documentation for consideration of LRSTs	End April 2014	Completed	RASG-MID Safety Advisory (RSA-01) – October 2014 circulated to States 2 November 2014 (Ref: ME 4-14/253)
✓ Organise a Workshop for Regional RST Go-Teams	End June 2014	Completed	3 June 2014 – see <i>RSC/3 WP 5</i> - Outcome of the MID-RRSS/2 for details
✓ Develop and issue regulatory framework supporting establishment of LRSTs	End September 2014	Completed	Draft circular provided to ICAO MID. Circulated to States for feedback on 28 September 2014
Develop and issue a model checklist for LRSTs	End December 2014	In Progress	

APPENDIX C
DIP Tracking for MID-RAST/RGS/3

Development Guidance Material and Training Programmes to Support Aerodrome Infrastructure and Maintenance Management

RGS/3 DIP Deliverable	Target Date	Status	Comments
✓ Conduct a MID-Regional Runway Safety Seminar	End June 2014	Completed	4 June 2014 - see <i>RSC/3 WP 5</i> - Outcome of the MID-RRSS/2
 ✓ Organise a Regional Aerodrome Certification Workshop 	End June 2014	Completed	4 June 2014 - see <i>RSC/3 WP 5</i> - Outcome of the MID-RRSS/2 and <i>RSC/3 WP 6</i> - Runway Safety Related Issues
Develop a MID-Region Aerodrome Certification toolkit for States.	End January 2015	In Progress	
Develop and issue guidance material on periodic surveillance audits of Aerodrome Infrastructure and Maintenance	End April 2015	In Progress	
Develop and issue guidance material on proactive oversight of Aerodrome Infrastructure Development	End June 2015	In Progress	