

APPENDIX 1.1

**ORGANIZATIONAL CHALLENGES (ORG) ROADMAP
COMPONENT 1 – STATE SAFETY OVERSIGHT SYSTEM**

PHASE 1 – ESTABLISHMENT OF A SAFETY OVERSIGHT FRAMEWORK (CE-1 TO CE-5)

Safety enhancement initiative	Action	Timeline	Responsible Entity	Metrics/Indicators	Priority	Monitoring Activity	Status of Implementation
			Stakeholders				
1	2	3	4	5	6	7	8
COMPONENT 1 – STATE SAFETY OVERSIGHT SYSTEM							
PHASE 1 – ESTABLISHMENT OF A SAFETY OVERSIGHT FRAMEWORK (CE-1 TO CE-5)							
<i>G2-SEI-1 Consistent implementation of ICAO SARPs at the regional level.</i>	<i>Refer AFI-RASP: 1A-1E</i>	Continuous	<ul style="list-style-type: none"> States ICAO AFCAC RSOOs RAIOs 	<ul style="list-style-type: none"> Number of SSCs resolved. Number of States that met the EI score as per the timelines for CE-1 Number of States that have fully implemented the priority PQs Percentage of ICAO SARPs implemented per State 	<ul style="list-style-type: none"> High 	<ul style="list-style-type: none"> Technical missions to States. USOAP activities, including audits, ICVMs, off-site validations, IVAs, CAP assessments, etc. USOAP CMA OLF information and updates, including PQ self-assessments, CAPs, CC/EFOD and SAAQ. 	<ul style="list-style-type: none"> Conducted technical assistance missions (onsite and remote) to States, with special emphasis on States with low EI: <ul style="list-style-type: none"> ➤ ICAO Regional Offices— ROST missions ➤ AFCAC—AFI CIS
<i>G2-SEI-2 Establishment of an independent regional accident and incident investigation process, consistent with Annex 13 — Aircraft Accident and Incident Investigation</i>	<i>Refer AFI-RASP: 2A-2B</i>	Continuous	<ul style="list-style-type: none"> States ICAO AFCAC RSOOs RAIOs 	<ul style="list-style-type: none"> Number of States provided assistance. Number of personnel trained. 	<ul style="list-style-type: none"> High 	Technical missions to States.	<ul style="list-style-type: none"> Conducted technical assistance missions (onsite and remote) to States, with special emphasis on States with low EI: <ul style="list-style-type: none"> ➤ ICAO Regional Offices— ROST missions ➤ AFCAC—AFI CIS
<i>G2-SEI-3 Regional safety enhancement initiatives to support consistent coordination of regional programmes in establishing adequate safety</i>	<i>Refer AFI-RASP: 3A-3D</i>	Continuous	<ul style="list-style-type: none"> States ICAO AFCAC RSOOs RAIOs 	<ul style="list-style-type: none"> Percentage of safety enhancement initiatives completed by RASGAFI on safety risk management. Number of States that have established a mechanism to collect and process data on operational safety risks and emerging issues. Number of States seeking assistance, by using a regional safety mechanism, other States', or other safety oversight 	<ul style="list-style-type: none"> High-Medium 	<ul style="list-style-type: none"> RASC Reports. Annual Safety Report Technical missions to States. Progress Reports. 	<ul style="list-style-type: none"> Conducted technical assistance missions (onsite and remote) to States, with special emphasis on States with low EI: <ul style="list-style-type: none"> ➤ ICAO Regional Offices— ROST missions ➤ AFCAC—AFI CIS Annual ESAF WACAF AFCAC RSOOs Coordination meetings

<i>oversight capabilities</i>				organisations' ICAO-recognised functions.			
<p>G2-SEI-4</p> <p><i>Strategic collaboration with key aviation stakeholders to enhance safety in a coordinated manner.</i></p>	<p><i>Refer AFI-RASP: 4A-4E</i></p>	<p>Continuous</p>	<ul style="list-style-type: none"> • States • ICAO • AFCAC • RSOOs • RAIOs 	<ul style="list-style-type: none"> • Percentage of hazards and safety deficiencies that have been resolved. • Number of mentoring/ collaboration activities conducted. • Number of personnel trained. • Process for the development and promulgation of technical guidance, tools and the provision of safety-critical information established and implemented. • Number of joint activities conducted. 	<p>Low-High-</p>	<ul style="list-style-type: none"> • Technical missions to States. • USOAP activities, including audits, ICVMs, off-site validations, IVAs, CAP assessments, etc. • USOAP CMA OLF information and updates, including PQ self-assessments, CAPs, CC/EFOD and SAAQ • Progress Report 	<ul style="list-style-type: none"> • Conducted technical assistance missions (onsite and remote) to States, with special emphasis on States with low EI: <ul style="list-style-type: none"> ➢ ICAO Regional Offices— ROST missions ➢ AFCAC—AFI CIS • Annual ESAF WACAF AFCAC RSOOs Coordination meetings • Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM
<p>G2-SEI-5</p> <p><i>Provision of the regional safety information to ICAO by asking States to complete, submit and update all relevant documents and records</i></p>	<p><i>Refer AFI-RASP: 5A-5F</i></p>	<p>Continuous</p>	<ul style="list-style-type: none"> • States • ICAO • AFCAC • RSOOs • RAIOs 	<ul style="list-style-type: none"> • Percentage of completed SAAQs, PQs, CAPs per State (using USOAP CMA OLF). • Number of States that submitted their CAPs. • Percentage of completed self-assessment per State (using USOAP CMA OLF) • Percentage of completed SAAQs per State (using USOAP CMA OLF) • Percentage of completed CCs per State (using USOAP CMA OLF CC/EFOD). • Level of implementation of the ICAO SARPs determined at the regional level. 	<p>High</p>	<ul style="list-style-type: none"> • USOAP CMA OLF information and updates, including PQ self-assessments, CAPs, CC/EFOD and SAAQ. • Technical missions to States. • USOAP CMA OLF information and updates on, CAPs. • USOAP CMA OLF information and updates, including PQ Self-assessment. • USOAP CMA OLF information and updates, including SAAQs. • USOAP CMA OLF information and updates, including CC/EFOD. • Regional Plans implementation reports. 	<ul style="list-style-type: none"> • Conducted technical assistance missions (onsite and remote) to States, with special emphasis on States with low EI: <ul style="list-style-type: none"> ➢ ICAO Regional Offices— ROST missions ➢ AFCAC—AFI CIS • Annual ESAF WACAF AFCAC RSOOs Coordination meetings
<p>G2-SEI-6</p> <p><i>Continued implementation of, and compliance with, ICAO SARPs at the regional level</i></p>	<p><i>Refer AFI-RASP: 6A-6C</i></p>	<p>Continuous</p>	<ul style="list-style-type: none"> • States • ICAO • AFCAC • RSOOs • RAIOs 	<ul style="list-style-type: none"> • Number of States that met the EI score as per the timelines for CEs 6 to 8. • Number of States that have fully implemented the priority PQs 	<p>High</p>	<ul style="list-style-type: none"> • Technical missions to States. • USOAP activities, including audits, ICVMs, off-site validations, IVAs, CAP assessments, etc. • USOAP CMA OLF information and updates, 	<ul style="list-style-type: none"> • Conducted technical assistance missions (onsite and remote) to States, with special emphasis on States with low EI: <ul style="list-style-type: none"> ➢ ICAO Regional Offices— ROST missions

				<ul style="list-style-type: none"> • Percentage of safety issues regarding foreign operators resolved. • Percentage of regional high-risk categories of occurrences addressed. 		<ul style="list-style-type: none"> • including PQ self-assessments, CAPs, CC/EFOD and SAAQ. • Regional programmes • Implementation reports. 	<ul style="list-style-type: none"> ➢ AFCAC—AFI CIS • Annual ESAF WACAF AFCAC RSOOs Coordination meetings • Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM
<p><i>G2-SEI-7</i></p> <p><i>Regional safety enhancement initiatives to support consistent coordination of regional programmes in implementing adequate safety oversight capabilities</i></p>	<p><i>Refer AFI-RASP: 7A-7D</i></p>	Continuous	<ul style="list-style-type: none"> • States • ICAO • AFCAC • RSOOs • RAIOS 	<ul style="list-style-type: none"> • Number of Safety enhancement initiatives implemented. • Number of regional priorities and resources that can be used to assist States. • Number of coordination meetings organised. • Number of States that met the EI score as per the timelines. 	High	<ul style="list-style-type: none"> • Progress reports. • Regional programmes implementation reports. • Technical assistance to States. 	<ul style="list-style-type: none"> • Conducted technical assistance missions (onsite and remote) to States, with special emphasis on States with low EI: <ul style="list-style-type: none"> ➢ ICAO Regional Offices—ROST missions ➢ AFCAC—AFI CIS • Annual ESAF WACAF AFCAC RSOOs Coordination meetings • Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM
<p><i>G2-SEI-8</i></p> <p><i>Strategic collaboration with key aviation stakeholders to enhance safety in a coordinated manner</i></p>	<p><i>Refer AFI-RASP: 8A-8E</i></p>	Continuous	<ul style="list-style-type: none"> • States • ICAO • AFCAC • RSOOs • RAIOS 	<ul style="list-style-type: none"> • Number of Safety issues resolved. • Number of surveillance activities conducted. • Number of technical guidance, tools and safety-critical information, developed in collaboration with States, RSOO, ICAO and/or other stakeholders, to assist in safety oversight functions. • Number of safety recommendations implemented. • Number of States that have addressed regional high-risk categories of occurrences. 	High	<ul style="list-style-type: none"> • Progress reports. • Reports on surveillance activities. • Monitoring the implementation of SEIs. 	<ul style="list-style-type: none"> • Conducted technical assistance missions (onsite and remote) to States, with special emphasis on States with low EI: <ul style="list-style-type: none"> ➢ ICAO Regional Offices—ROST missions ➢ AFCAC—AFI CIS • Annual ESAF WACAF AFCAC RSOOs Coordination meetings • Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM
<p><i>G2-SEI-9</i></p> <p><i>Continued provision of the primary source of</i></p>	<p><i>Assess if States in the region have updated their primary source of safety</i></p>	Continuous	<ul style="list-style-type: none"> • States • ICAO • AFCAC • RSOOs • RAIOS 	<ul style="list-style-type: none"> • Number of States that have updated their primary source of safety information to ICAO. 	High	<ul style="list-style-type: none"> • Progress reports. 	<ul style="list-style-type: none"> • Conducted technical assistance missions (onsite and remote) to States, with special emphasis on States with low EI:

<p><i>regional safety information to ICAO by asking States to update all relevant documents and records as progress is made</i></p>	<p><i>information to ICAO.</i></p>					<ul style="list-style-type: none"> ➤ ICAO Regional Offices— ROST missions ➤ AFCAC—AFI CIS • Monitoring activities using ICAO portals including OLF and iSTARS
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APPENDIX 1.2

ORGANIZATIONAL CHALLENGES (ORG) ROADMAP
COMPONENT 2 –STATE SAFETY PROGRAMME (SSP)

Safety enhancement initiative	Action	Timeline	Responsible Entity	Metrics/Indicators	Priority	Monitoring Activity	Status of Implementation
			Stakeholders				
1	2	3	4	5	6	7	8
COMPONENT 2 –STATE SAFETY PROGRAMME (SSP)							
<i>G3-SEI-1</i> <i>Guide and support SSP implementation in the region</i>	<i>Refer AFI-RASP:</i>	2023-2025	<ul style="list-style-type: none"> • States • ICAO (SSP-SST, SSO-SST, OSI-SST), • State SMEs • AFCAC • RSOOs • RAIO • Industries 	<ul style="list-style-type: none"> • 3.1.1- Number of States Assisted • 3.1.3- Level of SSP Implementation for Assisted States • % of Required CAPs related to the SSP foundational PQs submitted/completed by States (using OLF) • Number of States published a National Aviation safety Plan • SMS regulations, SSP guidance materials and tools • % of States Assisted on the SMS acceptance 	High	<ul style="list-style-type: none"> • Progress report to the RASG - AFI/APIRG meetings 	<ul style="list-style-type: none"> • Conducted technical assistance missions (onsite and remote) to States, with special emphasis on States with low EI: <ul style="list-style-type: none"> ➢ ICAO Regional Offices— ROST missions ➢ AFCAC—AFI CIS • Monitoring activities using ICAO portals including OLF and iSTARS
<i>G3-SEI-2</i> <i>Facilitate capacity building activities through training, seminars and workshops in partnership with States/ industry/RSOOs/RAIOs</i>	<i>Refer AFI-RASP:</i>	2023-2025	<ul style="list-style-type: none"> • States • ICAO (SSP-SST), • State SMEs • AFCAC • RSOOs • RAIO • Industries 	<ul style="list-style-type: none"> • Number of States participated in the capacity building activities 	High	<ul style="list-style-type: none"> • Progress report to the RASG - AFI/APIRG meetings 	<ul style="list-style-type: none"> • Conducted meetings, seminars and workshops (onsite and remote) to States: <ul style="list-style-type: none"> ➢ ICAO HQ ➢ ICAO Regional Offices— ROST missions ➢ AFCAC—AFI CIS • Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM
<i>G3-SEI-3</i> <i>Promote safety culture and the establishment of safety data and safety information collection and processing systems,</i>	<i>Refer AFI-RASP:</i>	2023-2025	<ul style="list-style-type: none"> • States • ICAO (SSP-SST), • AFCAC • RSOOs • RAIO • Industries 	<ul style="list-style-type: none"> • Number/Percentages of States mandatory and voluntary reporting systems, including requirements for protection of safety data and information • Number/Percentages of State with aircraft accident and investigation processes, including the 	High	<ul style="list-style-type: none"> • Progress report to the RASG - AFI/APIRG meetings 	<ul style="list-style-type: none"> • Conducted technical assistance missions, meetings, seminars and workshops (onsite and remote) to States: <ul style="list-style-type: none"> ➢ ICAO Regional Offices— ROST missions ➢ AFCAC—AFI CIS

<p><i>including exchange and protection of information.</i></p>				<p>implementation accidents/incidents databases</p> <ul style="list-style-type: none"> • regulations and guidance on safety data and safety information governance • Established mechanism/models for States to collect Safety Risks and SPIs and share with RASGs • No. of SSP-related sharing sessions/ presentations No. of SSP areas covered. 			<ul style="list-style-type: none"> • Monitoring activities using ICAO portals including OLF and iSTARS
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APPENDIX 2.1

REGIONAL OPERATIONAL SAFETY RISKS (OPS) ROADMAP - DETAILED SAFETY ENHANCEMENT INITIATIVES (SEIS)
R-HRC 1: Controlled Flight Into Terrain (CFIT)

Safety enhancement initiative	Action	Timeline	Responsible Entity	Metrics/Indicators	Priority	Monitoring Activity	Status of Implementation
			Stakeholders				
1	2	3	4	5	6	7	8
REGIONAL OPERATIONAL SAFETY RISKS (OPS) ROADMAP - DETAILED SAFETY ENHANCEMENT INITIATIVES (SEIS).							
R-HRC 1: Controlled Flight Into Terrain (CFIT)							
<p><i>G1-SEI-1</i></p> <p><i>(AFI-RASP OPS SEI on CFIT)</i></p> <p><i>Mitigate contributing factors to the risk of CFIT</i></p>	<p><i>Refer AFI-RASP:</i></p>	<p>Q4 2024</p>	<ul style="list-style-type: none"> States ICAO ROs (ESAF/ WACAF) RASG-AFI Industry 	<ul style="list-style-type: none"> Number of States that have attained TAWS-related PQs satisfactory. Number of States that have completed CAPs/ Self- Assessment on TAWS-related PQs. Number of States that have PBN-AR approved procedures for their Instrument Runways. Number of States that have ATC surveillance radar system with MSAW safety net MOR system established. VOR system established, nonpunitive; and protects the information and source of information. Number of contributing factors to CFIT occurrences Training of flight crew on strict adherence to SOPs Number of States that have designed and published current LPV procedures Number of States implementing refresher training of ATCOs Number of States implementing Fatigue Management 	<p>High</p>	<ul style="list-style-type: none"> Review TAWS related PQs (4.151; 4.171; 4.301) during ROST assistance missions and report status to RASG-AFI. Use the USOAP CMA OLF to obtain the status of TAWS-related PQs. Review PQs related to PBN-AR authorisation (4.434) during ROST assistance missions and report status to RASGAFI. Use the USOAP CMA OLF to obtain the status of PBN-related PQs. Review PQs related to minimum safe altitude (MSAW) requirements (4.301; 4.151; 4.161; 4.171) during ROST assistance missions and report status to RASG-AFI. Use the USOAP CMA OLF to obtain the status of MSAW-related PQs. Review PQs related to Flight Data Analysis Programme (FDAP) (4.203) during ROST assistance missions and report status to RASG-AFI. Use the USOAP CMA OLF to obtain the status of FDAP-related PQs. Data from Mandatory Occurrence Reporting Systems and Voluntary Occurrence Reporting Systems provided by 	<ul style="list-style-type: none"> Conducted technical assistance missions, meetings, seminars and workshops (onsite and remote) to States: <ul style="list-style-type: none"> ICAO Regional Offices— ROST missions AFCAC—AFI CIS Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM Monitoring activities using ICAO portals including OLF and iSTARS

						<p>States to RASG-AFI on quarterly basis.</p> <ul style="list-style-type: none"> • Status of PQs related to implementation of training programmes being satisfactory from the USOAP CMA OLF • Monitor through ROST Missions and report to RASG-AFI • Status of PQs related to implementation of Fatigue Management being satisfactory from the USOAP CMA OLF 	
<p><i>G1-SEI-2</i></p> <p><i>Mitigate contributing factors to CFIT accidents and incidents</i></p>	<p><i>Refer AFI-RASP:</i></p>	<p>Annually</p>	<ul style="list-style-type: none"> • OSI-SST • States • IATA, AFRAA, • BAGASOO, BAGAIA, • CASSOA, URSAC, • AAMAC • ICAO ROs (ESAF/ WACAF) • RASG-AFI • Industry 	<ul style="list-style-type: none"> • Number of Seminars held • Attendance at Seminars • Number of States in the region that have implemented CFIT safety actions. • Number of SEIs considered effective • Number of contributing factors to CFIT • occurrences • Number of States that have implemented their CAPs/ States self-assessment at least 75% 	<p>High</p>	<ul style="list-style-type: none"> • Review ROST assistance mission reports on CFIT related PQs (4.093, 4.149, 4.151, 4.153, 4.161, 4.165, 4.171, 4.203, 4.301, 4.434, 4.435,) and report status to RASG-AFI. • Use the USOAP CMA OLF to obtain the status of CFIT-related PQs; and formulate measures for further improvement. • Report on the implementation status of SEIs provided by OSI-SST to RASGAFI • Data from Mandatory Occurrence Reporting Systems and Voluntary Occurrence Reporting Systems provided by States to RASG-AFI on quarterly basis • PQs: 4.093, 4.149, 4.151, 4.153, 4.161, 4.165, 4.171, 4.203, 4.301, 4.434, 4.435. • Monitor the status of identified PQs using USOAP CMA OLF; and the monitoring tool provided as Appendix 3 to this document. 	<ul style="list-style-type: none"> • Conducted technical assistance missions, meetings, seminars and workshops (onsite and remote) to States: <ul style="list-style-type: none"> ➢ ICAO Regional Offices— ROST missions ➢ AFCAC—AFI CIS • Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM • Monitoring activities using ICAO portals including OLF and iSTARS
<p><i>G1-SEI-3</i></p> <p><i>Mitigate contributing factors</i></p>	<p><i>Refer AFI-RASP:</i></p>	<p>Continuous</p>	<ul style="list-style-type: none"> • Industry, • States, • IATA, 	<ul style="list-style-type: none"> • Types of aircraft engaged in international air transport operations equipped with TAWS 	<p>High</p>	<ul style="list-style-type: none"> • Data from FDAP • Data from Mandatory Occurrence Reporting Systems 	<ul style="list-style-type: none"> • Conducted technical assistance missions, meetings, seminars and workshops (onsite and remote) to States:

<p><i>to CFIT accidents and incidents</i></p>			<ul style="list-style-type: none"> • AFRAA, IFALPA, IFATCA. 	<ul style="list-style-type: none"> • Number of trainings, workshops and seminars • Number of SEIs considered effective • Number of contributing factors to CFIT occurrences • Number of additional SEIs implemented to mitigate the risk of the identified contributing factors for CFIT • Number of SEIs effectively implemented 		<p>and Voluntary Occurrence Reporting Systems</p> <ul style="list-style-type: none"> • Trainings, Seminars and Workshops conducted. • Audit outcomes of industry programmes • Report on the implementation status of SEIs provided by OSI-SST to RASGAFI • Data from Mandatory Occurrence Reporting Systems and Voluntary Occurrence Reporting Systems provided by Industry to RASG-AFI on quarterly basis • Audit outcomes of industry programmes 	<ul style="list-style-type: none"> ➤ ICAO Regional Offices— ROST missions ➤ AFCAC—AFI CIS • Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM • Monitoring activities using ICAO portals including OLF and iSTARS
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APPENDIX 2.2

**REGIONAL OPERATIONAL SAFETY RISKS (OPS) ROADMAP - DETAILED SAFETY ENHANCEMENT INITIATIVES (SEIS)
R-HRC 2: Loss of control in-flight (LOC-I)**

Safety enhancement initiative	Action	Timeline	Responsible Entity	Metrics/Indicators	Priority	Monitoring Activity	Status of Implementation
			Stakeholders				
1	2	3	4	5	6	7	8
REGIONAL OPERATIONAL SAFETY RISKS (OPS) ROADMAP - DETAILED SAFETY ENHANCEMENT INITIATIVES (SEIS).							
R-HRC 2: Loss of control in-flight (LOC-I)							
<i>G1-SEI-1</i> <i>Assist States and stakeholders implement LOC-I safety mitigation actions through promotion/sensitization</i>	<i>Refer AFI-RASP:</i>	Q1 2024 to Q4 2028	<ul style="list-style-type: none"> RASG-AFI LOC-I Champion State ICAO Secretariat CAAs Air Operators ATOs Accident Investigation Board (AIBs) Manufacturers Regional organizations 	<ul style="list-style-type: none"> Number of workshops held Attendance at workshops Change in States’ training requirements in the region 	High	<ul style="list-style-type: none"> Regional survey USOAP CMA self-assessment questionnaire 	<ul style="list-style-type: none"> Conducted technical assistance missions, meetings, seminars and workshops (onsite and remote) to States: <ul style="list-style-type: none"> ICAO Regional Offices—ROST missions AFCAC—AFI CIS Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM Monitoring activities using ICAO portals including OLF and iSTARS
<i>G1-SEI-2</i> <i>Implementation of the RASG-AFI 5-year LOC-I and UPRT Plan of Action</i>	<i>Refer AFI-RASP:</i>	Q1 2024 to Q4 2028	<ul style="list-style-type: none"> RASG-AFI LOC-I Champion State CAAs Air Operators ATOs Accident Investigation Board (AIBs) 	<ul style="list-style-type: none"> Level of implementation of the different action items of the Plan % implementation of the SEIs in the five-year plan and any SEIs stemming from subsequent LOC-I workshops (Appendix) 	High	<ul style="list-style-type: none"> Reporting Online survey Data from other industry partners Reporting and communication SEIs in the five-year plan and recommendations stemming from the LOC-I/ UPRT workshops to be used in the implementation of the five year plan 	<ul style="list-style-type: none"> Conducted technical assistance missions, meetings, seminars and workshops (onsite and remote) to States: <ul style="list-style-type: none"> ICAO Regional Offices—ROST missions AFCAC—AFI CIS Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM Monitoring activities using ICAO portals including OLF and iSTARS
<i>G1-SEI-4</i>	<i>Refer AFI-RASP:</i>	Q1 2024 to Q4 2028	<ul style="list-style-type: none"> RASG-AFI LOC-I Champion State 	<ul style="list-style-type: none"> Procedures included in the operation manual FDAP SMS 	High	<ul style="list-style-type: none"> Reporting through CAAs USOAP CMA Online Framework iSTARS 	<ul style="list-style-type: none"> Conducted technical assistance missions, meetings, seminars and workshops (onsite and remote) to States:

<p><i>Factor in Error and Threat Management</i></p>			<ul style="list-style-type: none"> • CAAs • Air Operators • ATOs • Accident Investigation Board (AIBs) 	<ul style="list-style-type: none"> • Training 		<ul style="list-style-type: none"> • Monitor the status of identified PQs related to FDAP, SMS and Training using USOAP CMA OLF 	<ul style="list-style-type: none"> ➢ ICAO Regional Offices— ROST missions ➢ AFCAC—AFI CIS • Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM • Monitoring activities using ICAO portals including OLF and iSTARS
<p><i>GI-SEI-5</i> <i>Ensure the Effectiveness of the SEIs</i></p>	<p><i>Refer AFI-RASP:</i></p>	<p>Continuou s</p>	<ul style="list-style-type: none"> • RASG-AFI • LOC-I • Champion • State • CAAs • Air Operators • ATOs • Accident Investigation Board (AIBs) 	<ul style="list-style-type: none"> • Number of SEIs considered effective 		<ul style="list-style-type: none"> • Responsible entities and stakeholders Reporting Online survey • Report on the implementati on status of SEIs provided by OSI-SST to RASG-AFI 	<ul style="list-style-type: none"> • Conducted technical assistance missions, meetings, seminars and workshops (onsite and remote) to States: <ul style="list-style-type: none"> ➢ ICAO Regional Offices— ROST missions ➢ AFCAC—AFI CIS • Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM • Monitoring activities using ICAO portals including OLF and iSTARS
<p><i>GI-SEI-6</i> <i>Mitigate the risk of the identified contributing factors</i></p>	<p><i>Refer AFI-RASP:</i></p>	<p>Continuou s</p>	<ul style="list-style-type: none"> • RASG-AFI • LOC-I • Champion • State • CAAs • Air Operators • ATOs • Accident Investigation Board (AIBs) 	<ul style="list-style-type: none"> • Number of additional SEIs implemented to mitigate the risk of the identified contributing factors for LOC-I 		<ul style="list-style-type: none"> • Audit outcomes of industry programmes • USOAP CMA Online Framework • iSTARS • Responsible entities and stakeholders Reporting • Online survey 	<ul style="list-style-type: none"> • Conducted technical assistance missions, meetings, seminars and workshops (onsite and remote) to States: <ul style="list-style-type: none"> ➢ ICAO Regional Offices— ROST missions ➢ AFCAC—AFI CIS • Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM • Monitoring activities using ICAO portals including OLF and iSTARS

APPENDIX 2.3

**REGIONAL OPERATIONAL SAFETY RISKS (OPS) ROADMAP - DETAILED SAFETY ENHANCEMENT INITIATIVES (SEIs)
R-HRC 3: Mid-Air Collision (MAC)**

Safety enhancement initiative	Action	Timeline	Responsible Entity	Metrics/Indicators	Priority	Monitoring Activity	Status of Implementation
			Stakeholders				
1	2	3	4	5	6	7	8
REGIONAL OPERATIONAL SAFETY RISKS (OPS) ROADMAP - DETAILED SAFETY ENHANCEMENT INITIATIVES (SEIs).							
R-HRC 3: Mid-Air Collision (MAC)							
<p><i>G1-SEI-1</i></p> <p><i>Collection of data concerning airspace around the Horn of Africa coordination challenges</i></p> <p><i>RVSM airspace monitoring</i></p>	<p><i>Refer AFI-RASP:</i></p>	<p>Ongoing</p>	<ul style="list-style-type: none"> • States concerned, • ICAO • ANSP's • Regulators, • Airlines, • IATA 	<ul style="list-style-type: none"> • % of CAP implementation to address failure in coordination around the horn of Africa • Convening of Coordination meetings and conduct of associated workshops • Number of States that have submitted RVSM data to ARMA 	<p>High</p>	<ul style="list-style-type: none"> • In conjunction with ARMA ongoing monitoring of threats of MAC • Report of the coordination meetings and associated workshops • In conjunction with ARMA ongoing monitoring of threats of MAC • Collision Risk Assessment (CRA) Reports 	<ul style="list-style-type: none"> • Conducted technical assistance missions, meetings, seminars and workshops (onsite and remote) to States: <ul style="list-style-type: none"> ➢ ICAO Regional Offices— ROST missions ➢ AFCAC—AFI CIS • Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM • Monitoring activities using ICAO portals including OLF and iSTARS

APPENDIX 2.4

**REGIONAL OPERATIONAL SAFETY RISKS (OPS) ROADMAP - DETAILED SAFETY ENHANCEMENT INITIATIVES (SEIS)
R-HRC 4: Runway Excursions (RE)**

Safety enhancement initiative	Action	Timeline	Responsible Entity Stakeholders	Metrics/Indicators	Priority	Monitoring Activity	Status of Implementation
1	2	3	4	5	6	7	8
REGIONAL OPERATIONAL SAFETY RISKS (OPS) ROADMAP - DETAILED SAFETY ENHANCEMENT INITIATIVES (SEIS).							
R-HRC 4: Runway Excursions (RE)							
<i>GI-SEI-1</i> <i>Mitigate contributing factors to risk of RE</i>	<i>Refer AFI-RASP:</i>	Continuous	<ul style="list-style-type: none"> • States • IATA, • ACL, • RSOOs, • AFCAC, • CANSO, • ICAO 	<ul style="list-style-type: none"> • Number of workshops held. • Attendance at workshops • Downward changes in number of risk factors • Changes in State training requests • Number of runway safety programmes established • Number of state runway safety programmes being implemented • Number of States implementing GRF • Number of Runway Excursion incidents reported. 	High	<ul style="list-style-type: none"> • Report of events • Monitoring implementation of RST programmes using the KPIs • Review of PQs related to RSTs • Survey data, • Incident reports • RSTs to report quarterly on KPIs • Quarterly reports on implementation of Runway safety programmes to RASGAFI • Review PQs related to establishment of RSTs • Gather State Runway Safety Programme documents • GRF reports at airports • Monitor the status of identified PQs using USOAP CMA OLF • Report on Runway Excursion incidents 	<ul style="list-style-type: none"> • Conducted technical assistance missions, meetings, seminars and workshops (onsite and remote) to States: <ul style="list-style-type: none"> ➢ ICAO Regional Offices— ROST missions ➢ AFCAC—AFI CIS • Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM • Monitoring activities using ICAO portals including OLF and iSTARS

APPENDIX 2.5

**REGIONAL OPERATIONAL SAFETY RISKS (OPS) ROADMAP - DETAILED SAFETY ENHANCEMENT INITIATIVES (SEIS)
R-HRC 5: Runway Incursions (RI)**

Safety enhancement initiative	Action	Timeline	Responsible Entity Stakeholders	Metrics/Indicators	Priority	Monitoring Activity	Status of Implementation
1	2	3	4	5	6	7	8
REGIONAL OPERATIONAL SAFETY RISKS (OPS) ROADMAP - DETAILED SAFETY ENHANCEMENT INITIATIVES (SEIS).							
R-HRC 5: Runway Incursions (RI)							
<i>GI-SEI-1</i> <i>Mitigate contributing factors to the risk of RI</i>	<i>Refer AFI-RASP:</i>	Continuous	<ul style="list-style-type: none"> • States • IATA, • ACL, • RSOOs, • AFCAC, • CANSO, • ICAO • RASG-AFI 	<ul style="list-style-type: none"> • Number of workshops held. • Attendance at workshops • Downward trends in Runway incursions reported • Number of requests by States implemented • Number of participants in Runway Safety Go-team missions. • Changes in runway safety related incidents 	High	<ul style="list-style-type: none"> • Report of events • Monitoring implementation of RST programmes using the KPIs • Review of PQs related to RSTs • Survey data, • Incident reports • RSTs to report quarterly on KPIs • Reporting activities of Runway Safety Go-Teams 	<ul style="list-style-type: none"> • Conducted technical assistance missions, meetings, seminars and workshops (onsite and remote) to States: <ul style="list-style-type: none"> ➢ ICAO Regional Offices— ROST missions ➢ AFCAC—AFI CIS • Assistance activities by partners, including CAA of Singapore (CAAS), EU, FAA and OEM • Monitoring activities using ICAO portals including OLF and iSTARS