

Session 1

Sustainability of El improvement and mitigation of regression of El levels achieved by States

Moderator: Mohamed Khalifa Rahma Regional Director, ICAO/MID Office

Rapporteur: Ousman K. Manjang
Regional Officer - Airworthiness, ICAO/WACAF

Challenges to sustain El enhancements in the Region



Mr. Simon Christopher Allotey
Director General, Civil Aviation Authority, Ghana
Chairman of RASG-AFI



Presentation Outline



- Improvements in Effective Implementation (EI) in ESAF & WACAF States between 2012-2015
- Role of ICAO and States in El Improvements
- Challenges to Sustainability of El Enhancements in Africa
 - Analysis using the 7s Model
 - Strategy
 - Structure
 - Systems
 - Shared Values
 - Skills
 - Style
- Conclusion



El Improvements







Source: ICAO



Role of ICAO & States in El Enhancements



- ICAO develops SARPs
 & States are to IMPLEMENT SARPs
- ICAO provides technical support to States towards the improvement of Safety Management
- Els can be enhanced &
 Sustained if both ICAO &
 States perform their
 complimentary roles efficiently
 and effectively





Challenges in Sustaining El Enhancements



Analysis of Challenges

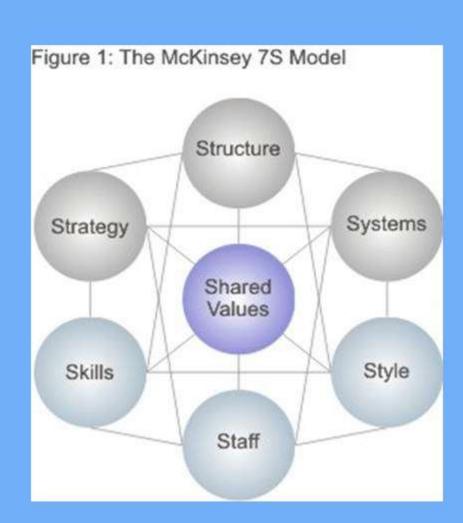
Based on 7 internal elements:

HARD ELEMENTS:

Strategy, Structure, Systems

SOFT ELEMENTS:

Shared Values, Skills, Style, Staff





El Sustainability Challenges - 1 OVERSIGHT STRATEGY



- Without a coherent oversight strategy and identifiable oversight objectives, the State will lack the needed focus to develop short and long term action plans to improve or sustain the level of El of the Critical Elements. e.g. AFI States continue to have low scores in AGA & ANS Audit Areas despite the existence of these findings for over a decade now.
- Without a coherent oversight strategy, and there is no focused effort for employee training, qualification and development to ensure effective and timely implementation of Corrective Action Plans

States should consider:

- developing a comprehensive set of oversight strategies, objectives & targets (in line with ICAO and Regional Objectives) with an annual review mechanism built into it.
- Providing adequate funding and other resources to support strategy implementation

21 May 2017

Website: www.gcaa.com.gh Email: info@gcaa.com.gh Phone: 233 30 2776171



El Sustainability Challenges - 2 OVERSIGHT STRUCTURE



A number of States lack the basic Oversight Structure and Functions as defined in ICAO Doc 9734, Part A.

- No hierarchy of responsibility
- Poor accountability
- Poorly defined functions
- No separation of roles between Regulator and Service providers resulting in weak oversight

States should consider:

 developing a comprehensive oversight structure to effectively fulfil its responsibilities. The State Civil Aviation System must be properly structured with clearly defined job functions, accountabilities and roles.



El Sustainability Challenges - 3 OVERSIGHT SYSTEMS



- Documented Policies, Processes and Procedures (Manuals) are
 the mechanisms required to implement the critical elements in civil
 aviation oversight system in an effective and efficient manner.
 They help to guide actions of all staff, ensure consistency in safety
 oversight practices and form the basis for staff capacity
 development and EI enhancements.
- States are required to be equipped with current technical guidance materials and modern tools (including facilities and equipment) for the proper execution of its technical operations.

States should consider:

 the implementation of Quality Management Systems to ensure improvements in their oversight systems

21 May 2017



El Sustainability Challenges - 4 **EFFECTIVE LEADERSHIP (STYLE)**



LACK OF EFFECTIVE LEADERSHIP

- With good leadership, staff understand the vision and goals of the oversight system, and are committed to it. Employees become certain of the oversight goals and objectives, buy-in and run with them.
- "Great leaders are almost always great simplifiers, who can cut through argument, debate, and doubt to offer a solution everybody can understand."—General Colin Powell

States should:

invest in leadership development and good corporate governance practices in their Civil Aviation Administrations to engender staff buy-in to the State safety oversight programme

21 May 2017 Website: www.gcaa.com.gh Email: info@gcaa.com.gh Phone: 233 30 2776171



El Sustainability Challenges - 5 STAFF ISSUES



Lack of committed staff in civil aviation oversight system could lead to most of the deficiencies identified in the USAOP- CMA programmes:

- Poor certification
- Inadequate surveillance activities
- · Lack of identification and resolution of safety concerns

Employees are the most important resource for any oversight organisation and their level of motivation will have an impact on the performance of the oversight organisation. Workplace conditions of service, career development, work/life balance and remuneration are some issues that CAAs need to address to ensure a passionate & motivated workforce.

 States should put in appropriate strategies to motivate, remunerate, develop and retain staff

21 May 2017



El Sustainability Challenges - 6 STAFF SKILLS



- Highly skilled technical personnel are required for an effective Safety Oversight system and the sustainability of EI levels.
 Effective recruitment programmes, appropriate training (initial, on the job, recurrent) and qualification, sound technical skills and good job knowledge are essential for outstanding staff performance.
- Although training policies and procedures are in place in most African States they are not being adhered to.
- Training is ad-hoc (often dictated by external Agencies) and not often evaluated. As a result, the actual training programmes do not fully address the identified skill gaps in staff performance.



El Sustainability Challenges - 6 STAFF SKILLS (Contd)



States should consider the following:

- Enforce a transparent Recruitment process to ensure the engagement of the best candidates.
- Training policy and procedures should be adhered to and aligned to equipping staff with the appropriate skills, knowledge and competencies for the effective discharge of the State's safety oversight functions.
- Staff should be thoroughly conversant with ICAO's USOAP CMA Online Framework (OLF) & implemented CAPs should be consistently uploaded to the OLF.
- Introduce a Performance Management System for identifying skills gaps
 & to reward and motivate staff for good performance
- Monitor and evaluate all training programmes for relevance
- Establish mechanisms for the sharing of acquired skills and knowledge.
- Enter into MoUs with States or RSOOs with the appropriate capabilities for technical assistance in staff training and development.

21 May 2017

Website: www.gcaa.com.gh Email: info@gcaa.com.gh Phone: 233 30 2776171



El Sustainability Challenges - 7 SHARED VALUES



Effect of a Weak Corporate Culture

- Leads to poor team spirit
- Mistrust among the Leadership and the technical staff
- Lack of commitment and passion
 - Staff are often capable but apathetic towards the attainment of the strategic safety oversight objectives.
 - High Staff Turnover

States should consider:

 building a strong corporate culture based on mutual respect & recognition, trust, diversity, strong core values, integrity, hard work and transparency.



Conclusion



- The role of ICAO, development partners and International Organisations to enhance aviation safety within Africa is commendable and should be encouraged.
- The consequent improvements in the El levels should be recognised. There is however room for further improvements.
- African States have a complimentary role to implement effective safety Oversight systems based on good corporate governance and shared values to ensure enhancements and sustainability of El Levels.



End of Presentation





An Old Adage

"Where there is a will, there is a always a way!"

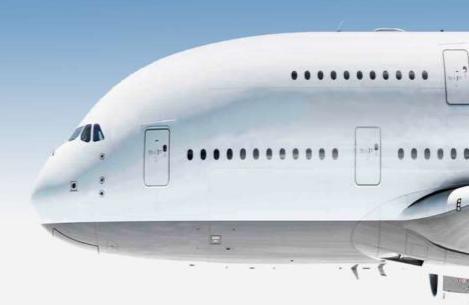
Thank you.





Application of Safety Margins for State Safety Risk Analysis and Prioritization



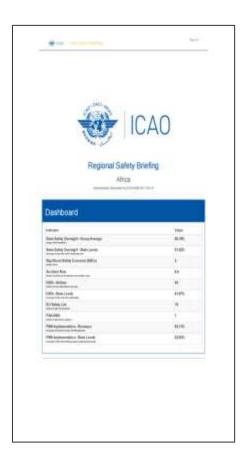


Mr. Michiel Vreedenburgh,
Chief, Implementation Planning & Support Section –
Safety, ANB, ICAO HQ





Regional Safety Briefing - Africa



ficator	Value
ate Safety Oversight - Group Average	50.18%
ate Safety Oversight - State Levels	51.92%
gnificant Safety Concerns (SSCs)	3
ccident Rate	6.4
ISA - Airlines the of USA control action in the region	43
ISA - State Levels wage of househit COV section arising	41.67%
U Safety List	15
AA IASA other of States and as Congrey 3	1
BN Implementation - Runways	62.13%
3N Implementation - State Levels	52.83%





State Safety Briefing - Botswana



ndicator	Target	Value	Achieved
JSOAP EI 100Fcmaf(Etx)	60%	71,58%	Yes
Significant Safety Concerns (SSCs)	0	0	Yes
Fatal Accidents		0	
Aerodrome Certification	Satisfactory	Satisfactory	Yes
State Safety Programme (SSP)	Level 2	Level 1	No
OSA unitse of 1994 perfiled operatus	>0	1	Yes
FAA IASA	Cat 1	NR	
EU Safety List	Unrestricted	Unrestricted	Mes
PBN energy of transitional instrument consequents FBH approaches	70%	0%	No





USOAP Results by Area and Critical Element

7 areas and 5 critical elements are above the target of 60% Et.





Botswana currently has 218 open USOAP protocol findings. The highest number of protocol findings (35) concern Licensing, Certification, Authorization and Approval Obligations (CE-6) in the area of Aerodromes (AGA).

	LEG.	086	PEL	OPS.	AIR	AIG	ANS	AGA
Œ4	1					1		
CE-2	1		2	2	3	5	3	- 6
CE-3		+			1	1	6	1
Œ4			4	5	3	3	12	4
CE-5			1.	2	2	7	1	1.
Œ4			2	17	1		11	
CE-7			4	3	5		18	15
Œ4			3	4	2	4	3	5

Protocol findings by Area and Critical Element intersection

Note: Due to organig work on our data management platform the above results may digitify differ from the ones published on the CNA online framework. These may be differenced in the protocol findings obtained from the CCF and iSTARS due to regardion to the 2016 PQ version.





State Safety Programme (SSP) Implementation

Implementation of the State Safety Programme (SSP) is included in the priorities of the Global Aviation Safety Plan, in particular for States with an El above 60%. ICAO tracks the implementation of SSPs via the SSP Gap Analysis tool on iSTARS. States are invited to use this tool to perform their GAP analysis, define action plans and benchmark their progress.

ICAO measures SSP implementation in levels as follows:

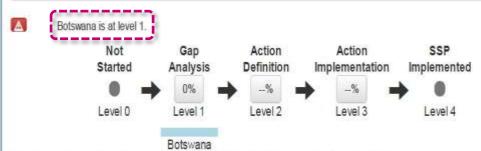
Level 0: States not having started a GAP analysis

Level 1: States having started a GAP analysis

Level 2: States having reviewed all the GAP analysis questions

Level 3: States having defined an action plan for all non implemented questions

Level 4: States having closed all actions and fully implementated their SSPs



The data used to evaluate those levels is self-reported by the State and not validated by ICAO.





Safety Margins App on iSTARS

- Tool for risk-based prioritization
- Target EI score calculated based on a global linear regression of traffic versus EI

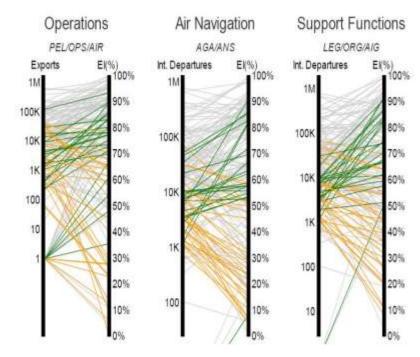




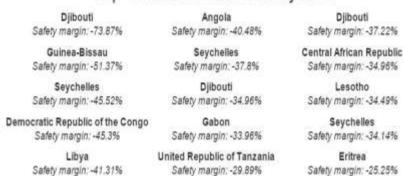


Regional Priorities - Africa

- States are prioritized by considering the EI as well as the related activity at risk in operations, air navigation and support functions
- The profile of each State is benchmarked against all other ICAO member States
- Priority is given to the least performing areas in ascending order



Top-5 States in each Priority area





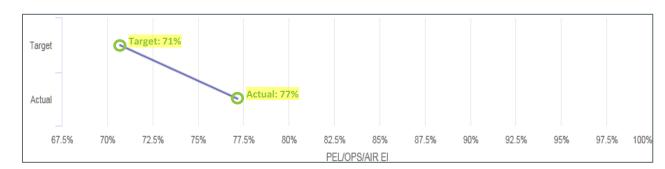
Source: iSTARS 3.0 - Regional Safety Briefing (https://portal.icao.int/space)



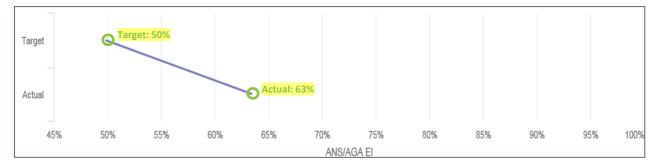


Safety Margins - Botswana

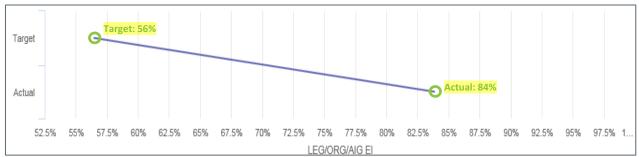
Margins in Operations



Margins in Air Navigation



Margins in Support Functions







- In each of the 3 functional areas, a State is given a target El score which is calculated based on a global linear regression of traffic versus El of all States.
- A State with a positive safety margin would be considered to have sufficient regulatory controls in place to cover its existing traffic volume.
- A State with a negative safety margin would be considered to have an insufficient oversight system taking into consideration its traffic volume.

			Operation	ns	Air Navigation		Support	
State	Departures	Flag-carrier Flights	EI (%)	Margin (%)	EI (%)	Margin (%)	EI (%)	Margin (%)
Botswana	8888	8563	77.15	6.49	63.38	13.58	83.81	27.4

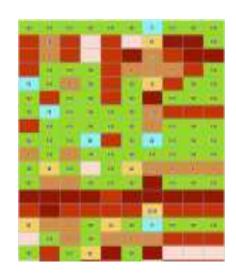






SSP pre-requisites

Identifies pre-requisites to an effective and sustainable SSP implementation





A subset of the approx. 1,096 USOAP PQs with more granularity than the 60% EI threshold;





Retining the Pre-requisites

- ✓ Approximately 380 USOAP PQs identified as pre-requisites
- ✓ Grouped by topic
- Existing USOAP PQ data can be imported to create App
- **✓** SSP implementation plan should address pre-requisites

	USOAP PQ Prerequisites						#	Topic		
									1	Primary aviation
		0							1	legislation
									2	Specific operating
									2	regulations
								0	3	State system functions
									1	Qualified technical
									4	personnel
									F	Accident and incident
1									5	investigation







ASIAP Prioritization App on iSTARS

- Prioritization tool for the Aviation Safety Implementation Assistance Partnership (ASIAP
- Uses safety margins integrated with other indicators and factors to identify and prioritize States for technical assistance



ASIAP Prioritisation

Prioritisation of Assistance Needs

The Avaitors Safety Implementation Assistance Partnership (ASIAP) Prioritization Tool is designed to identify States prioritised for technical existance using the ASIAP methodology in an automated mode and interactive presentation using real-time data sourced from the ICAO Universal Safety Oversight Audit Programme (USCAP), integrated Safety Triind Analysis and Reporting System (STARS) Safety Margins App, and the World Bank Worldwide Governance Indicators (WGI). The Safety Margin is the value above or below target USCAP effective implementation (EI) which is based on a global linear regression of air traffic versus EI of all audited States. The top 5 States with negative SM (below target EI) and oversill EI < 80% per ICAO Regional Office accreditation area and by technical area, namely, operations (OPSIARPEL), air navigation (AGA/ANS) and support (LEGIORG/AIG) are identified. Political stability and control of corruption conditions are identified by State. SSC States are also highlighted.

For more information on the Availors Safety Implementation Assistance Partnership, please click on the following link http://www.icao.int/safety/scan/Pages/Aviation-Safety-Implementation-Assistance-Partnership aspx.

Select a Region:

All Member States (Morks)

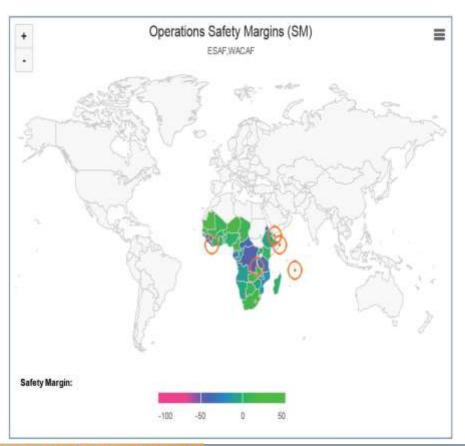
Send PDF by email



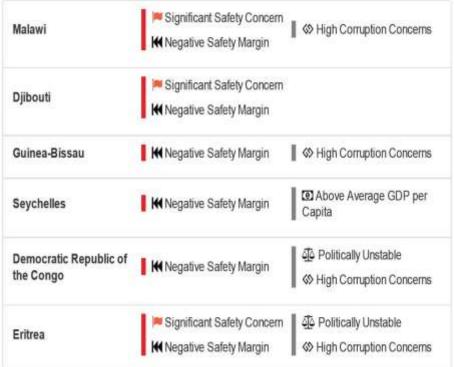


ASIAP Prioritization ESAF, WACAF

Operations (OPS/AIR/PEL)



List of Priority States

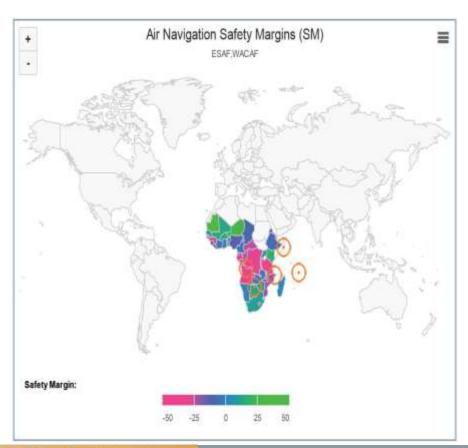






ASIAP Prioritization ESAF, WACAF

Air Navigation (ANS/AGA)



List of Priority States







Safety Information Monitoring Service (SIMS)



Benefits

Modules

Ramp Inspection (RI)

 comprises safety data from national ramp inspection programmes in accordance with ICAO Doc 8335

Air Navigation Monitoring (ANM)

 processing of safety data collected through Automatic Dependent Surveillance-Broadcast (ADS-B), radar surveillance systems and other types of flight parameter monitoring systems.

Operational Safety Data (OSD)

 comprises of data collected through flight data monitoring and other types of flight parameter monitoring systems.

Safety Indicator Dashboard (SID)

 allows States to monitor and have their State activity and operational indicators and metrics visualized for decision making.





State Safety Risk Analysis Principles

- Safety goals & targets (global, regional, national)
- Risk based prioritisation
- Data driven analysis
- Safety margin targets
- Fatality risk reduction
- Layered risk mitigation
- Safety Information Monitoring
- Transparency





Outcome of the ICAO/EASA Forum on RSOO for Global Aviation Safety - (Swaziland, March 2017)



Ms. Suzette Nieuwoudt
Acting Executive Director, iSASO

RS00 Forum Outcomes



3-Day Forum

- Two days of global discussions
- One day dedicated to the Africa region at Ministerial level.

Attendance

- 200 participants
- 48 States
- 32 international organizations
- Ministers responsible for Civil Aviation from 13 States in the AFI Region.

Global RSOO Discussions

- Theme 1 RSOO State-of-Play Global Update
 - Report on the actions and achievements since the last ICAO RSOO Symposium
 - RSOO pitch I: new RSOOs
- → Theme 2 RSOO State-of-Play RSOO Update
 - RSOO pitch II: existing RSOOs updates on main activities, developments in competences, recognition and challenges

- Theme 3 Practical Aspects of Operating Regional Mechanisms:
 - What they can offer and perform for States
 - Financing and sustainability: Which possibilities exist? How sustainable are they? Presenting the views of RSOOs, their donors, States and industry.
- Theme 4 Institutional Aspects of Operating Regional Mechanisms
 - The relationship between RSOOs and their Member States
 - The relationship between RSOOs and ICAO: recognition, audits and integration into ICAO activities.

Proposed Cooperative Platform

- facilitate inter-RSOO Communication
- become an information hub and facilitate the exchange of information and sharing of best practices, including the establishment of common or harmonised definitions, standards and
- specifications relevant to RSOOs
- facilitate the exchange of data and common data analysis
- facilitate the supply of technical assistance and support to RSOO
- interface with ICAO on topics of mutual interest for RSOO
- receive tasks from ICAO that concerns development of the RSOO community
- provide an RSOO pool of experts
- nurture the continued stability and progression of RSOO

RSOO Forum Outcome

→ Global Strategy and Action Plan for the Improvement of Regional Safety Oversight Organizations (RSOOs) and the Establishment of a Global System for the Provision of Safety Oversight



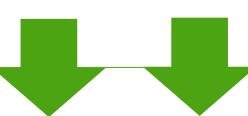
GASOS

a new Global Aviation Safety Oversight System for the provision of safety oversight

- Improvement and strengthening of RSOOs
- Development and implementation of an RSOO cooperative platform
- Development and implementation of a global aviation safety oversight system (GASOS)

AFI Ministerial Event Outcome

→ Regional Ministerial Declaration HOW States will work to refine their collaborative efforts and improve aviation safety oversight



EZULWINI DECLARATION endorsement

GASOS

a new Global Aviation Safety Oversight System

for the provision of safety oversight

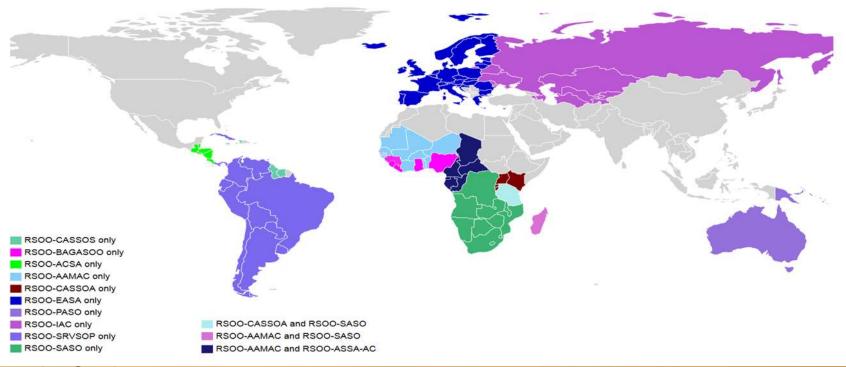
Global Strategy and Action Plan

for the improvement of RSOOs



Thank you!

Regional Safety Oversight Organizations (RSOOs)





AFI AVIATION WEEK



Improvements in the AFI Region



Mr. Peter Bombay
European Commission, DG MOVE
Chair of the EU Air Safety Committee







Cooperation ICAO - EU

- EU experiences good cooperation with ICAO
- Synergies exist and more coordination and cooperation could be achieved to avoid duplication of efforts
- Development of ICAO tools provides for better safety analysis





EU Air Safety List

AFI region makes good progress, removal of airlines from the ASL:

- 2012: Mauritania (all)
- 2014: Swaziland (all)
- 2016: Zambia (all), Air Madagascar, TAAG (less restrictions), Botswana (managed to stay off the list with timely improvements)
- 2017: Benin (all), Mozambique (all)





Sustainability of improvements

None of removed airlines re-entered the ASL

Important elements:

- Recognition of safety problems
- No quick fixes
- Re-build the aviation safety system



Sustainability of improvements

Civil Aviation Authorities:

- Independency
- Solid funding mechanisms
- Enforcement powers
- Good governance
- Cooperation at regional level



Aviation growth

The expected growth of aviation in Africa requires that:

 CAA's have to be prepared and keep up with this growth in oversight capabilities

 Airlines should demand good safety oversight from their authorities



Third Country Operators

- Since 26 April 2014 the foreign operator rules in Europe are complemented by the new Third Country Operators (TCO) authorization system
- Majority of African TCO applications succeeded and some were among the first authorizations issued by EASA.





Technical cooperation projects

Name	Zone	Amount
SATA	Sub-Saharan Africa (closed)	9.0 M€
CAASP	Central Africa	2.2 M€
IASOM	Malawi (closing)	2.5 M€
ASSP	Zambia (closed)	3.0 M€
Euromed III	Northern Africa (+ Middle East)	2.0 M€
Twinning	Algeria (closed)	1.4 M€
Twinning	Morocco	1.5 M€
Twinning	Tunisia	1.2 M€
	TOTAL	22.8 M€





EU implementing partner



The EU institutions mandated EASA to carry out cooperation activities



EASA is the preferred partner from the EC for aviation-related TA



Some of the project specifically targeted countries with low El



SIASA

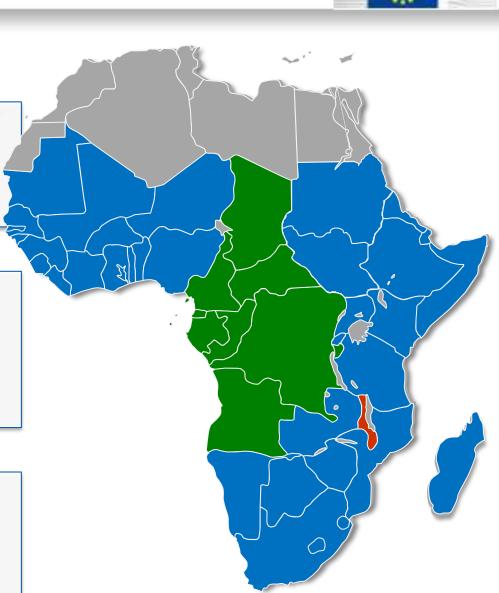
 Support to the Improvement of Aviation Safety in Africa

CAASP

Central Africa Aviation Safety
 Project (also known in French as ATA-AC)

IASOM

Improvement of Aviation Safety
 Oversight in Malawi







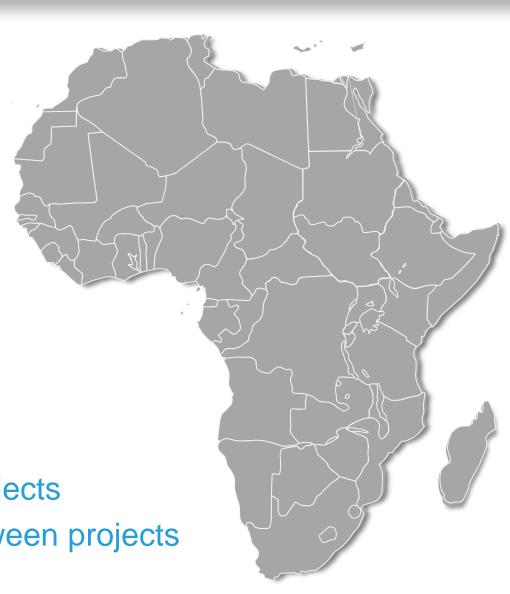
Two key words

Cooperation

 Europe will pursue its cooperation with **Africa**

Coordination

- Deliver qualitative projects
- Avoid duplication between projects and misuse of funds







"When the right, capable people are put on the right spot and are allowed to do their job properly, progress become a reality"

And this progress IS a reality in Africa





AFI Region improvements

- Significant Safety Concerns are being resolved
- Effective Implementation of international safety standards improves
- For foreign operators to Europe:
 - Many African carriers received a TCO authorisation from EASA
 - Ever more African states/carriers released from the EU ASL
- All partners should cooperate in their efforts to improve the situation in the region





Through hard work of many capable people, it will be possible to ensure that "No Country is Left Behind"

Thank you!



Questions?



Session 1

Sustainability of El improvement and mitigation of regression of El levels achieved by States

Moderator: Mohamed Khalifa Rahma Regional Director, ICAO/MID Office

Rapporteur: Ousman K. Manjang
Regional Officer - Airworthiness, ICAO/WACAF