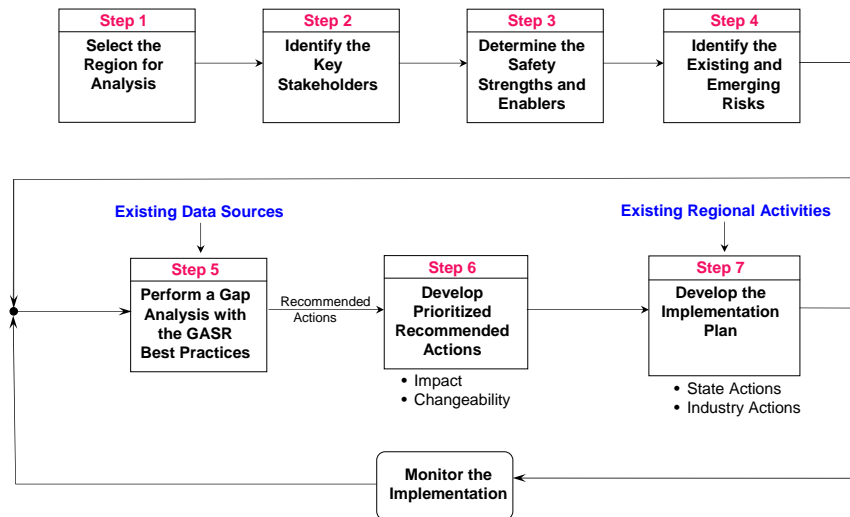


GASR Process

Workshop: Global Aviation Safety Roadmap
Implementation

Focus Areas 1-4
Combined Workgroup Findings

GASR Process: Key Steps



GASR Regional Planning Process



Table Of Contents

1. Select Region for Analysis
2. Identify Key Stakeholders
3. Outline Strengths and Enablers
4. Identify Existing and Emerging Risks

Ref: Implementing the GASR, Fig. 3.2 & Appendix I

1. Select Region for Analysis

1.0 Regional Scope

- SADC States
- Angola
- Botswana
- DRC X
- Lesotho X
- Malawi
- Mauritius
- Mozambique X
- Madagascar
- Namibia
- Tanzania
- Swaziland
- Seychelles
- South Africa X
- Zambia
- Zimbabwe X

2. Identify Key Stakeholders

- **2.1 International State Authorities/Organizations**
ICAO, FAA, EC, EASA, World Bank, World Metrological Organization (WMO)
- **2.2 Regional State Authorities/Organizations**
SADC, AFCAC, African Union, African Development Bank, ICAO Regional Offices (ESAF), EAC
- **2.3 Regional Safety Organizations**
COSCAP (SADC and COMESA), CASSOA, EAC
- **2.4 Industry Organizations**
ACI, IFALPA, IATA, ATNS, TCATC, FSF, AFRAA, AASA, ISSG, IFATCA, CAASA

3. Outline Strengths and Enablers

- **3.1 Regional Strengths**
 - *SADC VSAT project, COSPAS-SARSAT, South Africa civil aviation system (CAA, ATNS), legacy airlines*
- **3.2 International Enablers**
 - *ICAO, EU, EASA, World Bank, FAA (IASA)*
- **3.3 Regional Enablers**
 - *COSCAP, African Development Bank, AFCAC, SADC Transport Protocol (CAC, Committee of Ministers of Transportation), ACIP, ICAO Regional Offices (ESAF), AU Decisions*
- **3.4 Industry Enablers**
 - *IATA, (SITA), FSF, ISSG, Manufacturers*

4. Identify Existing and Emerging Risks

- **4.1 States**
- **4.1.1. Regulatory Environment-Aviation Laws and Regulations**
 - **4.1.1.1 Existing Risks**
 - *CAA lack of autonomy, lack of cooperation between Ministry and CAA, outdated regulations, laws and regulations are not in compliance with ICAO SARPS, no independent accident investigation agency*
 - **4.1.1.2 Emerging Risks**
 - *Lack of harmonization of safety regulations in the region, lack of political commitment, change in government structure*
- **4.1.2 Regulatory Oversight**
 - **4.1.2.1 Existing Risks**
 - *Unavailability/shortage of Qualified personnel for safety oversight (retention), Lack of financial resources, Lack of technical guidance material, Insufficient regulatory oversight in certification of operations and continued airworthiness , Conflict of interest between regulator and operator, Lack of aircraft maintenance organizations*
 - **4.1.2.2 Emerging Risks**
 - *Fast growth with no strategic planning/2010, Lack of proficiency of personnel involved in aircraft certification/surveillance and issuance of (AOCs), Lack of appropriate training programmes, Lack of implementation of Article 83 bis of the Chicago convention, Aging aircraft (challenges for enhancing safety oversight)*
- **4.1.3 Unique States Considerations**
 - **4.1.3.1 Existing Risks**
 - *Training facilities, (but lack support), Imbalance between infrastructure and operations*
 - **4.1.3.2 Emerging Risks**
 - *Financial impact on airlines (due to economic turmoil)*

4. Identify Existing and Emerging Risks

- **4.2 Region**
- **4.2.1 Unique regional considerations**
 - *Geography, weather, behavioral norms, language proficiency, diverse level of aviation development, political instability, economic situation of the region, inadequate understanding of inter-state laws and regulations, start-up airlines*
- **4.2.2 Existing Risks**
 - **4.2.2.1 Operating Environment:**
 - *Weather, different and insufficient Nav aids, ATM/ATC, difficult terrain in SADC region (obstacles), lack of sufficient coverage of coms and surveillance, inadequate airport infrastructure*
 - **4.2.2.2 Most Frequent Types of Events**
 - *Approach and Landing, CFIT, Runway/Ramp Incidents and Accidents, Bird Strikes, FODs*
- **4.2.3 Emerging Risks**
 - *Unaccommodated Traffic Growth, non-Availability of Qualified Personnel, Startup/LC Carriers, Flaps of Convenience, Seasonal traffic fluctuation*

4. Identify Existing and Emerging Risks

- **4.3 Industry**
- **4.3.1 Operator's Organization / Business Practices**
 - **4.3.1.1 Existing Risks**
 - *Lack of safety leadership and management by operators, Fleet obsolescence (age and maintenance and operational costs, and environment), improper certified foreign aircraft operating in Africa, lack of maintenance organizations, inadequate safety oversight by CAA (what results is self regulation of organizations), poor SMS knowledge and practice*
 - **4.3.1.2 Emerging Risks**
 - *Certification issues on transfer of ownership of airlines, Startups/LCCs Initial and Continued Compliance with AOC, Management of Aircraft Transfers (e.g. Maintenance Records)*
- **4.3.2 Operator's Fleets / Equipment**
 - **4.3.2.1 Existing Risks**
 - *Obsolescence of Fleets, lack of qualified personnel among air operators, inadequate number of maintenance organizations, cost of aircraft operation, unfair competition between airlines, commercial operation using military certified aircraft, Definition, Resolution and Accuracy of FMS and TAWS Databases*
 - **4.3.2.2 Emerging Risks**
 - *Aging Aircraft, cost of aircraft operation, unfair competition between airlines*
- **4.3.3 Flight Operations / Crew Training**
 - **4.3.3.1 Existing Risks**
 - *Poaching of pilots, inadequate training of pilots, inadequate training schools, no adherence to CRM techniques, English proficiency and use of improper phraseology, training schools lowering standards, update training of pilots, lack of submission by operator and competent review by the regulator of operator training programmes, follow-up between training and practice by regulator, lack of training*
 - **4.3.3.2 Emerging Risks**
 - *Shortage of Pilots and other flight personnel to deal with traffic growth, "poaching" of Pilots Eroding Ranks, lack of HR development programmes to meet current and future demand*

4. Identify Existing and Emerging Risks

- **4.3 Industry (Continued)**
- **4.3.4 Maintenance / Training**
 - **4.3.4.1 Existing Risks**
 - *Poaching of mechanics and engineers, No high level of skill due to high turnover, lack of qualified personnel for key positions, insufficient and improper facilities for maintenance, lack of proper rostering of maintenance personnel, quality of maintenance records, inadequate aircraft maintenance training schools*
 - **4.3.4.2 Emerging Risks**
 - *Shortage of Trained and Qualified Personnel to Face Growth, lack of proper rostering of maintenance personnel, inadequate existence of training organization for maintenance, lack of succession planning*
- **4.3.5 Infrastructure / Airports, Nav aids, ATC**
 - **4.3.5.1 Existing Risks**
 - *Need of airport certification, lack of timely calibration of Nav aids, lack of implementation of new technology, lack of maintenance of nav aids, inoperative nav aids, lack of capacity to satisfy the demand for calibration, lack of surveillance means, lack of effective civil-military coordination, lack of adequate communication coverage, lack of SAR LOA, most international airports not certified, lack of sms procedures and expertise, insufficient nr of ATC trainers, lack of proper fire and rescue equipment*
 - **4.3.5.2 Emerging Risks**
 - *Lack of staff, lack of harmonized quality of ATS, air traffic growth, emerging bigger aircraft, e.g. A380,*

Reminder;

***FLYING IS OPTIONAL,
BUT LANDING IS MANDATORY!!!***

Hence pursuit of aviation safety should
remain everyone's priority worldwide

