

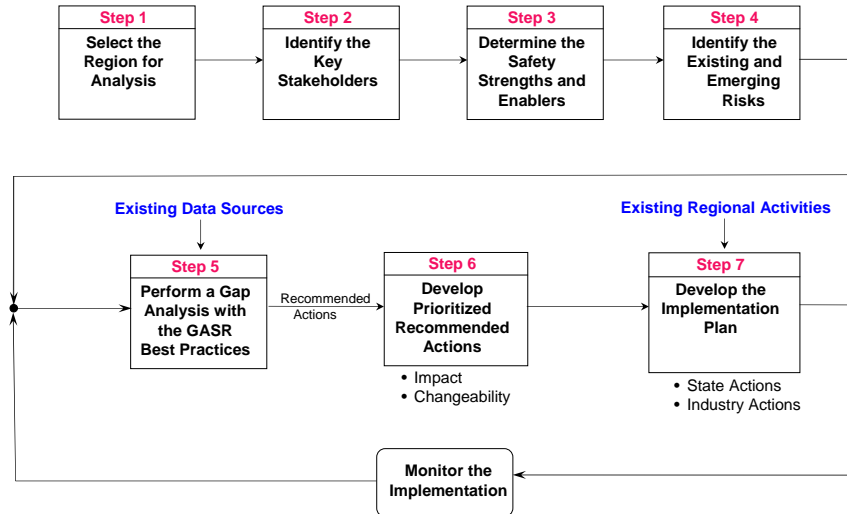
GASR FA 11

Workshop: Global Aviation Safety Roadmap
Implementation

Group Discussion Guidelines

- Participants are expected to contribute their knowledge to the discussion and to raise questions that will further the group's understanding of the issues
- Mutual respect for other's ideas will be maintained
- The facilitators will seek to involve everyone in the discussion; any participant may submit a point anonymously to the group in written format
- Participants can change their minds at any time
- The facilitator will ask for volunteers to keep notes of the ideas, facts, consensus, and questions raised during the discussion, including a "parking lot" sheet
- Facilitators will be mindful of potential language barriers and will attempt to ensure that communication is successful
- Facilitators and members of the group are expected to remind others of these guidelines during breakout sessions

GASR Process: Key Steps



GASR Regional Planning Process

- 1. Select Region for Analysis
- 2. Identify Key Stakeholders
- 3. Outline Strengths and Enablers
- 4. Identify Existing and Emerging Risks
- 5. Perform Gap Analysis
- 6. Develop Prioritized Recommended Actions
- 7. Develop an Action Implementation Plan

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

1. Select Region for Analysis

- 1.0 Regional Scope

Countries included in the region:

– Kenya, Uganda, Tanzania, Rwanda and Burundi:

2. Identify Key Stakeholders

- 2.1 International State Authorities/Organizations
ICAO, IFALPA, FAA, IATA and AFRAA
- 2.2 Regional State Authorities/Organizations
EAC, CASSOA
- 2.3 Regional Safety Organizations
CASSOA, ASSET
- 2.4 Industry Organizations
Boeing, ISSG, Flight Safety Foundation

3. Outline Strengths and Enablers

- 3.1 Regional Strengths
 - Existence of aviation training colleges
 - Strong airlines eg PAS, KQ,
 - Vibrant General Aviation
 - Autonomous Airport Authorities
 - Autonomous CAA
 - Strong political will
 - Aeronautical Meteorology
- 3.2 International Enablers
 - ICAO, COSCAPs, World Bank, SSFAI
- 3.3 Regional Enablers
 - Capetown Convention, EAC Treaty, CASSOA.
- 3.4 Industry Enablers
 - IATA Partnership for Safety Initiative, Manufacturer's support

4. Identify Existing and Emerging Risks

- 4.1 States
 - 4.1.1. Regulatory Environment-Aviation Laws and Regulations
 - 4.1.1.1 Existing Risks
 - Non-separation of service provider from regulator in respective CAAs
 - Lack of capacity in the judicial system
 - Inadequate enforcement
 - Lack of national consistent laws
 - Inadequacy in harmonized regulations
 - Lack of harmonized training curriculum
 - Prevalent health risks
 - Non existence of staff retention policy
 - Inadequacy in the operating regulations
 - 4.1.1.2 Emerging Risks
 - Compounded workload on the regulating staff
 - Development in technology
 - Threats to safety and security in air transport
 - Lack of good corporate governance
 - An over regulated industry
 - Impact of labor laws
 - Non-availability of qualified staff
 - 4.1.2 Regulatory Oversight
 - 4.1.2.1 Existing Risks
 - Aging personnel
 - *Lack of harmonized retiring age*
 - *Lack of a clear and harmonized succession policy in the region*
 - *Availability of Qualified personnel for safety oversight*
 - *Insufficient regulatory oversight in certification of operations and continued airworthiness of aircraft*
 - Inability to retain qualified staff
 - Gender imbalance

4. Identify Existing and Emerging Risks

- **4.2 Region**
- 4.2.1 Unique regional considerations
 - Existence of mountains, hills and high grounds
 - Additional training requirements due to specific weather hazards
 - Additional requirements due to English language proficiency requirements
- 4.2.2 Existing Risks
 - 4.2.2.1 Operating Environment:
 - Additional skills requirements to manage modern CNS/ATM systems
 - 4.2.2.2 Most Frequent Types of Events
 - Prevalent bird strikes
 - Control Flight into Terrain
 - Loss of control
 - Runway incursions
 - (Not in any order)
- 4.2.3 Emerging Risks
 - 4.2.3.1 Un-accommodated Traffic Growth
 - 4.2.3.2 Non-availability of Qualified Personnel
 - 4.2.3.3 Increase in number of Startup/LC Carriers

4. Identify Existing and Emerging Risks

- **4.3 Industry**
- 4.3.1 Operator's Organization / Business Practices
 - 4.3.1.1 Existing Risks
 - *Safety Leadership & Management by Operators*
 - *Pressure to meet organizational goals eg profits, marketshare etc*
 - *Pressure to manage cost at the expense of safety*
 - *Lack of Business plans*
 - *Pressure due to constant external audits eg IOSA*
 - *Changes due to e-business eg e-ticketing*
 - 4.3.1.2 Emerging Risks
 - *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
 - *Increased operating costs*
 - *The need to update the TAWS database*
 - *Increased pressure on the crew due to RVSM requirements*
 - *Obsolescence of Fleets*
 - *Definition, Resolution and Accuracy of FMS and TAWS Databases*
 - 4.3.2.2 Emerging Risks
 - *Aging Aircraft*
- 4.3.3 Flight Operations / Crew Training
 - 4.3.3.1 Existing Risks
 - *Insufficient number of training schools*
 - *Lack of adherence to operating requirement*
 - *The risk of aircraft overloading*
 - *Adherence to HF/CRM Principles and SOPs*
 - *Level and Capacity of Pilot's Training Schools*
 - *Lack of enforcement of regulations*
 - *Lack of recurrent training*
 - 4.3.3.2 Emerging Risks
 - *Availability of Pilots to Face Traffic Growth*
 - *"poaching" of experienced Pilots, cabin crew, type rated instructors, ATC*

4. Identify Existing and Emerging Risks

- 4.3 Industry (Continued)
 - 4.3.4 Maintenance / Training
 - 4.3.4.1 Existing Risks
 - Lack of approved training schools
 - Lack of abntio training
 - Lack of recurrent training
 - Lack of Skilled staff in aircraft maintenance and records keeping
 - Quality of Maintenance Records
 - Reliability of training records
 - Parts from non-approved sources
 - 4.3.4.2 Emerging Risks
 - High cost of training
 - Poaching of AMEs
 - Inadequacy of AMOs
 - Non-availability of Trained and Qualified Personnel to Face Growth
 - 4.3.5 Infrastructure / Airports, Nav aids, ATC
 - 4.3.5.1 Existing Risks
 - Inadequate space in accommodation, parking etc
 - Lack of flight calibration capabilities
 - Lack of adequate fencing of airports and airstrips
 - Lack of procedures development capabilities
 - 4.3.5.2 Emerging Risks
 - Security threats
 - No land tenure
 - Inadequacy of Airport's infrastructures to face growth
 - 4.3.6 Unique Industry Considerations

5. Perform Gap Analysis

- 5.1 Identification of Gaps Between Best Practices and Current State of the System

Best Practices	Metrics	Implementation
BP 11a-1 – <u>Stakeholders, collectively and individually, assess human resources requirements for the recruitment and training of personnel that includes growth projections, target levels and training standards.</u> <p>a. The assessment projects the needs, expected shortfalls and required training based on:</p> <ul style="list-style-type: none"> • Sound market-based assessment of operational projections across all operators; • Expected development of flight operations and related support requirements for all sectors of the industry; • Anticipated retirements and replacements. 	<p>a. Assessment exists for all industry sectors</p>	<p> <input type="checkbox"/> Complete <input type="checkbox"/> Somewhat <input checked="" type="checkbox"/> Little <input type="checkbox"/> Not Applicable </p> <p>Discussion:</p>

5. Perform Gap Analysis

- 5.1 Identification of Gaps Between Best Practices and Current State of the System

Best Practices	Metrics	Implementation
<p>BP 11b-1 – <u>Stakeholders identify potential sources of appropriately qualified personnel and actively encourage a sufficient number of people to enter accredited training institutions.</u></p> <p>a. Promotion of the acceptance of licenses and qualifications issued by other regulatory authorities/civil aviation authorities.</p> <p>b. Development of incentives to attract potential candidates into the industry.</p> <p>c. Development of incentives to reduce the migration of professional staff from one region to another.</p>	<p>a. Source of qualified personnel identified, along with a recruitment strategy</p>	<p> <input type="checkbox"/> Complete <input type="checkbox"/> Somewhat <input checked="" type="checkbox"/> Little/None <input type="checkbox"/> Not Applicable </p> <p>Discussion:</p>

5. Perform Gap Analysis

- 5.1 Identification of Gaps Between Best Practices and Current State of the System

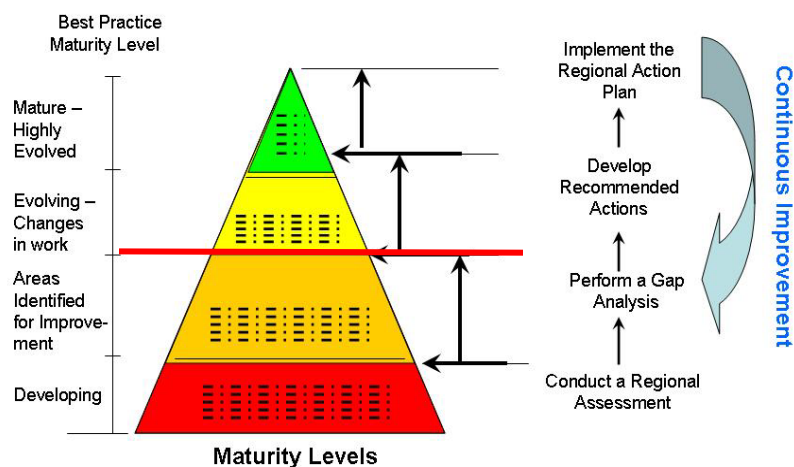
Best Practices	Metrics	Implementation
<p>BP 11b-2 – <u>Organizations develop and implement a rolling multi-year human resources plan that is regularly reviewed and updated.</u></p> <p>a. A flexible human resource plan is implemented as an integral part of the organization's business plan.</p> <p>b. The plan provides a basis upon which to make adjustments to reflect unanticipated changes in the industry and includes specific strategies for the retention of qualified staff.</p>	<p>a. Number of qualified personnel to meet the plan.</p>	<p> <input type="checkbox"/> Complete <input type="checkbox"/> Somewhat <input checked="" type="checkbox"/> Little/None <input type="checkbox"/> Not Applicable </p> <p>Discussion:</p>

5. Perform Gap Analysis

- 5.1 Identification of Gaps Between Best Practices and Current State of the System

Best Practices	Metrics	Implementation
<p>BP 11c-1 – Stakeholders establish internal and independent audit processes and reviews.</p> <p>a. Internal audits are conducted as an integral part of the organization's business plan review.</p> <p>b. External independent auditing is conducted through the use of recognized and accepted audit processes such as USOAP and IOSA.</p>	<p>a. The audit process is integral to the organization's business plan.</p>	<p><input type="checkbox"/> Complete</p> <p><input checked="" type="checkbox"/> Somewhat</p> <p><input type="checkbox"/> Little/None</p> <p><input type="checkbox"/> Not Applicable</p> <p>Discussion:</p>

Maturity Model to Guide Gap Analysis



Prioritize the Recommended Actions

Using the Impact-Changeability Level as a Guide

Recommended Action	Impact	Change-ability	IC Level	Selected Priority
1. Harmonization of existing training plans <ul style="list-style-type: none"> Assessment of the level of activities and requirements Establishment of database of ATOs 	3	3	P1	1
2. Upgrade of current ATOs <ul style="list-style-type: none"> Encourage the regional approach in sharing of training resources 	3	2	P2	2
3. Establish a regional training fund to enable access to aviation specialized training	3	2	P2	3
4. Encourage Private Public Ownership in the development of aviation skilled HR	3	2	P2	4
5. Adoption of labor and immigration laws that encourage sharing of skilled resources	3	1	P3	5
6. Promote initiatives that encourage aviation as a career	2	3	P4	6
7.				
8.				

Develop an Action Implementation Plan

Recommended Action	Impact	Change-ability	IC Level	Action by
1. Harmonization of existing training plans <ul style="list-style-type: none"> Assessment of the level of activities and requirements Establishment of database of ATOs 	3	3	P1	EAC
2. Upgrade of current ATOs <ul style="list-style-type: none"> Encourage regional approach in sharing of training resources 	3	2	P2	EAC
3. Establish a regional training fund to enable access to aviation specialized training	3	2	P2	EAC
4. Encourage Private Public Ownership in the development of aviation skilled HR	3	2	P2	Operators' Association/CAAS
5. Adoption of labor and immigration laws that encourage sharing of skilled resources	3	1	P3	EAC/States
6. Promote initiatives that encourage aviation as a career	2	3	P4	Operators' Association/CAAs
7.				
8.				

7. Develop an Action Implementation Plan

- 7.1 Leverage Current Regional Activities and Players
- 7.2 Consider Existing Safety Initiatives from Different Regions
 - CAST, ECAST, FAST, COSCAPs