COMPREHENSIVE REGIONAL IMPLEMENTATION PLAN FOR AVIATION SAFETY IN AFRICA (AFI PLAN)

FIFTEENTH AFI PLAN STEERING COMMITTEE MEETING

(Maputo, Mozambique, 19 May 2015)

Agenda Item 1: **Information on available courses and training organizations in Africa**

(Presented by GAT/AATO/Morocco)

EXECUTIVE SUMMARY

This paper presents information on available courses and training organizations in Africa

Action: The Steering Committee is invited to:

a) Note the information contained in the paper and its attachments;

b) Provide further guidance/instructions for the implementation of a coordinated training programme to assist African States in their capacity building.

---

1.   **INTRODUCTION**

During the fourteenth meeting of the Comprehensive Regional Implementation Plan for Africa (AFI PLAN) Steering Committee held in Montreal, Canada on 24th October 2014 GAT and AATO were requested to complete the information on the available courses and training organizations in Africa and submit an update to the AFI Plan SC meeting in Maputo.

2.   **DISCUSSION**

2.1   **Update of the Inventory of Existing Courses**

2.1.1   African continent count some very active training centres mostly supported by a civil aviation authority, an airline or a service provider in addition to few private training centres. Attachment A includes an updated list of training centres and their level of recognition by ICAO as members of TRAINAIR PLUS Programme or authorized to deliver Government Safety Inspectors courses (GSI) or

both. There are currently in Africa one ICAO Regional Training Centre of Excellence, 7 Full Members, 7 Associate Members and 3 centres authorized to deliver GSI courses. These training centres have access to a wide range of training courses they have developed in addition to those shared in TRAINAIR PLUS network (currently sixty two Standardized Training Packages and the number is growing). Attachment B include sample of portfolio of training courses. The global aviation course catalogue 2015 is available in pdf on GAT webpage at www://icao.int/training.

2.1.2   In addition to a large number of operational courses available in the African continent following are courses available for civil aviation authorities (regulatory staff):

Area	French	English
Personnel Licensing	Being developed by Morocco	GSI Course developed by the FAA
Aircraft Operations	Being developed by Morocco	GSI Course developed by the FAA
Airworthiness of Aircraft	Being developed by Morocco	GSI Course developed by the FAA
Aerodrome certification	Available in EAMAC	Will be available as ICAO course in 2016
Air Navigation Services oversight	Not available	Available as a set of Standardized Training Packages
Accident Investigations	Not available	ECCAIRS

3.   CHALLENGES FACING CAPACITY BUILDING IN AFRICA

3.1   African States receive training from various sources but the challenges facing capacity building in Africa are not due only to the lack of training. There are several training centres established in the continent with appropriate facilities for the delivery of training but they need to have access to valid course materials and instructors. The main challenges facing capacity building in Africa can be summarized as follow:

   a) Training and competency requirements not identified by Civil Aviation Authorities and the aviation industry;

   b) No Human Resources Development strategies established by aviation organizations including CAAs and aviation industry, therefore training is provided on ad-hoc basis rather than planned;

   c) On several occasions trainees have been identified as not meeting the entry level; and

   d) Training provided not consistent with staff responsibilities.

4.   THE WAY FORAWRD

4.1   Building capacity in aviation in Africa and more specifically for Civil Aviation Authorities requires a coordinated roadmap including the following:

      An established Master Plan with a clear and monitored schedule of implementation;

a) Identified training and competency requirements for Civil Aviation Authorities and aviation industry staff and management positions;

b) Identified consistent training programmes (combination of courses) to be completed by aviation personnel including ASIs as well as a list of high quality, valid and credible training courses consistent with these training programmes;

c) Implementation of a systematic and comprehensive Train-The-Trainer programme addressing all existing and potential training areas and courses in addition to the establishment of a roaster of qualified instructors;

d) Commitment from all stakeholders to ensure that only trainees meetings entry level requirements will be enrolled;

e) A comprehensive and shared evaluation of training outcomes identifying who has been trained on what and what was the result for the individual, the organization (employer) and relevant ICAO programme; and

f) Enhanced role of CAAs for oversight on training organizations and programmes in Africa and abroad.

g) Implementation of a Human Resource Development methodology by all African States for the recruitment and training of aviation personnel;

h) Improve attraction and retention measures for all key staff including ASIs, managers and instructors.

-END-

DP/03 ATTACHMENT A: AFRICAN AVIATION TRAINING ORGANIZATIONS

REGIONAL OFFICE	STATE	TRAINING ORGANIZATION	ICAO RECOGNITION
ESAF **(2 Full and 4 Associate)**	**ETHIOPIA**	Ethiopia Civil Aviation Authority Training Centre (ECAATC), Addis Ababa	TPP Associate Member
	ETHIOPIA	Ethiopian Aviation Academy (EAA), Addis Ababa - (www.ethiopianairlines.com)	TPP Associate Member
	KENYA	East Africa School for Aviation (EASA), Nairobi (www.easa.ac.ke)	TPP Full Member + GSI
	SOUTH AFRICA	Air Traffic and Navigation Services Limited-Aviation Training Academy (ATNS), Gauteng (www.atns.co.za)	TPP Full Member + GSI
	SOUTH AFRICA	43 Air School Air Traffic Control College, Port Alfred - (www.43airschool.com/atc-training)	TPP Associate Member
	TANZANIA	Civil Aviation Training Centre (CATC) of Tanzania, Dar Es Salaam - (www.tcaa.go.tz)	TPP Associate Member
WACAF (4) **(One RTCE and 3 Full)**	**CAMEROUN**	École Régionale de Sécurité Incendie (ERSI), Douala - (www.ersi-asecna.com)	TPP Full Memebr
	NIGER	École Africaine de la Météorologie et de l'Aviation Civile (EAMAC), Niamey (www.eamac.ne)	ICAO Regional Training Centre of Excellence
	NIGERIA	Nigerian College of Aviation Technology (NCAT), Zaria - (www.ncat.gov.ng)	TPP Full Member
	SENEGAL	École Régionale de la Navigation Aérienne et du Management (ERNAM), Dakar (www.asecna.aero)	TPP Full Member + GSI
EURNAT (1 Full and 1 Associate)	**MOROCCO**	L'Académie Internationale Mohamed VI de l'Aviation Civile (AIAC) - (www.aviation.ma)	TPP Full Member
	MOROCCO	Loumed Cabin Crew Training Centre	TPP Associate Member

MID (1 Full and 2 Associate)	EGYPT	Egyptair Training Center, Cairo (www.training.egyptair.com)	TPP Associate Member
	EGYPT	Egypt Aviation Academy, Cairo – (www.eaaegypt.com)	TPP Associate Member
	SUDAN	Sudan Academy for Aviation Sciences and Technology (SUDAFAST), Khartoum	TPP Full Member

-END-

DP/03 ATTACHMENT B: Sample Catalogue of Courses currently available by training centres

NIGERIAN COLLEGE OF AVIATION TECHNOLOGY

1. FLYING SCHOOL

Course Title	Duration
Standard Pilot Course No. 31	65 Weeks
Standard Flight Operations Course	25 Weeks
Cabin Crew Course Ab-Initio	10 Weeks
Refresher	2 Weeks
Dispatch Recurrent course	1 Week
Cabin Crew Course Refresher	1 Weeks
Aviation Meteorology	8 Weeks
Abridged Cabin Crew	2 Weeks

2. AVIATION MANAGEMENT SCHOOL

Course Title	Duration
Basic Aviation Planning, Operations and Management Course	2 Weeks
Advance Aviation Planning, Operations and Management Course	2 Weeks
Executive Aviation Planning, Operations and Management Course	1 Week
Aviation Passenger Service	3 Weeks
Air Transport Economics Course	5 Weeks
League of Airport and Aviation Correspondence Course: Basic/ Advance/ Management/ Senior Management/ Refresher.	1 Week
Modern Office Management	2 Weeks
Management Information Systems	2 Weeks
Basic Aviation Store House Management (ASHM)	3 Weeks
Advance Aviation Store House Management (ASHM)	3 Weeks
Introduction Safety Management Systems	5 Days
Human Factors	5 Days
Dangerous Goods	5 Days
Aviation Facility Administration and Management Course	2 weeks
Crew Resource Management	3 days
Terminal Operations and Management	3 weeks
Air Cargo Acceptance and Handling (ICAO/TRAINAIR PLUS).	1 Week
Managing Safety at Airports (ICAO/TRAINAIR PLUS).	1 Week
Delivering Great Customer Service (ICAO/TRAINAIR PLUS).	1 Week
Travel Documents (ICAO/TRAINAIR PLUS).	1 Week
Airport Emergency Procedures (ICAO/TRAINAIR PLUS).	1 Week
Post Graduate Diploma in Aviation Management.	One (1) Academic Year.
Air Transport Fundamentals (IATA)	1 Week
Airline Cabin Crew (IATA)	1 Week
Airline Customer Service (IATA)	1 Week
Airport Operations (IATA)	1 Week
Airport Ramp Services (IATA)	1 Week
Aviation Security Awareness (IATA)	1 Week
Introduction to Safety Management Systems (IATA)	1 Week

3. AERONAUTICAL TELECOMMUNICATION ENGINEERING SCHOOL

Course Title	Duration
Airfield Ground Lighting System	3 Weeks
Airfield Ground Lighting System Maintenance & CCR	3 Weeks
Airfield Power Supply System	3 Weeks
Operation and Maintenance Diesel Engine Generator	2 Weeks
Operation and Maintenance Refrigeration & Air-Conditioning System	2 Weeks
Operation and Maintenance Solar Power System	2 Weeks
Marking and Sign	1 Weeks
PSR & SSR Antenna subassembly	2 Weeks
Air Navigation Systems Management	2 Weeks
Surveillance Radar Principles	4 Weeks
Secondary Surveillance Radar Principle (Monopulse)	3 Weeks
Printed Circuit Board Design & Fabrication	2 Weeks
VSAT Installation and Maintenance	1 week
Data Communication	2 weeks
Communication Equipment Maintenance	2 weeks
Antenna Systems	3 weeks
Fibre Optics	2 weeks
Air Traffic Safety Electronics Personnel License	12Weeks
Air Traffic Safety Electronics Systems	8 Weeks
Standard Aeronautical Telecommunication Engineering Diploma	93Weeks
Abridged Aeronautical Telecommunication Engineering Diploma	40Weeks
Aeronautical Data Networks AIS Data Management; Statistical Application using SSPS & Linux Operating System	6 Weeks
Printed Circuit Board Production and Computer Aided Design	2Weeks
Managing and Maintaining Microsoft Windows Server Environment	2Weeks
Database Management System	2Weeks
Computer Installation, Maintenance and Repairs	2Weeks
Computer Networking	2 Weeks
Linux Operating System	2 Weeks
Computer Appreciation and Application Course	2Week
Alcatel ILS Principles	1 week
Alcatel CVOR Principles	1 week
Navigation aids Principles	2 weeks
Alcatel DVOR Principles	1 week
Alcatel DVOR Equipment (Trainair STP)	3 weeks
Alcatel ILS Equipment	4 weeks
Navigation Aids Equipment Training (THALES)	2 weeks
Navigation Aids Equipment Refresher	1 week
Performance Based Navigation Course	1 week
GBAS Augmentation Systems Training for Precision Approach & Surface movement	2 weeks
Flight Calibration Training for (Engineers/Technicians)	2 weeks
Navaids Equipment System Monitoring & Control course	2 weeks

4. AIR TRAFFIC SERVICES/COMMUNICATION SCHOOL

Course Title	Duration
Basic aviation security course	8 Weeks
Aviation security – cargo and mail security	1 Week
Aviation security for flight deck and cabin crew	2 Weeks
Aviation security for ground staff	2 Weeks

Terminal radar control	12 Weeks
Aviation Security for Executives	1 Week
Aeronautical Communication Operation	44 Weeks
Radio Telephony Operation	8 Weeks
Advanced Aeronautical Communication Operation	12 Weeks
Communication Centre Management	3 Weeks
Aeronautical Mobile Services	12 Weeks
Aviation English Language	8 Weeks
Aviation English Language (Refresher)	3 Weeks
Communication Officers Refresher	3 Weeks
Advanced Radio telephony Operation	8 Weeks
Airport Telephone Operation And Billing	8 Weeks
General English Immersion	24 Weeks
Basic Aeronautical Information Management Officer's Course No. 7 & 8	34 Weeks
Area Control (Non-Radar) Course N.36	10 Weeks
Base Operations Course (BOPS) NO.5	8 Weeks
Government Aviation Operation Course No. 10	12 Weeks
Advance AIS/AIM Course	8 Weeks
Basic Airport Operations Course No.5	12 Weeks
AIS TO AIM	2 Weeks
Standard Air Traffic Control No.61	40 Weeks
Apron Control Course (Experienced Officers)	18 Weeks
Apron Control Course (Refresher)	8 Weeks
Marshallers Course	4 Weeks
Standard Air Traffic Control (Remedial Course)	4 Weeks
Standard Air Traffic Control (Refresher)	3 Weeks

5. AIRCRAFT MAINTENANCE ENGINEERING SCHOOL

Course Title	Duration
Aircraft Maintenance Engineering Course (Airframe & Power plant)	120 Weeks
Aircraft Maintenance Engineering Course (Avionics)	120 Weeks
Pressurised Metal Airframe	6 Weeks
Direct And Remote Reading Compasses	4 Weeks
Airborne Radio Course	12 Weeks
Automatic Flight Control System Course	8 Weeks
Human Factor In Aircraft Maintenance Course	2 Weeks
Non Destructive Testing & Inspection Course	2 Weeks For Each Module
Maintenance Organization And Regulation Course	2 Weeks
Gas Turbine Engine Course	3 Weeks
Abridged Aircraft Maintenance Engineering Course (Airframe & Power plant)	90 Weeks
Abridged Aircraft Maintenance Engineering Course (Avionics)	90 Weeks
Aircraft Batteries Maintenance Course	2 Weeks
Aircraft Sheet Metal Repairs Course	12 Weeks
Wheels And Brake Modular Course	2 Weeks
Workshop Machine Tools	8 Weeks
Aircraft Engineering Special Course	45 Weeks
Basic Technician Certificate Course	45 Weeks
Intermediate Technician Certificate Course	45 Weeks
Licence Preparatory Course	30 Weeks
TB-9 Line Inspection Course (STP)	2 Weeks

Electrical & Electronics Maintenance Tools Course	2 Weeks

ETHIOPIAN AVIATION ACADEMY

1. Aircraft Maintenance Technician School

Course Title	Duration
Aircraft Maintenance Technicians (AMl) Training	22 Months
CAT A1 Training	6 Months
Aircraft Structure Maintenance Technicians Training	12 Months
Gas Turbine Engine Maintenance Technicians Training	9 Months
Mechanical Component Maintenance Technicians Training	10 Months
Avionics Component Maintenance Technicians Training	15 Months
Aircraft Cabin Maintenance Technicians Training	7 Months
Aircraft Painters Training	3 Months
Aircraft General Familiarization Training for Maintenance Engineers	1 Month
Aircraft Type Training	Depending of the specific aircraft
Aircraft Component Maintenance Training	Depending of the specific aircraft
Continuation Training Programs for aircraft maintenance professionals	

2. . Pilot Training School

Course Title	Duration
Integrated CPL/MEJIR Rating	18 Months
Multi-Crew Pilot License Training	18 Months

3. Cabin Crew Training School

Course Title	Duration
Basic (Initial) Cabin Crew Training	3 months
Cabin Crew Recurrent Training	46 hrs.

The following courses can be provided either separately or together as applicable in a period of two years (24 months)

- General Safety & Emergency Procedures
- Crew Resource Management (CRM)
- Cabin System Operation & Equipment Drill
- Aviation First Aid
- Dangerous Goods
- Aviation Security

4. Commercial & Ground Services Training School

Course Title	Duration
Ramp Handling Agent Training	2.7 months
Airline Call Center and Ticketing Agent Training	3 months
Airline Commercial and Ground Operation Training	4.5 months

Airport Passenger Handling Agent Training	2 months
Cargo Handling Agent Training	3 months
Airline Accounting and Finance	420 hrs
Specialized and Recurrent Commercial & Ground Services Trainings. The specialized courses are: Basic Reservations; Automated Reservations; Basic Passenger fares and Ticketing; Sabre Automated Passenger Fares and Ticketing; Sabre SSCI Check-in; Intermediate fares and Ticketing; Revenue Accounting; Airline Passenger hand ling (I); Airline Passenger handling (II); Aircraft Weight & Balance - Initial (Pax); Aircraft Weight Balance - Initial (Freighter); Automated Cargo (Cargo Spot); World Tracer; Basic cargo Skills and Procedures; Dangerous Goods Regulation-Initial (category 1-4); Dangerous Goods Regulation - Refresher (Category 1-4); Live Animal Regulation; Advanced cargo Skills and Procedures; Ground Operations Ramp Handling; Automated ULD Handling; Ramp and Airside Safety; Perishable Regulations; Introduction to Cargo; Introduction to the Airline Industry; Professional Customer Handling; Professional Telephone Handling; Salesmanship and Customer Awareness; Air Carrier Access Act (ACCA) and Implementing Regulation; 14 CFR Part 382.	Depending of the specific training

5. Leadership & Career Development

Course Title	Duration
Corporate Governance	Depending of the specific training
Decision Making and Problem Solving	Idem
Transformational Leadership Course	Idem
Project Management	Idem
Maintenance Planning and Management	Idem
Systems & Procedures Course	Idem
Supply Chain Management Course	Idem
Financial Management Course	Idem
Time Management	Idem
Office Management Course	Idem
Strategic Management	Idem
Executive Project Management	Idem
Team Building	Idem
Performance Management and BSC	Idem
Effective Team Leadership	Idem
Communication Skill	Idem

EAMAC

1.   Air Transport Division

Course Title	Duration (weeks)
Airworthiness and Operation Inspector Basics	3
Airworthiness Inspector	4
Civil Aviation Personnel Licensing	2
Airport Certification	3
Search and Rescue	2
Flight Safety Inspector	4

2.   Meteorological Division

Course Title	Duration (weeks)
Upper Measurement	2
Classic Meteorological instruments	2
Basic satellite Meteorology	2
Advanced satellite meteorology	3
Observations /codes	4
Synoptic Forecasting	4
VMAR training	4

3.   **Air Navigation Division**

Course Title	Duration (Weeks)
On Site Testers	2
ATC Instructors	4
ATM Means for ATC	3
Aerodrome control refresher	5
Approach control (procedural) refresher	5
Area control (procedural) refresher	5
Human Factors in ATC	2
Aeronautical Information Officer	3
ATS Reporting Officer	3
ARO and Aeronautical Information Instructor	3
ARO and Aeronautical Information Supervisor	3
NOTAM Officer	3
Aeronautical and ICAO message routing	5
Aeronautical Telecommunications Basics	4
AMSS Operations	5
Aeronautical Telecommunications Operation Supervisor	3

4.   **Electronics and computer science Division**

Course Title	Duration (weeks)
RADAR Principles	3
Remote VHF	4
DME maintenance	5
ILS maintenance	6
VSAT maintenance	5
VOR maintenance	6
RADAR MSSR	5
MUX ATS/DS	4
Visual Aids maintenance	4
Energy Transport and distribution	4

-END-