



WORKING PAPER

**SPECIAL AFRICA-INDIAN OCEAN (AFI)
REGIONAL AIR NAVIGATION (RAN) MEETING**

Durban, South Africa, 24 to 29 November 2008

**Agenda Item 5: Development of a set of comprehensive work programmes in the safety field
(Safety Committee)**

TRAINING STRATEGIES FOR AVIATION SAFETY IN AFRICA

(Presented by the Secretariat)

SUMMARY

This paper proposes a set of strategies oriented to harmonize national policies in training to ensure an effective approach to unified training standards and application criteria in the AFI Region: identical training solutions for similar operations problems.

Action by the meeting is in paragraph 4.

1. INTRODUCTION

1.1 Training constitutes a significant contributing factor for safety and security in air operations. The safety and efficiency of international civil aviation depends primarily on the skills of the personnel that manage, operate and maintain its systems. These professionals must not only possess high individual skills, but in order for an international system to function safely and efficiently, they must also be able to work together as an “international team”. To achieve this goal, it is essential that the team members receive the same high quality training throughout the world. ICAO is committed to working with Contracting States to advance worldwide quality standards in civil aviation training.

1.2 Today, the technology exists to create a seamless global air navigation system. However, a seamless air navigation environment will require more than technology to function effectively. It will require an international team that is competent to perform its job in such an environment.

2. BACKGROUND

2.1 Standardization in aviation training programmes aims at establishing a common set of procedures and practices in course design, development and implementation which, in turn, should follow a pre-established framework of rules and guidelines related to States’ obligations to establish requirements for competency-based training.

2.2 Since its creation in 1944, ICAO has been engaged in training as a way to improve the safety and security of air operations. ICAO's traditional role in training led, jointly with the United Nations Development Programme (UNDP), to the establishment of approximately seventy Civil Aviation Training Centres (CATCs) worldwide, including institutes at Niamey, Niger; Mvengue, Gabon and Nairobi, Kenya. In the late 1980s, ICAO developed the TRAINAIR Programme, originally as a technical cooperation project funded through the UNDP Global Programme with a view to implementing a standardized methodology for aviation training, and to providing a standards reference framework for the design and development of competency-based training programmes. In the early 1990s, this project became an integral part of the Organization.

2.3 The original ICAO standardized training guidelines have since evolved into specialized training manuals which are made available to the aviation community for the design, development and production of training materials, the most relevant of which are the *Training Manual* (Doc 7192) and the *Procedures for Air Navigation Services — Training* (PANS-TRG, Doc 9868).

2.4 Members of the TRAINAIR Programme, using the Instructional Systems Development (ISD) or Systems Approach, a standardized training development methodology, have produced more than one hundred and forty Standardized Training Packages (STPs) in numerous civil aviation disciplines, which are freely shared between TRAINAIR members.

3. DISCUSSION

3.1 AFI Region Training Implementation: A Safety Case

3.1.1 In the AFI Region, planning and implementation of training is mostly fragmented and carried out by individual States in accordance with outdated national systems, using a variety of obsolete training technologies. Safety-related priorities in training are focused on air traffic management, maintenance and operations personnel.

3.1.2 Training curricula for licensed and non-licensed personnel depends on individual criteria of Civil Aviation Administrations (CAAs). In consequence, the outcome of the training path followed by individual national personnel may vary from one State to another. Existing differences in standards for training curricula have led to the further fragmentation of training into small, inefficient blocks within States in the Region. As a result, licenses, titles, certificates and diplomas issued by one State are not easily transferable to, or readily validated by, other States.

3.1.3 Harmonization of competency-based training outcomes can be achieved through standardized training curricula for licensed and non-licensed instruction in the States of the region. This unified process should include common criteria for the acceptance by the CAA of the training undertaken by their personnel in another State.

3.2 Effectiveness of Unified Training in the Region

3.2.1 Availability of subject matter experts (SMEs) and certified instructors is critical for adequate course development. At present, most of the CAA training organizations rely on their own SMEs for the preparation of course material and assessment subsystems under the existing training plans. However, in order to ensure updated and upgraded technical backstopping during the development of training material, coordination and cross-referencing between SMEs of various States should be established.

3.2.2 Quality assurance of training processes and products should be part of every stage, including course development, implementation and on-the-job training. An interdisciplinary and international follow-up and monitoring action plan of the entire training process should be implemented. The final goal is to set a continuous benchmarking mechanism in the AFI Region and beyond to ensure permanent quality assurance and the achievement of performance objectives as described in the national training plans.

3.2.3 Full harmonization of the relevant rules is not feasible in view of the cost implications and the existence of different legal frameworks in the various States. Instead, a more pragmatic approach is required through mutual recognition by States of their respective training systems based on equivalent standards. For this purpose, a detailed study of national legal and training requirements would facilitate the definition of a common core of regulations for the issuance of licenses, titles, certificates and diplomas applicable to all States in the region.

3.3 Harmonization Strategies for Training

3.3.1 It is therefore recommended that a common pool of experts from States within the AFI Region develop, and/or facilitate the identification of, existing operational regulations defining the duties and responsibilities of civil aviation personnel within CAAs, with a view to their harmonization in accordance with ICAO standards of global applicability. This approach would greatly improve the safety of air operations, by facilitating cost-effective training of personnel in different countries where standardized training delivery of a specific discipline is more affordable, as well as the mobility of operational staff among civil aviation administrations in the region, where necessary to compensate for temporary capability constraints.

3.3.2 Periodic meetings of high-level authorities responsible for training in each State should be held to establish and regularly review the agreed framework for training harmonization, and prioritize the actions to be taken. Discussions should encompass the analysis of feedback received from training institutions and operational units within the CAAs to redirect the training processes as required.

3.3.3 On the basis of the above, and with a view to establishing a continuous process for the harmonization of training and mutual recognition by States of the training of national personnel carried out in any State in the region, the meeting is invited to adopt the following recommendation:

Recommendation 5/x — Harmonization of Training Programmes

- a) the CAAs and other authorities responsible for training in the AFI Region adopt the necessary measures to create a catalogue of training activities in their respective countries, including expected post-training performance objectives;
- b) CAAs create a group of experts to study the establishment of a harmonized legal framework to allow mutual recognition of training of national staff carried out in other States;
- c) ICAO under the AFI Implementation Plan organize the First Pan African Training Coordination Conference of Civil Aviation Training Centres in the AFI Region, at the highest managerial level, as a forum for training experts to establish the pool of experts and lay the groundwork for closer cooperation and harmonization of training requirements including standardization and quality control; and
- d) the services of a team of international training and legal experts be used to define a master plan for harmonization of the training in the AFI Region.

4. ACTION BY THE MEETING

4.1 The meeting is invited to approve the draft Recommendation in paragraph 3.3.3 above.