



ICAO

EIGHTH MEETING OF DIRECTORS GENERAL OF CIVIL AVIATION OF AFRICA-INDIAN OCEAN REGION (AFI-DGCA/8)

4. Aviation Professionals in the AFI Region – Gap analysis and enhancement project

(Presented by the Secretariat)

SUMMARY	
<p>This working paper presents the “Aviation Professionals in the AFI Region – Gap analysis and enhancement project”. It describes the background of the project, the activities which were carried out and the current implementation status.</p> <p>As part of the initial activities, a survey on current staff levels and gaps within the Western and Central African (WACAF) and Eastern and Southern African (ESAF) regions was carried out. The focus of the present paper lies on the preliminary analysis of the current survey responses.</p> <p>Finally, this working paper provides a short description of the next steps of this project.</p> <p>The actions by the Meeting are indicated in section 3.</p>	
<i>Strategic Objectives</i>	<ul style="list-style-type: none"> A — Safety B — Air Navigation Capacity and Efficiency C — Security & Facilitation D — Economic Development of Air Transport E — Environmental Protection

1. INTRODUCTION

1.1 The challenge of inadequate Aviation professionals is prevalent globally and more so in the AFI Region. ICAO Aviation Safety and Security Audits have identified the lack of qualified aviation personnel as one of the common deficiency and root cause for low scores in the average Effective Implementation (EI) of critical elements (CEs) of a State oversight system, hence low levels of compliance with ICAO SARPs in many African States. This adversely impedes States’ fulfilment of their international obligations under the Chicago Convention and effective participation in the global aviation market.

1.2 The enhancement of aviation human resource capacity in Africa remains a key component of the deliverables of the AFI Region initiatives including: the Comprehensive Regional Implementation Plan for Aviation Safety in Africa (AFI Plan), the Comprehensive Implementation Plan for Aviation Security and Facilitation in Africa (AFI SECFAL Plan) and the African Human

Resource Development Fund (HRDF). There is also a need for capacity building on Sustainable Development of Air Transport in Africa and the development of State Environment Plan.

1.3 In addition to the ICAO programmes mentioned above, there is need to implement the African Aviation Training Roadmap indicating aviation training needs in Africa, developed by the African Aviation Training Organization (AATO) supported by ICAO GAT upon the recommendation of the AFI and AFI AVSEC/FAL Plans Steering Committees (SCs).

1.4 Considering the various initiatives, programmes and plans in the region it is imperative that priority be given to development of a comprehensive data base on aviation professionals related to ICAO Strategic Objectives, as well as to come up with a gap analysis and a forecast of the needs of the aviation sector in Africa.

1.5 The objectives of the project are to:

- a) Establish baseline data/information on aviation professionals in the region and build a sustainable platform for available data on expertise in real time;
- b) Assess the existing gaps of expertise in specific areas and present future anticipated demand to effectively carry out the oversight responsibilities of States in the AFI region;
- c) Develop a tool to support a data bank/platform providing information on the available aviation professional and accessible to relevant stakeholders such as AFCAC, AATO, ICAO TCB, AFI Plan, AFI SECFAL Plan, RSOOs;
- d) Address the gender balance and parity inadequacies in the AFI Region; and
- e) Prioritize and provide the required training and competencies.

2. **DISCUSSION**

2.1 **Status of Implementation**

2.1.1 ICAO has carried out the following activities:

- a) January 2021: Project Document and Terms of Reference developed and approved by the Secretary General
- b) 7 March 2021: Project Team established (Regional Offices and GAT)
- c) 24 March 2021: Funding/budget approved by the Secretary General
- d) 7 to 21 April 2021: Vacancy Notice for consultancy published
- e) May 2021: Fact-finding/data collection launched as a preliminary step, pending the recruitment of a consultant
- f) July 2021: Consultant recruited and to commence work

2.2 Preliminary Analysis of the Survey Results

2.2.1 The survey was launched on 31 May 2021 and was aimed at capturing data on current staffing numbers and gaps and developing preliminary observations.

2.2.2 The survey was anchored on 89 data points. As at 5 July 2021, 24 out of 48 States responded, which corresponds to a response rate of 50 per cent.

2.2.3 The 24 States that responded to the survey provided on average 74 out of the required 89 data points, i.e. the data is 83 per cent complete. Some elements, such as required staff numbers or average ages for specific areas or domains are missing. The available data corresponds to 43 per cent of the data of the entire AFI region.

2.2.4 The results are based on several assumptions:

- a) If a State has not provided information on the required number of staff, it was assumed that this value corresponds to the current number of staff.
- b) The totals for aerodromes and ground aids (AGA) for Strategic Objective A were copied to the field of aerodrome operational planning (AOP) for Strategic Objective B.
- c) The percentage of female staff is calculated based on those areas and domains for which the current number of female staff was provided. Since some States did not provide the current number of female staff, its percentage is calculated based on a subset of the total number of staff.
- d) The average age of staff was calculated in the same way as the percentage of female staff; entries with incomplete information were not taken into account.
- e) In cases where the staff numbers were incorrect (i.e. number of female staff greater than the total number of staff), the corresponding values were not taken into account for the calculation of the gaps, the percentage of female staff or the average age.

Current Staff and Gaps for Strategic Objective A

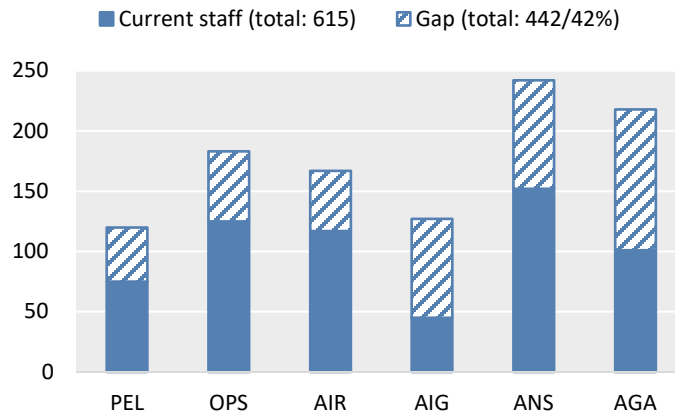


Figure 1: Current Staff and Gaps - Strategic Objective A

2.2.5 Figure 1 above shows the current staff numbers and corresponding gaps for Strategic Objective A.

2.2.6 The main observations are the following:

- a) About one third of the positions are vacant.
- b) There are significant gaps in all areas, the largest ones being in AIG, ANS and AGA.

Current Staff and Gaps for Strategic Objective B

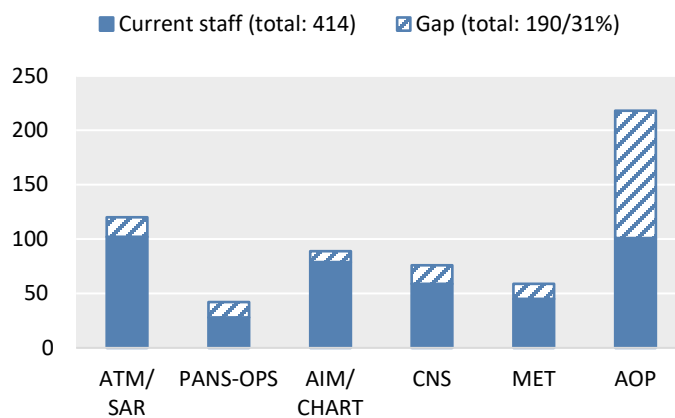


Figure 2: Current Staff and Gaps - Strategic Objective B

2.2.7 Figure 2 shows the current staff numbers and corresponding gaps for Strategic Objective B.

2.2.8 The main observations are the following:

- a) Close to 30% of the positions are vacant.

- b) The gaps are overall small, with the exception of AOP (which is identical to AGA for Strategic Objective A).

Current Staff and Gaps for Strategic Objective C

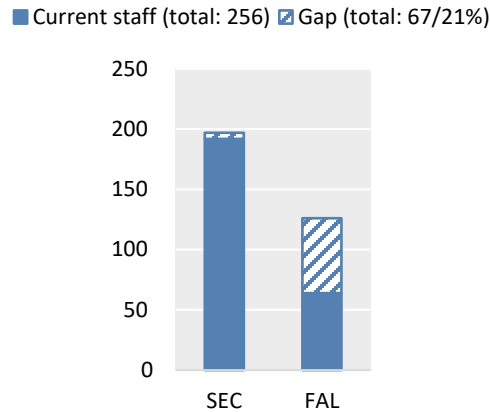


Figure 3: Current Staff and Gaps - Strategic Objective C

2.2.9 Figure 3 shows the current staff numbers and corresponding gaps for Strategic Objective C.

2.2.10 The main observations are the following:

- a) About 20% of the positions are vacant.
- b) While the gap for Security is small, close to 50% of the positions in Facilitation are vacant.

Current Staff and Gaps for Strategic Objectives D (LEG and AT) and E (ENV)

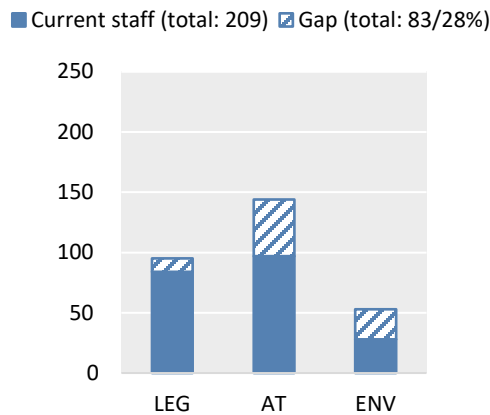


Figure 4: Current Staff and Gaps - Strategic Objectives D and E

2.2.11 Figure 4 shows the current staff numbers and corresponding gaps for Strategic Objectives D and E.

2.2.12 The main observations are the following:

- a) About 28% of the positions are vacant.
- b) The gap is relatively small for the Legal Experts, however one third of the Air Transport Expert positions are vacant.
- c) Environment shows a gap of 50%, however the number of current staff is overall very low.

Female Staff by Strategic Objective

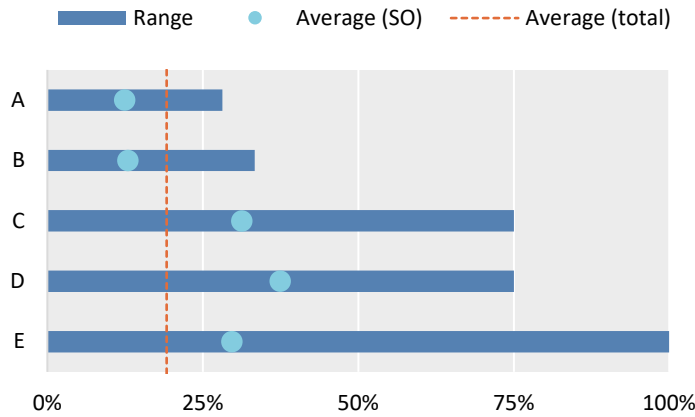


Figure 5: Female Staff by Strategic Objective (SO)

2.2.13 Figure 5 above shows the average percentage of female staff as well as the range of percentages by Strategic Objective.

2.2.14 The main observations are the following:

- a) Overall, 18 per cent of the staff across all Strategic Objectives are female. Assuming an objective of 50 per cent of female staff, the current number corresponds to less than half of the objective.
- b) The percentage of female staff for Strategic Objectives A and B (12 per cent on average) is significantly lower than for Strategic Objectives B, C and D (30 to 35 per cent on average).
- c) There are significant variations amongst States and across the Strategic Objectives. While some States have no female staff, the percentages are comparatively high for others.

Average Age of Current Staff by Strategic Objective

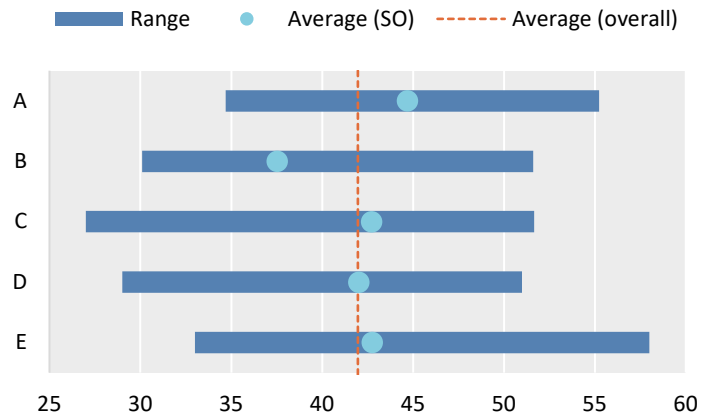


Figure 6: Average Age of Staff by Strategic Objective (SO)

2.2.15 Figure 6 above shows the average age of staff as well as the range of average ages by Strategic Objective.

2.2.16 The main observations are the following:

- a) Assuming that staff work from the age of 25 and retire at the age of 60, the average age of current staff (42 years) is close to the average age of this range of 42.5 years.
- b) With the exception of Strategic Objective B, for which the average age of staff is 37 years, the average ages for all Strategic Objectives are close to the overall average.
- c) There are significant variations amongst States and across the Strategic Objectives. While there are States for each Strategic Objective for which the average age of staff is less than 35 years, there are others for which the average age is higher than 50 years. In particular, for Strategic Objectives A and E, there are States whose staff is on average more than 55 years old, i.e. close to retirement.

2.3 Next Steps

2.3.1 Based on the objectives stated above, the next steps of this project to be carried out by the Consultant are to:

- a) Estimate (extrapolate) the missing values based on parameters such as flight movements or fleet size; and
- b) Calculate and present anticipated future demand to effectively carry out the States' safety and security oversight responsibilities in the AFI region.

3. ACTION BY THE MEETING

3.1

The meeting is invited to:

- a) Take note of the information presented in this working paper;
- b) Take note of preliminary observations which indicate significant gaps in the number of required aviation professionals in several areas and gender imbalance;
- c) Note that a comprehensive study will be undertaken by the Consultant and the outcome coordinated with the AFI Group and AFCAC and shared by States for implementation;
- d) Invite African States to take advantage of existing programmes and initiatives to address inherent and anticipated challenges in AFI Region and support the project by designating Focal Points and provide complete information/data through surveys;
- e) Commend the ICAO Secretary General for the initiation of the Project in close coordination with the AFI Group and AFCAC; and
- f) Recognise and applaud the ICAO Secretary General support to build a robust aviation sector in Africa dependent on an aviation professionals component, especially in the post COVID-19 recovery period.