



ICAO

## INTERNATIONAL CIVIL AVIATION ORGANIZATION

## Twenty-Seventh Meeting of the AFI Planning and Implementation Regional Group (APIRG/27)

5 to 6 November 2024

**Agenda Item 3: Implementation of air navigation goals, targets and indicators, including the priorities set in the Regional Air Navigation Plan**

**OPMET DATA QUALITY AND AVAILABILITY IN THE AFI REGION**

*(Presented by South Africa)*

<b>SUMMARY</b>
This paper presents the status of OPMET data quality and availability in the AFI Region and highlight factors impacting on data quality and availability in a broader context. Furthermore, the paper presents the role played by regional OPMET Databanks Dakar and Pretoria to enhance data availability and data exchange in the region and beyond.
<b>REFERENCE(S):</b> APIRG 20 report (Conclusion 20/43) APIRG 21 report (Conclusion 21/24) APIRG 24 report (Conclusion 24/33) AFI AMBEX Handbook
<b>Related ICAO Strategic Objective(s): Safety (A) and Air Navigation Capacity and Efficiency (B)</b>

## 1. INTRODUCTION

1.1 There are two Regional OPMET Data Banks designated through conclusion 67 of APIRG 13 held in 2001 (APIRG/13 Conclusion 67). The roles and responsibilities of AFI RODBs with respect to OPMET Data in the AFI Region are prescribed in the AMBEX Handbook and further clarified through various APIRG Conclusions and Decisions.

1.2 Regardless of the effort and calls made through working papers which led to APIRG conclusions 20/43, 21/24, 24/33, 24/35; challenges which impact on the quality and availability of OPMET data in the AFI Region are continuing. These factors are systematic in nature and require drastic measures by all relevant stakeholders to address them, otherwise the safety and efficiency of air navigation within the African continent will remain compromised.

## 2. DISCUSSION

2.1 Dakar and Pretoria are two designated RODBs within the ICAO AFI Region. The roles and responsibilities of the two RODBs include the collection, storage, and exchange of OPMET data within the AFI Region and exchange of such data with other Regions (IROG Toulouse) of ICAO in accordance with the AMBEX scheme. In addition, RODBs are expected to play a leading role

in OPMET data exchange under the System Wide Information management (SWIM) through the implementation of ICAO Weather Exchange Model (IWXXM).

- 2.2 In fulfilling the above, AFI RODBs are expected to implement the required capabilities *inter alia* bandwidth and data control capabilities to ensure effective collection, storage, quality control and exchange of OPMET Data within the AFI Region and beyond. Furthermore, APIRG Conclusion 20/23 (c ) calls for the AFI RODBs to conduct regular monitoring of OPMET data and present quarterly statistics reports in accordance with the reporting formats prescribed in AFI AMBEX Handbook (i.e. regularity, availability and compliance indices).
- 2.3 The validation of OPMET Data is one of the key capabilities that exist at Pretoria RODB. It enables the detection and isolation of OPMET Data which does not conform to the set standards as prescribed in the AMBEX Handbook. Pretoria RODB has also implemented several measures to assist in increasing OPMET data quality and availability in the region including ongoing interaction with ICAO ESAF office, Inter Regional OPMET Gateway (IROG) Toulouse as well as individual States to address identified issues relating to OPMET data such as incorrect headers line, coding and lack of adherence to bulletin transmission times. This is in addition to regular interaction with users through an established user consultative forum which has led to a better understanding of user perception and perspective about challenges associated with the quality and availability of OPMET Data in the AFI Region.
- 2.4 The impact of poor quality OPMET data is significant to the safety of air navigation in the region. It also impacts on the accuracy of numerical weather prediction models and subsequent products provided to support the safety of flight operations. Several contributing factors may be responsible for poor quality and availability of OPMET data in the AFI region. Some of these challenges are inherent in the overall system and may require structural changes including changes in Government policy to alleviate them.
- 2.5 The lack of implementation of relevant APIRG Resolutions (APIRG conclusions 20/43, 21/24, 24/33, 24/35;..) has been one of the major contributing factor and so is the lack of a collective effort amongst States at regional and sub-regional level to confront challenges together in the spirit of No Country Left Behind.

### **3. ACTION BY THE MEETING**

The meeting is invited to: -

- 3.1 Note the information contained in this paper and
- 3.2 In order to improve the availability of OPMET data in the region, States are urged :
  - 3.2.1 to OPMET availability by ensuring that messages are quality controlled prior to disseminating them; and
  - 3.2.2 to use relevant, applicable guidelines provided by ICAO for the correct formatting of messages.
  - 3.2.3 to update the list of required OPMET information in Table MET II-2 in the eANP Volume II Part V.