

INTERNATIONAL CIVIL AVIATION ORGANIZATION

Third Meeting of the APIRG Airspace and Aerodrome Operations Sub-Group (AAO/SG3), Virtual Meeting, 3 to 5 August 2020

Agenda Item 3: Planning and implementation

APIRG 22 ADS-B transponder requirement mandate timelines review

(Presented by South Africa)

SUMMARY

This working paper discussed the AFI Planning and Implementation Regional Group (APIRG)/22 conclusion 22/41.

APIRG/22 Conclusion 22/41:

Mandates ADS-B 1090MHz Extended Squitter Aircraft Transponder requirements in the AFI Region.

The WP also discusses the global devastating impact of the COVID-19 pandemic on industry and the proposal to endorse the review of the AFI mandate compliance timelines in support of industry recovery plans.

REFRENCE(S):

- APIRG/22 Conclusion 22/41
- ICAO Doc 9924
- ICAO Cir 326/AN188
- GANP et al.

Related ICAO Strategic Objective(s):

- Safety
- Air Navigation Capacity and Efficiency
- Environmental Sustainability.

1. INTRODUCTION

- 1.1 ICAO SARPs (Standards and Recommended Practices) and ADS-B implementation guidelines recommends that all new transponder installations consist of an ADS-B 1090MHz and Mode S Extended Squitter aircraft transponder.
- 1.2 It is envisaged that all aircraft required to carry transponders will need to upgrade avionics in accordance with a schedule consistent with Regional and National Plans as appropriately defined.

- 1.3 The report of the twenty-second meeting of the AFI planning and implementation regional group (APIRG/22 Accra, Ghana, 29 July 2 August 2019) has reference;
- 1.3.1 States and aircraft operators to ensure that all aircraft operating within the AFI RVSM airspace are equipped with ADS-B 1090MHz Extended Squitter aircraft transponder by June 2023 (AIRAC date);
- 1.3.2 An Assessment for a Go or No-Go Decision be conducted on 2022 targeting 90% aircraft equipped with Transponder Extended Squitter 1090 for AFI RVSM airspace as the threshold; and
- 1.3.3 States and aircraft operators to ensure that all aircraft operating within the AFI Region airspace are equipped with ADS-B Transponder Extended Squitter 1090 by January 2025 (AIRAC date).

2. DISCUSSION

- 2.1 The avionics equipage required to be installed in aircraft (Commercial and private) to validate the above-mentioned mandate carry an associated capital expenditure.
- 2.2 The COVID 19 pandemic has had a profound impact on the aviation industry globally. All facets of the industry find themselves under financial constraints and the financial outlook considering the protracted COVID 19 pandemic is bleak.
- 2.3 Whilst the industry has adapted to deal with the impact of previous crises, it's clear that the magnitude of the impacts on aviation presented by COVID-19 will be far greater than any downturns the industry has ever experienced.
- 2.4 The proposed extension / adjustment of the ADS-B aircraft transponder requirements mandate will support regional recovery efforts in support of industry recovery plans and operational strategies considering various operations' financial status and economic outlook.
- 2.5 Considering the aforementioned capital expenditure along with the protracted COVID 19 pandemic.
- 2.6 The AFI ADS-B aircraft transponder requirements mandate extension will enable appropriate planning and implications contemplation by the AFI ATM community and thus support planning for compliance with the mandate timelines.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) Endorse the proposal for the AAO/SG3 to submit a working paper to the next APIRG meeting, recommending the review of the APIRG/22 conclusion 22/41.
 - b) Endorse the recommendations to APIRG for the amendment of the AFI ADS-B 1090MHz ES aircraft transponder requirements mandate, by extending the compliance timelines by a minimum of one year or more to the right at the discretion of APIRG.
