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**Agenda Item 4: Review of the process of Phase 2 of the transition from AIS to AIM and preparation for SWIM**

**Status of implementation of TOD**

(Presented by the Secretariat)

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| <b>SUMMARY</b>  |   |
| This working paper follows up on TOD implementation for the different areas contemplated in Annex 15 - <i>Aeronautical information services</i> .   |   |
| <b>References:</b>  |   |
| <ul style="list-style-type: none"><li>• Annex 15 – <i>Aeronautical information services</i></li><li>• Doc 10066 PANS-AIM</li><li>• SAM/AIM/14 meeting report</li><li>• Report of the Teleconference to follow up on SAM/AIM/14 Conclusions and Recommendations</li><li>• Minutes of the Fourth virtual meeting of the GREPECAS Programmes and Projects Review Committee (ePPRC/4)</li></ul> |   |
| <b>Strategic objectives:</b>  | <i>A – Safety</i><br><i>B – Capacity and efficiency</i> |

**1. Introduction**

1.1 The SAM/AIM/14 meeting followed up on the implementation of the terrain and obstacle digital data (TOD) set.

1.2 The Secretariat held a follow-up teleconference on SAM/AIM/14 recommendations and conclusions in April 2022.

1.3 The ePPRC/4 meeting was informed of the follow-up to AIS implementations.

**2. Discussion**

2.1 The Meeting will recall that Annex 15, Chapter 5. 5.3.3 sets forth the requirements for digital data sets related to terrain and obstacles.

2.2 The Secretariat, in successive meetings, noted that the implementation of e-TOD digital data sets was significantly delayed. The pandemic has further delayed the construction of both digital data sets. States should make an effort to implement these requirements.

2.3 The Meeting should also take into account State letter LN1/4.1-SA317, dated 12 August 2022, listing States' pending deficiencies in the air navigation database. The Meeting will recall that, for the AIS area, most of the deficiencies are related to TOD.

2.4 The Secretariat urges States to expedite this implementation and to update the information contained in the Table in **Appendix A**.

### 3. **Suggested action**

3.1. The Meeting is invited to:

- a) take note of the information contained in this working paper;
- b) provide information to update the table;
- c) update the corrective action plan; and
- d) consider other actions it may deem appropriate..

**APPENDIX A**  
**(Updated on 15/11/2022)**

| STATES OF THE SAM REGION | ACTION PLAN  | FOLLOW-UP   |
|--------------------------|--|---|
| <i>Argentina</i>         | Estimated date: 27 November 2019   | The Action Plan will be reviewed and corrections will be sent with more detailed information.   |
| <i>Bolivia</i>           | Corrective action start date: July 2017<br>Corrective active action was updated on September 2022  | Corrective actions have started on the indicated date.<br><br>To be followed up according to the dates presented in the deficiency response letter.   |
| <i>Brazil</i>            | 2017 - 8 AD<br>2018 - 8 AD<br>2019 - 8 AD<br>2020 - 7 AD<br>2021 - 7 AD<br>2022 - 7 AD<br><br>Communicate updates in October 2022                                      | Has reported on the progress of its e-TOD program, the availability of eTOD data through a GIS portal, as well as its application in procedure designs, and as for UAS.<br><br>Brazil has responded on the process in the deficiency response letter and will proceed to update it.   |
| <i>Chile</i>             | Completion is scheduled for 2022.<br>According to the report presented in the eCRPP/3, it would be delayed due to the pandemic.<br>Communicate updates in October 2022 | Has raised obstacles in 5 airports and one is in process, but due to the situation of the pandemic, it would be postponed. In addition, they are working to make the data available through a portal that they are preparing with ESRI, but this has no implementation date yet.<br><br>Chile has sent a reply to the deficiency letter stating that only two airports are missing. |
| <i>Colombia</i>          | Has not submitted a Plan.  | The area is managed by the Procedure Design Group.  |
| <i>Ecuador</i>           | Has not submitted a Plan.  | Reported that they are working to lift obstacles through the use of drones and with the advice of IFAIMA experts.   |

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| <i>Guyana Francesa</i> | Has not submitted a Plan.   |   |
| <i>Guyana</i>          | Estimated start date: April 2017.<br>To date, the first seven points of the Action Plan presented should have been completed. | They are in the initial stage. The process began when one of its officers attended the ICAO CAR/SAM seminar on e-TOD in Mexico City in 2015. Last year (2019), COCESNA provided theoretical training on PANS/OPS and RNAV/RNP design procedures to various officers. Currently, the on-the-job training process is being discussed with the company.  |
| <i>Panama</i>          | Has not submitted a Plan.   | Tocumen S.A. has carried out the lifting of obstacles at the Tocumen and Panama Pacific airports. These data have been sent to the Civil Aviation Authority of Panama. In relation to the other international airports, they have not registered any progress.  |
| <i>Paraguay</i>        | Data collection for Areas 2a, b, c, d completed.<br>Other activities related to e-TOD are planned for 2016 to 2019.           | Has not submitted a Plan.   |
| <i>Peru</i>            | Has not submitted a Plan.   | The e-TOD project in Cusco could not be finalized due to breach of the supplier. A DGAC-CORPAC work team is being formed, which in this first phase will carry out the analysis and evaluation of the new implementation date, which will take until October. As a second phase, the aerodrome operators will be summoned to prepare the plan. It is planned to have the plan for the month of November and make it known to ICAO |
| <i>Suriname</i>        | Has not submitted a Plan.   |   |

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| <i>Uruguay</i>   | Has not submitted a Plan.  | They are in meetings with providers of raw e-TOD data (without processing). They have established working groups with the companies that carry out the obstacle lifting work and are in the process of preparing a tender to acquire a system to process this data. |
| <i>Venezuela</i> | In the second half of 2017, will start with the corresponding terrain and obstacle data. | Reported that it currently has an automated, interoperable system with a database of obstacles and terrain capable of being exported in AIXM, HTML or Shape File format, if the user so requires.   |