



**Agenda Item 2: Report of activities of the GESEA and Subgroups**

**b) ATM implementation. Progress of the Subgroups**

**TECHNICAL COOPERATION OF BRAZIL (DECEA) FOR THE RESTRUCTURING OF THE URUGUAYAN AIRSPACE AND ITS OPTIMIZATION**

(Prepared by Uruguay)

**Summary**

This paper presents a summary of DECEA's technical cooperation for the development of the restructuring of Uruguayan airspace and its modernization, as well as looking to the future in capacity and demand (ATFM).

**References:**

- LAR 211 Air Traffic Management
- LAR 215 Aeronautical Information Services
- LAR 204 Aeronautical charts
- Doc 9368 Design of flight procedures
- Doc 9613 Manual PBN
- CONOPS ATFM CAR/SAM
- Doc 9971 - Flow Management Manual

**1. Background**

1.1. This activity is carried out as part of the cooperation project between DECEA Brazil, DINACIA Uruguay and entities from other States signed on April 18, 2017, which contemplates developing joint actions to provide information exchange, promotion of new technologies, technical assistance, consulting and expert advice, training, as well as other purposes of the entities involved.

1.2. The technical cooperation project specifically in the area of PANS PAHO, began in 2019 between ICA / DECEA and the Directorate of Air Circulation (DCA) / DINACIA.

1.3. Considering the type of project and the time available to carry it out, 3 PHASES were established to carry out the design and publication and implementation work, which were affected over time due to the pandemic.

1.4. The phases include development, design, inspection, approval, publication and implementation in which DECEA ICA, GEIV and DINACIA DCA, DNA participate.

1.5. The technical cooperation project for the ATFM area provides for the training of officials for the development of this task and involves CGNA/DECEA and DCA/DINACIA.

## 2. Analysis

2.1 Brazil's support in the development of the airspace design was coordinated between the organizations DECEA (ICA) and DINACIA (DCA).

2.2 The planning of the process was divided into 3 phases:

PHASE 1: implement procedures in SUMU, SULS and SUAA.

PHASE 2: implement SID/STAR terminal area Carrasco concept CDO CCO.

PHASE 3: implement other airport procedures.

2.3 PHASE 1:

The first phase worked on the procedures of approach to the airports of Carrasco (SUMU), Laguna del Sauce (SULS) and Adami (SUAA) which consisted of:

- Analysis of published airport charts.
- Analysis of the impact of the new approach charts at these airports.
- Analysis of airports that cause interference to air navigation.
- Analysis in the coverage of surveillance, navigation and communications.
- Coordination meetings between designers, publishers, users, etc.
- Development of instrumental procedures.
- Flights for testing, validation, training, publishing, deployment.

PHASE 1 was completed in October 2022.

2.4 PHASE 2:

In this phase, the SID/STAR procedures will be developed in accordance with the CCO and CDO concepts for the runways of Carrasco and Laguna del Sauce airports.

Development of the Carrasco terminal area for this new concept.

Implementation is expected by the end of the second half of 2023.

2.5 PHASE 3:

Development and implementation of approach procedures for the 7 airports in the rest of the country.

Implementation is expected for the second half of 2024.

2.6 In the area of ATFM, training provided by CGNA will be developed to address the concepts of capacity/demand and the use of existing technology for this purpose. It will allow the broad development of cross-border ATFM facilitating the ATFM service between states (Brazil/Uruguay/Argentina). Estimated date of completion November 2023.

## 3. Suggested actions

3.1 The meeting is invited to learn more about and highlight the work carried out by DECEA through the different organizations and those who integrate them, in support of the DCA, which allows to implement the restructuring of Uruguayan airspace and its modernization towards new concepts.