



**Agenda item 2: Optimization of the SAM airspace**  
**a) Progress in the regional PBN implementation PBN ARGENTINA**

(Presented by Argentina)

<b>SUMMARY</b>	
<p>This informative note aims at presenting an update on the projects and action plans for PBN implementation in Argentina, its current situation and the progress in the project on the changes in BAIREs Terminal and other measures that have been taken by EANA regarding Argentine airspace changes and optimization.</p>	
<b>References:</b>	
<ul style="list-style-type: none"><li>- Doc 9750 – Global Air Navigation Plan</li><li>- Doc 9992 – Manual on the Use of Performance Based Navigation.</li></ul>	
<b>ICAO strategic objectives:</b>	<ul style="list-style-type: none"><li><i>A - Safety.</i></li><li><i>B - Air Navigation Capacity and Efficiency.</i></li><li><i>E –Environmental protection.</i></li></ul>

**1. Introduction**

1.1. As regards the conclusion reached at GREPECAS/18, there is a need to continue doing the necessary to publish and implement IFR routes and PBN procedures for Terminal Areas in order to increase and maintain safety.

1.2. In accordance with Conclusion SAM / IG / 14-4 (Follow-up of the PBN established targets on Bogota declaration), Argentina has yet not been able to fulfil its commitments regarding the redesign of TMAs and the establishment the PBN procedures for international airport's threshold according to the metrics that were gathered.

1.3. All changes presented and made by EANA arose from the work carried out by different EANA sectors as well as with different users, such as airlines and the sporting sector flights.

**2. Progress analysis**

2.1. The following informative chart describes the changes made in Argentine TMAs:

<b>A R G E N T I N A</b>	TRELEW PUERTO MADRYN	June 2018
	MAR DEL PLATA	June 2018
	EL CALAFATE	July 2018
	MENDOZA	July 2018
	ROSARIO	October 2018
	NEUQUEN	October 2018
	BARILOCHE	November 2018
	COMODORO RIVADAVIA	December 2018
	BAHIA BLANCA	January 2019
	RESISTENCIA CORRIENTES	July 2019
	JUJUY	October 2019
	LA RIOJA	October 2019
	PARANA SAUCE VIEJO	December 2019
	CORDOBA	February 2019
	BAIRES INTERMEDIO	April 2020
	ESQUEL	April 2020
	USHUAIA RIO GRANDE	April 2020

2.2. EANA continues fulfilling its commitment together with the Aeronautical Authority in order to comply with the percentage metrics of international airports' PBN thresholds in Argentina:

- 2016: 6%
- 2017: 31%
- 2018: 58%
- 2019: 91% (estimated – published)

2.3. In 2018, 268 new procedures were published and 464 were republished accounting for 732 adopted procedures, establishing such procedures in 28 airports.

2.4. The Second Meeting on Argentine Routes Network Optimization (RO2) was held in January 2019, ATCs from all over the country attended this meeting as well as representatives from the Safety Management, airline representatives that had the opportunity to submit their ideas, which were analyzed and incorporated as content to make the necessary airspace changes. The Design Department considered the 30 proposals and the impact they could have on the published instrumental procedures, including their revision and adequacy.

2.5. Implementation plan: Circular 353

- 54 published procedures to be modified
- Foreseen AIC to make minor modifications and adapt them to circular No.353
- Incorporated to the instrumental procedures of the following Publication Jul 2019 – AMDT AIP.

## 2.6. Infrastructure Project in Airports

Possibility given by the Design Department of developing instrumental procedures before launching the projects, this prevents airport accessibility to be affected regardless of the number of projects, such as in the following airports:

- Córdoba. Displaced threshold.
- Comodoro Rivadavia. PBN procedures used to operate in taxiway.  
These have special procedures for each project phase.

## 3. TMA BAIRES Re-design

3.1. TMA BAIRES includes Ezeiza (SAEZ), Aeroparque (SABE), El Palomar (SADP), San Fernando (SADF) and Morón (SADM) airports, where each of their needs and requirements makes it essential to update the arrival, departure and approach procedures.

3.2. Given its importance and impact, EANA is carrying out two parallel projects, of similar characteristics, but with different impact and set up:

- Intermediate BAIRES
  - In April 2017, several meetings with different TMA units were held, in order to establish the possible changes.
  - Over more than a year, 21 meetings were held; as a result the Concept Design of TMA BAIRES was obtained.
  - In October 2018, the Design Department began to implement their work.
  - In May 2019, the trajectories began to be uploaded in the RTS (Real-Time Simulator) in order to validate the trajectories that were developed by TMA ATCs.
  - The services from a FTS (Fast-Time Simulator) were not obtained to validate the trajectories.
  - The design of the flight procedures will begin in June 2019. 90 new instrumental procedures are expected to be published.
  - This work was presented to the Airlines.
- Future BAIRES
  - Public tender 06/2018. October 2018. Bid opening in January 25th.
  - 4 Companies were part of the outset; visits to the units were made with them so that they could make the proposal according to the company's current situation.
  - Indra Business Consulting is the Company in charge of running the project; this company will have Tetrattech, DFS Aviation Services, IDS and Indra's collaboration.
  - Process according to Doc9992
  - Before the end of the 1<sup>st</sup> semester, the Planning phase and the Concept of Operations (CONOPS) development will begin.
  - The Implementation phase is expected to start at the beginning of 2022, in which emphasis will be placed on the training of such procedures.

**4. Suggested actions**

4.1. The Meeting is invited to:

- a) Take note of the information provided; and
- b) make comments and suggestions that could collaborate with the different projects that are being carried out by the ANSP of the Argentine Republic.

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