



assessment of the NAVAID infrastructure (both, ground and space-based), communications and surveillance infrastructure, fleet capacity, the provision of ATS and safety within the Region.

2.2 Suriname has adopted regulations for operations approval for the implementation of the RNAV routes within the Paramaribo FIR (en-route airspace) and has already started the implementation of PBN, initially using 40 NM longitudinal separation within our airspace that focuses on the harmonization of the navigation specifications in the different airspaces. Letters of Agreement (LoAs) have already been signed with Guyana (signed 2017-08-21) and Trinidad and Tobago (signed 2017-08-16) and also implemented. The LoAs of Brazil and French Guiana are being reviewed. On the 17<sup>th</sup> August 2017 the implementation of the new and aligned routes with Brazil, Guyana and Trinidad and Tobago with the focus on the harmonization of the navigation specifications in the different airspaces in our Region, has started.

2.3 In order to meet the requirements of PBN implementation, Suriname has begun ensuring that personnel of the ANS receive the requisite introduction training. This began officially with the attendance of ATS personnel at the two (2) day Basic ICAO Procedures for ANS - Operations (PANS-OPS) lecture during the last quarter of 2016. There is an intension for some personnel to attend an advanced PANS-OPS Course and train their colleagues in return for the continued implementation of PBN.

2.4 Suriname has already designed, in cooperation with a qualified airspace designer from Peru, a possible restructure to the airspace near the SMJP Aerodrome to implement PBN arrivals, routes and approaches (SID and STAR) that provide operational rewards for airspace users and ANSPs. The designer, **Mr. Tomas Macedo**, has given a two (2) day teach-in to ANSPs about the concept STARs for SMJP Aerodrome in February 2017. Suriname's goal is to implement this reconstruction in February 2018.

### **PBN implementation in en-route/terminal areas and approach procedures**

2.5 **Appendix A** to this working paper shows the known PBN applications that have been implemented within the Paramaribo airspace. The RNAV routes UL576, UL462, UL452 and the aligned UL776 are introduced into the Paramaribo airspace with effect from 17<sup>th</sup> August 2017.

### **3. Assessment of operational requirements to determine the implementation of improvements in communications, navigation and surveillance (CNS) capabilities for operations in route and terminal areas**

3.1 Our surveillance capabilities for operations (en-route and terminal area) are still in progress. The equipment is already available but need to be updated. At the moment we have ongoing conversations with an approved training organization concerning our surveillance system to train Suriname's ANS personnel and restart the Radar system (SSR & PSR).

**APPENDIX A**

**Status of implementation of PBN SIDs, STARs, and approach procedures**

DATA COLLECTION DATE: September 2017											
STATE	CAR/SAM ANP INTERNATIONAL AIRPORTS	IFR thresholds	VFR thresholds	APV IAP	LNAV IAP	RNPA R IAP	PBN SID	PBN STAR	CCO SIC	CDO STAR	OBS
SURINAME	<b>SURINAME (1 AERODROME)</b>										
	JOHAN ADOLF PENGEL INT'L SMJP	(2)	(2)	(1)	(4)	(0)	(0)	(0)	(0)	(0)	All published
		11/29	11/29	YES*	11/29**	NO	NO	NO	NO	NO	
(5) RNAV ROUTE within Paramaribo Airspace: <b>RNAV routes UM791, UL576, UL462, UL452, and the aligned UL776</b>											

Note: The cited AIRAC dates are tentative, based on the capability of publishing instrument procedures.

\* SMJP ILS RWY 11 Temporarily U/S

\*\* VOR RWY 11/29, VOR/DME RWY 11/29