

**INTERNATIONAL CIVIL AVIATION ORGANIZATION**
**Fourth Meeting of the APIRG Infrastructure and Information Sub-group  
(IIM/SG/4)**

*(Online Meeting, 31 August – 3 September 2021)*

**Agenda Item 5 : Implementation of ASBU modules**

*(Presented by Senegal)*

<b>SUMMARY</b>
<p>This working paper presents the modifications to the ASBU modules brought by the Sixth Edition of the GANP.</p> <p>Action by the Meeting is at <b>paragraph 3.</b></p>
<p><b>REFERENCE(S):</b></p> <ul style="list-style-type: none"> <li>•Global Air Navigation Plan (GANP), Sixth Edition</li> <li>•APIRG/21, 22 and 23 Reports</li> </ul>
<p><b>ICAO Strategic Objectives:</b></p> <p>A- Security;</p> <p>B- Capacity and Efficiency of air navigation;</p> <p>E- Environmental protection.</p> <p><b>KPIs and ASBU B0 Modules concerned : .ALL</b></p>

**1. INTRODUCTION**

1.1 The Sixth Edition of the Global Air Navigation Plan (GANP) has several changes from the Fifth Edition. As a result, there is a need to update the ASBU Block 0 AFI implementation plan, the national ASBU implementation plans and the air navigation reporting forms (ANRF).

1.2 The Sixth Edition of the GANP is available online on the ICAO portal at: <https://www4.icao.int/ganportal/>.

**2. DISCUSSION**

2.1 The most salient changes brought by the sixth edition are:

- a) extension of the strategic vision for civil aviation evolution from 2031 to the year 2040 and beyond;
- b) concerning the ASBU framework, the replacement of the 4 Performance Improvement Areas (PIAs) (Airport Operations, Globally interoperable systems and data, Optimum capacity and flexible flights, Efficient flight paths) with 3 high level areas (Operational, Information, Technology) ;

- c) grouping of the threads in these 3 areas. Guidance material on the threads are to be found at: <https://www4.icao.int/ganportal/ASBU/Thread> ;
- d) introduction of CNS technology and services threads: COMI (Communication infrastructure), COMS (ATS communication service) and NAVS (Navigation systems) ;
- e) increasing of the number of Blocks from 4 to 5 (B0, B1, B2, B3, B4) ;
- f) deletion from Block 0 of the threads ACAS, ASEP, DATM and WAKE;
- g) the CCO et CDO modules are elements of the thread APTA.

2.2 A tutorial presentation on the sixth edition of the GANP is at : <https://www4.icao.int/ganportal/Tutorial>.

2.3 The **attachment** to this working paper shows the Block 0 elements of the Sixth edition of the GANP. It emerges that, within the APIRG, the implementation plan for the ASBU Block 0 must be reviewed and amended by choosing the elements to be implemented in the AFI Region so that States can update their ASBU plans.

### 3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

- a) note the information provided herein;
- b) to update the AFI regional ASBU Block 0 implementation plan and the air navigation reporting forms (ANRF), taking into account the sixth edition of the GANP;
- c) request States to update their ASBU Block 0 implementation plans as a component of their national air navigation plan (APIRG 21/17 Conclusion) according to the Sixth Edition of the GANP ;
- d) adopt the following draft conclusion.

#### **DRAFT CONCLUSION IIMG/SG/4-XX – ASBU BLOCK 0 IMPLEMENTATION PLAN**

That:

- a) ICAO Regional Offices update the AFI regional ASBU Block 0 Implementation Plan and the air navigation reporting forms (ANRF), taking into account the Sixth Edition of the GANP;
- b) States update their ASBU Block 0 implementation plans to the Sixth Edition of the GANP as a component of their national air navigation plan (APIRG 21/17 Conclusion) according to the sixth edition of the GANP, and periodically advise the Secretariat of their progress in their implementation.

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**ATTACHMENT**

## ASBU BLOCK 0 ELEMENTS OF THE GANP, SIXTH EDITION

Labelling of Block elements : *thread-Block #/element #*

Example : APTA-B0/2

*Note : The threads with an asterisk (\*) are included in the AFI Region Block 0.*

AREA	THREAD	BLOCK 0 ELEMENTS	TITLE OF THE ELEMENTS
OPERATIONAL	ACDM*	ACDM-B0/1	Airport CDM Information Sharing (ACIS)
		ACDM-B0/2	Integration with ATM network function
	APTA*	APTA-B0/1	PBN Approaches (with basic capabilities)
		APTA-B0/2	PBN SID and STAR procedures (with basic capabilities)
		APTA-B0/3	SBAS/GBAS CAT I precision approach procedures
		APTA-B0/4	CDO (Basic)
		APTA-B0/5	CCO (Basic)
		APTA-B0/6	PBN Helicopter Point in Space (PinS) Operations
		APTA-B0/7	Performance based aerodrome operating minima – Advanced aircraft
		APTA-B0/8	Performance based aerodrome operating minima – Basic aircraft
	FRTO*	FRTO-B0/1	Direct routing (DCT)
		FRTO-B0/2	Airspace planning and Flexible Use of Airspace (FUA)
		FRTO-B0/3	Pre-validated and coordinated ATS routes to support flight and flow
		FRTO-B0/4	Basic conflict detection and conformance monitoring
	NOPS*	NOPS-B0/1	Initial integration of collaborative airspace management with air traffic flow management

AREA	THREAD	BLOCK 0 ELEMENTS	TITLE OF THE ELEMENTS
		NOPS-B0/2	Collaborative Network Flight Updates
		NOPS-B0/3	Network Operation Planning basic features
		NOPS-B0/4	Initial Airport/ATFM slots and A-CDM Network Interface
		NOPS-B0/5	Dynamic ATFM slot allocation
	OPFL*	OPFL-B0/1	In Trail Procedure (ITP)
	RSEQ*	RSEQ-B0/1	Arrival Management
		RSEQ-B0/2	Departure Management
		RSEQ-B0/3	Point merge
	SNET*	SNET-B0/1	Short Term Conflict Alert (STCA)
		SNET-B0/2	Minimum Safe Altitude Warning (MSAW)
		SNET-B0/3	Area Proximity Warning (APW)
		SNET-B0/4	Approach Path Monitoring (APM)
	SURF*	SURF-B0/1	Basic ATCO tools to manage traffic during ground operations
		SURF-B0/2	Comprehensive situational awareness of surface operations
		SURF-B0/3	Initial ATCO alerting service for surface operations
	TBO*	TBO-B0/1	Introduction of time-based management within a flow centric approach
INFORMATION	AMET*	AMET-B0/1	Meteorological observations products
		AMET-B0/2	Meteorological forecast and warning products
		AMET-B0/3	Climatological and historical meteorological products
		AMET-B0/4	Dissemination of meteorological products
	FICE*	FICE-B0/1	Automatic basic inter facility data exchange (AIDC)
TECHNOLOGIE	ASUR*	ASUR-B0/1	Automatic Dependent Surveillance – Broadcast (ADS-B)

AREA	THREAD	BLOCK 0 ELEMENTS	TITLE OF THE ELEMENTS
		ASUR-B0/2	Multilateration cooperative surveillance systems (MLAT)
		ASUR-B0/3	Cooperative Surveillance Radar Downlink of Aircraft Parameters (SSR-DAPS)
	COMI	COMI-B0/1	Aircraft Communication Addressing and Reporting System (ACARS)
		COMI-B0/2	Aeronautical Telecommunication Network/Open System Interconnection (ATN/OSI)
		COMI-B0/3	VHF Data Link(VDL) Mode 0/A
		COMI-B0/4	VHF Data Link(VDL) Mode 2 Basic
		COMI-B0/5	Satellite communications (SATCOM) Class C Data
		COMI-B0/6	High Frequency Data Link (HFDL)
		COMI-B0/7	ATS Message Handling System (AMHS)
		COMS	COMS-B0/1
	COMS-B0/2		ADS-C (FANS 1/A) for procedural airspace
	NAVS	NAVS-B0/1	Ground Based Augmentation Systems (GBAS)
		NAVS-B0/2	Satellite Based Augmentation Systems (SBAS)
		NAVS-B0/3	Aircraft Based Augmentation Systems (ABAS)
		NAVS-B0/4	Navigation Minimal Operating Networks (Nav. MON)

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