



ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

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**APIRG endorsed
ASBU Elements**



Decision of the APIRG/25 Meeting adopting the ASBU elements applicable to the Region in AOP, ATM, SAR, CNS, AIM and MET areas

APIRG/25 Decision 25/10 Adoption of the ASBU Elements applicable to the region

That, to align the Regional Air Navigation Plan to the Sixth Edition of the GANP, the ASBU elements, as identified in the Appendix 3D to the APIRG/25 Report, are endorsed.

ASBU elements - AOP

ASBU Modules	ASBU Elements
ACDM-B0	ACDM-B0/1 Airport CDM Information Sharing
	ACDM-B0/2 integration with ATM Network function



ASBU elements - ATM (1/2)

ASBU Modules	ASBU Elements
APTA-B0	APTA-B0/1 PBN Approaches
	APTA-B0/2 PBN SID and STAR procedures
	APTA-B0/4 CDO (Basic)
	APTA-B0/5 CCO (Basic)
	APTA-B0/8 Performance based aerodrome operating minima – Basic aircraft
FRTO-B0	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-B0	NOPS-B0/1 Initial integration of collaborative airspace management with air traffic flow management
	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
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)

ASBU elements - ATM (2/2)

ASBU Modules	ASBU Elements
SURF-B0	SURF-B0/1 Basic ATCO tools to manage traffic during ground operations
TBO-B0	TBO-B0/1 Introduction of time-based management within a flow centric approach
ACAS-B1	ACAS-B1/1 ACAS Improvements
CSEP-B1	CSEP-B1/1 Basic airborne situational awareness during flight operations (AIRB)
FRTO-B1	FRTO-B1/1 Free Route Airspace (FRA)
	FRTO-B1/2 Required Navigation Performance (RNP) routes
	FRTO-B1/3 Advanced Flexible Use of Airspace (FUA) and management of real time airspace data
	FRTO-B1/5 Enhanced Conflict Detection Tools and Conformance Monitoring
NOPS-B1	NOPS-B1/6 Initial Dynamic Airspace configurations
SNET-B1	SNET-B1/1 Enhanced STCA with aircraft parameters



ASBU elements - ATM & SAR

ASBU Modules	ASBU Elements
GADS-B1	GADS-B1/1 Aircraft Tracking
	GADS-B1/2 Contact directory service



ASBU elements - CNS^(1/2)

ASBU Modules	ASBU Elements
COMI-B0	COMI-B0/1 Aircraft Communication Addressing Reporting System (ACARS)
	COMI-B0/2 Aeronautical Telecommunication Network/Open System Interconnection (ATN/OSI)
	COMI-B0/3 VHF Data Link (VDL) Mode O/A
	COMI-B0/4 VHF Data Link (VDL) Mode 2 Basic
	COMI-B0/5 Satellite Communication (SATCOM) Class C Data
	COMI-B0/6 High Frequency Data Link (HFDL)
	COMI-B0/7 ATS Message Handling System (AMHS)
COMI-B1	COMI-B1/1 -Ground-Ground Aeronautical Telecommunication Network/Internet Protocol suite (ATN/IPS)
	COMI-B1/2 VHF Data Link (VDL) Mode 2 Multi- Frequency
	COMI-B1/3 SATCOM Class B Voice and Data
	COMI-B1/4 Aeronautical Mobile Airport Communication System (AeroMACS)
COMS-B0	COMS-B0/1 CPDLC (FANS 1/A & ATN B1) for domestic and procedural airspace
	COMS-B0/2 ADS-C (FANS 1/A) for procedural airspace

ASBU elements - CNS (2/2)

ASBU Modules	ASBU Elements
COMS-B1	COMS-B1/1 PBCS approved CPDLC (FANS 1/A +) for domestic and procedural airspace
	COMS-B1/2 PBCS-approved ADS-C (FANS 1/A +) for procedural airspace
	COMS-B1/3 SATVOICE (incl. routine communication) for procedural airspace
NAVS-B0	NAVS-B0/1 Ground Based Augmentation System (GBAS)
	NAVS-B0/2 Satellite Based Augmentation System (SBAS)
	NAVS-B0/3 Aircraft Based Augmentation system (ABAS)
	NAVS-B0/4 Navigation Minimal Operating Networks (Nav. MON)
NAVS-B1	NAVS-B1/1 Extended GBAS
ASUR-B0	ASUR-B0/1 Automatic Dependent Surveillance - Broadcast (ADS-B)
	ASUR-B0/2 Multi-lateration cooperative surveillance systems (MLAT)
	ASUR-B0/3 Cooperative Surveillance Radar Downlink of aircraft Parameters (SSR-DAPS)
ASUR-B1	ASUR-B1/1 Reception of aircraft ADS-B signals from space (SB ADS-B)
ACAS-B1	ACAS-B1/1 ACAS Improvement
FICE-B0	FICE-B0/1 Automated basic facility data exchange (AIDC)

ASBU elements - AIM

ASBU modules	ASBU elements
DAIM-B1	DAIM-B1/1 Provision of quality-assured aeronautical data and information
	DAIM-B1/2 Provision of digital Aeronautical Information Publication (AIP) data sets
	DAIM-B1/3 Provision of digital terrain data sets
	DAIM-B1/4 Provision of digital obstacle data sets
	DAIM-B1/5 Provision of digital aerodrome mapping data sets
	DAIM-B1/7 NOTAM improvements



ASBU elements applicable to the Region in **MET** area

ASBU Modules	ASBU Elements
AMET-B0	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
AMET-B1	AMET-B1/1 Meteorological observations information
	AMET-B1/2 Meteorological forecast and warning information
	AMET-B1/3 Climatological and historical meteorological information
	AMET-B1/4 Dissemination of meteorological information



Thank You!