



**SAMPLE TEMPLATE
AIR NAVIGATION REPORT FORM (ANRF)**

Regional and National planning for all ASBU Modules

REGIONAL/NATIONAL PERFORMANCE OBJECTIVE IMPROVED OPERATIONS THROUGH ENHANCED EN-ROUTE TRAJECTORIES (ASBU B0-10) Performance Improvement Area 3: Optimum Capacity and Flexible Flights – Through Global Collaborative ATM					
ASBU B0-10: Impact on Main Key Performance Areas (KPA)					
	Access & Equity	Capacity	Efficiency	Environment	Safety
Applicable	Y	Y	Y	Y	N
ASBU B0-10: Implementation Progress					
Elements			Implementation Status (Ground and Air)		
1. Airspace classification					
2. Airspace planning and application of CDM					
3. Flexible Use of Airspace					
4. Flexible Routing –Enroute PBN					
ASBU B0-10: Implementation Roadblocks					
Elements	Implementation Area				
	Ground system Implementation	Avionics Implementation	Procedures Availability	Operational Approvals	
1. Airspace classification					
2. Airspace planning and application of CDM					
3. Flexible Use of Airspace					
4. Flexible Routing – Enroute PBN					

ASBU B0-10: Performance Monitoring and Measurement	
Main Key Performance Areas	Performance Metrics
Access & Equity	
Capacity	
Efficiency	
Environment	
Safety	

AIR NAVIGATION REPORT FORM HOW TO USE - EXPLANATORY NOTES

1. **Air Navigation Report Form (ANRF):** This form provides a standardized approach to implementation monitoring and performance measurement of Aviation System Block Upgrades (ASBU) Modules. The Planning and Implementation Regional Groups (PIRGs) and States could use this report format for their planning, implementation and monitoring framework for ASBU Modules. Also, other reporting formats that provide more details may be used but should contain as a minimum the elements described below. The Reporting and monitoring results will be analysed by ICAO and aviation partners and then utilized in developing the Annual Global Air Navigation Report. The Global Air Navigation Report conclusions will serve as the basis for future policy adjustments aiding safety practicality, affordability and global harmonization, amongst other concerns.
2. **Performance objective:** In the ASBU methodology, the performance objective for the regions as well as for the States will be the ASBU module title itself along with corresponding Performance Improvement area (PIA). Consequently, for ASBU Block 0, a total of 18 ANRFs will be developed that reflects respective 18 Modules.
3. **Impact on Key Performance Areas:** Key to the achievement of a globally interoperable ATM system is a clear statement of the expectations of the ATM community. The expectations, also known as Key Performance Areas (KPA), are interrelated and cannot be considered in isolation since all are necessary for the achievement of the objectives established for the system as a whole. It should be noted that while safety is the highest priority, the eleven KPAs shown below are in alphabetical order as they would appear in English. They are access/equity; capacity; cost effectiveness; efficiency; environment; flexibility; global interoperability; participation of ATM community; predictability; safety; and security. However, out of these eleven KPAs, for the present, only five have been selected for reporting through ANRF, which are Access & Equity, Capacity, Efficiency, Environment and Safety. The KPAs applicable to respective ASBU module are to be identified by marking Y (Yes) or N (No).
4. **Implementation Progress:** This section, while describing different elements of the ASBU Module, indicates progress in its implementation by PIRGs/States.
5. **Elements related to ASBU module:** The regional/national air navigation work programmes, under this section, will list elements that are needed to implement the respective ASBU Module and thus achieve the said performance objective. For the list of elements related to different Block 0 Modules, refer to the documentation describing ASBU Modules. Furthermore, should there be elements that are not reflected in the ASBU Module (example: In ASBU B0-80/Airport CDM, Aerodrome certification and data link applications D-VOLMET, D-ATIS, D-FIS are not included; Similarly in ASBU B0-30/AIM, note that WGS-84 and eTOD are not included) but at the same time they are linked to the module, ANRF should specify those elements. As a part of guidance to PIRGs/States, the FASID (Volume II) of every Regional ANP will have all 18 ANRFs formats for 18 Modules of ASBU Block 0. Note that not all Modules are applicable to all airspaces/States. These ANRFs formats include, in some cases, elements not reflected in the module but linked in view of their close relationship. The PIRGs and States could use these 18 ANRFs formats available in FASID as the basis for reporting ASBU implementation status for Block 0 Modules.
6. **Implementation Status (Ground/Air):** Planned implementation date (month/year) and the current status/responsibility for each element are to be reported in this section that should provide as much details as possible and cover both avionics and ground systems. If necessary, use additional pages.

7. **Implementation Roadblocks:** Challenging issues for the implementation of elements of the Module are to be reported in this section. The purpose of the section is to identify in advance any issues that will delay the implementation and if so, corrective action to be initiated. The four areas under which implementation issues, if any, for the ASBU Module to be identified are as follows:

- Ground System Implementation:
- Avionics Implementation:
- Procedures Availability:
- Operational Approvals:

Should be there no issues/roadblocks to be resolved for the implementation of ASBU Module, indicate as “NIL”

8. **Performance Monitoring and Measurement:** Performance monitoring and measurement is done through the collection of data for the supporting metrics. In other words, metrics are quantitative measure of system performance – how well the system is functioning. The metrics fulfil three functions. They form a basis for assessing and monitoring the provision of ATM services, they define what ATM services user value and they can provide common criteria for cost benefit analysis for air navigation systems development. The Metrics could be in terms of monitoring infrastructure implementation (example: Number of airports with ADS-B) and its impact on KPAs such as access, Capacity, Efficiency, Environment and Safety. On the basis of suggested list of Metrics detailed below, PIRGs/States to indicate under this section the appropriate metrics that represents the monitoring of respective ASBU Module implementation.

LIST OF SUGGESTED PERFORMANCE METRICS FOR ASBU MODULES

Key Performance Area	Related Performance Metrics
1. Access & Equity	1. KPA/Access: Percentage of instrument runway ends having an APV
	2. KPA/Access: Duration of Special Use Airspace (SUA) limits Civil Operations
	3. KPA/Equity Percentage of aircraft operators by class who consider that equity is achieved
	4. KPA/Access: Percentage of requested flight level versus cleared flight level
2. Capacity	1. Number of movements per day per aerodrome
	2. Average ATFM delay per flight at an airport
	3. Number of aircraft entering a specified volume of airspace per hour
	4. Average en-route ATFM delay generated by airspace volume
3. Cost effectiveness	1. IFR movements per ATCO hour on duty
	2. IFR flights (en-route) per ATCO hour duty
4. Efficiency	1. Kilograms of fuel saved per operation
	2. Average ATFM delay per flight in the airport
	3. Percentage of PBN routes
5. Environment	1. Kilograms of CO2 emissions reduced per operation
6. Flexibility	To be decided
7. Global Interoperability	1. Number of ATC automated systems that are interconnected
8. Participation of the ATM Community	1. Level of participation in meetings
	2. Level of responses to planning activities
9. Predictability	1. Arrival/departure delay (in minutes) at airport)
10. Safety	1. Percentage of instrument runway ends having a precision approach procedure
	2. Number of runway incursions per aerodrome per year
	3. Percentage of certified aerodromes used for international operations
	4. Number of aircraft fitted with ADS-B IN
	5. Number of aircraft fitted with ACAS / logic Version 7.1
	6. Percentage of aerodromes with PBN STARs implemented
	7. Percentage of aerodromes with CDOs implemented
	8. Number of ADS-Cs available over oceanic and remote Areas
	9. Number of continental CPDLC systems established
	10. Percentage of aerodromes with PBN SIDs implemented
	11. Percentage of aerodromes with CCOs implemented
	12. Number of States implemented WGS-84
11. Security	Not applicable