SAMPLE TEMPLATE

APPENDIX 3.5C-1

AIR NAVIGATION REPORT FORM (ANRF)
ASBU METHODOLOGY

Regional and National planning for all ASBU Modules

<table>
<tr><td colspan="6" align="center">

REGIONAL/NATIONAL PERFORMANCE OBJECTIVE

Service Improvement through Digital Aeronautical Information Management (ASBU B0-30)

Performance Improvement Area 2: Globally Interoperable Systems and Data – Through Globally Interoperable System Wide Information Management

</td></tr>
<tr><td colspan="6" align="center">**Main Key Performance Areas (KPA)**</td></tr>
<tr><td></td><td align="center">**Access & Equity**</td><td align="center">**Capacity**</td><td align="center">**Efficiency**</td><td align="center">**Environment**</td><td align="center">**Safety**</td></tr>
<tr><td>**Applicable**</td><td align="center">N</td><td align="center">N</td><td align="center">Y</td><td align="center">Y</td><td align="center">Y</td></tr>
</table>

<table>
<tr><td colspan="2" align="center">**Implementation Progress**</td></tr>
<tr><td align="center">**ASBU B0-30**
Elements including baseline
Phase 1 of the AIS/AIM Transition Roadmap
(Consolidation)</td><td align="center">**Implementation Status**</td></tr>
<tr><td>1. AIRAC adherence monitoring (P-03)</td><td align="center">FC</td></tr>
<tr><td>2. Monitoring of States ' differences to Annex 4 and 15 (P-04)</td><td>FC</td></tr>
<tr><td>3.WGS-84 Implementation (P-05)</td><td>PC</td></tr>
<tr><td>4. Quality (P-17)</td><td>PC</td></tr>
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<tr><td colspan="5" align="center">**Implementation Roadblocks**</td></tr>
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<tr><td>**Remarks, if any**</td><td></td><td></td><td></td><td></td></tr>
</table>

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AIR NAVIGATION REPORT FORM - ASBU METHODOLOGY
EXPLANATORY NOTES

1. **Air Navigation Report Form (ANRF):** This form may be used when Planning and Implementation Regional Groups (PIRGs) and States report on the implementation status of Aviation System Block Upgrades (ASBU) modules. Other formats may be appropriate but should contain as a minimum the elements described below.

2. **Performance objective:** To align with 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).

3. **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, hereafter known as Key Performance Areas (KPAs), 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 are shown 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, five have been selected for reporting, which are Access & Equity, Capacity, Efficiency, Environment and Safety. KPAs applicable to ASBU module are to be identified by marking Y (Yes) or N (No).

4. **Implementation Progress:** This section, while describing different elements of ASBU Module, indicates progress in its implementation by States.

5. **Elements including baseline related to ASBU module:** The regional/national air navigation work programmes, under this section, will identify elements that are needed to achieve the said performance objective/ASBU module. For the list of elements related to of different ASBUs, refer to the description of respective ASBU Module. 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 part of baseline requirements, ANRF should specify those elements.

6. **Implementation Status:** Planned implementation date (year) and the current status are to be reported in this section It is recognized that not all ASBU modules/or elements are required in all airspaces. If that be the case, mention as "Not Applicable" in this section.

7. **Implementation Roadblocks**: Challenging issues for the implementation of Elements /baseline of the Module are to be reported in this section. The four implementation roadblocks are as follows:

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

8. **Remarks:** Comments, if any, related to any of the sections are to be reported here.

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LIST OF SUGGESTED PERFORMANCE METRICS

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 CO_2 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 STAR 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 and
	11. Percentage of aerodromes with CCOs implemented;
	12. Number of States implemented WGS-84
11. Security	Not applicable

— END —.

AIR NAVIGATION REPORT FORM (ANRF)
ASBU METHODOLOGY

Regional and National planning for all ASBU Modules

REGIONAL/NATIONAL PERFORMANCE OBJECTIVE

Service Improvement through Digital Aeronautical Information Management (ASBU B0-30)

Performance Improvement Area 2: Globally Interoperable Systems and Data – Through Globally Interoperable System Wide Information Management

Main Key Performance Areas (KPA)

	Access & Equity	Capacity	Efficiency	Environment	Safety
Applicable	N	N	Y	Y	Y

Implementation Progress

ASBU B0-30 Elements including baseline PHASE 2 of the AIS/AIM Transition Roadmap (Going Digital)	Implementation Status
1. Data Quality monitoring (P-01)	
2. Data integrity monitoring (P-02)	
3. Integrated Aeronautical Information Database (P-06)	
4. Unique identifiers (P-07)	
5. Aeronautical Information Conceptual Model (P-08)	
6. Electronic AIP (P- 11)	
7. Terrain (P-13)	
8. Obstacles (P- 14)	
9. Aerodrome mapping (P-15)	

Implementation Roadblocks

Elements including baseline PHASE 2 of the AIS/AIM Transition Roadmap (Going Digital)	Ground system Implementation	Avionics Implementation	Procedures Availability	Operational Approvals
1.Data Quality monitoring (P-01)				
2. Data integrity monitoring (P-02)				
3. Integrated Aeronautical Information Database (P-06)				
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7. Terrain (P-13)				
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9. Aerodrome mapping (P-15)				
Remarks, if any				

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9. **Air Navigation Report Form (ANRF):** This form may be used when Planning and Implementation Regional Groups (PIRGs) and States report on the implementation status of Aviation System Block Upgrades (ASBU) modules. Other formats may be appropriate but should contain as a minimum the elements described below.

10. **Performance objective:** To align with 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).

11. **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, hereafter known as Key Performance Areas (KPAs), 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 are shown 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, five have been selected for reporting, which are Access & Equity, Capacity, Efficiency, Environment and Safety. KPAs applicable to ASBU module are to be identified by marking Y (Yes) or N (No).

12. **Implementation Progress:** This section, while describing different elements of ASBU Module, indicates progress in its implementation by States.

13. **Elements including baseline related to ASBU module:** The regional/national air navigation work programmes, under this section, will identify elements that are needed to achieve the said performance objective/ASBU module. For the list of elements related to of different ASBUs, refer to the description of respective ASBU Module. 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 part of baseline requirements, ANRF should specify those elements.

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- Ground System Implementation:
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16. **Remarks:** Comments, if any, related to any of the sections are to be reported here.

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LIST OF SUGGESTED PERFORMANCE METRICS

Key Performance Area	Related Performance Metrics
1. Access & Equity	1. KPA/Access: Percentage of instrument runway ends having an APV
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	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 CO_2 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
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	10. Percentage of aerodromes with PBN SIDs implemented and
	11. Percentage of aerodromes with CCOs implemented;
	12. Number of States implemented WGS-84
11. Security	Not applicable

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Implementation Progress	
ASBU B0-30 **Elements including baseline** **PHASE-3 of the AIS/AIM Transition Roadmap** **(Information Management)**	**Implementation Status**
1.Aeronautical Data Exchange (P-09)	
2.Communications networks (P-10)	
3. Aeronautical Information Briefing (P-12)	
4. Training (P-16)	
5. Agreements with Data Originators (P-18)	
6.Interoperability with meteorological products (P- 19)	
7. Electronic aeronautical charts (P-20)	
8. Digital NOTAM(P-21)	

Implementation Roadblocks

Elements including baseline PHASE-3 of the AIS/AIM Transition Roadmap (Information Management)	Ground system Implementation	Avionics Implementation	Procedures Availability	Operational Approvals
1. Aeronautical Data Exchange (P-09)				
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8. Digital NOTAM(P-21)				
Remarks, if any				

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EXPLANATORY NOTES

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	11. Percentage of aerodromes with CCOs implemented;
	12. Number of States implemented WGS-84
11. Security	Not applicable

REFERENCE TABLE OF THE NEW AND OLD ASBU MODULES

Old ASBU Modules Numbering System	New ASBU Modules Identifiers	
65	APTA	Airport Accessibility
70	WAKE	Wake Turbulence Separation
15	RSEQ	Arrival/Departure Management
75	SURF	Surface Operations
80	ACDM	Airport Collaborative Decision Making
81	RTWR	Remote Aerodrome Control Towers
25	FICE	FF/ICE
30	DAIM	Digital Aeronautical Management
31	SWIM	System Wide Information Management
105	AMET	Advanced Meteorological Information
10	FRTO	Free Routing
35	NOPS	Network Operations
84	ASUR	Initial Surveillance
85	ASEP	Airborne Separation
86	OPFL	Optimum Flight Levels
101	ACAS	Airborne Collision Avoidance Systems
102	SNET	Ground-Based Safety Nets
05	CDO	Continuous Descent Operations
40	TBO	Trajectory-Based Operations
20	CCO	Continuous Climb Operations
90	RPAS	Remotely Piloted Aircraft Systems

— END —