APPENDIX-8D

B0 – DATM: Service Improvement through Digital Aeronautical Information Management

Description and purpose

The initial introduction of digital processing and management of information, through aeronautical information service (AIS)/aeronautical information management (AIM) implementation, use of aeronautical information exchange model (AIXM), migration to electronic aeronautical information publication (AIP) and better quality and availability of data.

Applicability

Applicable at State level, to all States

Scope

The Global Air Traffic Management Operational Concept presented in ICAO Doc 9854 depends upon a System Wide Information Management (SWIM). The management, utilization and transmission of data and information are vital to the proper functioning of the ATM system and are at the core of air navigation services.

As part of SWIM, AIM is required to support evolving requirements for, inter alia, collaborative decision making (CDM), performance-based navigation (PBN), ATM system interoperability, network-centred information exchange, and to take advantage of improved aircraft capabilities.

In the short- to medium-term, the focus is on the continuing transition of the services provided by aeronautical information services (AIS) from a product-centred, paper-based and manually transacted focus to a digitally-enabled, network-centred and service-oriented aeronautical information management (AIM) focus. AIM envisages a migration to a data centric environment where aeronautical data will be provided in a digital form and in a managed way. This can be regarded as the first step of SWIM implementation, which is based on common data models and data exchange formats. The next (long-term) SWIM step implies the re-thinking of the data services in terms of a "network" perspective.
The transition to AIM requires that all aeronautical information, including that currently held in AIP be stored as individual digital standardized data sets to be accessed by user applications. The distribution of these data sets will both enhance the quality of output and ultimately provide a platform for new applications. This will constitute the future integrated aeronautical information package that will contain the minimum regulatory requirement to ensure the flow of information necessary for the safety, regularity and efficiency of international air navigation.

The transition from AIS to AIM will have to, inter-alia:

a) support or facilitate the generation and distribution of aeronautical information which serves to improve the safe and cost-effective accessibility of air traffic services in the world;
b) provide a foundation for measuring performance and outcomes linked to the distribution of quality assured aeronautical information and a better understanding of the determinants of ATM, safety and effectiveness not related to the distribution of the information; and

c) ensure, to the greatest extent possible, that solutions are internationally harmonized and integrated and do not unnecessarily impose multiple equipment carriage requirements for aircraft or multiple systems on the ground.

AIM requires all aeronautical information to be stored as datasets that can be accessed by user applications. The establishment and maintenance of an Integrated Aeronautical Information Database where datasets are integrated and used to produce current and future AIS/AIM products and services is a fundamental step in the transition to AIM.

Expected performance benefits

Access/Equity : N/A

Capacity : N/A

Efficiency : Reduced costs in terms of data inputs and checks, paper and post, especially when considering the overall data chain, from originators, through AIS to the end users

Environment : Reducing the time necessary to promulgate information concerning airspace status will allow for more effective airspace utilization and allow improvements in trajectory management

Safety: Reduction in the number of possible inconsistencies. Module allows reducing the number of manual entries and ensures consistency among data through automatic data checking based on commonly agreed business rules.

B0-DATM Implementation Roadblocks/Issues/Challenges

- Lack of electronic Database.
- Lack of electronic access based on Internet protocol services.
- Lack of procedures to allow airlines provide digital AIS data to on-board devices, in particular electronic flight bags (EFBs).
- Lack of training for AIS/AIM personnel

(List from ASBU Document, to be reviewed/customized by the Regions)

B0-DATM Elements/KPIs/Metrics

B0 – DATM: Service Improvement through Digital Aeronautical Information Management		
Element	**Key Performance Indicators**	**Supporting Metrics**
1-AIXM	% of States that have implemented an AIXM-based Integrated Aeronautical Information Database (IAID)	Number of States that have implemented an AIXM-based Integrated Aeronautical Information Database (IAID)
2-eAIP	% of States that have implemented an IAID driven AIP Production (eAIP)	Number of States that have implemented an IAID driven AIP Production (eAIP)
3-QMS	% of States that have implemented QMS for AIS/AIM	Number of States that have implemented QMS for AIS/AIM

4-WGS-84	% of States that have implemented WGS-84 as horizontal reference system	Number of States that have implemented WGS-84 as horizontal reference system
	% of States that have published the WGS-84 Geoid Undulation, in accordance with Annex 4 and Annex 15 provisions	Number of States that have published the WGS-84 Geoid Undulation, in accordance with Annex 4 and Annex 15 provisions
5-eTOD	% of States that have implemented required Terrain datasets	Number of States that have implemented required Terrain datasets
	% of States that have implemented required Obstacle datasets	Number of States that have implemented required Obstacle datasets
6-Digital NOTAM*	Plan for the implementation of Digital NOTAM	

B0-DATM Enablers/Tables

In order to assist States in the planning for the transition from AIS to AIM in an expeditious manner, the following Tables, which provide more details than the standard ANRF, should be used:

1- **Table B0-DATM 3-1** sets out the requirements for the Provision of AIS/AIM products and services based on the Integrated Aeronautical Information Database (IAID). It reflects the transition from the current product centric AIS to data centric AIM. For the future digital environment it is important that the authoritative databases are clearly designated and such designation must be published for the users. This is achieved with the concept of the Integrated Aeronautical Information Database (IAID), a single access point for one or more authoritative databases (AIS, Terrain, Obstacles, AMDB, etc) for which the State is responsible. This Table will be used for the monitoring of the Key Performance Indicators (KPIs) related to elements Nr. 1 and 2 of the Module B0-DATM.

2- **Table B0-DATM 3-2** sets out the requirements for aeronautical data quality. It will be used for the monitoring of the Key Performance Indicators (KPIs) related to the element Nr. 3 of the Module B0-DATM.

3- **Table B0-DATM 3-3** sets out the requirements for the implementation of the World Geodetic System – 1984 (WGS-84).The requirement to use a common geodetic system remains essential to facilitate the exchange of data between different systems. The expression of all coordinates in the AIP and charts using WGS-84 is an important first step for the transition to AIM. This Table will be used for the monitoring of the Key Performance Indicators (KPIs) related to the element Nr. 4 of the Module B0-DATM.

4- **Table B0-DATM 3-4-1** sets out the requirements for the provision of Terrain and Obstacle data sets for Area 1 and Area 4. It will be used for the monitoring of the Key Performance Indicators (KPIs) related to the element Nr. 5 of the Module B0-DATM.

5- **Table B0-DATM 3-4-2** sets out the requirements for the provision of Terrain and Obstacle data sets for Area 2. It will be used for the monitoring of the Key Performance Indicators (KPIs) related to the element Nr. 5 of the Module B0-DATM.

6- **Table B0-DATM 3-4-3** sets out the requirements for the provision of Terrain and Obstacle data sets for Area 3 and implementation of Airport Mapping Databases (AMDB). It will be used for the monitoring of the Key Performance Indicators (KPIs) related to the element Nr. 5 of the Module B0-DATM.

Table B0-DATM 3-1

Provision of AIS/AIM products and services based on the Integrated Aeronautical Information Database (IAID)

EXPLANATION OF THE TABLE

Column:

1 Name of the State or territory for which the provision of AIS/AIM products and services based on the IAID is required.

2 Requirement for the implementation and designation of the authoritative IAID, shown by:
FI – Fully Implemented
PI – Partially Implemented
NI – Not Implemented

Note 1 — The IAID of a State is a single access point for one or more databases (AIS, Terrain, Obstacles, AMDB, etc). The minimum set of databases which should be integrated is defined in Annex 15.

Note 2 — Information providing detail of "PI" should be given in the Remarks column (the implemented components of the IAID).

Note 3 — The information related to the designation of the authoritative IAID should be published in the AIP (GEN 3.1)

3 Requirement for an IAID driven AIP production, shown by:
FC – Fully compliant (eAIP: Text, Tables and Charts)
PC – Partially compliant
NC – Not compliant

Note 4 — AIP production includes, production of AIP, AIP Amendments and AIP Supplements

4 Requirement for an IAID driven NOTAM production, shown by:
FC – Fully Compliant
NC – Not compliant

5 Requirement for an IAID driven SNOWTAM production, shown by:
FC – Fully Compliant
NC – Not compliant

6 Requirement for an IAID driven PIB production, shown by:
FC – Fully compliant
NC – Not compliant

7 Requirement for Charting systems to be interoperable with the IAID, shown by:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

8 Requirement for Procedure design systems to be interoperable with the IAID, shown by:
FI – Fully Implemented
PI – Partially Implemented
NI – Not Implemented

Note 5 — full implementation includes the use of the IAID for the design of the procedures and for the storage of the encoded procedures in the IAID

9 Requirement for ATS systems to be interoperable with the IAID, shown by:

FI – Fully Implemented
PI – Partially Implemented
NI – Not Implemented

10 Action Plan — short description of the State's Action Plan with regard to the provision of AIM products and services based on the IAID, especially for items with a "PC", "PI", "NC" or "NI" status, including planned date(s) of full compliance, as appropriate.

11 Remarks — additional information, including detail of "PC", "NC", "PI" and "NI", as appropriate.

TABLE B0-DATM-3-1

Provision of AIS/AIM products and services based on the Integrated Aeronautical Information Database (IAID)

State	*IAID*	*AIP*	*NOTAM*	*SNOWTAM*	*PIB*	Charting	Procedure design	ATS	Action Plan	Remarks
1	*2*	*3*	*4*	5	6	7	8	9	10	11
Angola										
Benin	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Burkina Faso	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Botswana										
Burundi										
Cameroon	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Cape Verde										
Central African Republic	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Chad	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Comoros	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Congo	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Cote d'Ivoire	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Democratic Republic of Congo										
Djibouti										
Equatorial Guinea	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Eritrea										
Ethiopia										
Gabon	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Gambia										
Ghana										

State	*IAID*	*AIP*	*NOTAM*	*SNOWTAM*	*PIB*	Charting	Procedure design	ATS	Action Plan	Remarks
1	*2*	*3*	*4*	5	6	7	8	9	10	11
Guinea										
Guinea Bissau	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Kenya										
Liberia										
Lesotho										
Madagascar	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Malawi										
Mali	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Mauritania	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Mauritius										
Mozambique										
Namibia										
Niger	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Nigeria										
Rwanda										
Sao Tome and Principe										
Senegal	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Seychelles										
Sierra Leone										
Somalia										
South Africa										
South Sudan										
Sudan										
Swaziland										
Togo	PI	FC	FC	-	FC	FC	FI	FI	FC	By ASECNA
Uganda										
United Republic of Tanzania										

State	*IAID*	*AIP*	*NOTAM*	*SNOWTAM*	*PIB*	**Charting**	**Procedure design**	**ATS**	**Action Plan**	**Remarks**
1	***2***	***3***	***4***	**5**	**6**	**7**	**8**	**9**	**10**	**11**
Zambia										
Zimbabwe										

Table B0-DATM-3-2

Aeronautical Data Quality

EXPLANATION OF THE TABLE

Column:

1 Name of the State or territory.

2 Compliance with the requirement for implementation of QMS for Aeronautical Information Services including safety and security objectives, shown by:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

3 Compliance with the requirement for the establishment of formal arrangements with approved data originators concerning aeronautical data quality, shown by:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

4 Implementation of digital data exchange with originators, shown by:
FI – Implemented
PI – Partially Implemented
NI – Not implemented
Note 1 — Information providing detail of "PI" and "NI" should be given in the Remarks column (percentage of implementation).

5 Compliance with the requirement for metadata, shown by:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

6 Compliance with the requirements related to aeronautical data quality monitoring (accuracy, resolution, timeliness, completeness), shown by:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

7 Compliance with the requirements related to aeronautical data integrity monitoring, shown by:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

8 Compliance with the requirements related to the AIRAC adherence, shown by:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

9 Action Plan — short description of the State's Action Plan with regard to aeronautical data quality requirements implementation, especially for items with a "PC", "PI", "NC" or "NI" status, including planned date(s) of full compliance, as appropriate.

10 Remarks — additional information, including detail of "PC", "NC", "PI" and "NI", as appropriate.

TABLE B0-DATM-3-2
Aeronautical Data Quality

State	*QMS*	*Establishment of formal agreements*	*Digital data exchange with originators*	*Metadata*	*Data quality monitoring*	**Data integrity monitoring**	**AIRAC adherence**	**Action Plan**	**Remarks**
1	*2*	*3*	*4*	**5**	**6**	**7**	**8**	**9**	**10**
Angola									
Benin	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Burkina Faso	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Botswana									
Burundi									
Cameroon	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Cape Verde									
Central African Republic	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Chad	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Comoros	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Congo	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Cote d'Ivoire	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Democratic Republic of Congo									
Djibouti									
Equatorial Guinea	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Eritrea									
Ethiopia									
Gabon	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Gambia									
Ghana									
Guinea									
Guinea Bissau	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA

State	*QMS*	*Establishment of formal agreements*	*Digital data exchange with originators*	*Metadata*	*Data quality monitoring*	**Data integrity monitoring**	**AIRAC adherence**	**Action Plan**	**Remarks**
1	*2*	*3*	*4*	**5**	**6**	**7**	**8**	**9**	**10**
Kenya									
Liberia									
Lesotho									
Madagascar	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Malawi									
Mali	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Mauritania	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Mauritius									
Mozambique									
Namibia									
Niger	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Nigeria									
Rwanda									
Sao Tome and Principe									
Senegal	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Seychelles									
Sierra Leone									
Somalia									
South Africa									
South Sudan									
Sudan									
Swaziland									
Togo	**FC**	**PC**	**NI**	**FC**	**FC**	FC	FC	FC	By ASECNA
Uganda									
United Republic of Tanzania									
Zambia									
Zimbabwe									

Table B0-DATM-3-3

World Geodetic System-1984 (WGS-84)

EXPLANATION OF THE TABLE

Column:

1 Name of the State or territory for which implementation of WGS-84 is required.

2 Compliance with the requirements for implementation of WGS-84 for FIR and Enroute points, shown by:
- FC – Fully compliant
- PC – Partially compliant
- NC – Not compliant

3 Compliance with the requirements for implementation of WGS-84 for Terminal Areas (arrival, departure and instrument approach procedures), shown by:
- FC – Fully compliant
- PC – Partially compliant
- NC – Not compliant

4 Compliance with the requirements for implementation of WGS-84 for Aerodrome, shown by:
- FC – Fully compliant
- PC – Partially compliant
- NC – Not compliant

5 Compliance with the requirements for implementation of Geoid Undulation, shown by:
- FC – Fully compliant
- PC – Partially compliant
- NC – Not compliant

6 Action Plan — short description of the State's Action Plan with regard to WGS-84 implementation, especially for items with a "PC", "PI", "NC" or "NI" status, including planned date(s) of full compliance, as appropriate.

7 Remarks — additional information, including detail of "PC" and "NC", as appropriate.

TABLE B0-DATM-3-3
World Geodetic System-1984 (WGS-84)

State	FIR/ENR	Terminal	AD	GUND	Action Plan	Remarks
1	2	3	4	5	6	7
Angola						
Benin	**FC**	**FC**	**FC**	**FC**	**FC**	By ASECNA
Burkina Faso	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Botswana						
Burundi						
Cameroon	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Cape Verde						
Central African Republic	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Chad	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Comoros	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Congo	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Cote d'Ivoire	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Democratic Republic of Congo						
Djibouti						
Equatorial Guinea	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Eritrea						
Ethiopia						
Gabon	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Gambia						
Ghana						
Guinea						
Guinea Bissau	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Kenya						
Liberia						
Lesotho						
Madagascar	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**

State	FIR/ENR	Terminal	AD	GUND	Action Plan	Remarks
1	2	3	4	5	6	7
Malawi						
Mali	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Mauritania	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Mauritius						
Mozambique						
Namibia						
Niger	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Nigeria						
Rwanda						
Sao Tome and Principe						
Senegal	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Seychelles						
Sierra Leone						
Somalia						
South Africa						
South Sudan						
Sudan						
Swaziland						
Togo	**FC**	**FC**	**FC**	**FC**	**FC**	**FC**
Uganda						
United Republic of Tanzania						
Zambia						
Zimbabwe						

Table B0-DATM-3-4-1
Provision of Terrain and Obstacle data sets for Areas 1 and 4

EXPLANATION OF THE TABLE

Column

1 Name of the State or territory for which Terrain and Obstacle data sets for Areas 1 and 4 are required.

2 Compliance with requirement for the provision of Terrain data sets for Area 1, shown by:
FC – Fully Compliant
PC – Partially Compliant
NC – Not Compliant

3 Compliance with requirement for the provision of Terrain data sets for Area 4, shown by:
FC – Fully Compliant
PC – Partially Compliant
NC – Not Compliant

4 Compliance with requirement for the provision of Obstacle data sets for Area 1, shown by:
FC – Fully Compliant
PC – Partially Compliant
NC – Not Compliant

5 Compliance with requirement for the provision of Obstacle data sets for Area 4, shown by:
FC – Fully Compliant
PC – Partially Compliant
NC – Not Compliant

6 Action plan — short description of the State's Action Plan with regard to compliance with the requirements for provision of Terrain and Obstacle data sets for Areas 1 and 4, especially for items with a "PC" or "NC" status, including planned date(s) of full compliance, as appropriate.

7 Remarks— additional information, including detail of "PC" and "NC", as appropriate.

TABLE B0-DATM-3-4-1

Provision of Terrain and Obstacle data sets for Areas 1 and 4

State	Terrain data sets		Obstacle data sets		Action Plan	Remarks
	Area 1	Area 4	Area 1	Area 4		
1	2	3	4	5	6	7
Angola						
Benin	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Burkina Faso	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Botswana						
Burundi						
Cameroon	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Cape Verde						
Central African Republic	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Chad	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Comoros	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Congo	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Cote d'Ivoire	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Democratic Republic of Congo						
Djibouti						
Equatorial Guinea	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Eritrea						
Ethiopia						
Gabon	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Gambia						
Ghana						
Guinea						
Guinea Bissau	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Kenya						

State	Terrain data sets		Obstacle data sets		Action Plan	Remarks
	Area 1	Area 4	Area 1	Area 4		
1	2	3	4	5	6	7
Liberia						
Lesotho						
Madagascar	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Malawi						
Mali	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Mauritania	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Mauritius						
Mozambique						
Namibia						
Niger	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Nigeria						
Rwanda						
Sao Tome and Principe						
Senegal	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Seychelles						
Sierra Leone						
Somalia						
South Africa						
South Sudan						
Sudan						
Swaziland						
Togo	NC	NC	NC	NC	FC	ASECNA PLAN FOR 2015/2017
Uganda						
United Republic of Tanzania						
Zambia						
Zimbabwe						

Table B0-DATM-3-4-2
Provision of Terrain and Obstacle data sets for Area 2

EXPLANATION OF THE TABLE

Column

1 Name of the State or territory for which Terrain and Obstacle data sets for Area 2 are required.

2 Compliance with requirement for the provision of Terrain data sets for Area 2a, shown by:
FC – Fully Compliant
PC – Partially Compliant
NC – Not Compliant

3 Compliance with requirement for the provision of Terrain data sets for Area 2b, shown by:
FI – Fully Implemented
PI – Partially Implemented
NI – Not implemented
N/A – Not Applicable

4 Compliance with requirement for the provision of Terrain data sets for Area 2c, shown by:
FI – Fully Implemented
PI – Partially Implemented
NI – Not Implemented
N/A – Not Applicable

5 Compliance with requirement for the provision of Terrain data sets for Area 2d, shown by:
FI – Fully Implemented
PI – Partially Implemented
NI – Not Implemented
N/A – Not Applicable

6 Compliance with requirement for the provision of Obstacle data sets for Area 2a, shown by:
FC – Fully Compliant
PC – Partially Compliant
NC – Not Compliant

7 Compliance with requirement for the provision of Obstacle data sets for Area 2b, shown by:
FI – Fully Implemented
PI – Partially Implemented
NI – Not implemented
N/A – Not Applicable

8 Compliance with requirement for the provision of Obstacle data sets for Area 2c, shown by:
FI – Fully Implemented

PI – Partially Implemented
NI – Not Implemented
N/A – Not Applicable

9 Compliance with requirement for the provision of Obstacle data sets for Area 2d, shown by:

FI – Fully Implemented
PI – Partially Implemented
NI – Not Implemented
N/A – Not Applicable

10 Action plan — short description of the State's Action Plan with regard to compliance with the requirements for provision of Terrain and Obstacle data sets for Area 2, especially for items with a "PC", "PI", "NC" or "NI" status.

11 Remarks— additional information, including detail of "PC", "PI" and "NC", "NI", as appropriate.

TABLE B0-DATM-3-4-2

Provision of Terrain and Obstacle data sets for Area 2

State	Terrain data sets				Obstacle data sets				Action Plan	Remarks
	Area 2a	Area 2b	Area 2c	Area 2d	Area 2a	Area 2b	Area 2c	Area 2d		
1	2	3	4	5	6	7	8	9	10	11
Angola										
Benin	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Burkina Faso	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Botswana										
Burundi										
Cameroon	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Cape Verde										
Central African Republic	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Chad	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Comoros	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Congo	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Cote d'Ivoire	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Democratic Republic of Congo										
Djibouti										
Equatorial Guinea	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Eritrea										

State	Terrain data sets				Obstacle data sets				Action Plan	Remarks
	Area 2a	Area 2b	Area 2c	Area 2d	Area 2a	Area 2b	Area 2c	Area 2d		
1	2	3	4	5	6	7	8	9	10	11
Ethiopia										
Gabon	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Gambia										
Ghana										
Guinea										
Guinea Bissau	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Kenya										
Liberia										
Lesotho										
Madagascar	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Malawi										
Mali	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Mauritania	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Mauritius										
Mozambique										
Namibia										
Niger	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Nigeria										
Rwanda										
Sao Tome and Principe										
Senegal	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Seychelles										
Sierra Leone										
Somalia										

State	Terrain data sets				Obstacle data sets				Action Plan	Remarks
	Area 2a	**Area 2b**	**Area 2c**	**Area 2d**	**Area 2a**	**Area 2b**	**Area 2c**	**Area 2d**		
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
South Africa										
South Sudan										
Sudan										
Swaziland										
Togo	***NC***	NI	NI	NI	NC	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Uganda										
United Republic of Tanzania										
Zambia										
Zimbabwe										

Table B0-DATM-3-4-3
Provision of Terrain and Obstacle data sets for Area 3 and Airport Mapping Databases (AMDB)

EXPLANATION OF THE TABLE

Column

1 Name of the State or territory for which Terrain and Obstacle data sets for Area 3 and AMDB are required.

2 Compliance with requirement for the provision of Terrain data sets for Area 3, shown by:
FI – Fully Implemented
PI – Partially Implemented
NI – Not Implemented
N/A – Not Applicable

3 Compliance with requirement for the provision of Obstacle data sets for Area 3, shown by:
FI – Fully Implemented
PI – Partially Implemented
NI – Not Implemented
N/A – Not Applicable

4 Implementation of AMDB, shown by:
FI – Fully Implemented
PI – Partially Implemented
NI – Not Implemented
N/A – Not Applicable

5 Action plan — short description of the State's Action Plan with regard to compliance with the requirements for provision of Terrain and Obstacle data sets for Area 3 and AMDB implementation, especially for items with a "PC", "PI", "NC" or "NI" status.

6 Remarks— additional information, including detail of "PI" and "NI", as appropriate.

TABLE B0-DATM-3-4-3

Provision of Terrain and Obstacle data sets for Area 3 and Airport Mapping Databases (AMDB)

State	Terrain data sets (Area 3)	Obstacle data sets (Area 3)	AMDB	Action Plan	Remarks
1	2	3	4	5	6
Angola					
Benin	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Burkina Faso	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Botswana					
Burundi					
Cameroon	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Cape Verde					
Central African Republic	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Chad	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Comoros	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Congo	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Cote d'Ivoire	NI	NI	NI	FC	ASECNA PLAN FOR 2015/207
Democratic Republic of Congo					
Djibouti					
Equatorial Guinea	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Eritrea					
Ethiopia					
Gabon	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Gambia					
Ghana					
Guinea					
Guinea Bissau	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017

State	Terrain data sets (Area 3)	Obstacle data sets (Area 3)	AMDB	Action Plan	Remarks
1	2	3	4	5	6
Kenya					
Liberia					
Lesotho					
Madagascar	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Malawi					
Mali	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Mauritania	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Mauritius					
Mozambique					
Namibia					
Niger	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Nigeria					
Rwanda					
Sao Tome and Principe					
Senegal	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Seychelles					
Sierra Leone					
Somalia					
South Africa					
South Sudan					
Sudan					
Swaziland					
Togo	NI	NI	NI	FC	ASECNA PLAN FOR 2015/2017
Uganda					
United Republic of Tanzania					
Zambia					
Zimbabwe					