



International
Civil Aviation
Organization

Organisation
de l'aviation civile
internationale

Organización
de Aviación Civil
Internacional

Международная
организация
гражданской
авиации

منظمة الطيران
المدني الدولي

国际民用
航空组织

Bureau Afrique Occidentale et Centrale / Western and Central African Office

T2/7 - 0725

7 August 2012

Subject : Follow-up on APIRG/18 and 17 Conclusions concerning the AFI Region Strategies for the transition from AIS to AIM.

Sir/Madam,

I have the honour to draw your attention to the Conclusion 18/35 by the Eighteenth meeting of the AFI Planning and Implementation Regional Group (APIRG/18) held in Kampala, Uganda from 27 to 30 March 2012, as stated.

You will also find attached Appendix 3.5A (*Service Level Agreement template*) to facilitate the implementation process.

CONCLUSION 18/35: QMS IMPLEMENTATION AND ESTABLISHMENT OF SERVICE LEVEL AGREEMENTS

That, in order to support the effective implementation of QMS, AFI States are urged to:

- a) *take firm commitment at the level of Directors General of CAA Administrations to implement QMS supported by ISO 9001:2008;*
- b) *share their QMS implementation experience and support with other States; and*
- c) *establish and maintain formal Service Level Agreements (SLA) between data originators and AIS Providers as per sample template at Appendix 3.5A.*

I would also like to remind you of my State letter ref. T2/7-0476 of 16 June 2011, a copy of which is attached. As you may recall, Conclusion 17/86 of the APIRG/17 meeting re-iterates the transition from AIS to AIM as per attached State letter. In addition, the APIRG/18 Meeting agreed that a survey be conducted to assess the current status of AIM implementation of States in the AFI Region as per Appendix 3.5H attached herewith. The meeting also agreed that States provide their National Plans related to the transition from AIS to AIM or as a minimum, a status report against the 21 steps of the ICAO Roadmap for the transition from AIS to AIM as in **Appendix 3.5I** attached herewith.

You are kindly requested to accordingly complete and submit the attached APIRG/18 Appendices 3.5H and 3.5I to the ICAO Regional Offices of Dakar and Nairobi by 31 August 2012. Fulfilment of requirements of the above-mentioned APIRG/18 and 17 AIM Conclusions is still called for and States are encouraged to maintain continuous follow-up implementation action and inform ICAO Regional Offices of the results attained.

Please accept, Sir/Madam, the assurances of my highest consideration.



Mam Sait Jallow
Regional Director

Attachments :

State letter ref. : T2/7-0476

APIRG/18 Appendices 3.5A; 3.5H and 3.5I

APIRG/18 Report



International
Civil Aviation
Organization

Organisation
de l'aviation civile
Internationale

Organización
de Aviación Civil
Internacional

Международная
организация
гражданской
авиации

منظمة الطيران
المدني الدولي

国际民用
航空组织

Bureau Afrique Occidentale et Centrale / Western and Central African Office

T 2/7 - 0476

16 June 2011

Subject: Follow-up on APIRG/17 Conclusion on AIS/MAP (AIM)

Sir/Madam,

I have the honour to draw your attention to Conclusions and decisions in the field of Aeronautical Information Services (AIS/MAP) and Aeronautical Information Management (AIM) agreed to and endorsed by the Seventeenth meeting of the AFI Planning and Implementation Regional Group (APIRG/17) held in Ouagadougou, Burkina Faso from 2 to 6 August 2010.

The relevant Conclusions and decisions are listed below as a reminder for your administration / organization to take action on the implementation of the requirements contained therein:

1. CONCLUSION 17/86: TRANSITION FROM AIS TO AIM

That, recognizing the limitations of the current AIS, which does not meet the new global ATM system requirements envisioned by the ATM operational concept, and taking into consideration the ICAO roadmap for the transition from AIS to AIM:

- a) States that have not yet done so, are urged to develop national plans to implement the transition from AIS to AIM and send them to the ICAO ESAF and WACAF Regional Offices before 31 December 2010; and
- b) AFI AIM implementation task force monitor the progress of transition from AIS to AIM in the AFI Region and support regional and national planning efforts.

2. DECISION 17/87: PLANNING FOR THE TRANSITION FROM AIS TO AIM

That, based on the ICAO global ATM operational concept and the ICAO roadmap for the transition from AIS to AIM, the AFI AIM Implementation Task Force (AFI AIM TF):

- a) Develop performance goals for the transition from AIS to AIM in the AFI Region and identify achievable milestones; and

...

- b) Carry out a review of the AIS parts of the AFI basic ANP and FASID in order to introduce/develop planning material related to the transition from AIS to AIM.

3. CONCLUSION 17/88: e-TOD CHECKLIST

That, States be encouraged to use the e-TOD checklist at Appendix 3.6C to this report in order to assist them in the process of planning and implementation of the e-TOD provisions.

4. CONCLUSION 17/89: ADOPTION OF THE e-TOD IMPLEMENTATION PLAN TEMPLATE AS A REGIONAL MODEL

That states be encouraged to use the:

- a) e-TOD implementation plan template at Appendix 3.6D to this report as regional model in order to assist them in the process of planning and implementation of the e-TOD provisions.

- b) national e-TOD implementation plan at Appendix 3.6E to this report as a sample when developing their national e-TOD plans

5. CONCLUSION 17/90: IMPLEMENTATION OF WGS-84 AND ELECTRONIC TERRAIN AND OBSTACLE DATA

That:

- a) States adopt the revised AIM performance objective "Implementation of WGS-84 and Electronic Terrain and Obstacle Data" as contained in the Performance Framework Form in the Appendix 3.6F to this report, as a strategy for implementation;
- b) The proposed FASID table at Appendix F be adopted for inclusion as a requirement in the AFI FASID (Document 7474, Vol. II);
- c) The AFI Region e-TOD implementation strategy under Appendix 3.6G to this report be adopted for implementation; and
- d) The revised Terms of Reference of the AFI Region e-TOD working group are at Appendix 3.6H to this report be adopted.

6. CONCLUSION 17/91: e-TOD IMPLEMENTATION AWARENESS CAMPAIGNS

That, States' AIS should take the lead and carry out awareness campaigns at national level to promote a better understanding of the planning and implementation issues related to e-TOD and training programmes.

7. CONCLUSION 17/92: DEVELOPMENT AND MANAGEMENT OF A NATIONAL e-TOD PROGRAMME

That, States, in accordance with sound management principles and procedures, should:

- a) Develop a framework and a detailed planning including priorities and timelines, for the implementation of a national e-TOD programme;

- b) Adopt/follow a collaborative approach, involving all concerned parties, in the implementation of e-TOD provisions; and
- c) Make an inventory of and evaluate the quality of existing terrain and obstacle data sources, and in the case of data collection, consider carefully the required level of details of collected terrain and obstacle data with particular emphasis on obstacle data and associated cost.

8. CONCLUSION 17/93: COORDINATION BETWEEN STATES AND DATA PROVIDERS/INTEGRATORS FOR THE PROVISION OF e-TOD AND EXCHANGE OF EXPERIENCE FOR THE IMPLEMENTATION OF e-TOD REQUIREMENTS

That:

- a) Collaboration between States and data providers/integrators should be considered in the process of e-TOD provision; and
- b) Implementation of e-TOD provisions should be considered a global matter concerning all ICAO Regions, which thereby necessitates coordination and exchange of experience between States, ICAO and other national/international organizations and industry partners involved.

9. CONCLUSION 17/94: RESPONSIBILITY FOR THE PROVISION OF e-TOD

That, States, while maintaining the responsibility for data quality and availability, should consider the extent to which provision of electronic terrain and obstacle data could be delegated to national geodetic institutes/ agencies, based on Service Level Agreement (SLA) reflecting such delegation.

10. CONCLUSION 17/95: PROVISION OF FINANCIAL RESOURCES AND ASSISTANCE FOR THE IMPLEMENTATION OF e-TOD

That:

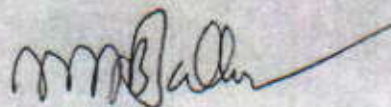
- a) e-TOD implementation should be managed by each State as a national e-TOD programme supported by necessary resources, a high level framework and a detailed national plan including priorities and timelines for the implementation of the programme; and
- b) States encountering difficulties in the implementation of e-TOD may seek assistance (individually or collectively) from ICAO and/or other States.

11. CONCLUSION 17/97: ADOPTION OF THE AIS TO AIM TRANSITION ROADMAP

That, States adopt the roadmap as guidance material to plan, manage and facilitate the global transition from AIS to AIM within the AFI Region including planning of the scope and prioritizing projects and actions for the transition to AIM.

Fulfilment of requirements of the above-mentioned AIS/MAP (AIM) APIRG/17 Conclusions and decisions is still called for and States are encouraged to maintain continuous follow-up implementation action and inform the ICAO Regional Offices on results attained by 07 July 2011.

Please accept, Sir/Madam, the assurances of my highest considerations.



M.S. Jallow
Regional Director

Attachment : APIRG/17 Report-en

<http://www.icao.int/wacaf/apirg/index.html>

APIRG/18 Meeting Report
Report on agenda item 3.5
Appendix 3.5A

APPENDIX-3.5A

Insert Logo Here
Organisation 1

Insert Logo Here
Organisation 2

Insert Logo Here
Organisation 3

**Service Level Agreement
Template**

Edition :
Edition Date :
Status :

Appendix A to WP-17 on Agenda Item 3.5

DOCUMENT APPROVAL

The following table identifies all management authorities that have successively approved the present issue of this document.

In witness whereof, the undersigned have executed this Agreement as of the date previously mentioned in this Agreement.

[Insert authority names below as appropriate]

AUTHORITY	NAME AND SIGNATURE	DATE
Aeronautical Information Services		
Data Originator		
Regulator		

Appendix A to WP/17 on Agenda Item 3.5

DOCUMENT CHANGE RECORD

The following table records the complete history of the successive editions of the present document.

EDITION	DATE	REASON FOR CHANGE	SECTIONS PAGES AFFECTED

Appendix A to WP/17 on Agenda Item 3.5

TABLE OF CONTENTS

1.	INTRODUCTION	
1.1	Scope	
1.2	Parties to the Agreement.....	
1.3	Perspective – Regulative Environment.....	
1.4	Term	
1.5	Conventions	
1.5.1	Time	
1.5.2	Quality Attributes	
1.5.3	Data Categories	
2.	SERVICES AND SERVICE LEVELS	
2.1	Service Description.....	
2.1.1	Regulation	
2.2	Optional Services	
2.3	Exclusions	
2.4	Limitations	
2.5	Entities Involved.....	
2.6	Service Levels	
2.6.1	Data Originator	
2.6.2	AISP	
2.7	Service Level Indications	
3.	MANAGEMENT ELEMENTS	
3.1	Rewards and Remedies	
3.2	Escalation Procedures	
3.3	SLA Lifecycle.....	
3.3.1	Reporting	
3.3.2	Reviews	
3.3.3	Change Process.....	
3.4	Points of Contact	
4.	REFERENCES	
4.1	Refer to docs and add a short description	

TABLE 1: PARTIES TO AGREEMENT	2
TABLE 2: DATA TO BE PROVIDED	5

Appendix A to WP/17 on Agenda Item 3.5

TABLE 3: DATA ATTRIBUTES – ENTITY X	6
TABLE 4: SERVICE LEVEL INDICATIONS	7
TABLE 5: POINTS OF CONTACT	8

3.5G-7

Appendix 3.5G to WP-17 on Agenda Item 3.5

1. INTRODUCTION

1.1 Scope

This Service Level Agreement (SLA) documents the agreed provision of service for the supply of aeronautical information (Data) by [organisation name] (The Data Originator) to [organisation name] (The AISP) and the agreed standards to which the said information shall be published by the AISP. This SLA is overseen and managed by the [organisation name] (The Regulator).

1.2 Benefits Gained from an SLA

An SLA is a contract between parties that defines the services provided, the indicators associated with these services, acceptable and unacceptable service levels, liabilities on the part of the service provider and the customer, and actions to be taken in specific circumstances.

In the scope of this SLA only modes of operation are discussed and formalised and financial components are not considered.

The basic objectives of an SLA are as follows:

- Better communication. It facilitates two-way communication between the parties. This communication starts at the beginning of the process to establish an SLA and continues throughout the life of the arrangement. The parties involved come together in order to understand each other's needs, priorities and concerns, and to gain an insight into the problems which may be faced by each party through the failure of each party to fulfil their obligations.
- Guards against expectation creep. It is not uncommon for one party's expectations of another to be higher than that which may be considered reasonable. Discussing these expectations and the resource commitments necessary to meet them is one activity undertaken in the establishment of an SLA. The process facilitates the identification and discussion of expectations. As a result, it helps identify service levels that are considered acceptable by each party and which are attainable and achievable.
- Mutually agreed standard. It sets an agreed standard against which performance may be measured. It identifies customer expectations, defines the boundaries of the service provision and clarifies responsibilities. In the absence of a shared understanding about needs and priorities, it is easy for conflicts to arise between parties. An SLA and the communication process involved in establishing it help to minimise the conflicts between the parties and provides a means for conflict resolution should a problem arise.
- A process for gauging service effectiveness. As the SLA defines standards against which the service may be measured and evaluated, it provides the basis for performing an assessment of the effectiveness of the service.

1.3 Parties to the Agreement

The following table describes and names the legal entities and their representatives who have reviewed and approved this SLA.

Appendix 3.5G to WP-17 on Agenda Item 3.5

Entity	Address	Re presentative
[Insert Regulator details here]		
[Insert AISP details here]		
[Insert Data Originator details here]		

Table 1: Parties to Agreement

1.4 Perspective – Regulative Environment

A number of documents specify the regulatory requirements for the provision of information by Data Originators and its subsequent processing by AIS. These include:

- ICAO Annex 4 "Aeronautical Charts";
- ICAO Annex 5 "Units of Measurement to be Used in Air and Ground Operations";
- ICAO Annex 11 "Air Traffic Services";
- ICAO Annex 14 "Aerodromes";
- ICAO Annex 15 "Aeronautical Information Services".

These documents are further supported by guidance material, including:

- ICAO Doc 8126 "AIS Manual";
- ICAO Doc 8697 "Aeronautical Chart Manual";
- ICAO Doc 9674 "WGS-84 Manual";
- Operating Procedures for AIS Dynamic Data (OPADD).

[Add any State applicable regulation here]

1.5 Term

The term of this SLA shall be as follows:

Start Date: [Insert start date here]

End Date: [Insert end date here]

Duration: [Insert duration here]

Once agreed The AISP and The Data Originator cannot withdraw from all or part of this agreement within the above dates.

[Add any other agreed constraints of / specification for the scope here.]

1.6 Conventions

Within this SLA, the following conventions are used:

3.5G-9

Appendix 3.5G to WP-17 on Agenda Item 3.5

1.6.1 Time**1.6.2 Presentation of Date and Time in All-numeric Form**

This SLA uses Co-ordinated Universal Time (UTC) as described in Attachment D of Annex 5.

This SLA uses the procedures for writing the date and time in all-numeric form as described in Attachment E of Annex 5.

Times expressed as a number of "Office hours" include the hours from 8:00 to 16:00 Dutch local time (Monday to Friday).

Times expressed as a number of "Office hours" include business hours, Monday through Friday, excluding designated holidays.

Unless specifically mentioned otherwise, all durations specified are in working days.

1.6.3 Quality Attributes / Definitions

Accuracy: A degree of conformance between the estimated or measured value and the true value.

AIRAC System: A system aimed at advance notification based on common effective dates, of circumstances that necessitate significant changes in operating practices.

NOTAM System: A system of distributing notices by means of telecommunication, that contain information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.

Resolution: A number of units or digits to which a measured or calculated value is expressed and used.

Integrity: A degree of assurance that an aeronautical data item and its value have not been lost or altered since its origination or authorised amendment.

Timeliness: A characteristic by which either data is provided or actions performed, with sufficient time remaining so as not to impact later actions and possibly jeopardise the achievement of the required result within due time.

1.6.4 Data Categories

The following data classifications are used within this document:

Routine: There is a very low probability when using corrupted routine data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe.

The permitted maximum error rate is 1 in 1000, providing an integrity level of 1×10^{-3} .

Essential: There is a low probability when using corrupted essential data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe.

The permitted maximum error rate is 1 in 100,000, providing an integrity level of 1×10^{-5} .

Critical: There is a high probability when using corrupted critical data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe.

The permitted maximum error rate is 1 in 100,000,000, providing an integrity level of 1×10^{-8} .

1.7 Entities Involved for Data Provision

The following entities categories involved are used within this document:

1. Civil Aviation Authority (CAA)

The national body responsible for the overall supervision of aviation-related activities.

2. [Insert Organisation Name Here]

The organisation responsible for the provision of Air Navigation Services for the State.

3. Aeronautical Information Management/Services (AIM/AIS)

The unit of the ANSP responsible for the provision of Aeronautical Information Services (AIS) for the State.

4. Data Originator

Describe the data originator body here.

5. National Supervisory Authority (NSA)

2. SERVICES AND SERVICE LEVELS

2.1 Service Description

The Data Originator will provide the AISP with the Data for which it is responsible as listed in Table 2, below.

Data Entity	Description
X	
Y	
Z	

Table 2: Data to be Provided

The AISP will, in turn, publish the information within the National Publication and in accordance with ICAO and National regulations.

2.1.1 Regulation

[Detail here the regulation that applies to this SLA]

2.2 Optional Services

[Detail any further services required here]

2.3 Exclusions

[Detail any further services required here]

2.4 Limitations

[Detail any further services required here]

2.5 Entities Involved

[Detail any the entities involved here]

2.6 Service Levels

2.6.1 Data Originator

All Data shall be provided in accordance with the following criteria:

1. The Data shall include its effective date.
2. The Data shall include its period of validity.
3. The Data shall be provided with the requested publication.
4. The Data shall be prepared in accordance with the following standards:
 - a. [List standards here]

Additionally, the Data Originator shall provide each of the identified Data items in Table 2, in accordance with the following specific criteria:

2.6.1.1 Data Item x – Repeat for each data item.

The Data shall be provided at least [insert timeliness requirement] days prior to the effective date.

The Data shall be provided by [insert delivery requirement] means.

The Data shall be provided in [insert required format of delivery].

The Data shall be provided with the following quality attributes:

Attribute	Accuracy	Resolution	Integrity Level	Note
X'1	20 m	1 second	Critical	
X'2	1 ft	0.1 ft	Essential	
X'3	n/a	n/a	Routine	Textual data

Table 3: Data Attributes – Entity X

The Data shall be provided by with the following meta-data:

1. [insert meta-data requirement].

[Add more requirements for the provision of information]

2.6.2 AISP

The AISP shall process the Data upon receipt.

The AISP shall present a draft publication including the Data for approval by [insert approver] at least [insert timeliness requirement] days prior to the effective date.

The AISP shall publish the Data within the requested publication unless otherwise agreed, in writing, with the Data Originator.

[Add more requirements for the publication of information]

2.7 Service Level Indications

The following measures will be used to assess the performance of the service:

Appendix 3.5G to WP-17 on Agenda Item 3.5

Measure	Description	Target date ¹ . Late provision must be alerted to the AIM as soon as known. The publication of this information will then be the subject of negotiation.
Format	The Data is provided by the Data Originator to the AIM, without errors in presentation or content, in the format detailed within this SLA.	95%
Draft Publication	The AIM will present a draft publication to the Data Originator for approval within the specified timeframe.	95% by required due date ² . 100% within one day following due date ² .
Publication	The AIM will publish the Data within the required period (e.g. in compliance with the AIRAC cycle).	95% by required due date.
Quality of Publication	The IAIP product prepared will be provided in accordance with the applicable standards.	95%
Add and amend indications as required.		

Due date is used to mean the number of days in advance of the effective date that the information is to be provided to the AIS. This period is defined in section 2.6.1.

Measure	Description	Target
Quality of Data	The Data is delivered by the Data Originator to the AIM with the required quality levels.	100%
Timeliness	The Data is delivered by the Data Originator to the AIM within the specified timeframe.	95% by required due date ¹ . 100% within three days following due

Table 4: Service Level Indications

²Due date is used to mean the number of days in advance of the effective date that the draft publication is to be provided to the Data Originator.

3. MANAGEMENT ELEMENTS

3.1 Rewards and Remedies
[Detail rewards and remedies here]

3.2 Escalation Procedures
[Detail any escalation procedures here]

3.3 SLA Lifecycle
3.3.1 Reporting
[Detail any reporting here]

3.3.2 Reviews
[Detail any reviews here]

3.3.3 Change Process
[Detail the change process here]

3.4 Points of Contact

The following points of contact for execution of the SLA are:

Organisation	Primary Contact	Secondary Contact
[Insert Regulator details here]	[Insert Primary Contact details here, including name, role/job title, address, telephone, fax and email]	[Insert Secondary Contact details here, including name, role/job title, address, telephone, fax and email]
[Insert AISP details here]	[Insert Primary Contact details here, including name, role/job title, address, telephone, fax and email]	[Insert Secondary Contact details here, including name, role/job title, address, telephone, fax and email]
[Insert Data Originator details here]	[Insert Primary Contact details here, including name, role/job title, address, telephone, fax and email]	[Insert Secondary Contact details here, including name, role/job title, address, telephone, fax and email]

Table 5: Points of Contact

3.5G-15
Appendix 3.5G to WP-17 on Agenda Item 3.5

4. FUTURE INTENTIONS

4.1 General

Although outside the scope of this SLA, AIM and the **[Data Originator]** have a number of intentions for improvement which may have a consequential impact on this SLA.

The following sections outline these and should be considered during the review of the SLA, once it is in operation.

4.2 Describe future intentions here

5. REFERENCES

5.1 Refer to docs and add a short description.

End of Document

APIRG/18 Meeting Report
 Report on agenda item 3.5
 Appendix 3.5H

AFI REGION QUESTIONNAIRE FOR STATE'S TRANSITION FROM AIS TO AIM
 National Plan for the transition from AIS to AIM

a) Have you developed a National Plan for the transition from AIS to AIM? If Yes, is it based on the ICAO Roadmap (Phases 1, 2 and 3)?		YES	NO
Sample	No formal plan has been developed for the whole transition but a set of initiatives for several steps of the Roadmap. Phase 1 is fully covered by our initiatives / Phases 2 and 3 are partly covered by our initiatives.		X
STATE			

1. Phase 1 – Consolidation (2009)

a) What do you consider a realistic timeframe for the implementation of Phase 1?	
Sample	2013 – due to the implementation of QMS by the raw data originators Quality measures will be reinforced to ensure the required level of quality of the aeronautical information. Before end of June 2013. Incremental improvements in data quality will be achieved through the implementation of the revised QMS. Data quality is expected to be fully compliant before the end of June 2017.
STATE	

b) What is the status of implementation of the following steps of Phase 1 in your State?		
P-03 — AIRAC adherence monitoring		
	Implemented (specify how)	Planned (specify when/how)
Sample	Implemented up to the process step "publication" in the frame of the Quality Management System.	There seems currently no effective means available to monitor the process steps after "publication", (which is beyond our influence and control (mailing)).
STATE		
b) What is the status of implementation of the following steps of Phase 1 in your State?		
P-03 — AIRAC adherence monitoring		

APIRG/18 Meeting Report
Report on agenda item 3.5
Appendix 3.5H

STATE	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
b) What is the status of implementation of the following steps of Phase 1 in your State?			
P-05 — WGS-84 implementation			
Sample	Implemented (specify how) Implemented — since 1998	Planned (specify when/how)	Additional comments/clarification required Geoid Undulation not yet implemented
STATE			
b) What is the status of implementation of the following steps of Phase 1 in your State?			
P-04 — Monitoring of States' differences to Annex 4 and Annex 15			
Sample	Implemented (specify how) During preparations for ICAO USOAP all differences to Annex 4 and Annex 15 have been identified and recorded, using standard checklists supplied from ICAO. Since then, some of those differences are removed and some standards are changed, checklists were updated. Differences are published in the AIP.	Planned (specify when/how)	Additional comments/clarification required Dialogs are conducted concerning differences between CAA and service provider about measures and time frame.
STATE			

Appendix H 4-3

b) What is the status of implementation of the following steps of Phase 1 in your State?			
P-17 — Quality			
	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
Sample	Partially achieved. Not in place for all data throughout the data management chain. Partly implemented concerning integrity.		Data exchange tool will improve data integrity.
STATE			

2. Phase 2 – Going Digital (2009 – 2011)

a) What do you consider a realistic timeframe for the implementation of Phase 2?	
Sample	Many steps of Phase 2 are already implemented; however the entire scope of data will be covered by 2015.
STATE	

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-01 — Data quality monitoring			
	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
Sample	A structured monitoring system is not implemented. Quality management in the chain is fractured.		State policy under development
STATE			

Appendix H 4-4

a) What is the status of implementation of the following steps of Phase 2 in your State?			
P-02 — Data integrity monitoring			
STATE	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
a) What is the status of implementation of the following steps of Phase 2 in your State?			
P-06 — Integrated aeronautical information database			
STATE	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
	<p>AISP operates a database of static aeronautical data based on AICM/AIXM 4.5 and a separate database for dynamic aeronautical data. The database was converted to the current AIXM 4.5 version with the effective date of 4th of June 2010. Obstacle data database with only one way exchange from (originator) to AISP under test operation.</p>	<p>With the introduction of a system based on AIXM 5.1 an integration of the static and dynamic database is expected. The deadline for the transition to AIXM 5.1 is not specified yet.</p>	
a) What is the status of implementation of the following steps of Phase 2 in your State?			
P-07 — Unique identifiers			
STATE	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
	<p>AISP uses a model of unique feature identification based on natural keys in compliance with AIXM 4.5.</p>	<p>With the introduction of a system based on AIXM 5.1 the universally unique identifier (UUID) model will be implemented. We expect possible difficulties in the transition process to the new unique identifiers.</p>	
b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-07 — Unique identifiers			
STATE	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
a) What is the status of implementation of the following steps of Phase 2 in your State?			
P-08 — Aeronautical information conceptual model			
STATE	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required

Appendix H P-5

	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
Sample	The data model which is used by AIXM 4.5 is implemented.	With the introduction of a system based on AIXM 5.1 the appropriate data model will be implemented.	
b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-08 — Aeronautical information conceptual model			
STATE	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
a) What is the status of implementation of the following steps of Phase 2 in your State?			
P-11 — Electronic AIP			
STATE	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-11 — Electronic AIP			
Sample	No	Initial eAIP produced May 11. Operational version planned for Sep 11.	Additional comments/clarification required AIP available in digital format (PDF) on CD and on the web
STATE			
a) What is the status of implementation of the following steps of Phase 2 in your State?			
P-13 — Terrain			
Sample	Implemented (specify how)	Terrain datasets are available, but unfit to cover all eTOD requirements. Implementation is planned until mid 2013	Additional comments/clarification required Implementation Project is ongoing, charging mechanism under discussion.
STATE			State policy under development.

Appendix H J-6

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-13 — Terrain			
STATE	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification
a)	What is the status of implementation of the following steps of Phase 2 in your State?		
P-14 — Obstacles			
STATE	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification
Sample	Partially provided but not compliant with chapter 10 of ICAO Annex 15 Data collected for Area 1	Area 1 planned for 2012 Area 2 and Area 3 planned 2015	State policy under development.
b)	What is the status of implementation of the following steps of Phase 2 in your State?		
P-14 — Obstacles			
STATE	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification
a)	What is the status of implementation of the following steps of Phase 2 in your State?		
P-15 — Aerodrome mapping			
STATE	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
Sample	No	No concrete planning available yet, still under review.	

Appendix H J-7

3. Phase 3 – Information Management (2011 – 2016)

<p>a) What do you consider a realistic timeframe for the implementation of Phase 3? We believe that the foreseen implementation time frame of Phase 3 is too ambitious and think that 2013-2018 would be a more realistic time frame.</p>			
<p>Sample STATE</p>			
<p>a) What is the status of implementation of the following steps of Phase 3 in your State?</p>			
<p>P-09 – Aeronautical data exchange</p>			
	<p>Implemented (specify how)</p>	<p>Planned (specify when/how)</p>	<p>Additional comments/clarification required</p>
<p>Sample STATE</p>	<p>An AIXM interface from/to the central aeronautical database (refer to P-06) is available.</p>	<p>It is planned to implement the exchange model and mechanisms together with AICM 5.1. This starts in 2013</p>	<p>Not implemented between data providers and AIS</p>
<p>b) What is the status of implementation of the following steps of Phase 3 in your State?</p>			
<p>P-09 – Aeronautical data exchange</p>			
	<p>Implemented (specify how)</p>	<p>Planned (specify when/how)</p>	<p>Additional comments/clarification required</p>
<p>Sample STATE</p>			
<p>a) What is the status of implementation of the following steps of Phase 3 in your State?</p>			
<p>P-10 – Communication networks</p>			
	<p>Implemented (specify how)</p>	<p>Planned (specify when/how)</p>	<p>Additional comments/clarification required</p>
<p>Sample</p>	<p>AISP has been using the Internet for static and dynamic data exchange for some time already. AFTN is also being used, currently in the role of a backup network for dynamic data exchange. Starting August 2010 the AISP is using PENS for dynamic data exchange.</p>	<p>Migration to AMHS completed. For some specific services Internet is being used.</p>	<p>In some specific cases the ANSP is delivering aeronautical data to customers (airlines) through business-to-business (B2B) web services (industry standard). Briefing services (self- and home briefing) are provided by making use of the Internet in line with the ICAO Doc 9855 (requires update in line with latest developments).</p>

Appendix H-8

STATE	P-12 — Aeronautical information briefing		
a) What is the status of implementation of the following steps of Phase 3 in your State?	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
Sample	For many years the ANSP is applying enhanced NOTAM selection criteria for the delivery of NOTAMs to airlines going beyond the ICAO provisions (enhancing the operational relevance for the airline). This procedure is applied in agreement with the Regulator.		Despite the constraints with the current NOTAM selection criteria, the presentation of all required pre-flight information (AIS, FPL and MET) has been improved in an integrated system allowing for custom tailored information.
b) What is the status of implementation of the following steps of Phase 3 in your State?	P-12 — Aeronautical information briefing		
	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
STATE			
a) What is the status of implementation of the following steps of Phase 3 in your State?	P-16 — Training		
	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
Sample			Currently it is not clear what is expected under the training header. ICAO training manual has to be developed to reflect the new competencies required by the transition to AIM, before national requirements can be developed.

Appendix H 4-9

STATE			
a) What is the status of implementation of the following steps of Phase 3 in your State?			
P-18 — Agreements with data originators			
	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
Sample	Partially achieved, some requirements in current CAA publications.	By July 2013 – Implementation of CAA Policy for Agreements with Data Originators.	Under Development. See P-01.
STATE			
a) What is the status of implementation of the following steps of Phase 3 in your State?			
P-19 — Interoperability with meteorological products			
	Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
Sample	Partially implemented, pre-flight information briefing is provided in harmonized way (one stop shop) in accordance with current ICAO Annex 3 and ICAO Annex 15 requirements.	Next step (fully integrated briefing) will be implemented after the design and implementation of the appropriate data exchange technology is finished (WXXM – Weather Exchange Model).	
STATE			

Appendix H 3-10

P-20 — Electronic aeronautical charts		
Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
Sample		More detailed specification are required; Annex 4, Chapter 20 Electronic Aeronautical Chart Display is too general.
a) What is the status of implementation of the following steps of Phase 3 in your State? P-20 — Electronic aeronautical charts		

Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
STATE		

P-21 — Digital NOTAM		
Implemented (specify how)	Planned (specify when/how)	Additional comments/clarification required
Sample	Plan to provide digital NOTAM by Jul 2017.	AIXM 5.1 will be the enabler to digital NOTAM.
STATE		

4. Do you expect any specific difficulty which could impede the transition from AIS to AIM?

	YES	NO
--	-----	----

Appendix H 3-11

<p>Sample</p>	<p>x Potential for the non-participation of key stakeholders providing e-TOD data. x Continuation of downturn in aviation industry causing financial constraints on the State AIS provider and other key stakeholders supplying aeronautical data. x Non-agreement by airports to establishment of SLA with State AIS for provision of data. x Justification to aerodromes for additional costs related to the provision of survey data for digital mapping. x Funding, decision making on all levels, manpower capacity, availability of knowledge, technical infrastructure, acceptance by all stakeholders, timescales unrealistic.</p>	<p>X</p>
<p>STATE</p>		

5. What kind of assistance/support do you expect from ICAO to expedite the transition from AIS to AIM?

<p>Sample</p>	<p>x Specific guidance material for implementation of each subject. Development of more detailed guidance materials, manuals, best practices examples and other supporting documents. x Expeditious revisions to Annex 15 and 4 when appropriate. x Regional workshops and seminars to ensure consistency in the transition to AIM.</p>
<p>STATE</p>	

6. Do you have any suggestion to update/improve the ICAO Roadmap for the Transition from AIS to AIM?

<p>Sample</p>	<p>x In the first version of the Roadmap document the description of the steps is quite basic and insufficient. Those definitions should be expanded and/or reference to specific standards, manuals and other documents should be provided within it. x Timelines should be permanently monitored and adapted accordingly.</p>
<p>STATE</p>	

7. Any other suggestion on the subject?

<p>Sample</p>	<p>x ICAO Doc 9881 is only a draft, but the content is paramount for the transition to AIM - e.g. the attributes of terrain and obstacle data need clear definitions and explanations - including examples of obstacles together with attributes.</p>
<p>STATE</p>	

Appendix H 3-12

APIRG/18 Meeting Report
Report on agenda item 3.5
Appendix 3.5I

**STATUS REPORT AGAINST THE 21 STEPS OF THE ICAO ROADMAP FOR THE
TRANSITION FROM AIS TO AIM**

State AIS AIM Transition Table

Phase 1

- P-03 — AIRAC adherence monitoring
- P-04 — Monitoring of States' differences to Annex 4 and Annex 15
- P-05 — WGS-84 implementation
- P-17 — Quality

Phase 2

- P-01 — Data quality monitoring
- P-02 — Data integrity monitoring
- P-06 — Integrated aeronautical information database
- P-07 — Unique identifiers
- P-08 — Aeronautical information conceptual model
- P-11 — Electronic AIP
- P-13 — Terrain
- P-14 — Obstacles
- P-15 — Aerodrome mapping

Phase 3

- P-09 — Aeronautical data exchange
- P-10 — Communication networks
- P-12 — Aeronautical information briefing
- P-16 — Training
- P-18 — Agreements with data originators
- P-19 — Interoperability with meteorological products
- P-20 — Electronic aeronautical charts
- P-21 — Digital NOTAM

