



## **CIVIL AVIATION ADVISORY PUBLICATION**

### **CAAP 56**

(Issue September 2011)

## **ELECTRONIC DATA PROVISION IN AIM**

---

### **GUIDANCE INFORMATION REGARDING THE PROVISION OF ELECTRONIC DATA IN AIM**

---

#### **1. PURPOSE**

- 1.1 The purpose of this CAAP is to provide guidance to AIS data providers and AIS Service Provider organisations in the establishment of a service level agreement (SLA) for the provision of AIM Data in electronic format.
- 1.2 Furthermore, a recommended Aeronautical Information Change Request form is provided to standardize the requests from AIS data providers to the AIS Service provider for the update or change of relevant Aeronautical Information.

#### **2. STATUS OF THIS CAAP**

- 2.1 This is the first issue of CAAP 56 –Electronic Data Provision in AIM, and will remain current until withdrawn or superseded.

#### **3. APPLICABILITY**

- 3.1 This guidance and policy material applies to all UAE AIS data providers and AIS Service Providers.

## 4 REFERENCES

- 4.1.1 ICAO Annex 4 “Aeronautical Charts”;
- 4.1.2 ICAO Annex 5 “Units of Measurement to be Used in Air and Ground Operations”;
- 4.1.3 ICAO Annex 11 “Air Traffic Services”;
- 4.1.4 ICAO Annex 14 “Aerodromes”;
- 4.1.5 ICAO Annex 15 “Aeronautical Information Services”.
- 4.1.6 ICAO Doc 8126 “AIS Manual”;
- 4.1.7 ICAO Doc 8697 “Aeronautical Chart Manual”;
- 4.1.8 ICAO Doc 9674 “WGS-84 Manual”;
- 4.1.9 UAE GCAA CAR PART VIII Subpart 2
- 4.1.10 CAAP 40 – Certification of AIS providers
- 4.1.11 EUROCONTROL Operating Procedures for AIS Dynamic Data (OPADD).

## 5. BACKGROUND

- 5.1 CAAP 54 Transition from AIS to AIM identifies 21 steps in the transition process from AIS to AIM. One of the major steps provided is STEP-18 — Agreements with data originators.

## 6. SCOPE

- 6.1 This CAAP in Appendix A provides a template for a Service Level Agreement between data providers and AIS Service Providers for the provision of electronic data.
- 6.2 All AIS Data providers and the AIS Service provider are encouraged to use this template as the basis for setting up service level agreements for the provision of electronic data to AIM.
- 6.3 This CAAP in Appendix B provides the Aeronautical Information Change Request Form.
- 6.4 All AIS Data providers and the AIS Service provider are encouraged to use this form as the basis for requesting a change to aeronautical information to be published.

## APPENDIX A

### SLA TEMPLATE FOR THE PROVISION OF ELECTRONIC DATA TO AIM

# SLA Template AIM ELECTRONIC DATA PROVISION

## BETWEEN

**AIS SERVICE PROVIDER:** Sheikh Zayed Air Navigation Centre AIM Department

**AIS DATA ORIGINATOR:** [\[Insert authority as appropriate\]](#)

**SLA/number**

<b>Edition</b>	:	<b>0.1</b>
<b>Edition Date</b>	:	<b>DD MMM YYYY</b>
<b>Status</b>	:	<b>Draft</b>
<b>Class</b>	:	<b>AIM</b>

## 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
Sheikh Zayed Air Navigation Centre AIM Department		
Data Originator		
UAE GCAA		

---

**DOCUMENT CHANGE RECORD**

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

<b>EDITION</b>	<b>DATE</b>	<b>REASON FOR CHANGE</b>	<b>SECTIONS PAGES AFFECTED</b>
0.1	15 September 2011	Initial Creation	All

---

**TABLE OF CONTENTS**

<b>1.</b>	<b>INTRODUCTION.....</b>	<b>8</b>
1.1	Scope .....	8
1.2	Parties to the Agreement .....	8
1.3	Perspective – Regulative Environment.....	10
1.4	Term .....	11
1.5	Conventions .....	11
1.5.1	Time.....	12
1.5.2	Quality Attributes .....	12
1.5.3	Data Categories .....	12
<b>2.</b>	<b>SERVICES AND SERVICE LEVELS .....</b>	<b>15</b>
2.1	Service Description .....	15
2.1.1	Regulation.....	15
2.2	Optional Services.....	15
2.3	Exclusions.....	16
2.4	Limitations .....	16
2.5	Entities Involved .....	16
2.6	Service Levels .....	16
2.6.1	Data Originator.....	16

---

2.6.2	AISP.....	17
<b>2.7</b>	<b>Service Level Indications .....</b>	<b>18</b>
<b>3.</b>	<b>MANAGEMENT ELEMENTS .....</b>	<b>19</b>
<b>3.1</b>	<b>Rewards and Remedies.....</b>	<b>19</b>
<b>3.2</b>	<b>Escalation Procedures.....</b>	<b>19</b>
<b>3.3</b>	<b>SLA Lifecycle .....</b>	<b>19</b>
3.3.1	Reporting.....	19
3.3.2	Reviews.....	20
3.3.3	Change Process.....	20
<b>3.4</b>	<b>Points of Contact .....</b>	<b>20</b>
<b>4.</b>	<b>REFERENCES.....</b>	<b>21</b>
<b>4.1</b>	<b>Refer to docs and add a short description.....</b>	<b>Error! Bookmark not defined.</b>
<b>TABLE 1: PARTIES TO AGREEMENT .....</b>		<b>10</b>
<b>TABLE 2: DATA TO BE PROVIDED.....</b>		<b>15</b>
<b>TABLE 3: DATA ATTRIBUTES – ENTITY X.....</b>		<b>17</b>
<b>TABLE 4: SERVICE LEVEL INDICATIONS.....</b>		<b>19</b>
<b>TABLE 5: POINTS OF CONTACT .....</b>		<b>20</b>

## 7. INTRODUCTION

### 7.1 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 **Sheikh Zayed Air Navigation Centre AIM Department** (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 GENERAL CIVIL AVIATION AUTHORITY ANA Section (The Regulator).**

### 7.2 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.

### 7.3 Parties to the Agreement

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

<u>Entity</u>	<u>Address</u>	<u>Representative</u>
<b>UAE GCAA Ana section</b>	P.O. Box 6558 Abu Dhabi	
<b>Sheikh Zayed Air Navigation Centre AIM Department</b>	P.O. Box 666 Abu Dhabi	
<b>[Insert Data Originator details here]</b>		

**Table 1: Parties to Agreement**

### 7.4 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).
- UAE GCAA CAR PART VIII Subpart 2
- CAAP 40 – Certification of AIS providers

## 7.5 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.

[\[Add any other agreed constraints of / specification for the scope here.\]](#)

## 7.6 Conventions

Within this SLA, the following conventions are used:

### 7.6.1 Time

### 7.6.2 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 07:30 to 14:30 U.A.E. local time (Sunday to Thursday).

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

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

### 7.6.3 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.

#### 7.6.4 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  $1 \times 10^{-3}$ .

**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  $1 \times 10^{-5}$ .

**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  $1 \times 10^{-8}$ .

#### 7.7 Entities Involved for Data Provision

The following entities categories involved are used within this document:

##### 1. General Civil Aviation Authority (GCAA)

The national body responsible for the certification of AIS services under CAR PART VIII Subpart 2, and the overall supervision of aviation-related activities.

## 2. Sheikh Zayed Air Navigation Centre

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

## 3. Data Originator

Describe the data originator body here.

# 8. Services and Service Levels

## 8.1 Service Description

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

<u>Data Entity</u>	<u>Description</u>
(Example) GEN 3.1.5	PRE-FLIGHT INFORMATION SERVICE AT AERODROMES / HELIPORTS
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.

### 8.1.1 Regulation

CAR PART VIII Subpart 2 and CAAP 40

## 8.2 Optional Services

[Detail any further services required here]

### 8.3 Exclusions

[Detail any exclusions required here]

### 8.4 Limitations

[Detail any limitations required here]

### 8.5 Entities Involved

[Detail any other entities involved here]

### 8.6 Service Levels

#### 8.6.1 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:

#### 8.6.1.1 Data Item x (Example GEN 3.1.5) – 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	
(Example) GEN 3.1.5	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]

### 8.6.2 AISP

1. The AISP shall process the Data upon receipt.
2. The AISP shall present a draft publication including the Data for approval by [Data Originator] at least [insert timeliness requirement] days prior to the effective date.
3. 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]

## 8.7 Service Level Indications

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

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

---

<sup>1</sup> 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 AISP. This period is defined in [Add respective Document \(May be an AIC\)](#).

<sup>2</sup> Due 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.

<u>Measure</u>	<u>Description</u>	<u>Target</u>
	SLA.	
Draft Publication	The AISP will present a draft publication to the Data Originator for approval within the specified timeframe.	95% by required due date <sup>i</sup> .  100% within one day following due date <sup>i</sup> .
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 Integrated Aeronautical Information Package (IAIP) product prepared will be provided in accordance with the applicable standards.	95%

**Table 4: Service Level Indications**

## 9. Management Elements

### 9.1 Rewards and Remedies

[\[Detail rewards and remedies here\]](#)

### 9.2 Escalation Procedures

[\[Detail any escalation procedures here\]](#)

### 9.3 SLA Lifecycle

#### 9.3.1 Reporting

[\[Detail any reporting here\]](#)

### 9.3.2 Reviews

[Detail any reviews here]

### 9.3.3 Change Process

[Detail the change process here]

## 9.4 Points of Contact

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

<u>Organisation</u>	<u>Primary Contact</u>	<u>Secondary Contact</u>
<b>GCAA</b> <b>ANA Section</b>	<b>Herman Groenewald</b>  ATS Inspector   ANA Section   GCAA P.O.Box: 6558   Abu Dhabi   UAE M: +971 50 615 0872 T: +971 2 405 4252 F: + 971 2 405 4406 Email: <a href="mailto:hermang@gcaa.ae">hermang@gcaa.ae</a>	<b>Alan Roberts</b>  ATS Inspector   ANA Section   GCAA P.O.Box: 6558   Abu Dhabi   UAE M: +971 50 611 7596 T: +971 2 405 4214 F: + 971 2 405 4406 Email: <a href="mailto:aroberts@gcaa.ae">aroberts@gcaa.ae</a>
<b>Sheikh Zayed Air Navigation Services</b> <b>AIM Section</b>	[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

## 10.Future Intentions

### 10.1 General

Although outside the scope of this SLA, **Sheikh Zayed Air Navigation Services AIM Department** 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.

### 10.2 Describe future intentions here

APPENDIX B

AERONAUTICAL INFORMATION CHANGE REQUEST FORM

AERONAUTICAL INFORMATION CHANGE REQUEST FORM		
<b>Aeronautical Information Services</b> <b>General Civil Aviation Authority</b> <b>P.O. Box 666</b> <b>Abu Dhabi</b> <b>United Arab Emirates</b>	<b>Telephone:</b> +971 (0) 2 599 6895 <b>Telefax:</b> +971 (0) 2 599 6889 <b>AFS:</b> OMAEYNYX <b>e-mail:</b> <a href="mailto:ais@szc.gcaa.ae">ais@szc.gcaa.ae</a> <b>Website:</b> <a href="http://www.gcaa.ae">www.gcaa.ae</a>	
<b>Requesting Authority</b>	<b>REFERENCE NUMBER</b> <b>(ISSUED BY SZC AIS)</b>	<b>DATE</b>
<b>ATTACHMENTS:</b>		

Originators reference	AIP REFERENCE				Changed Text of AIP, AIP Supplement, AIC or NOTAM	Effective date (AIRAC)
	Page (Dated)	Para	Line	Column		

**PROMULGATION TYPE**

REFERENCE	AIP	AIP SUPPLEMENT	AIC	NOTAM


The above particulars and/or the attached draft are authorized for publication as indicated. The information/data is certified as accurate and correct.

NAME \_\_\_\_\_ DESIGNATION \_\_\_\_\_ DATE \_\_\_\_\_

\_\_\_\_\_