



International Civil Aviation Organization

**The Seventh Meeting of the Asia/Pacific Aeronautical Information Services –
Aeronautical Information Management Implementation Task Force
(AAITF/7)**

Ha Noi, Viet Nam, 13 – 16 March 2012

Agenda Item 4: AIS-AIM Updates

ASIA PACIFIC STATE AIS-AIM IMPLEMENTATION SURVEY

(Presented by the Secretariat)

SUMMARY

This paper presents the results of the survey on the current status of AIM implementation in the ASIA/PACIFIC Region.

This paper relates to –

Strategic Objectives:

A: Safety – Enhance global civil aviation safety

C: Environmental Protection and Sustainable Development of Air Transport – Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment

Global Plan Initiatives:

GPI-12 Functional integration of ground systems with airborne systems

GPI-18 Aeronautical information

GPI-20 WGS-84

1. INTRODUCTION

1.1 The results of the AIM implementation survey are provided to assist the Task Force to assess the current status of AIM implementation across the region, and to provide the opportunity to update this information.

1.2 The Survey results are appended to this paper as **Attachment 1**.

2. DISCUSSION

2.1 The survey on the current status of AIM implementation asked the States to respond to 13 questions. 19 of the 40 Asia/Pacific Region administrations responded to the survey. Their responses are summarized below:

Q1: Has QMS been implemented in your state?

- Yes: 9 No: 4. Partial: 6
- Most cases of partial implementation were due to ISO9001 requirements not yet met.

Q2: Do you consider 'AIRAC adherence' is implemented in your State?

- Yes: All responding States.

Q3: Has WGS-84 been implemented in your state?

- Yes: 17 States. No: 2 States
- Two States where WGS-84 has been implemented advised that re-survey of critical positions points was either underway or being considered.
 - One State advised that it was using a datum considered equivalent to WGS-84.

Q4: Do you consider 'Monitoring of Annex differences' is implemented in your State?

- Yes: 17 States. No: 2 States.
- One State advised it is working on a plan of action for monitoring ICAO differences.
- One State advised waiting on ISO Certification.

Q5: Has electronic AIP been implemented in your State?

- Yes: 11 States No: 8 States.
- States yet to transition to electronic AIP were planning implementation sometime within the period 2011 to 2015.

Q6: Has electronic terrain data been implemented in your State?

- Yes: 3 States No: 15 States Partial: 1 State.
- States yet to introduce electronic terrain data were planning implementation sometime within the period 2012 to 2018.
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Q7: Has electronic obstacle data been implemented in your State?

- Yes: 3 States No: 16 States Partial: 1 State.
- States yet to introduce electronic terrain data were planning implementation sometime within the period 2012 to 2018.

Q8: Has aerodrome mapping been implemented in your State?

- Yes: 2 States No: 17 States.
- States yet to introduce aerodrome mapping were planning implementation sometime within the period 2012 to 2015.

Q9: Has AIM/AIXM been implemented in your State?

- Yes: 7 States. No: 12 States.
- Most States yet to introduce AIM/AIXM were planning implementation by 2013, but in one case not until 2015.

Q10: Has ‘integrated aeronautical information database’ been implemented in your State?

- Yes: 7 States No: 12 States
- Most states yet to introduce integrated aeronautical databases were planning implementation sometime within the period late 2011 to 2015.

Q11: Has ‘Data integrity monitoring’ been implemented in your State?

- Yes: 9 States No: 9 States Partial: 1 State
- Of the nine States answering “yes” to this question, five use manual methods to conduct their data integrity monitoring.

Q12: Has ‘Data quality monitoring’ been implemented in your State?

- Yes: 9 States No: 9 States Partial: 1 State
- Of the nine States answering “yes” to this question, four use manual methods to conduct their data integrity monitoring.

Q13a: Has training for AIS been implemented in your State?

- Yes: 17 States No: 2 States

Q13b: IS AIS Officer required to obtain AIS license?

- Yes: 6 States No: 12 States Partial: 1 State.
- Several states reported that implementation of training and proficiency standards and/or AIS Officer licensing are being planned.
- Some states indicated they have no plan for introducing AIS Officer Licensing, and that such licensing is not required by regulations.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) discuss any relevant matters as appropriate;
- c) identify any areas of concern; and
- d) consider whether an updated survey is required.

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RESULT OF THE SURVEY ON THE CURRENT STATUS FOR AIM IMPLEMENTATION IN THE ASIA/PACIFIC REGIONRelated Phase 1

Q1. Has QMS been implemented in your State?			
	YES	NO	COMMENT
Australia	X		Partial (90%) compliance. Expect to be fully compliant during 2012 or 2013.
Hong Kong, China	X		
Macao, China	X		
Fiji	X	CAAF Standard Document – AIS (SD-AIS) requires ISO standards to be met during certification of AISP, Fiji AISP to achieve certification last quarter 2011 (October-November 2011).	AIS QMS is planned to be implemented by last quarter of 2011. AIS ISO certification will be in-line with AFL policy & guidelines on ISO standards & certification, which is yet to be implemented.
France – New Caledonia	X	ISO 9001 expected by the end of 2013 Implementation start 2012	Safety management system implemented in 2004
France – French Polynesia	X (by mid 2012)		
India	X		
Indonesia	X		a) Implemented but not yet have ISO9001 certification b) AIS National SOP/regulations are being developed and proposed for approval, then after will be submitted to have ISO9001 certification
Japan	X		Our AIS follows ISO9001:2008 requirements.
Malaysia		Expect to implement by December 2012.	
Mongolia	X		
Myanmar		X	To be implemented by Year 2013.
New Zealand	X		
Pakistan	X	ISO9001:2008 certification likely by 30 th September 2011	

Attachment 1

Q1. Has QMS been implemented in your State?			
	YES	NO	COMMENT
Palau (Republic of)		Palau is working closely with US FAA to establish future QMS implementation, on the national level, PNAA as the appropriate authority will ensure the airport operator and all other aviation stakeholders will adopt QMS in their future plans.	The Palau National Aviation Administration (PNAA), the appropriate authority and newly created government of Palau agency to regulate and oversight the aviation industry is developing proper regulations, procedures and policies to ensure all aviation safety and security are in place and implemented accordingly.
Philippines	X	In the process of preparing documents for ISO certification by 2012-2013	
Rep of Korea		X	
Singapore	X		AIS Singapore is certified ISO9001:2008 compliant.
United States	X		

Q2. Do you consider "AIRAC adherence" is implemented in your State?			
	YES	NO	COMMENT
Australia	X		
Hong Kong, China	X		
Macao, China	X		
Fiji	X		The publishing of AIP AMDTS, SUP, AIC & Aeronautical Chartings adhere to the AIRAC system of notification.
France – New Caledonia	X		
France – French Polynesia	X		
India	X		
Indonesia	X		
Japan	X		
Malaysia	X		
Mongolia	X		Operationally significant changes are issued by AIRAC system new procedure for provision of originated data to the AIS has been approved to ensure timely and effective provision of raw data.
Myanmar	X		
New Zealand	X		
Pakistan	X		AIRAC Cycle is issued through AIC at the end of every year
Palau	X		The Republic of Palau has delegated the Air Navigation Services to US FAA; therefore all Aeronautical Information Regulations And Control are implemented and adhere to ensure flight safety. The Palau International Airport Flight Information Services (AFIS) is obtaining all related flight and meteorological information from US FAA agencies.
Philippines	X		
Rep of Korea	X		

Attachment 1

Q2. Do you consider "AIRAC adherence" is implemented in your State?			
	YES	NO	COMMENT
Singapore	X		An AIC is published yearly to disseminate the pre-determined dates of the regulated system for the publication of aeronautical information in the following year. Originator of an AIRAC AIP Supplement is required to adhere to and follow strictly the internationally agreed predetermined schedule of effective dates to ensure that such operationally significant aeronautical information is published at least 42 days before the effective date to allow for at least 28 days of prior notification.
United States	X		

Q3. Has WGS-84 been implemented in your State?			
	YES	NO	COMMENT
Australia	100%		
Hong Kong, China	Fully Implemented		
Macao, China	Fully Implemented		
Fiji	Full implementation. Fiji adopted & implemented WGS84 in the early 1990.		Re-survey of critical positions is currently in progress and is targeted for completion by early 2012. These include the re-survey of all domestic aerodromes.
France – New Caledonia	Fully implemented		
France – French Polynesia	Fully implemented		
India	Fully implemented		
Indonesia	Fully implemented		
Japan	Fully implemented		
Malaysia	Fully implemented		
Mongolia	Yes		WGS-84 has been fully implemented in Mongolia.
Myanmar	Fully implemented. Ref AIC 02/09 and AIP Myanmar		
New Zealand	Fully implemented		
Pakistan	WGS-84 is fully implemented in Pakistan.		The WGS-84 Data of all airports is published in AIP Pakistan.
Palau		At this time, Palau has no plan to implement WGS-84. This concept still need to be explored, studied and plan of development will be considered.	Palau Aviation Industry is working to take on ICAO requirements to ensure flight and ground operations will not be compromised. Palau’s technical expertise and resources are limited, therefore we are in process of improving what we have and adopting the rest.
Philippines	Approximately 70% of AIP Philippine Charts are WGS-84 compliant		
Rep of Korea	It is fully implemented.		

Attachment 1

Q3. Has WGS-84 been implemented in your State?			
	YES	NO	COMMENT
Singapore	WGS-84 is fully implemented.		Resurvey may be conducted to verify the integrity of the WGS-84 coordinates for critical points within the vicinity of the airport. Project Officers concerned will arrange to provide to AIS new or revised WGS-84 coordinates required to be published in AIP Singapore.
United States		X	The US uses the North American Datum of 1983 which is considered equivalent to WGS-84.

Q4. Do you consider “Monitoring of Annex differences” is implemented in your State?			
	YES	NO	COMMENT
Australia	Spreadsheet, with monitoring and maintenance across 3 government agencies (Dept of Infrastructure and Transport; Civil Aviation Safety Authority & Airservices Australia).		
Hong Kong, China	Using a compliance list, the differences are monitored and reviewed from time to time, and every time when a new amendment to an Annex is issued by ICAO		
Macao, China	Procedure Monitoring		
Fiji	CAAF State Letter Procedures gives instructions for handling ICAO State Letters including receiving, circulating, actioning, follow-up, recording and reporting. Filing of differences requires CAAF Board paper and approval, Differences documented in AIP Fiji		
France – New Caledonia	By France		
France – French Polynesia	By France		
India	India complies with the provisions of Annexes and Amendments. Any difference is intimated to ICAO while filing response to Amendments		

Attachment 1

Q4. Do you consider “Monitoring of Annex differences” is implemented in your State?			
	YES	NO	COMMENT
Indonesia			Each Unit related to the each annex, any differential will be submitted to AIS for publication on AIP.
Japan	Concerning divisions of Civil Aviation Bureau, to whom all concerning amendments to Annexes are delivered, are responsible to monitor differences from Annexes. They are also responsible to report differences to ICAO.		
Malaysia	By checking them with the amendments of the Annex filing the differences.		
Mongolia	Safety and regulations department monitors the implementation and reviewing of differences in the application of standards. AIS has a system to monitor ITS differences to Annexes 4 and 15.		The transition of AIM requires us to increase focus on implementation and on reviewing difference in application of standard. Therefore SRD and AIS systems to monitor differences need to be constantly improved.
Myanmar	A mechanism has already been established and implemented. Ref. AIP Myanmar Gen 1.7 and Departmental Exposition Manual.		
New Zealand	The CAANZ has a process and procedure for monitoring ICAO differences.		

Q4. Do you consider “Monitoring of Annex differences” is implemented in your State?			
	YES	NO	COMMENT
Pakistan	ICAO Annex differences are published in AIP Amendment or AIC.		ICAO differences are updated twice a year in amendment to AIP Pakistan.
Palau		Palau is working on plan of action to implement the Monitoring of Annex differences.	Palau’s aviation stakeholders, especially the airport operator will include in their future plans on the implementations of all ICAO requirements and compliance to ICAO annexes.
Philippines		After acquiring the ISO Certification by 2012	
Rep of Korea	*SMIS : SARPs Management & Implementation System		
Singapore	On receipt of ICAO State Letter on the adoption of amendments to the ICAO Annex, the subject officer will review the amendments and notify ICAO of any differences that will exist between the national regulations or practices and the provisions of the ICAO Annex. Differences to the ICAO Annex are also published in the AIP.		
United States	X		

Attachment 1Related Phase 2

Q5. Has electronic AIP been implemented in your State?			
	YES	NO	COMMENT
Australia	X		
Hong Kong, China		eAIP will be provided by the future AIM system in 2013. Currently, AIP in pdf format is available in the website	
Macao, China	X		Only PDF format
Fiji		Implementation of the e-AIP is planned for 2014, after we've successfully converted the static data in the AIS DB to AIXM ver. 4.5 format.	Currently the Fiji AIP is published in paper form only. Editing by AISP done using the publishing software program, Broadleaf Quicksilver.
France – New Caledonia	X		
France – French Polynesia	X		
India		AIS Automation has been implemented. eAIP Publication is under progress	
Indonesia	X		Temporarily issued AIP Supplement, AIC, Monthly NOTAM Summaries on website, AIP planned to be issued on next year (2012)
Japan	X		
Malaysia	X		Produce PDF version of the AIP Malaysia.
Mongolia	X		
Myanmar	X		
New Zealand		Planned to be completed in late 2011.	
Pakistan	X		Two electronic amendments are issued in a year.
Palau		Palau Air Navigation Services is delegated to US FAA, PNAA as the state appropriate authority will work closely with US FAA appropriate agency to set up electronic AIP.	Palau's aeronautical publications and all related parts will be coordinated with US FAA for proper implementations.

Q5. Has electronic AIP been implemented in your State?			
	YES	NO	COMMENT
Philippines		Philippines AIS personnel undergoing training for eAIP by 2012	
Rep of Korea		X	It is scheduled for implementation late of this year (2011).
Singapore	X		The pdf copy of AIP Singapore is published in the CAAS website: www.caas.gov.sg
United States		Currently under construction, expected completion in 2015.	

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Q6. Has electronic terrain data been implemented in your State?			
	YES	NO	COMMENT
Australia	X		
Hong Kong, China	Partially implemented, providing Area 4 terrain data which is available from Hong Kong Airport Authority as specified in Hong Kong AIP AD2-83B		Working on Areas 1, 2 and 3. Data outside the territory of Hong Kong will not be provided. Expect data to be ready by 2012.
Macao, China		Under study phase	
Fiji		Re-survey of all Fiji aerodromes in progress by ANSP. Collating of data on Annex 15 Areas 1-4 at major airports to be completed by August 2011	Digital topographical data for the Fiji Islands is available with Government Lands & Survey Dept. ANSP to source data from Lands & Survey. Target for completion by 2013. The challenge is the conversion of the surveyed digital topo data from Fiji Datum (WGS72) to WGS84.
France – New Caledonia		Progressive surveys of datas are on progress. Intention is to have ETOD for international airport by 2015.	Limitation of budget implies progressive surveys
France – French Polynesia		Not yet planned.	
India		eTOD as per area classification in Chapter 10, is intended to be implemented by 12 NOV 2015	
Indonesia		Collaboration will be planned with National Mapping & Survey Coordination Agency	
Japan		Considering to provide in 2015	It would be difficult to fully comply with ICAO Annex 15 requirements
Malaysia		Expect to implement by 2013.	
Mongolia		Mongolia plans to implement electronic terrain data by 12 November 2015.	Mongolia has a large territory which makes the compilation and provision of terrain data very costly and time consuming
Myanmar	An AIS Database has been established including terrain data.		

Q6. Has electronic terrain data been implemented in your State?			
	YES	NO	COMMENT
New Zealand		Area 1 data is available and full compliance expected in mid 2012.	
Pakistan		Terrain data may be implemented by December 2012.	Differences are published in AIP Page GEN 1.7.
Palau		Electronic terrain data will be included in future plans and work, PNAAC and Palau International Airport is coordinating with US FAA appropriate agency.	PNAAC and Palau International Airport are organizing a plan of action to accomplish its goal on developing proper procedures to implement ICAO standards and new requirements that will ensure flight safety.
Philippines		For implementation on CNS/ATM by 2013-2018	
Rep of Korea		It is scheduled for implementation by 2015.	
Singapore		Target to implement by middle of Year 2012.	
United States	X		

Attachment 1

Q7. Has electronic obstacle data been implemented in your State?			
	YES	NO	COMMENT
Australia		Not Yet	Partial (25%) compliance.
Hong Kong, China		Expect data to be ready by 2012	
Macao, China		Under study phase	
Fiji		Re-Survey of airport data in progress by ANSP. Collating of data on Annex 15 Areas 1-4 at major airports to be completed by August 2011.	Digital topographical data is available with Government Lands & Survey Dept, ANSP to source data from Lands & Survey. Target for completion by 2013. The challenge is the conversion of the surveyed digital topo data from Fiji Datum (WGS72) to WGS84
France – New Caledonia		Progressive surveys of data are on progress. Intention is to have ETOD for international airport by 2015.	Limitation of budget implies progressive surveys
France – French Polynesia		eTOD not yet planned.	
India		eTOD as per area classification in Chapter 10, is intended to be implemented by 12 NOV 2015	
Indonesia	Obstacle data are collected, compiled and up dated in electronic file.		
Japan		Considering to provide in 2015	It would be difficult to fully comply with ICAO Annex 15 requirements
Malaysia		Expect to implement by 2013.	
Mongolia		Mongolia plans to implement electronic obstacle data by 12 November 2015.	
Myanmar	An AIS Database has been established including obstacle data.		
New Zealand		Database not fully completed – Expected completion mid 2012.	

Q7. Has electronic obstacle data been implemented in your State?			
	YES	NO	COMMENT
Pakistan	Partially implemented. Electronic Obstacle Data within 45 KMs from threshold of all airports are published in AIP Pakistan.		Likely to be fully implemented as per Annex 15 Chapter 10 by December 15.
Palau		It will be implemented in Palau's plan of action to work with US FAA to establish electronic data to ensure flights in and out of Palau International Airport are safe.	Palau and US FAA partnership in aviation will ensure all safety management services will be develop and implemented.
Philippines		For implementation on CNS/ATM by 2013-2018	
Rep of Korea		It is scheduled for implementation by 2015.	
Singapore		Target to implement by middle of Year 2012.	
United States	X		

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Q8. Has aerodrome mapping been implemented in your State?			
	YES	NO	COMMENT
Australia		X	No plan yet; monitoring development of SARPs from ICAO AIS-AIM SG.
Hong Kong, China		X	In the process of co-ordination with the Airport Authority, who is responsible for airport mapping.
Macao, China		Under study phase	
Fiji		Previously, AIP charts/mapping was done with the assistance of Airways NZ. Staff has been recruited and AIS Fiji has taken over these responsibilities. Staff training and acquisition of CAD tools & equipment are in the future plan.	AIP charts are being progressively updated and are being published as AIP SUPP, transition to AIP AD section targeted for 17 Nov 11 AIRAC date.
France – New Caledonia		X	
France – French Polynesia		AMDB not yet planned.	
India		X	
Indonesia	X		
Japan		No Plan	Expecting Annex 15 amendment
Malaysia		Expect to implement by 2013.	
Mongolia		Mongolia plans to implement aerodrome mapping by 2015.	
Myanmar		It is partially implemented and to be completed by 2012.	
New Zealand		Not started, expected to start late 2011.	
Pakistan		Transformation of AIS to AIM is planned by December 2012.	
Palau	X		At this time Palau International Airport is finalizing the Aerodrome Certification Manual (ACM) to be submitted for the appropriate authority (PNAA) for approval. In the ACM aerodrome mapping is included and will be approved soon.
Philippines		Together with CNS/ATM by 2013-2018	
Rep of Korea		It is scheduled for implementation by	

Q8. Has aerodrome mapping been implemented in your State?			
	YES	NO	COMMENT
		2013.	
Singapore		X	Can be implemented only after the implementation of electronic terrain and obstacle data.
United States		Currently being constructed to support digital NOTAMS and SMGs chart production.	

Attachment 1

Q9. Has AICM/AIXM been implemented in your State?			
	YES	NO	COMMENT
Australia		Not Yet	Partial (40%) implementation. Project initiated with completion date 2012 or 2013. Version AIXM 5.1 to be deployed.
Hong Kong, China		Our new AIM system will be implemented with AICM/AIXM and the tentative date of operation is around the end of 2013	
Macao, China		Under study phase	
Fiji		AIXM Ver. 4.5 implementation planned for Mid 2012	
France – New Caledonia	AIXM 4.5		
France – French Polynesia	AIXM 4.5 from France		
India	Version 4.5		
Indonesia		No	
Japan	AIXM 4.5		
Malaysia		Expect to implement by 2012.	
Mongolia	Automation systems of AIS Mongolia are compliant with AICM/AIXM. AIXM version number is 33.		Necessary improvements will be made as later versions of AIXM are introduced.
Myanmar		A planning is underway to implement AICM/AIXM by 2013 utilizing supports from outsource solution provider.	
New Zealand	Yes – AIXM v 4.5 (EAD release 6) – some elements of AIXM v 5.1 are being implemented incrementally.		
Pakistan		Linked with transformation from AIS to AIM by December 2012.	

Q9. Has AICM/AIXM been implemented in your State?			
	YES	NO	COMMENT
Palau		The method is still very new to Palau; we will make all necessary studies with our aviation partners, such as air carrier serving Palau and US FAA on how and when plans and implementations can be accomplished.	Will be included in future planning, however Palau has to research and study the best and acceptable way to implement such requirement.
Philippines		After CNS/ATM project implementation	
Rep of Korea		It is scheduled for implementation by 2015.	
Singapore		Target to implement AIXM 5.1 for our new AIM System by end of Year 2011.	
United States	AIXM 5.1		

Attachment 1

Q10. Has “Integrated aeronautical information database” been implemented in your State?			
	YES	NO	COMMENT
Australia	X		
Hong Kong, China		Our new AIM system to be implemented around 2013 will have the “Integrated aeronautical information database”	
Macao, China		Under study phase	
Fiji		Integrated aeronautical information database is planned to be implemented by 2015. This will be implemented after implementation of AIXM Ver. 4.5.	
France – New Caledonia	X		
France – French Polynesia		Not yet planned, monitoring development of NOPIA from France.	
India	X		
Indonesia	X		
Japan	X		
Malaysia		Expect to implement by 2013.	
Mongolia		Mongolia plans to implement integrated aeronautical information database by 12 November 2015	Aeronautical database is complete but electronic terrain and obstacle database is only in the beginning stage.
Myanmar	X		
New Zealand		Static data is nearly fully completed and dynamic data will be done with new software release 2012.	Static and Dynamic data have not been integrated in the current release of the Database.
Pakistan		Linked with transformation from AIS to AIM by December 2012.	
Palau		This database is being incorporated into the Palau International Airport “Aerodrome Certification Manual”. All this information is develop with assistance of US FAA appropriate agency in accordance with agreements signed between	Palau limited expertise and resources, PNAA and the airport management coordinating efforts with US FAA to establish and implement all necessary standards to ensure flight safety.

		Palau and US.	
Philippines	X		Database under EUROCONTROL (EAD)
Rep of Korea		It is scheduled for implementation by 2015.	
Singapore		Target to implement the integrated aeronautical information database for our new AIM System by end of Year 2011.	
United States		Integrated AIM database is currently under construction.	

Attachment 1

Q11. Has “Data integrity monitoring” been implemented in your State?			
	YES	NO	COMMENT
Australia	Airservices ADMS (Aeronautical Data Management Service) data entry controls and database data validation tools		
Hong Kong, China	Currently a regular manual audit is used.		In future, data integrity monitoring will be designed into the database management system.
Macao, China		Under study phase	
Fiji		AISP Certification targeted for last quarter 2011 (October-November 2011) requires AISP SLA with internal and external data provide	Currently monitored by AIP RG consisting of Regulator/AISP/MET/Industry
France – New Caledonia	Automation of aeronautical information processing		
France – French Polynesia	Currently, data integrity is monitored manually.		
India	At present ‘Manual Verification’. Automated tool will be implemented shortly.		
Indonesia	Integrity data monitored manually		
Japan	Partially implemented. Data integrity is assured on the database on AIS side. But no methods to measure Data integrity on raw data reception.		Expecting ICAO guidance
Malaysia		Expect to implement by 2013.	
Mongolia		Data integrity is monitored in accordance with Civil Aviation rule 175Monitoring the integrity of raw data has been a challenge. Mongolia plans to implement by 2013.	
Myanmar		To be implemented by 2013.	

Q11. Has “Data integrity monitoring” been implemented in your State?			
	YES	NO	COMMENT
New Zealand	Integrity of data transfer is ensured by the use of a 32-bit CRC algorithm inherent to our Database Systems’ transactions. This applies to the input, storage and retrieval of data, the generation of aeronautical data sets (including AIXM snapshot and update messages), and the transfer of these data sets from the database servers to the Internet File System (IFS). It does not apply to data sets generated or transmitted in any other way.		
Pakistan		Linked with transformation from AIS to AIM by December 2012.	
Palau		This new method of monitoring will be studied closely with our aviation partners and adopt the acceptable way for implementation.	Palau’s aviation industry has a lot of requirements to adopt. PNAA and airport management is working closely with US FAA to adopt and implement these standards.
Philippines		After ISO Certification (2012-2013)	
Rep of Korea		It is scheduled for implementation by 2015.	
Singapore	Currently, data integrity is monitored manually.		
United States		Data integrity plan currently being considered.	

Attachment 1

Q12. Has “Data quality monitoring” been implemented in your State?			
	YES	NO	COMMENT
Australia	X		Partial (80%) compliance. Deployment of Letters Of Agreements with data originators will be required to claim full compliance. Target 2012 or 2013.
Hong Kong, China		In future, “Data quality monitoring” will be designed into the database management system.	
Macao, China		Under study phase	
Fiji		Partial, AISP Certification targeted for last quarter 2011 (October-November 2011) requires AISP ISO & SLA with internal and external data providers.	Currently monitored by AIP RG consisting of Regulator/AISP/MET/Industry.
France – New Caledonia	Automation of aeronautical information processing		
France – French Polynesia	Currently, data quality is monitored manually.		
India	By ISO 9001:2008 System Process		
Indonesia	Data quality monitored manually, data checking start from receiving raw data		
Japan	Partially implemented. Monitoring is by QMS, SDP, and the database. But no methods to assure Data quality between AIS and originators		Expecting ICAO guidance
Malaysia		Expect to implement by 2013.	
Mongolia		Mongolia plans to implement data quality monitoring by 2013.	Measuring and monitoring data quality has been a challenge like elsewhere.
Myanmar		To be implemented by 2013.	

Q12. Has “Data quality monitoring” been implemented in your State?			
	YES	NO	COMMENT
New Zealand	As an EAD Data Provider, NZ Static data is subject to a quarterly data consistency review administered independently.		
Pakistan	Data Quality Monitoring is ensured manually.	Will be completely implemented after acquiring software by December 2012.	
Palau		Will be included in the future plans.	All new ICAO requirements or upgrades to existing system will be incorporated into Palau’s plans and implementations. Thorough studies and planning will also be conducted on how best to achieve our goal.
Philippines		After ISO Certification (2010-2013)	
Rep of Korea		It is scheduled for implementation by 2015.	
Singapore	Currently, data quality is monitored manually.		
United States	CRC and metrics collected during QMS reviews.		

Attachment 1Related Phase 3

Q13. Has training for AIS been implemented in your State?			
	YES	NO	COMMENT
Australia	X		
Hong Kong, China	X		
Macao, China	X		
Fiji	X		
France – New Caledonia	X		
France – French Polynesia	X		
India	X		
Indonesia	X		
Japan	X		
Malaysia	X		
Mongolia	X		
Myanmar	X		
New Zealand	X		
Pakistan	X		
Palau	X		
Philippines		X	
Rep of Korea	X		
Singapore	X		
United States		X	

Q13. a) & b) Is AIS Officer required to obtain AIS license?			
	YES	NO	COMMENT
Australia		Target 2012 or 2013 for implementation of training and proficiency regime.	Partial (60%) implementation.
Hong Kong, China		There is no plan to implement requirements for AIS license.	
Macao, China		X	
Fiji	X		<p>CAAF Standard Document – AIS (SD-AIS) requires certification of AISP, Fiji AISP to achieve certification last quarter 2011 (October-November 2011).</p> <p>The training plan for AIS personnel is reflected in the ANSP proposed organizational structure. The plan is to have all AIS personnel undergo the appropriate training to make them fully qualified in their respective fields of work.</p> <p>The issue of AIS Officer License is under consideration, and we will await the inclusion of the issuance of AIS Licenses in ICAO Annex 1 (Personnel Licensing).</p> <p>Request ICAO RO for assistance in the continuation of AIS personnel training particularly in specialist fields of work e.g. aeronautical cartography, digital cartography/mapping etc, which does not seem to be available for the Region.</p>
France – New Caledonia		X	
France – French Polynesia		Implementation of AIS license in progress.	
India		X	
Indonesia	There are two type licences for Junior and Senior AIS officer, procedure to obtain license available approved by DG decree.		

Attachment 1

Q13. a) & b) Is AIS Officer required to obtain AIS license?			
	YES	NO	COMMENT
Japan	X		Considering improvement of training for AIM
Malaysia	X		A certificate of attendance was issued.
Mongolia	X		Training program has been developed which reflects the competencies required by the Annex 4, 15 and automation systems and all employees are trained according to this program. Necessary training program will be developed in the future to comply with the new requirements on skill and competencies introduced by transition to AIM.
Myanmar		X	No specific requirement established to issue license to AIS personnel for time-being.
New Zealand		The State does not require a specific license for AIS. However the AIS provider must have a Part 175 certificate issued under the Civil Aviation Rules which includes training and competency requirements.	Formal qualifications currently exist for dynamic AIS (NOTAM/PIB) through a Flight Information rating, but not Static AIS (AIP/DB), where the roles are more varied. New Zealand is monitoring emerging trends in the skills that will be required by the integration of static and dynamic information, and is awaiting the expected release of an ICAO training manual for integrated AIM personnel. New Zealand has already started to amalgamate the traditional static AIS roles of Editor, Charting Officer, and Desktop Publisher into a new role of Aeronautical Information Specialist (Static), recognizing the aptitude and skills of a new generation of specialist. It is envisioned that there will continue to be an erosion of the historic divisions between static and dynamic data management, and New Zealand plans to have implemented an Integrated AIM role by 2015 .
Pakistan		AIS Officer has obtained AIS Certificate.	Requirement for AIS License is not contained in Annex 1.

Q13. a) & b) Is AIS Officer required to obtain AIS license?			
	YES	NO	COMMENT
Palau	X		The Aerodrome Flight Information Services (AFIS) officers are trained in communication with airlines flight crew to relay weather information near and around the airport. They are required to obtain certification from the meteorological office in Palau, who are US accredited. The AFIS officers are also certified to issue NOTAMS and to relay aerodrome information and inform pilots of traffic advisory around airport. However, they are not authorized to direct flights. Palau airport is non-tower aerodrome and rated as CLASS G AIRSPACE. (UNCONTROLLED).
Philippines		Not included in the Philippine Civil Air Regulations for Airmen Licensing	
Rep of Korea		X	It is required to obtain AIS training certificate.
Singapore		X	AIS Officer is fully trained on-the-job before being deployed to man the operational positions. Currently, AIS Officer is not required to obtain an AIS licence/certification.
United States		Specific AIS Officer training course does not exist in the US.	

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