



International Civil Aviation Organization

ICAO

Seventeenth Meeting of the ICAO Aeronautical Information Services – Aeronautical Information Management Implementation Task Force (AAITF/17)

Video Teleconference, 20 – 24 June 2022

Agenda Item 5: AIS-AIM Updates

REGIONAL IMPLEMENTATION STATUS OF AIM PERFORMANCE EXPECTATIONS

(Presented by the Secretariat)

SUMMARY

This paper presents a summary of the implementation progress of the regional performance expectations in the Asia/Pacific Regional Plan for Collaborative Aeronautical Information Management (AIM).

1. INTRODUCTION

1.1 The Asia/Pacific Regional Plan for Collaborative AIM (Version 2.0) was developed by the Asia/Pacific AIS – AIM Implementation Task Force (AAITF) and approved by the Seventh Meeting of the ATM Sub-Group of APANPIRG (ATM/SG/7, Bangkok, Thailand, 05 to 09 August 2019). The plan includes background information and general guidance, and a performance improvement plan. The performance objectives of the Plan are expected to be implemented in phases of *Regional AIM Capability* aligned, where practicable, with the performance objectives of the Asia/Pacific Seamless ANS Plan, as follows:

- **Phase I**, expected to be implemented immediately;
- **Phase II**, expected to be implemented by 7 November 2019, and
- **Phase III**, expected to be im

1.2 The Regional AIM Implementation Monitoring and Reporting process measures State implementation of the performance expectations specified in Section 7 of the plan. Asia/Pacific Administrations should report their implementation status to the ICAO Asia/Pacific Regional Office at least once annually, by no later than 30 April each year.

1.3 The Regional AIM Plan Monitoring and Reporting Form is available on the ICAO Asia/Pacific Regional Office website at:

<http://www.icao.int/APAC/Pages/edocs.aspx>

2. DISCUSSION

AIM Implementation Monitoring

2.1 In 2022 the following 16 Administrations provided information on the implementation status of AIM to the ICAO Regional Office.

Australia, Bangladesh, Cambodia, China, Hong Kong China, Fiji, India, Indonesia, Japan, Mongolia, Pakistan, Republic of Korea, Singapore, Sri Lanka, Thailand, Viet Nam.

2.2 This is the same *number* of Administrations that reported in 2021 (14 Administrations in common in 2021 and 2022), and, while better than the 10 that reported in 2020 and 11 in 2019, it remains a disappointing response.

2.3 The meeting is reminded of the following ATM/SG/7 Conclusion, drafted by AAITF/14 in 2019:

Conclusion ATM/SG/7-16: Amendment to the Regional Plan for Collaborative AIM

That,

1. *the Amendment to the Regional Plan for Collaborative AIM at **Appendix J to the Report** be adopted, and the amended Plan be posted on the ICAO Asia/Pacific Regional Office eDocuments web-page;*
2. *the revised Regional AIM Implementation Status Reporting Form (Appendix D to the Regional Plan for Collaborative AIM) be separately uploaded to the Regional Office eDocuments web-page for implementation reporting by Asia/Pacific Administrations:*
 - a. *immediately on adoption of this Conclusion; and then;*
 - b. *annually, by not later than 30 April each year; and*
3. *Asia/Pacific Regional reporting against the transition steps in the ICAO Roadmap for Transition from AIS to AIM be discontinued, and the AIM Transition Table be removed from the Regional Office eDocuments web-page.*

*Note: This Draft Conclusion supersedes **Conclusions APANPIRG 22/2 and APANPIRG/25-15.***

2.4 Japan and Singapore are the only Asia/Pacific States to have now reported completion of **Regional AIM Capability Phase I**, which were expected to be implemented **immediately on approval of the Plan** by ATM/SG.

2.5 Only Singapore has reported completion of **Regional AIM Capability Phase II**, which was expected to be implemented by **07 November 2019**.

2.6 The latest update of reported Regional implementation of AIM performance expectations is provided at **Attachment A**. Any further updates received during or in the week immediately following AAITF/17 will be included in the updated implementation table appended to the meeting report.

Overall Progress

2.7 Regional implementation of **Regional AIM Capability Phase I** is summarized as follows:

- 2 Administrations (≈ 5%) have completed implementation of Phase I;
- 35 Administrations (≈ 83%) have partly implemented Phase I;
- 5 Administrations (≈12%) have not reported implementation of any Phase I Performance Expectations; and
- Overall Regional implementation of Phase I ≈ **55%**. (49% in 2020, 54% in 2021).

2.8 **Figure 1** illustrates current Asia/Pacific Region progress towards completion of Phase I.

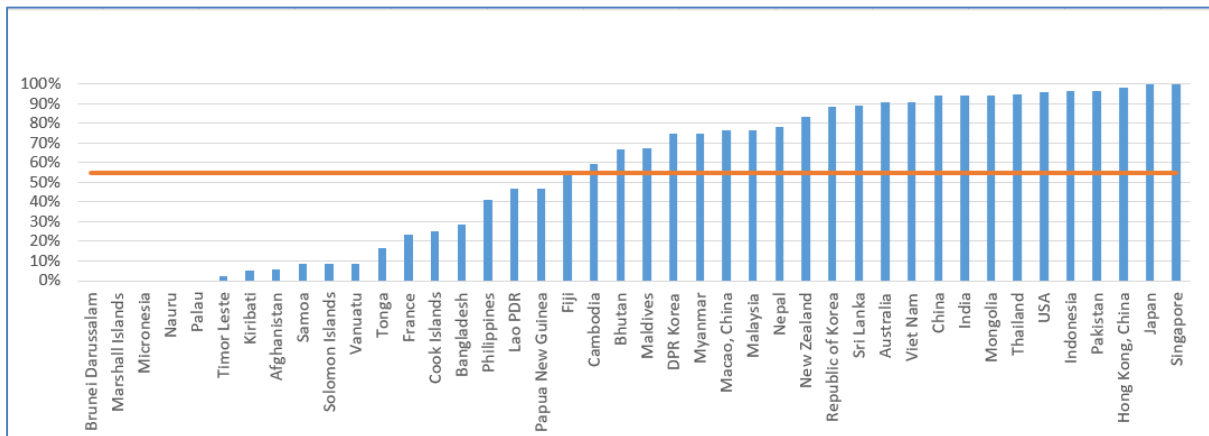


Figure 1: Regional Phase I Implementation Progress (updated on 15 June 2022)

2.9 Regional implementation of **Regional AIM Capability Phase II** is summarized as follows:

- 1 Administration (≈ 2%) has completed implementation of Phase II (no change from 2021);
- 34 Administrations (≈ 81%) have partly implemented Phase II (no change from 2021);
- 7 Administrations (≈17%) have not reported implementation of any Phase II Performance Expectations (no change from 2021); and
- Overall Regional implementation of Phase II ≈ **40%**. (38% in 2021, 37% in 2020).

2.10 **Figure 2** illustrates current Asia/Pacific Region progress towards completion of Phase II

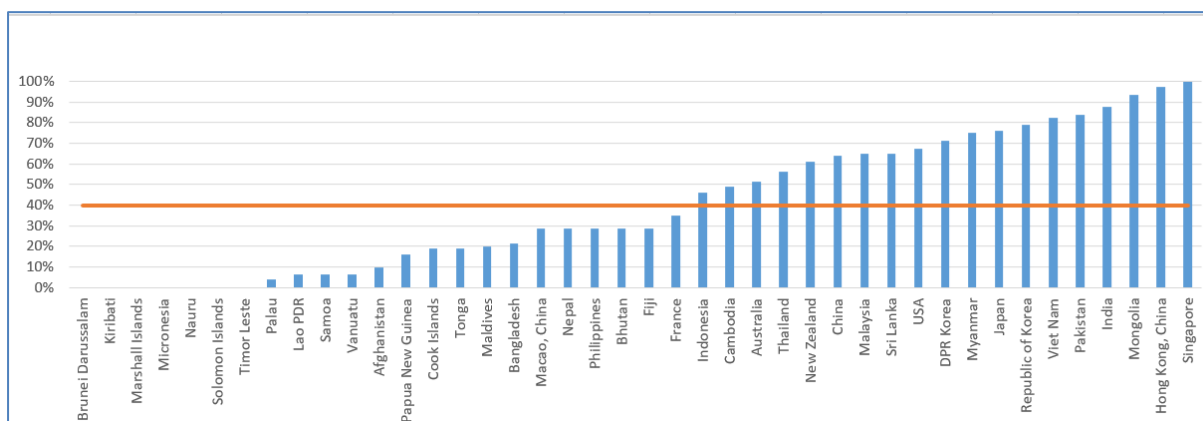


Figure 2: Regional Phase II Implementation Progress (updated on 15 June 2022)

2.11 Overall regional implementation of Regional AIM Capability Phases I&II is summarized as follows:

- 1 Administration ($\approx 2\%$) has completed implementation of Phases I&II;
- 37 Administrations ($\approx 88\%$) have partly implemented Phases I&II;
- 4 Administrations ($\approx 10\%$) have not reported implementation of any Phase I or Phase II Performance Expectations; and
- Overall Regional implementation of Phases I&II $\approx 48\%$. (44% in 2020).

2.12 **Figure 3** illustrates current Asia/Pacific Region progress towards completion of Phases I&II.

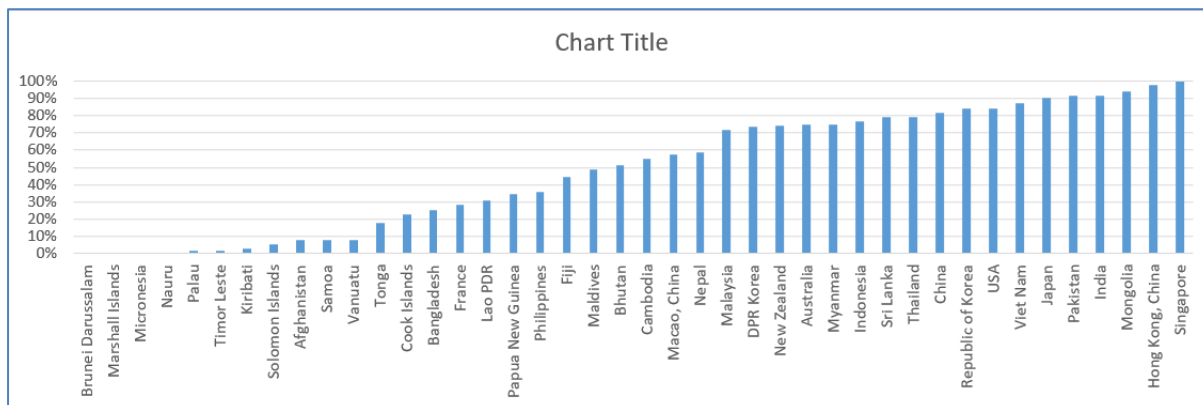


Figure 3: Regional Phase I&II Implementation Progress (updated on 15 June 2022)

2.13 Regional implementation of **Regional AIM Capability Phase III** (expected implementation **27 November 2025**) is summarized as follows (unchanged from 2021):

- No Administrations has completed implementation of Phase III;
- 16 Administrations ($\approx 38\%$) have partly implemented Phase III;
- 26 Administrations ($\approx 62\%$) have not reported implementation of any Phase III Performance Expectations; and
- Overall Regional implementation of Phase III $\approx 12\%$. (9% in 2020).

2.14 **Figure 4** illustrates current Asia/Pacific Region progress towards completion of Phase III

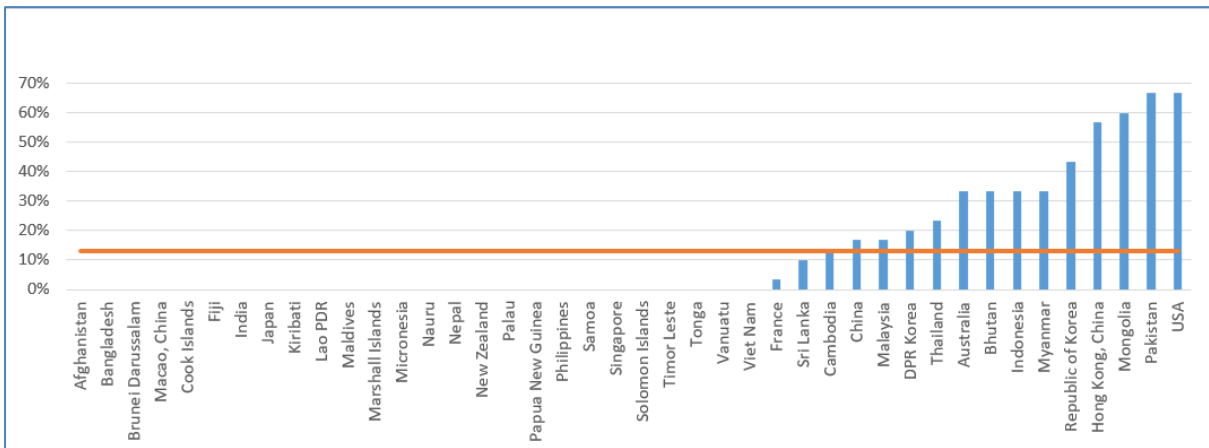


Figure 4: Regional Phase III Implementation Progress (updated on 15 June 2022)

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) note the continuing poor progress, particularly in Phase 1 which consolidates implementation of key SARPS that have been in existence for many years;
- c) note **Conclusion ATM/SG/7-16**, and ensure the Regional AIM Plan Monitoring and Reporting Form is used for all future reporting of AIM implementation progress; and
- d) discuss any relevant matters as appropriate.

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Regional Implementation Status of AIM Performance Expectations

Date Last Amended: June 14, 2022

	Phase 1										Phase 2								Phase 3				Average Implementation					
	1				2	3	4	5	6	7	8	9	10	11	12	13	14			15	16	17	18	Phase 1	Phase 2	Phase 3	Phase 1&2	
	1a	1b	1c	1d													14a	14b	14c									
Afghanistan	0%	0%	0%	0%	0%	0%	40%	0%	30%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	50%	0%	0%	0%	6%	10%	0%	8%	
Australia	100%	100%	100%	100%	40%	100%	100%	50%	100%	100%	100%	100%	100%	50%	100%	60%	0%	100%	0%	0%	100%	0%	0%	91%	51%	33%	75%	
Bangladesh	50%	0%	0%	0%	0%	50%	0%	30%	0%	30%	80%	100%	50%	0%	0%	0%	0%	90%	0%	30%	0%	0%	28%	21%	0%	26%		
Bhutan	100%	100%	100%	100%	0%	100%	40%	20%	50%	30%	60%	100%	50%	50%	50%	40%	10%	10%	20%	0%	100%	0%	0%	67%	29%	33%	52%	
Brunei Darussalam	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cambodia	100%	50%	70%	70%	10%	80%	50%	30%	50%	50%	50%	100%	50%	50%	30%	80%	50%	50%	10%	70%	10%	20%	10%	59%	49%	13%	55%	
China	100%	100%	100%	80%	100%	100%	100%	100%	100%	60%	100%	90%	40%	70%	100%	100%	0%	50%	50%	100%	30%	10%	10%	94%	64%	17%	82%	
Hong Kong, China	100%	100%	100%	100%	100%	100%	100%	100%	100%	80%	100%	100%	100%	100%	100%	100%	100%	100%	80%	100%	70%	50%	50%	98%	98%	57%	98%	
Macao, China	100%	100%	100%	100%	0%	100%	100%	100%	50%	0%	100%	70%	0%	50%	50%	50%	0%	0%	0%	80%	0%	0%	0%	77%	29%	0%	58%	
Cook Islands	0%	100%	0%	0%	0%	0%	100%	0%	30%	0%	0%	70%	0%	0%	100%	0%	0%	0%	0%	50%	0%	0%	0%	25%	19%	0%	23%	
DPR Korea	100%	100%	50%	100%	0%	0%	100%	100%	80%	100%	100%	70%	0%	100%	100%	100%	30%	50%	100%	90%	0%	0%	60%	75%	71%	20%	74%	
Fiji	100%	100%	30%	0%	30%	100%	10%	0%	100%	30%	100%	60%	100%	50%	70%	10%	0%	0%	0%	0%	0%	0%	0%	55%	29%	0%	45%	
India	100%	100%	100%	100%	30%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	100%	0%	0%	0%	94%	88%	0%	92%	
Indonesia	100%	100%	100%	100%	80%	80%	100%	100%	100%	100%	100%	100%	70%	70%	100%	50%	10%	10%	10%	50%	50%	50%	0%	97%	46%	33%	77%	
Japan	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	80%	80%	100%	80%	80%	90%	0%	100%	0%	0%	0%	100%	76%	0%	91%	
Kiribati	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	3%	
Lao PDR	100%	100%	100%	100%	0%	100%	0%	0%	0%	30%	0%	30%	0%	0%	20%	0%	0%	30%	0%	0%	0%	0%	0%	47%	6%	0%	31%	
Malaysia	100%	100%	100%	50%	0%	100%	50%	50%	100%	100%	100%	70%	0%	50%	100%	100%	60%	60%	50%	100%	0%	0%	50%	77%	65%	17%	72%	
Maldives	100%	80%	50%	100%	0%	100%	50%	50%	60%	50%	100%	70%	0%	50%	60%	0%	0%	0%	0%	50%	0%	0%	0%	68%	20%	0%	49%	
Marshall Islands	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Micronesia	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Mongolia	100%	100%	100%	100%	30%	100%	100%	100%	100%	100%	100%	100%	100%	50%	100%	100%	100%	100%	100%	100%	100%	100%	50%	94%	94%	60%	94%	
Myanmar	100%	100%	100%	100%	0%	100%	0%	100%	30%	100%	100%	70%	0%	50%	50%	100%	100%	100%	100%	100%	100%	0%	0%	100%	75%	75%	33%	75%
Nauru	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Nepal	100%	100%	100%	100%	20%	100%	20%	100%	50%	50%	100%	100%	30%	0%	30%	0%	20%	50%	50%	50%	0%	0%	0%	78%	29%	0%	59%	
New Zealand	100%	100%	100%	100%	0%	100%	50%	100%	80%	100%	100%	70%	0%	50%	100%	90%	100%	80%	20%	50%	0%	0%	0%	83%	61%	0%	75%	
Pakistan	100%	100%	100%	100%	100%	100%	100%	100%	100%	60%	100%	100%	70%	70%	100%	100%	70%	100%	60%	100%	100%	50%	50%	97%	84%	67%	92%	
Palau	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	4%	0%	2%	
Papua New Guinea	50%	100%	50%	50%	0%	100%	50%	50%	30%	50%	0%	30%	0%	50%	50%	30%	0%	0%	0%	0%	0%	0%	0%	47%	16%	0%	35%	
Philippines	0%	100%	0%	0%	0%	50%	100%	50%	60%	50%	50%	30%	0%	50%	50%	100%	0%	0%	0%	30%	0%	0%	0%	41%	29%	0%	36%	
Republic of Korea	100%	100%	80%	100%	80%	0%	100%	100%	100%	100%	100%	100%	100%	20%	100%	80%	50%	80%	100%	100%	100%	0%	30%	88%	79%	43%	85%	
Samoa	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	8%	6%	0%	8%	
Singapore	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	0%	100%	100%	0%	100%	
Solomon Islands	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%	0%	5%	

Sri Lanka	100%	100%	100%	100%	100%	100%	70%	60%	100%	40%	100%	100%	100%	70%	70%	90%	40%	40%	20%	90%	10%	10%	10%	89%	65%	10%	80%
Thailand	100%	100%	100%	100%	80%	100%	90%	100%	100%	80%	100%	90%	100%	100%	100%	30%	20%	0%	0%	100%	30%	20%	20%	95%	56%	23%	80%
Timor Leste	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	2%
Tonga	0%	100%	0%	0%	0%	0%	0%	0%	30%	0%	0%	70%	0%	0%	100%	0%	0%	0%	0%	50%	0%	0%	0%	17%	19%	0%	18%
Vanuatu	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	8%	6%	0%	8%
Viet Nam	100%	100%	100%	100%	70%	100%	100%	70%	70%	80%	100%	100%	100%	80%	100%	80%	80%	70%	70%	80%	0%	0%	0%	91%	83%	0%	88%
USA	100%	100%	100%	100%	50%	100%	100%	100%	100%	100%	100%	100%	70%	70%	100%	100%	0%	70%	30%	100%	100%	50%	50%	96%	68%	67%	85%
France	0%	100%	0%	0%	0%	0%	0%	0%	80%	0%	0%	100%	0%	0%	100%	100%	0%	0%	0%	80%	0%	0%	10%	23%	35%	3%	28%
	62%	70%	55%	56%	27%	59%	50%	49%	57%	47%	58%	68%	36%	39%	59%	47%	27%	36%	23%	53%	19%	7%	11%	55%	40%	13%	49%

Phase 1

- 1 Developed policy and enacted primary legislation and supporting regulations for Annex 4 and Annex 15 SARPS, and PANS-AIM Procedures including:
 - 1a establishment of an organizational structure for the safety oversight of aeronautical information service providers;
 - 1b requirements for monitoring of differences from Annex 4 and Annex 15 SARPS;
 - 1c Requirements for aeronautical information/data originators;
 - 1d Requirement for AIS quality management systems and processes to be established by all entities in the end-to-end AIS data chain.
- 2 Ensured National ATM Plans include implementation planning for each of the performance expectations of the Regional Plan for Collaborative AIM.
- 3 Established AIS either as a separate entity within, or separated from the civil aviation administration.
- 4 Developed competency requirements for AIS personnel, including English language proficiency requirements, supported by a program of regular performance assessment.
- 5 Established regular programs of engagement with all stakeholders.
- 6 Established quality management processes for aeronautical information.
- 7 Established formal agreements between AIS providers and aeronautical data originators.
- 8 Provided full access to relevant ICAO Annexes and Documents to all personnel having responsibility for the reception, management, publication and/or distribution of aeronautical information and aeronautical data.
- 9 Ensured compliance of all aeronautical products with common reference systems WGS-84, MSL/EGM-96 and UTC

Phase 2

- 10 Adapted policy, primary legislation and supporting regulations to support digital data sets of aeronautical information and associated products
- 11 Adapted training, competency and performance assessment of AIS personnel for digital data sets and eAIP
- 12 Implemented and maintained quality management systems encompassing all functions of the AIS
- 13 Established and maintained digital databases of aeronautical information (PANS-AIM Appendix 1)
- 14 Managed terrain, obstacle and aerodrome mapping data through the establishment of:
 - 14a a terrain database, from which terrain data sets conforming with Annex 15 Section 5.3.3.3 may be generated
 - 14b an obstacle database, from which obstacle data sets conforming with Annex 15 Section 5.3.3.4 may be generated
 - 14c an aerodrome mapping database, from which aerodrome mapping data sets conforming with Annex 15 Section 5.3.4 may be generated
- 15 Implemented internet-accessible electronic AIP generated from digital database of aeronautical information

Phase 3

- 16 Adapted policy, primary legislation and supporting regulations to support automated exchange of aeronautical data
- 17 Adapted competency development and performance assessment of AIS personnel to support the automated exchange of aeronautical data and production of electronic charts and digital NOTAM.
- 18 Commenced aeronautical information exchange through digital data sets, digital NOTAM, integrated briefing and electronic charts

Color Code:
Green - Increased implementation
Red - Decreased implementation
Blue - No Change