

International Civil Aviation Organization

Eleventh Meeting of the Air Traffic Management Sub-Group (ATM/SG/12) of APANPIRG

Bangkok, Thailand, 23 – 27 September 2024

Agenda Item 7: AOP, MET, AIM, SAR

AIS – AIM IMPLEMENTATION TASK FORCE OUTCOMES

(Presented by the Secretariat)

SUMMARY

This paper presents an update on Aeronautical Information Services (AIS) and Aeronautical Information Management (AIM) implementation, including the outcomes of the Nineteenth Meeting of the ICAO Aeronautical Information Services – Aeronautical Information Management Implementation Task Force.

1. INTRODUCTION

- 1.1. The Nineteenth Meeting of the ICAO Aeronautical Information Services (AIS) Aeronautical Information Management (AIM) Implementation Task Force (AAITF/19) in conjunction with a Quality Management System (QMS) Seminar were held from 10 to 14 June 2024 at the ICAO Asia and Pacific Regional Office in Bangkok, Thailand. A total of 94 participants from Australia, Bhutan, Brunei Darussalam, Cambodia, China, Hong Kong China, Macao China, Fiji, India, Indonesia, Japan, Lao PDR, Malaysia, Maldives, Mongolia, Nepal, Pakistan, Philippines, Republic of Korea, Singapore, Sri Lanka, Thailand, United States, Viet Nam, IATA, IFAIMA, Indra Avitech GmbH, and ICAO attended the AAITF/19 meeting.
- 1.2. 26 Working Papers (WPs), eight Information Papers (IPs) and nine presentations were presented to AAITF/19.
- 1.3. AAITF/19 formed two Draft Conclusions and one Decision for consideration by ATM/SG.
- 1.4. The full report of the meeting is available on the ICAO Asia/Pacific (APAC) Regional Office web-page at https://www.icao.int/APAC/Meetings/Pages/2024AAITF19.aspx

2. DISCUSSION

Asia/Pacific ATM and Airspace Safety Deficiencies in the AIS/AIM Field

- 2.1. AIS/AIM-related Air Navigation Deficiencies as identified/agreed by APANPIRG/34 were provided for review and update by the meeting.
- 2.2. There are four AIS/AIM-related deficiencies in the list agreed by APANPIRG/33:
 - WGS-84 not implemented (8 States);
 - AIP Format (2 States);

- Quality Management System (QMS) not implemented (20 States); and
- Aeronautical data promulgation within the State's area of responsibility (1 State).
- 2.3. No new deficiencies had been identified since APANPIRG/34.
- 2.4. ICAO analysis of the information provided by Philippines and AIP Nauru resulted in the recommendation that the following deficiencies be proposed for removal from the list, to be agreed by APANPIRG/35:
 - AIP Format not implemented Nauru; and
 - AIS Quality Management System not implemented Philippines
- 2.5. Nepal and Sri Lanka provided information in application of withdrawal from deficiencies. After analysing the documents, ICAO requested supplementary evidence from both States to support the claim of QMS implementation. However, as of 31 August 2024, no further evidence was received. Hence, Nepal and Sri Lanka would remain in the Deficiencies List.
- 2.6. According to Action Item 18/2 of the AAITF Task List, as of 1 May 2024, only Brunei Darussalam, Maldives and Myanmar have updated the corrective action plans against AIS/AIM-related deficiencies. All other Administrations having recorded deficiencies were requested to provide their corrective action plans and target dates for rectification of the deficiency
- 2.7. The list of AIS/AIM-related deficiencies as reviewed by AAITF/19 is included in the relevant working paper presented under ATM/SG/12 Agenda Item 4.

Regional Implementation Status of AIM Performance Expectations

- 2.8. The meeting was informed of the reported implementation status of AIM performance expectation detailed in the Performance Improvement Plan of the *APAC Regional Plan for Collaborative AIM. Conclusion ATM/SG/10-1: Revised Reporting Date for ATM Regional Plans' Implementation Status Monitoring* urged States to report using the Regional AIM Implementation Status Report form annually, by not later than 28 February each year.
- 2.9. The performance expectations were arranged in three phases:
 - **Phase I**, expected to be implemented immediately;
 - Phase II, expected to be implemented by 7 November 2019, and
 - **Phase III**, expected to be implemented by 27 November 2025.
- 2.10. States that had <u>never</u> provided information on their implementation status were:
 - Brunei Darussalam, Marshall Islands, Micronesia and Nauru.
- 2.11. In 2024, the following 24 Administrations provided information on the implementation status of AIM to the ICAO Asia and Pacific Regional Office (same number as 2023):

Australia, Bangladesh, Bhutan, Cambodia, China, Hong Kong China, Macao China, Fiji, India, Indonesia, Japan, Malaysia, Maldives, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Republic of Korea, Singapore, Sri Lanka, Thailand, United States and Viet Nam.

- 2.12. The latest update of regional implementation status of the AIM performance expectations is provided in **Attachment A**.
- 2.13. Hong Kong China, Japan and Singapore reported implementation of all Phase I elements. Only Singapore reported implementation of all Phase II elements. No Administration reported implementation of all Phase III elements.
- 2.14. **Figure 1** and **Figure 2** illustrate overall regional implementation of Phase I and II elements of the Regional Plan for Collaborative AIM; approximately 60% for Phase I and 42% for Phase II (58% and 42% respectively in 2023). Combined progress towards implementation of Phases I and II was 53%, (51% in 2023).

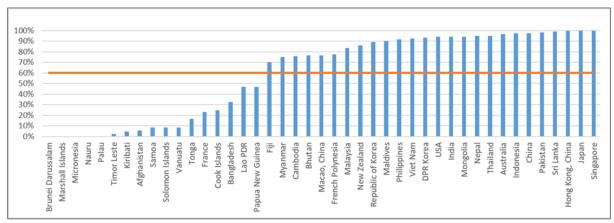


Figure 1: Regional Phase I Implementation Progress (updated on 15 May 2024)

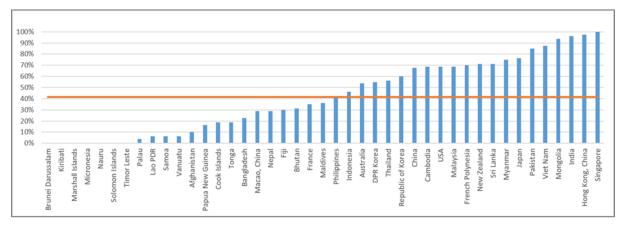


Figure 2: Regional Phase II Implementation Progress (updated on 15 May 2024)

2.15. Regional implementation of Phase III elements, expected to be implemented by 2025, was approximately 17%, increased from 15% in 2023 (**Figure 3**).

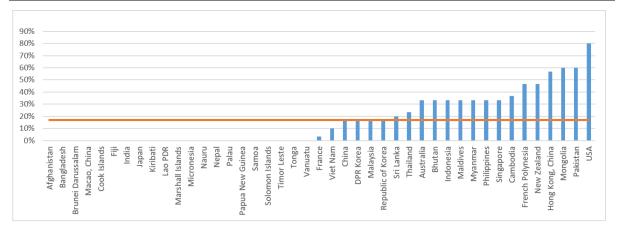


Figure 3: Regional Phase III Implementation Progress (updated on 15 May 2024)

NOTAM Proliferation Analysis

- 2.16. IFAIMA, in collaboration with the Secretariat, provided a regional analysis of NOTAM proliferation. The meeting is reminded of the following that ICAO provisions in Annex 15 *Aeronautical Information Services* and ICAO Doc 10066 *Procedures for Air Navigation Services Aeronautical Information Management* (PANS-AIM) require that:
 - Temporary changes of aeronautical information of long duration (three months or longer) shall be published as AIP Supplements;
 - Within three months from the issuing of a permanent NOTAM, the information contained in the NOTAM shall be included in the aeronautical information products affected;
 - Within three months from the issuing of a temporary NOTAM of long duration, the information in the NOTAM shall be included in the AIP Supplement;
 - When a NOTAM with estimated end of validity unexpectedly exceeds the threemonth period, a replacement NOTAM shall be issued, unless the condition is expected to last for a further period of more than three months; in this case, an AIP Supplement shall be issued.
- 2.17. AAITF/13 in 2018 had discussed the continuing existence of NOTAM containing information of permanent validity that had not been transferred to AIP in a timely manner, and had developed a Draft Conclusion on the subject, subsequently agreed by ATM/SG/6: *Conclusion ATM/SG/6-14: Management of NOTAMs*.
- 2.18. AAITF/13 had also agreed to a related action item in the AAITF Task List for the periodic sampling of NOTAM Pre-flight Information Bulletins (PIBs) to examine the proliferation of PERM and long-term temporary NOTAMs.
- 2.19. **Figure 4** illustrated APAC NOTAM statistics since 2021. On 01 May 2024, a total of 6057 NOTAMs were active in the APAC Region. 294 (5%) of these were *old* (i.e. more than three months but less than one year), and 179 (3%) were *very old* (one year or more).

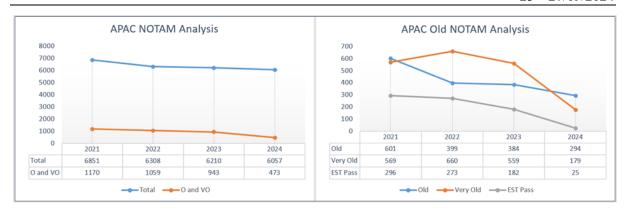


Figure 4: APAC NOTAM Statistics (Total, old and very old)

- 2.20. Compared with June 2023 the number of very old NOTAM had decreased by 380 (68%), but the number of old NOTAMs had decreased by 90 (23%)
- 2.21. **Table 1** listed the top 10 NOTAM-promulgating APAC Administrations. These Administrations promulgated **89.7%** of all APAC NOTAMs, including **89.2%** of APAC old and very old NOTAM.

Table 1: Top 10 NOTAM-producing Administrations

No	Administrations	Administrations Total NOTAM Old NOTAM		Very Old NOTAM	Percent of old and very old NOTAM
1	China	1336	97	25	9.1%
2	Japan	1162	0	0	0.0%
3	India	676	42	72	16.9%
4	Australia	673	73	6	11.7%
5	Republic of Korea	495	0	0	0.0%
6	Philippines	481	32	38	14.6%
7	Malaysia	260	0	0	0.0%
8	Thailand	130	5	3	6.2%
9	Singapore	114	1	0	0.9%
10	Papua New Guinea	108	16	12	25.9%
		5435	266	156	8%

2.22. **Table 2** listed the Top 10 poorest performing Administrations in this regard. These Administrations had **54.1%** of old and very old NOTAM in the APAC Region.

Table 2: Top 10 Poorest Performing Administrations – Old and Very Old NOTAM

No	Administrations	Total NOTAM	Old NOTAM	Very Old NOTAM	Percent of old and very old NOTAM		
1	Nauru	5	4	0	80.0%		
2	Lao PDR	33	0	0 18			
3	Samoa	5	0	2	40.0%		
4	Timor Leste	12	3	1	33.3%		
5	Papua New Guinea	108	16	12	25.9%		
6	Solomon Islands	22	5	0	22.7%		
7	Bangladesh	46	7	2	19.6%		

8	India	676	42	72	16.9%
9	Cambodia	12	2	0	16.7%
10	Philippines	481	32	38	14.6%
		1400	111	145	18.3%

- 2.23. The meeting reaffirmed that the NOTAM procedures in ICAO Doc 10066 *Procedures for Air Navigation Services Aeronautical Information Management (PANS-AIM)* Appendix 3 included the mandatory requirement that any NOTAM that has an EST duration shall be cancelled or replaced before the date-time specified in Item C). However, as of 1 May 2024, current NOTAMs in the APAC Region had passed their EST duration, i.e., were overdue for review or cancellation.
- 2.24. The meeting was informed of the top three examples of repetitive NOTAM replacements identified by the ICAO Regional Office. The need for another analysis focused on repetitive NOTAM replacements was also highlighted.
- 2.25. The meeting was invited to note that APANPIRG Air Navigation Deficiencies might be proposed by the ICAO Regional Office where necessary to highlight ongoing non-compliance with the relevant provisions of Annex 15 and PANS.

Airline Feedback on NOTAMs

- 2.26. IATA presented airline feedback on NOTAM quality, using examples from both the APAC Region and elsewhere, and identified issues needing addressing.
- 2.27. It was noted that, some States had not moved PERM NOTAMs into suitable aeronautical products, i.e., AIP according to the ICAO Doc 8126 *Aeronautical Information Services Manual* (para 6.3.7.2).
- 2.28. The meeting was informed that one airline recorded 38 different versions of how date, time, and month are presented in Item D) of published NOTAMs globally in one day. The wording used in Item D) made it difficult to understand its intent. As a result, end users were unable to effectively introduce automation to read Item D) of NOTAMs and populate them into an application.
- 2.29. IATA informed the meeting that late delivery of NOTAMs after their beginning time/date continued to be observed in the APAC region. It was reaffirmed that the industry needed a reliable and robust means to deliver aeronautical data in a timely manner.
- 2.30. The Chair encouraged Administrations to use the APAC Operating Procedures for AIS Dynamic Data (OPADD), available on the ICAO APAC Regional Office website under eDocuments, for standardising Item D) of NOTAM, to eliminate old and very old NOTAM and to take immediate action to reduce repetitive NOTAM Replacement.

Asia/Pacific Region ICARD Status and 5LNC Duplicate Resolution

- 2.31. ICAO provided a paper on the ICARD application, the requirement to utilise it as the sole source of 5LNCs used to mark waypoints, and the global project to eliminate duplicated 5LNCs. It also presented current ICARD usage and challenges.
- 2.32. The meeting was reminded that in all cases where any personnel of a State Regulator or Air Navigation Service Provider are responsible for the allocation of 5LNC for ATS routes, STARs, etc., at least one person, and preferably two, must be registered as an ICARD_5LNC_PLANNER to ensure compliance with Annex 11 requirements.

- 2.33. In a collaborative effort with States/Administration, ICAO HQ compiled a comprehensive list of global 5LNC duplication in 2018. The list revealed a total of 3905 duplicated 5LNCs worldwide, with a significant number of 2733 in the APAC region. Due to limited notification, the previous duplicate resolution list is difficult to maintain properly, and because of the complexity of the duplicate resolution list, the ICAO APAC Regional Office created a separate list of duplicated 5LNC in 2020 for each APAC State/Administration, updated in 2024, was attached to the **Attachment B** to this paper.
- 2.34. The meeting was reminded that ICARD shall be used as the central system for reservation and allocation of 5LNCs. Notes for new 5LNC request, 5LNC amendment, and 5LNC deletion were also informed.
- 2.35. The Secretariat informed the meeting that 7483 ICARD Requests (**Figure 5**) were processed with 6753 approvals and 730 rejections between January 2021 and May 2024. The common reasons for requests to be refused are sound-like proximity issues, duplicated 5LNCs, 5LNC currently published in the AIP of another State, 5LNCs which may pose sound-like and/or visual confusion such as 5LNCs with 'X' as the first letter and with 'Q'

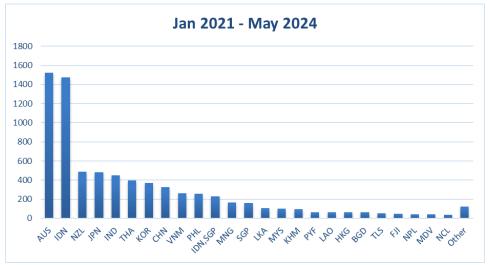


Figure 5: Number of 5LNC requests from Jan 2021 to May 2024

2.36. The meeting was also informed of the challenges the ICARD Planner and Regional Manager faced, including but not limited to a complex process of checking the States' requests and large batches in the same period. **Table 3** demonstrated the highest number of requests submitted categorised into day, week, month, and quarter.

Table 3: Historical Records of Highest Number of Requests Submitted by Day, Week, Month, and Ouarter

	V	uarter		
Highest number of requests	2021	2022	2023	2024
Day	80	67	106	152
Week	97	203	208	217
Month	214	352	611	445
Quater	460	736	949	751

- 2.37. The meeting agreed to the proposed action by the Secretariat as follows:
 - a) States are requested to plan well in advance for 5LNC submission in ICARD with a maximum of 10 5LNCs submitted each week. If needing to submit more than 40 5LNCs within four consecutive weeks, please send an email to notify ICAO no later than two weeks in advance. A minimum of 30 working days for processing is proposed, with a procedure to contact the ICAO Regional ICARD Manager directly if the code is not approved by 20 working days after submission.
 - b) The practice of reserving blocks of codes for State use was discontinued several years ago, and new blocks are no longer provided when existing blocks are exhausted. ICARD Planners need to draw 5LNC from the pool of codes reserved for the APAC Region. States are encouraged to release blocks of reserved codes.
 - c) The Regional Manager will consult other Regions to standardise the assigning proximity radius, which could allow more 5LNCs for ICARD Planers to select.
 - d) The Regional Manager will follow up on issues related to 5LNCs, starting with 'X' as the first letter and all available 5LNCs with a combination of 'Q', which may pose sound-like confusion.

USOAP Update - Aeronautical Information Service and Aeronautical Chart

- 2.38. ICAO presented the AIS and Aeronautical chart compliance status of Asia/Pacific States measured against the Universal Safety Oversight Audit Program (USOAP) protocol questions (PQs).
- 2.39. Based on the 2020 edition of the USOAP CMA Protocol Questions (PQs), 16 USOAP AIS and Charts-related PQs for the Asia/Pacific Region indicated that the average Effective Implementation (EI) is 59% (**Figure 6**).

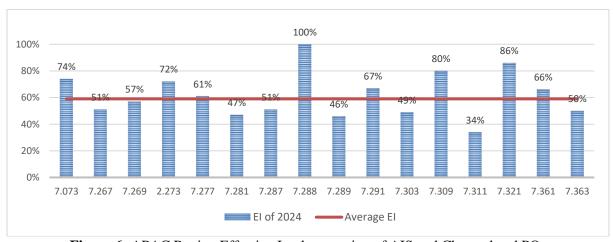


Figure 6: APAC Region Effective Implementation of AIS and Chart related PQs

Implementation of Amendment 1 to PANS-AIM

2.40. IFAIMA, in collaboration with the Secretariat, presented an overview of the implementation status of Amendment 1 to the Procedures for Air Navigation Services (PANS) — Aeronautical Information Management (PANS-AIM, Doc 10066). The Amendment 1 to PANS-AIM for applicability on 4 November 2021 for the elements concerning ATS route classification, GBAS Cat II and Cat III Criteria, visual segment surface (VSS) and folding wing tips (FWT), and 28 November 2024 for pavement classification rating (PCR) was approved on 12 May 2020 by the President of the Council and circulated by the State Letter AN 2/33.1-20/26 on 8 June 2020.

- 2.41. The changes to ATS route classification and VSS, which took effect on 4 November 2021, necessitated updates to all States' AIPs. As of March 2024, only six of the APAC Administrations examined (i.e., Cambodia, French Polynesia, India, Mongolia, Philippines, and Singapore) had successfully implemented the ATS route classification changes and updated their AIPs.
- 2.42. The meeting was informed that SARPs and procedures related to pavement classification rating would become applicable on 28 November 2024. Therefore, AIS providers, especially those responsible for publishing a significant amount of aerodrome information, might experience a heavy workload for the AIRAC cycle, effective 28 November 2024. It was highly recommended that AIS providers collaborate with relevant aerodrome authorities and incorporate the publication of pavement classification rating changes into their AIP Amendment planning at the earliest

Update on the Publication of Aerodrome Certification

- 2.43. An update on the progress made by Asia/Pacific States in publishing aerodrome certifications in the Aeronautical Information Publication was presented.
- 2.44. The meeting reaffirmed that PANS-AIM required States to publish a status of certification of aerodromes in the AIP with details as shown below:

AD 1.5 Status of certification of aerodromes

A list of aerodromes in the State, indicating the status of certification, including:

- 1) aerodrome name and ICAO location indicator;
- 2) date and, if applicable, validity of certification; and
- 3) remarks, if any.
- 2.45. Extracted from Working Paper (WP/05) of the Sixth Meeting of the Asia/Pacific Aerodrome Assistance Working Group (AP-AA/WG/6), Table presented the publication status of aerodrome certification.

Table 4: Publication status of aerodrome certification (AP-AA/WG/6)

States	North Asia (5 States & 2 SARs)	South East Asia (11 States)	South Asia (8 States)	Pacific (15 States & 8 OTs)
No aerodromes		1) Brunei	1) Afghanistan	1) Kiribati
listed in AD		Darussalam		2) Nauru
1.5/AD 1.5 missing				3) Samoa
in AIP				4) Tonga
				5) Tuvalu
				6) Vanuatu
AIP cannot be				1) Marshall Is.
located				2) Micronesia (Federated
				States of)
				3) Palau

2.46. States that had not published the status of certification of aerodromes in the State's AIP were urged to publish the status in AD 1.5 as soon as possible in accordance with Annex 14 Vol I (para. 2.13.1), PANS-Aerodromes (para. 2.3.7) and Appendix 2 to PANS-AIM.

Update on the AIS/AIM related Documents

2.47. IFAIMA, in collaboration with ICAO, provided a brief introduction of the Amendments to Annex 4, Annex 15, PANS-AIM Doc 10066, PANS-ABC Doc 8400 and new PANS-IM Doc 10199.

- 2.48. The meeting was informed the Amendment 62 to Annex 4, including Aeronautical Charts regarding the charting navigation specifications and accuracies, and Aeronautical Charts, PANS-AIM and Doc 8697 concerning areas where it is safe to operate aeroplanes with wing tips extended.
- 2.49. The meeting was also informed that the Amendment 43 introduced the competency-based training and assessment (CBTA) methodology, editorial changes, and system-wide information management (SWIM) and information security, to Annex 15.
- 2.50. Amendment 3 to PANS-AIM was introduced to address the requirements and procedures concerning:
 - aircraft with folding wing tips, the competency-based training and assessment (CBTA) methodology, consistency of data appearing in multiple aeronautical information products, editorial changes, and system-wide information management (SWIM);
 - b) initial implementation of the flight and flow information for a collaborative environment (FF-ICE) services; and
 - c) charting navigation specifications and accuracies.
- 2.51. The meeting was also informed that Amendment 34 to PANS-ABC contained a consequential amendment concerning the initial implementation of FF-ICE services and an amendment concerning the NOTAM code for hang gliding and paragliding activities of which all amendments would become applicable on 28 November 2024.
- 2.52. In addition, the meeting was informed that the Council approved Procedures for Air Navigation Services Information Management (PANS-IM, Doc 10199) at the fifth meeting of its 231st Session on 18 March 2024 for applicability on 28 November 2024.

Publication of Runway Surface Condition Assessment and Reporting in the AIP

- 2.53. An update on the publication of runway surface condition assessment and reporting in the Aeronautical Information Publication (AIP) and followed up on the Action Item to coordinate with ICAO HQ on the feasibility of AIP AD 1.2.3 was presented.
- 2.54. Recognising the need for the promulgation of the procedures for the reporting of runway condition report and issuance of the new SNOWTAM format by States in their AIP in accordance with 6.3.1.2 of Annex 15 Aeronautical Information Services (AIS), APANPIRG/33 adopted the Conclusion APANPIRG/33/2 formulated by AP-AA/WG/4 and endorsed by AOP/SG/6 which was also supported by ATM/SG/10 (17 21 October 2022): Conclusion APANPIRG/33/2: Publication of procedures for reporting of runway condition report and issuance of the SNOWTAM in AIP.
- 2.55. The current situation of the AIP AD1.2 and AD1.2.2 was explained using examples from both the APAC Region and EUR/NAT Region. The meeting was also informed that as ICAO HQ had provisionally agreed to discuss the proposed changes at the Information Management Panel.
- 2.56. The meeting was encouraged to consider publishing runway surface condition assessment and reporting according to *Conclusion APANPIRG/33/2* until the PANS-AIM Appendix 2 amendment.
- 2.57. Singapore proposed to standardize the categorisation of information in AIP sections would benefit users by facilitating easier navigation and ensuring uniformity across all States. The following proposal aimed to accurately categorise and distribute information, enhancing AIP standardisation.
 - Changing the title to "AD 1.2 Rescue and Firefighting Services, Snow Plan,

and Runway Surface Condition Reporting"

Establishing a new sub-section, i.e., AD 1.2.3, titled "AD 1.2.3 – Procedures for Assessment and Reporting of Runway Conditions"

Review of the AIP Subsection Numbering

2.58. Noting the difference between the State Letter AN 2/33.1-20/26 and the PANS-AIM Appendix 2 on the contents of the AIP (**Table 5**), Mongolia proposed a consecutive numbering for the AIP subsection ENR 3.1.

Table 5: Contents of AIP

State Letter AN 2/33.1-20/26	PANS-AIM Doc 10066 Appendix 2
ENR 3.1 Conventional navigation routes	ENR 3.1 Conventional navigation routes
ENR 3.2 Area navigation routes	ENR 3.2 Area navigation routes
ENR 3.3 Other routes	ENR <u>3.5</u> Other routes
ENR 3.4 En-route holding	ENR <u>3.6</u> En-route holding

- 2.59. Due to this uncertainty, Mongolia conducted a brief review of the implementation of Amendment 1 to the PANS-AIM using the EAD AIP Library and the electronic AIPs of APAC States. Out of 42 AIPs reviewed, 25 have used the AIP subsection numbering as outlined in State Letter AN 2/33.1-20/26, while 17 have used the numbering specified in the current PANS-AIM Appendix 2. In the APAC region, most Administrations have not yet implemented the changes to the ATS route classification. This analysis indicated that the publication of ATS routes was not consistent globally.
- 2.60. The meeting was informed that IMP WG-A had been aware of the issue, and the discussion was ongoing. Therefore, the meeting agreed that the Chair would coordinate with the IFAIMA representative of IMP for further discussion.

<u>Proposed Amendment to the Asia/Pacific Regional Plan for Collaborative Aeronautical Information Management</u>

- 2.61. ICAO proposed amendment to the Regional Plan for Collaborative AIM, including Aviation System Block Upgrades (ASBU), Asia/Pacific AIM Compliance Analysis USOAP Audit, and Structure of the Performance Improvement Plan. The proposal was included to **Attachment C** to this paper.
- 2.62. The meeting agreed to the following Draft Conclusion for consideration by ATM/SG/12:

Draft Conclusion ATM/SG/12-X: Amendment to the Asia/Pacific Regional Plan for Collaborative AIM

That, the Amendment to the Regional Plan for Collaborative AIM at **Attachment D** to this paper be adopted, and the amended Plan be posted on the ICAO Asia/Pacific Regional Office eDocuments web-page.

Revised Guidance on the Issuance of SNOWTAM

- 2.63. ICAO introduced the latest Guidance published in December 2020 on the Issuance of SNOWTAM used in the Asia/Pacific Region.
- 2.64. ICAO APAC Regional Office would consult with HQ and other Regional Offices on how they deal with the EUR Doc 041 and any plan for the global guidance document.
- 2.65. The meeting agreed to the following Draft Conclusion for consideration by ATM/SG/12:

Draft Conclusion ATM/SG/12-X: Revised Guidance on the Issuance of SNOWTAM

That, the revised EUR Doc 041 – Guidance on the Issuance of SNOWTAM (V.1.1) at **Attachment E** to this paper be uploaded on the ICAO Asia/Pacific Regional Office eDocuments web-page, to replace the existing.

Proposed Business Functionality of APAC Common SWIM Information Services

- 2.66. ICAO APAC SWIM TF Task Team on Information Services updated the meeting on the work to identify the business functionality to be supported by APAC Common SWIM Information Services for addressing the operational needs in APAC.
- 2.67. The list of recommended services in the initial APAC Common SWIM Information Services was further reviewed and modified by SWIM TF/9, and the list updated by SWIM TF/9 was provided in **Attachment F** of this paper.
- 2.68. Realising a need for further discussion, the meeting agreed to form an ad hoc group to discuss both technical and operational aspect of this subject rather than reaching a consensus at AAITF/19. The following States/Administrations and International Organisations were willing to volunteer the task:

Australia, Hong Kong China, Indonesia, Japan, Singapore, Thailand, USA, IATA, IFAIMA

2.69. The meeting agreed to the following Decision:

Decision AAITF/19-3: Establish APAC Common SWIM Aeronautical Information Services Ad hoc Group

That, AAITF establishes the APAC Common SWIM Aeronautical Information Services Ad hoc Group, that will:

- Review and discuss the proposed business functionality of APAC Common SWIM Aeronautical Information Services by SWIM TF, including but not limited to;
 - Business functionality of the service;
 - Brief description of the service;
 - Type of information to be exchanged;
 - Information exchange model / Message type;
 - Message exchange pattern; and
 - Recommended service in initial APAC Common SWIM IS;

- b) Coordinate and collaborate with APAC SWIM TF, ATM/SG and AOP/SG; review the development of AIXM revisions and, if needed, propose AIXM extension for regional adoption;
- c) Submit inputs and recommendations to the AAITF, ATM/SG, AOP/SG and APAC SWIM TF when deemed necessary; and
- d) Undertake any other tasks related to APAC Common SWIM Aeronautical implementation that may arise in the future

Quality Management System Seminar

- 2.70. A Quality Management System (QMS) seminar session was conducted on 14 June 2024 after the AAITF meeting. The aim of the seminar was to enhance States' understanding towards the implementation of QMS in order to be removed from the ANS Deficiency List for being failure to implement such system.
- 2.71. Six presentations were presented:
 - SP/4 AIS QMS implementation in the Asia/Pacific Region (ICAO)
 - SP/5 Quality Control and Corrective Action (IFAIMA)
 - SP/6 Internal Audit and Management Review (IFAIMA)
 - SP/7 Verification and Validation Activities (IFAIMA)
 - SP/8 NGA's Experience with QMS (USA)
 - SP/9 Indonesia's Journey Implementing QMS for AIS (Indonesia)

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) note the ATM and Airspace Safety Deficiencies in the AIS/AIM field, and particularly the deep concern about poor quality management of aeronautical information in the APAC Region;
 - b) note the continuing overall slow implementation of the Phase I and II performance expectations of the Regional Plan for Collaborative AIM;
 - c) note the need for increased effort and compliance in the management of NOTAMs;
 - d) note the ongoing effort to resolve duplicated 5-Letter Name Codes (5LNC), and for ICARD registration of all 5LNCs that are published in AIP;
 - e) note the amendment and revision for various AIS/AIM related document and guidance material;
 - f) agree to **Draft Conclusion ATM/SG/12-x: Amendment to the Asia/Pacific Regional Plan for Collaborative AIM**;
 - g) agree to **Draft Conclusion ATM/SG/12-x: Revised Guidance on the Issuance of SNOWTAM**
 - h) note to Decision AAITF/19-3: Establish the APAC Common SWIM Aeronautical Information Services Ad hoc Group; and
 - i) discuss any relevant matters as appropriate.

.....

Draft Conclusion ATM/SG/12-x: Amendment to	the Asia/Pacific	Regional Plan for Collaborative		
AIM				
What: That,	Expected impact:			
the Amendment to the Regional Plan for Collaborat		☐ Political / Global		
Attachment D to this paper be adopted, and the am		☐ Inter-regional		
posted on the ICAO Asia/Pacific Regional Office el	Jocuments web-	☐ Economic		
page.		☐ Environmental		
		☑ Ops/Technical		
Why: To ensure harmonisation with the Global				
Air Navigation Plan and Asia/Pacific Seamless	Follow-up:	⊠Required from States		
ANS Plan				
When: 27-Nov-24	Status: Draft to	be adopted by Subgroup		
Who: ⊠Sub groups ⊠APAC States ⊠ICAO AP	AC RO □ICAO	HQ □Other: XXXX		
Draft Conclusion ATM/SG/12-x: Revised Guidan	nce on the Issuan	ce of SNOWTAM		
What: That,		Expected impact:		
the revised EUR Doc 041 – Guidance on the Issuance	☐ Political / Global			
SNOWTAM (V.1.1) at Attachment E to this paper	•	☐ Inter-regional		
the ICAO Asia/Pacific Regional Office eDocuments	s web-page, to	□ Economic		
replace the existing.				

□ Environmental⊠ Ops/Technical

Status: Draft to be adopted by Subgroup

 \boxtimes Required from States

⊠Sub groups ⊠APAC States ⊠ICAO APAC RO □ICAO HQ □Other: XXXX

Follow-up:

To provide guidance to APAC States for

the issuance of SNOWTAM associated with the

conditions

Who:

When: 27-Nov-24

new Global Reporting Format for runway surface

Regional Implementation Status of AIM Performance Expectations

	Date Last Amended: May 15, 2024																						
	Phase 1										Pha	se 2				1	Phase 3	}					
	1a	1b	l 1c	1d	2	3	4	5	6	7	8	9	10	11	12	13	14a	14 14b	14c	15	16	17	18
Afghanistan	0%	0%	0%	0%	0%	0%	40%	0%	30%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	50%	0%	0%	0%
Australia	100%	100%	100%	100%	100%	100%	100%	60%	100%	100%	100%	100%	100%	70%	100%	60%	0%	100%	0%	0%	100%	0%	0%
Bangladesh	70%	30%	0%	0%	0%	50%	0%	30%	0%	30%	80%	100%	50%	10%	0%	0%	0%	90%	0%	30%	0%	0%	0%
Bhutan	100%	100%	100%	100%	0%	100%	40%	20%	60%	100%	100%	100%	50%	50%	60%	40%	10%	10%	20%	10%	100%	0%	0%
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%
Cambodia	100%	100%	90%	90%	30%	100%	70%	60%	50%	60%	60%	100%	80%	70%	50%	80%	70%	70%	30%	100%	30%	30%	50%
China	100%	100%	100%	80%	100%	100%	100%	100%	100%	100%	100%	90%	40%	70%	100%	100%	10%	50%	70%	100%	30%	10%	10%
Hong Kong, China	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	80%	100%	70%	50%	50%
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%
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%
DPR Korea	100%	100%	100%	100%	70%	50%	100%	100%	100%	100%	100%	100%	70%	40%	100%	60%	20%	20%	50%	80%	20%	20%	10%
Fiji	100%	100%	50%	0%	40%	100%	40%	100%	100%	50%	100%	60%	100%	60%	70%	10%	0%	0%	0%	0%	0%	0%	0%
French Polynesia	100%	100%	80%	100%	50%	0%	80%	80%	80%	100%	60%	100%	80%	100%	100%	80%	50%	50%	0%	100%	60%	60%	20%
India	100%	100%	100%	100%	30%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	70%	100%	0%	0%	0%
Indonesia	100%	100%	100%	100%	90%	80%	100%	100%	100%	100%	100%	100%	70%	70%	100%	50%	10%	10%	10%	50%	50%	50%	0%
Japan	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	80%	80%	100%	80%	80%	90%	0%	100%	0%	0%	0%
Kiribati	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
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%
Malaysia	100%	100%	100%	70%	0%	100%	50%	80%	100%	100%	100%	100%	0%	50%	100%	100%	70%	70%	70%	90%	0%	0%	50%
Maldives	100%	100%	100%	100%	0%	100%	80%	100%	100%	100%	100%	100%	100%	100%	90%	0%	0%	0%	0%	0%	100%	0%	0%
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%
Micronesia	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%	50%	30%
Myanmar	100%	100%	100%	100%	0%	100%	0%	100%	30%	100%	100%	70%	0%	50%	50%	100%	100%	100%	100%	100%	0%	0%	100%
Nauru	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%	100%	100%	50%	100%	100%	90%	100%	100%	30%	0%	50%	0%	50%	50%	50%	0%	0%	0%	0%
New Zealand	100%	100%	100%	100%	0%	100%	50%	100%	80%	100%	100%	100%	0%	80%	100%	90%	100%	80%	40%	80%	0%	60%	80%
Pakistan	100%	100%	100%	100%	100%	100%	90%	100%	100%	90%	100%	100%	70%	70%	100%	100%	80%	100%	60%	100%	80%	50%	50%
Palau	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%
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%
Philippines	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	0%	100%	100%	0%	0%	0%	30%	100%	0%	0%
Republic of Korea	100%	80%	80%	100%	80%	50%	100%	100%	100%	80%	100%	100%	80%	0%	100%	50%	50%	50%	50%	100%	50%	0%	0%
Samoa	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%
Singapore	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%
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%
Sri Lanka	100%	100%	100%	100%	100%	100%	100%	100%	100%	90%	100%	100%	100%	70%	100%	90%	50%	50%	20%	90%	20%	20%	20%
Thailand	100%	100%	100%	100%	80%	100%	90%	100%	100%	80%	100%	90%	100%	100%	100%	30%	20%	0%	0%	100%	30%	20%	20%
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%
Tonga	0%	100%	0%	0%	0%	0%	0%	0%	30%	0%	0%	70%	0%	0%	100%	0%	0%	0%	0%	50%	0%	0%	0%
Vanuatu	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%
Viet Nam	100%	100%	100%	100%	70%	100%	100%	70%	80%	90%	100%	100%	100%	90%	100%	80%	90%	90%	70%	80%	10%	10%	10%
USA	100%	100%	100%	90%	70%	100%	100%	100%	100%	100%	100%	70%	70%	50%	100%	100%	0%	80%	60%	90%	80%	90%	70%
France	0%	100%	0%	0%	0%	0%	0%	0%	80%	0%	0%	100%	0%	0%	100%	100%	0%	0%	0%	80%	0%	0%	10%
	66%	72%	62%	60%	33%	61%	54%	57%	62%	57%	60%	73%	43%	40%	63%	46%	29%	37%	24%	53%	26%	12%	13%

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;
- ${\tt 1c}\ \ requirements\ for\ aeronautical\ information/data\ originators;$
- 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 Air Navigation Plans developed in accordance with the Beijing Declaration, and the provisions of the Asia/Pacific Seamless ANS Plan, include the 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, ideally, separated from the civil aviation administration in accordance with the guidance provided in ICAO Doc 8126 AIS Manual Chapter 2 (2.4.1.2 and 2.4.1.3).
- 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 under the SARPS in Annex 15.

- 7 Established formal agreements between AIS providers and aeronautical data originators under the relevant SARPS in Annex 15 specifying the content, quality, maintenance and timing of the provision of aeronautical data that required to be promulgated in AIP, and the application of quality management process.
- 8 Provided full access to relevant ICAO Annexes and Documents to all personnel having responsibility for the origination, reception, management, publication and/or distribution of aeronautical information and aeronautical data.
- g Ensured full compliance of all aeronautical products with common reference systems in accordance with the relevant SARPS and procedures in Annex 15 and PANS-AIM: WGS-84, MSL/EGM-96 and UTC

Phase 2

- 10 Adapted policy, primary legislation and supporting regulations for Annex 4, Annex 15 SARPS and PANS AIM to support transition to AIM: implementation of digital databases of aeronautical information and production of electronic AIP and other Aeronautical Information Products.
- 11 Adapted training, competency and performance assessment of AIS personnel the establishment and maintenance of digital databases and generation of data sets of aeronautical information, quality management systems, and electronic AIP.
- 12 Implemented and maintained quality management systems encompassing all functions of an 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; and
- 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 a digital database of aeronautical information.

Phase 3

- 16 Adapted policy, primary legislation and supporting regulations for Annex 4 and Annex 15 SARPS, and PANS AIM procedures to support the automated exchange of aeronautical data in a SWIM environment: Interoperability with meteorological products, Communications networks for the exchange of aeronautical data and Electronic aeronautical charts.
- Adapted training, competency development and performance assessment of AIS personnel to support the automated exchange of aeronautical data in a SWIM environment, and the generation of electronic aeronautical charts.
- 18 Exchanged digital data sets of aeronautical information in a SWIM environment, aligned with ASBU DAIM-B2/1, provided Aeronautical Information briefing with integrated meteorological information and Electronic aeronautical charts.

Color Code

Green - Increased implementation **Red** - Decreased implementation

Dark Blue - No Change

5LNC STATUS - AFGHANISTAN

	Total number of 5LNCs	203		
	Terminal Airspace (TA)	94		
	En-route (ENR)	66		
ICARD	FIR	17		
	Other	9		
	No Purpose	17		
	No Coordinates	3		
	Total number of duplicated 5LNCs	12		
	Priority allocated to Afghanistan	5		
Duplicated	Priority allocated to other States	2		
5LNCs	Priority to be determined	0		
	In the process of being resolved	0		
	Completely resolved 5LNCs	1		

	Priority allocated to Afghanistan										
5LNC		States	Priority	Within 1000NM							
BOTAN	2	Afghanistan, Japan	Afghanistan	No							
GOSKI	2	Afghanistan, Japan	Afghanistan	No							
NIPIR	2	Afghanistan, New Zealand	Afghanistan	No							
TAPIS	2	Afghanistan, Malaysia	Afghanistan	No							
KAMAR	2	Afghanistan/Iran (Islamic Republic of) [FIR boundary], Japan	Afghanistan/Iran (Islamic Republic of)	No							

	Priority allocated to other States										
5LNC		States	Priority	Within 1000NM							
BENUL	2	Canada, Afghanistan	Canada	No							
MIRAB	2	Saudi Arabia, Afghanistan	Saudi Arabia	No							

5LNC STATUS - AUSTRALIA

	Total number of 5LNCs	3384
	Terminal Airspace (TA)	1428
	En-route (ENR)	1506
ICARD	FIR	36
	Other	216
	No Purpose	198
	No Coordinates	0

	Total number of duplicated 5LNCs	292
	Priority allocated to Australia	31
Duplicated	Priority allocated to other States	104
5LNCs	Priority to be determined	8
	In the process of being resolved	25
	Completely resolved 5LNCs	124

		Priority allocated to Australia		
5LNC		States	Priority	Within 1000NM
ALDAR	2	Mongolia, Australia	Australia	No
ALDEL	2	Australia, China	Australia	No
BENDO	2	Australia, Ethiopia	Australia	No
DAMIL	2	Australia, New Zealand	Australia	No
DOGAR	2	Australia/Sri Lanka (FIR boundary), China	Australia/Sri Lanka	No
DUBAG	2	Australia, China	Australia	No
EPDAM	2	Australia, Brazil	Australia	No
ESLAR	2	Australia, Chile	Australia	No
FISHA	2	Australia, Hong Kong China	Australia	No
GUKON	2	Australia, New Zealand	Australia	No
IKODA	2	Australia, Maldives	Australia	No
JACKI	2	United States of America, Australia	Australia	No
LEWIS	2	Australia, Tonga	Australia	No
LIDIT	2	Australia/Papua New Guinea, Canada	Australia/Papua New Guinea	No
MAMUT	2	Australia, Venezuela	Australia	No
MEBKA	2	Australia, New Zealand	Australia	No
MONIC	2	Australia, Brazil	Australia	No
NITOM	2	Australia, Viet Nam	Australia	No
NOBAR	2	Australia, New Zealand	Australia	No
NORMA	2	Australia, Japan	Australia	No
OKTON	2	Australia, Malaysia	Australia	No
ONUMA	2	Australia, Japan	Australia	No
PARSI	2	Australia, Nepal	Australia	No
SADAR	2	Australia, Malaysia	Australia	No
SATNA	2	Australia/Indonesia (FIR boundary), Brazil	Australia/Indonesia	No
SCOTT	4	Republic of Korea, Japan, Australia, United States of America	Australia	Yes
SUSAK	2	Australia, Japan	Australia	No
TEMIS	2	Australia, Japan	Australia	No
TOGAM	2	Australia, Maldives	Australia	No
TOSAS	2	Australia/Papua New Guinea (FIR boundary), China	Australia	No
VICMA	2	Australia, United States of America	Australia	No

ALEXI 2 Colombia, Australia ALEXI 2 United States of America, Australia ALEXI 2 Carnada, Australia ANOAS 2 Brazil, Australia ANOAS 2 Brazil, Australia ANOAS 2 Brazil, Australia ANOAS 2 Brazil, Australia ARPILE 4 United States of America, Australia ARRAN 2 United States of America, Australia BARTHA 2 United States of America, Australia BARTHA 3 United States of America, Australia BARTHA 3 Australia, United Kingdom, United States of America BERNI 3 Australia, United Kingdom, United States of America BERNI 4 United States of America, Australia BERNI 2 United States of America, Australia BERNI 4 Algeria, Brazil, United States of America, Australia BURPA 2 Colombia, Australia CHOOK 2 United States of America, Australia CHOOK 3 CHORNIA, Japan, Australia, Polymesie Française, Brazil, Cuba, Mexico, CORRIA 2 Mexico, Australia CHOOK 3 CHORNIA, Japan, Australia, Polymesie Française, Brazil, Cuba, Mexico, CHORNIA 3 CHORNIA, Australia, Polymesie Française, Brazil, Cuba, Mexico, CHORNIA 3 CHORNIA, Australia, United States of America United States of America, Australia CHORNIA 3 CHORNIA, Australia CHORNI			Priority allocated to other States		
ALERA 2 United States of America, Australia United States of America No. AMITY 2 Australia, Japan No. AMITY 2 United States of America, Junited Kingdom, Australia United States of America No. AMITY 2 United States of America, Australia United States of America No. AMITY 2 United States of America, Australia United States of America No. AMITY 2 Japan, Australia Polymeria, Junited States of America Japan No. BERNI 2 United States of America, Australia United States of America No. Algeria, Brazil, United States of America, Australia United States of America No. BERNI 2 United States of America, Australia United States of America No. Algeria, Brazil, United States of America, Australia United States of America No. Algeria, Brazil, United States of America, Australia United States of America, Australia United States of America No. Algeria, Brazil, United States of America, Australia United States of America No. Algeria, Brazil, United States of America, No. Algeria, Brazil of America, Australia United States of America No. Algeria, Brazil of America, Australia United States of America No. Algeria, Brazil of America, Australia United States of America No. Algeria, Brazil of America, Australia United States of America No. Algeria, Brazil of America, Australia No. Algeria, Brazil No. Al	5LNC		States	Priority	Within 1000NM
ALIRA 2 Canada, Australia Apan No. AMTY 2 Canada, Australia Apan No. AMTY 2 Australia, Japan No. AMGAS 2 Brazil, Australia Apan No. AMGAS 2 Brazil, Australia Apan United States of America, Junited Kingdom, Australia, Japan United Kingdom No. ARRAN 2 United States of America, Australia United Kingdom No. ARRAN 2 United Kingdom, Australia United Kingdom No. BEKKA 2 Japan, Australia United Kingdom, Australia United States of America United Kingdom No. BEKKA 2 Japan, Australia United States of America United States of America No. BERNI 2 United States of America, Australia United States of America No. BERNI 4 Algeria, Brazil, United States of America, Australia United States of America No. Colombia No. Australia United States of America No. Colombia	ALBAK	2	Colombia, Australia	Colombia	No
AMTY 2 Australia, Japan No. AAPPLE 4 United States of America, United Kingdom, Australia, Japan United Kingdom No. AAPPLE 4 United States of America, Australia United Kingdom No. AARRAN 2 United States of America, Australia United Kingdom No. AARRAN 2 United States of America, Australia United Kingdom No. AARRAN 3 Australia, United Kingdom, Australia United Kingdom No. BARTN 3 Australia, United Kingdom, United States of America United Kingdom No. BERKN 2 Japan, Australia United States of America, Australia United States of America No. BERTI 4 Algeria, Brazil, United States of America, Australia United States of America No. BRADD 2 ConadarUnited States of America (FIR boundary), Australia United States of America No. CANTY 2 United States of America, Australia United States of America No. CANTY 2 United States of America, Australia United States of America No. CORNA 2 United States of America, Australia United States of America No. CORNA 2 United States of America, Australia United States of America No. CORNA 2 United States of America, Australia United States of America No. CORNA 2 United States of America, Australia United States of America No. CORNA 2 United States of America, Australia United States of America No. CORNA 2 United States of America, Australia United States of America No. CORNA 2 No. CORN	ALEXI	2	United States of America, Australia	United States of America	No
ANGAS 2 Brazil, Australia Prazil, Australia United Kingdom, Australia, Japan United Kingdom No. ARRAN 2 United States of America, Australia United States of America No. ARRAN 2 United Kingdom, Australia United Kingdom No. Australia United Kingdom, Australia United Kingdom No. Australia United Kingdom, Australia United Kingdom No. BERKIN 3 Australia, United Kingdom, United States of America United Kingdom No. BERKIN 2 Japan, Australia United States of America, Australia United States of America No. BERKIN 2 United States of America, Australia United States of America No. BERKIN 2 Canada/United States of America, Australia United States of America No. BURPA 2 Colombia, Australia Colombia, Australia United States of America No. CORNY 2 United States of America, Australia United States of America No. CORNY 2 United States of America, Australia United States of America No. CORNY 2 United States of America, Australia United States of America No. CORNE 2 United States of America, Australia United States of America No. CORNE 2 United States of America, Australia United States of America No. CORNE 2 United States of America, Australia United States of America No. CORNE 2 United States of America, Australia United States of America No. CORNE 2 United States of America, Australia United States of America No. CORNE 2 United States of America, Australia Mexico, Australia United States of America No. CORNE 2 United States of America, Australia United States of America No. No. DIPSO 2 United States of America, Australia United States of America No. DIPSO 2 United States of America, Australia United States of America No. No. DIPSO 2 United States of America, Australia United States of America No. DIPSO 2 United States of America, Australia United States of America No. No. DIPSO 2 United States of America, Australia United States of America No. DIPSO 2 United States of America, Australia United States of America No. No. DIPSO 2 United States of America, Australia United States of America No. No. DIPSO 2 United States of America	ALIRA	2	Canada, Australia	Canada	No
APPLE 4 United States of America, United Kingdom, Australia, Japan United Kingdom No. ARTHA 2 United Kingdom, Australia United Kingdom, Australia United Kingdom, Australia United Kingdom, Un	AMITY	2	Australia, Japan	Japan	No
ARRAN 2 United States of America, Australia United States of America (No ARTHA 2 United Kingdom Australia United Kingdom (No BERK) 3 Australia, United Kingdom, Australia Japan (No BERK) 2 Japan, Australia United Kingdom, Australia United Kingdom (No BERK) 2 Japan, Australia United States of America (No BERK) 2 United States of America, Australia United States of America (No BERK) 2 United States of America (File boundary), Australia United States of America (No Canada/United States of America (No Control) (No Contr		2	·		No
ARTHA 2 United Kingdom, Australia United Kingdom No BARTN 3 Australia, United Kingdom No BERKIA 2 Japan, Australia United States of America, Australia United States of America No BERNI 2 United States of America, Australia United States of America No Colombia No	APPLE	4	United States of America, United Kingdom, Australia, Japan	United Kingdom	No
BARTN 3 A Justralia, United Kingdom, United States of America Japan No BEKKIA 2 Japan, Australia United States of America, Australia United States of America No BERTI 4 Algeria, Brazil, United States of America, Australia United States of America No BERTI 4 Algeria, Brazil, United States of America, Australia United States of America No Glombia Canada/United States of America No Glombia No Canney Organization United States of America No Colombia No Canney Organization United States of America No Colombia United States of America, Australia United States of America No Chrock 2 United States of America, Australia United States of America No China, Japan, Australia, Polynesie Française, Brazil, Cuba, Mexico, Australia United States of America No Corsa No Mexico, Australia No Mexico, Australia Prancelltaly No Corson No Hong Kong China, Australia, United States of America United States of America No OLALEY 3 Australia, United Kingdom, United States of America United Kingdom No No DALEY 2 United States of America, Australia United Kingdom United Kingdom No No DALEY 2 United States of America, Australia United States of America No OLALEY 3 Australia, United States of America United States of America No OLALEY 3 Australia, United States of America United States of America No OLALEY 3 Australia, United States of America, Australia United States of America No OLALEY 3 Australia, United States of America, No OLALEY 3 Australia, United States of America No OLALEY 3 Australia, No OLALEY 3 United States of America, Australia United States of America No OLALEY 3 United States of America, Australia United States of America N	ARRAN	2	United States of America, Australia	United States of America	No
BERKI 2 United States of America, Australia United States of America (Australia United States of America (COCRAL (CORAL Australia) United States of America (Australia United States of America (COCRAL (CORAL) United States of America, Australia (United States of America (COCRAL) United States of America, Australia (United States of America (COCRAL) United States of America, Australia (United States of America United States of America (COCRAL) United States of America, Australia (United States of America (United St	ARTHA	2	United Kingdom, Australia	United Kingdom	No
BERNI 2 United States of America, Australia United States of America No BERTI 4 Algeria, Brazil, United States of America No United States of America No BIANDD 2 Canada/United States of America (FIF boundary), Australia Canada/United States of America No Colombia United States of America No United States of America No United States of America No China, Japan, Australia, Polypresie Française, Brazil, Cuba, Mexico Brazil United States of America No Colombia No C	BARTN	3	Australia, United Kingdom, United States of America	United Kingdom	No
BERTI 4 A Algeria, Brazil, United States of America, Australia Canada/United States of America No BRADD 2 Canada/United States of America (Fir boundary), Australia Calombia Cantry 2 United States of America, Australia United States of America No Colombia (Australia) United States of America No Colombia (Australia) United States of America No Colombia United States of America, Australia United States of America No Colombia United States of America (COCESNA) United States of America, Australia United States of America No Corsa 2 United States of America, Australia Mexico, Australia Mexico, Australia Mexico, Australia Mexico, Australia Mexico, Australia Individual (Fira boundary), Australia Mexico, Australia Individual (Fira boundary), Australia Mexico, Australia Individual (Fira boundary), Australia United States of America United State	BEKKA	2	Japan, Australia	Japan	No
BRADD 2 Colamata/United States of America (FIR boundary), Australia Canada/United States of America No COIOmbia, Australia United States of America, Australia United States of America No United States of America, Australia United States of America No United States of America, Australia United States of America No CORAL 8 China, Japan, Australia, Polynesie Française, Brazil, Cuba, Mexico, Correct No.	BERNI	2	United States of America, Australia	United States of America	No
BURPA 2 Colombia, Australia Colombia Not CANTY 2 United States of America, Australia United States of America Not ChOCK 2 United States of America, Australia United States of America Not Corea. CORAL 8 China, Japan, Australia, Polynesie Française, Brazil, Cuba, Mexico, Honduras (COCESNA) Honduras (COCESNA) Honduras (COCESNA) CORSA 2 Mexico, Australia Polynesie Française, Brazil, Cuba, Mexico, Australia into tused by Mexico. CORSA 2 Mexico, Australia Mexico, Australia Franceltaly Not Corea. CORSA 2 Mexico, Australia Mexico, Australia Franceltaly Not Corea. CORSI 2 Franceltaly (FIR boundary), Australia Franceltaly Not Corea. CORSI 3 Hong Kong China, Australia, United States of America United States of America Not DALEY 3 Australia, United States of America United Kingdom Not DALEY 3 Australia, United States of America United Kingdom Not DAYBO 2 United States of America, Australia United States of America Not DEBAY 2 United States of America, Australia United States of America Not DIPSO 2 United States of America, Australia United States of America Not DIPSO 2 United Kingdom, Australia United States of America Not DIPSO 2 United Kingdom, Australia United States of America Not DIPSO 2 United Kingdom, Australia United States of America Not DIPSO 3 Australia, New Zealand, United States of America United States of America Not DIVES 3 Australia, New Zealand, United States of America United States of America Not DIVES 3 Australia, New Zealand, United States of America United States of America Not DIVES 3 Australia, New Zealand, United States of America United States of America Not DIVES 3 Australia, Australia United States of America Not DIVES 3 Australia, Australia United States of America Not DIVES 3 Australia, Australia United States of America Not DIVES 4 United States of America, Australia United States of America Not DIVES 4 United States of America, Australia United States of America Not DIVES 4 United States of America, Australia United States of America Not DIVES 4 United States of America, Australia Un	BERTI	4	Algeria, Brazil, United States of America, Australia	United States of America	No
CANTY 2 United States of America, Australia CHOOK 2 United States of America, Australia CHOOK 2 United States of America, Australia CORAL China, Japan, Australia, Polynesie Française, Brazil, Cuba, Mexico, Honduras (COCESNA) CORNE 2 United States of America, Australia United States of America No CORSA 2 Mexico, Australia United States of America No CORSA 2 Mexico, Australia United States of America No CORSA 2 Mexico, Australia COTON 3 Hong Kong China, Australia, United States of America United States of America No DALEY 3 Australia, United Kingdom, United States of America United States of America No DALEY 3 Australia, United Kingdom, United States of America United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 3 Australia, China, Mali (ASECNA) Mali (ASECNA) No DIPSO 2 United Kingdom, Australia United Kingdom No DOREN 2 Cyprus/Turkey (Filk boundary), Australia United States of America No DUNES 3 Australia, New Zealand, United States of America United States of America No DUNES 3 Australia, New Zealand, United States of America United States of America No DUNNE 3 Australia, Philippines, United States of America United States of America No DUNNE 2 United States of America, Australia United States of America No DUNNE 3 Australia, Philippines, United States of America United States of America No DUNNE 3 Australia, Philippines, United States of America No DUNNE 4 United States of America, Australia United States of America No DUNNE 5 Australia United States of America No DUNNE 6 Malaysia, Australia United States of America No DUNNE 7 United States of America, Australia United States of America No DUNDE 9 Malaysia, Australia United States of America No DUNDE 9 United States of America, Australia United States of America No DUNDE 9 United States of America, Australia United States of America No DUNDE 9 United States of Ameri	BRADD	2	Canada/United States of America (FIR boundary), Australia	Canada/United States of America	No
CHOOK 2 United States of America, Australia United States of America No CORAL 8 China, Japan, Australia, Polynesie Française, Brazil, Cuba, Mexico. Brazil Yest Honduras (COCESNA) states of America, Australia United States of America No CORSA 2 Mexico, Australia United States of America No CORSA 2 Mexico, Australia United States of America No COTON 3 Hong Kong China, Australia, United States of America United States of America No COTON 3 Hong Kong China, Australia, United States of America United States of America No DALEY 3 Australia, United States of America United States of America No DAYPO 2 United States of America, Australia United States of America No COTON 3 Hong Kong China, Australia United States of America United States of America No DAYPO 2 United States of America, Australia United States of America No COTON 3 Australia, China, Mali (ASECNA) Mali (ASECNA) No COTON 3 Australia, China, Mali (ASECNA) Mali (ASECNA) No COTON 3 Australia, China, Mali (ASECNA) Mali (ASECNA) No COTON 3 Australia, China, Mali (ASECNA) No COTON 3 Australia, New Zealand, United States of America United States of America No COTON 3 Australia, New Zealand, United States of America United States of America No COTON 3 Australia, New Zealand, United States of America United States of America No COTON 3 Australia, Philippines, United States of America United States of America No COTON 3 Australia, Philippines, United States of America United States of America No COTON 3 Australia, New Zealand, Australia United States of America No COTON 3 Australia, New Zealand, Australia United States of America No COTON 3 Australia, New Zealand, Australia United States of America No COTON 3 Australia, New Zealand, Australia United States of America No COTON 3 United States of America,	BURPA	2	Colombia, Australia	Colombia	No
CORAL 8 China, Japan, Australia, Polynesie Française, Brazil, Cuba, Mexico. CORNE 2 United States of America, Australia United States of America No CORSA 2 Mexico, Australia Mexico, Australia France/Italy FIR boundary), Australia France/Italy Prance/Italy FIR boundary), Australia France/Italy No COTON 3 Hong Kong China, Australia, United States of America United States of America No DALEY 3 Australia, United Kingdom, United States of America United States of America No DALEY 3 Australia, United Kingdom, United States of America United States of America No DALEY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 3 Australia, New Zealand, United States of America United States of America No DUNES 3 Australia, New Zealand, United States of America United States of America No DUNES 3 Australia, Philippines, United States of America United States of America No DUNNE 2 United States of America, Australia United States of America No DUNNE 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No No DEBAY 2 United States of America, Australia United States of America No N	CANTY	2	United States of America, Australia	United States of America	No
CORNE 2 United States of America, Australia United States of America Necorable States of America Necorable States of America, Australia United States of America Necorable States of America Necorable States of America Necorable States of America United States of America Necorable States of America United States of America United States of America Necorable States of America United States of America United States of America Necorable States of America, Australia United States of America United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, United States of America Necorable States of America, United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable States of America, Australia United States of America Necorable State	CHOOK	2	United States of America, Australia	United States of America	No
CORSA 2 Mexico, Australia Mexico. Australia fi not used by Mexico. No CORSI 2 France/Italy (Fir Boundary), Australia France/Italy (Fir Boundary), Australia France/Italy (Fir Boundary), Australia France/Italy (Dilted States of America United States of America No DAYBO 2 United States of America, Australia United States of America United States of America No DAYBO 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United Kingdom, Australia United States of America No DIPSO 2 United Kingdom, Australia United Kingdom No DOREN 2 Cyprus/Turkey (Fix Boundary), Australia United States of America Oxprus/Turkey (Fix Boundary), Australia United States of America No DURES 3 Australia, New Zealand, United States of America United States of America No DUNES 3 Australia, Spain, United States of America, United States of America No DUNES 3 Australia, Spain, United States of America, United States of America No DUNES 3 Australia, Philippines, United States of America United States of America No DUNES 2 United States of America, Australia United States of America No DUNES 2 Malaysia, Australia Malaysia No Malays	CORAL	8		Brazil	Yes
CORSI 2 France/Italy (FIR boundary), Australia France/Italy No COTON 3 Hong Kong China, Australia, United States of America United States of America DALEY 3 Australia, United Kingdom, United States of America United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DIPSO 2 United Kingdom, Australia United States of America No DIPSO 2 United Kingdom, Australia United Kingdom No DIPSO 2 United Kingdom, Australia United Kingdom No DIPSO 2 United Kingdom, Australia United Kingdom No DIPSO 2 United States of America, Australia United States of America No DIPSO 3 Australia, Now Zealand, United States of America United States of America No DIPSO 3 Australia, Now Zealand, United States of America United States of America No DIPSO 3 Australia, Spain, United States of America United States of America No DIPSO 3 Australia, Spain, United States of America, United States of America No DIPSO 2 United States of America, Australia United States of America No DIPSO 2 United States of America, Australia United States of America No DIPSO 2 United States of America, Australia United States of America No DIPSO 2 Malaysia, Australia No DIPSO 2 United States of America, Australia United States of America No DIPSO 2 United States of America, Australia United States of America No DIPSO 2 United States of America, Australia United States of America No DIPSO 2 United States of America, Australia United States of America No DIPSO 2 United States of America, Australia United States of America No DIPSO 2 United States of America, Australia United States of America No DIPSO 2 United States of America, Australia United States of America No DIPSO 2 United States of America, Australia United States of America No DIPSO 2 United States of America, Australia United States of America No DIPSO 2 United States of America, Australia United States of America No DIPSO 2 United States of America, Australia United States of America No DIPSO 2	CORNE	2	United States of America, Australia	United States of America	No
COTON 3 Hong Kong China, Australia, United States of America United States of America No DALEY 3 Australia, United Kingdom, United States of America United Kingdom No DAYBO 2 United States of America, Australia United States of America, Australia United States of America, Australia United States of America No DENIS 3 Australia, China, Mali (ASECNA) Mali (ASECNA) No DENIS 3 Australia, China United States of America, Australia United States of America No DENIS 2 United Kingdom, Australia United States of America No DRAIN 2 United States of America, Australia United States of America No DRAIN 2 United States of America, Australia United States of America No DUKES 3 Australia, New Zealand, United States of America United States of America No DUNES 3 Australia, Spain, United States of America, United States of America No DUNNE 2 United States of America, Australia United States of America No DUNNE 2 United States of America, Australia United States of America No ELIZA 3 Australia, Philippines, United States of America United States of America No ENDOR 2 Malaysia, Australia United States of America No ENDOR 2 Malaysia, Australia United States of America, Australia United States of America No ENDOR 2 United States of America, Australia United States of America No ENULY 2 United States of America, Australia United States of America No ENULY 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia Unite	CORSA	2	Mexico, Australia	Mexico. Australia if not used by Mexico.	No
DALEY 3 Australia, United Kingdom, United States of America United Kingdom No DAYBO 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DEBAY 3 Australia, China, Mali (ASECNA) Mali (ASECNA) No DIPSO 2 United Kingdom, Australia United Kingdom No DOREN 2 Cyprus/Turkey (FIR boundary), Australia United Kingdom No DRAIN 2 United States of America, Australia United States of America No DRAIN 2 United States of America, Australia United States of America No DUNES 3 Australia, New Zealand, United States of America United States of America No DUNNE 2 United States of America, Australia United States of America No DUNNE 2 United States of America, Australia United States of America No DUNNE 2 United States of America, Australia United States of America No DUNNE 2 United States of America, Australia United States of America No DUNNE 2 United States of America, Australia United States of America No DUNNE 2 United States of America, Australia United States of America No DENTRA 2 United States of America, Australia United States of America No DENTRA 2 United States of America, Australia United States of America No DENTRA 2 United States of America, Australia United States of America No DELITA 2 United States of America, Australia United States of America No DELITA 2 United States of America, Australia United States of America No DELITA 2 United States of America, Australia United States of America No DELITA 2 United States of America, Australia United States of America No DELITA 2 United States of America, Australia United States of America No DELITA 2 United States of America, Australia United States of America No DELITA 2 United States of America, Australia United States of America No DELITA 2 United States of America, Australia United States of America No DELITA 2 United States of America, Australia United States of America No DELITA 2 United States of America, Australia United States of America No DELITA 3 United States of America, Aust	CORSI	2	France/Italy (FIR boundary), Australia	France/Italy	No
DAYBO 2 United States of America, Australia United States of America No DEBAY 2 United States of America, Australia United States of America No DENIS 3 Australia, China, Mali (ASECNA) Mali (ASECNA) No DIPSO 2 United Kingdom, Australia United Kingdom No DOREN 2 Cyprus/Turkey (FIR boundary), Australia United Kingdom No DOREN 2 Cyprus/Turkey (FIR boundary), Australia United States of America No DUKES 3 Australia, New Zealand, United States of America United States of America No DUNES 3 Australia, New Zealand, United States of America United States of America No DUNES 3 Australia, Philippines, United States of America United States of America No DUNES 3 Australia, Philippines, United States of America United States of America No ELIZA 3 Australia, Philippines, United States of America United States of America No ENDOR 2 Malaysia, Australia Malaysia Malaysia No ENTRA 2 United States of America, Australia United States of America No FIKUL 2 United States of America, Australia United States of America No FIKUL 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No HAYES 2 United States of America, Australia United States of America No HAYES 2 United States of America, Australia United States of America No HAYES 2 United States of America, Australia United States of America No HAYES 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of	COTON	3	Hong Kong China, Australia, United States of America	United States of America	No
DEBAY 2 United States of America, Australia United States of America No DENIS 3 Australia, China, Mali (ASECNA) Mali (ASECNA) No DIPSO 2 United Kingdom, Australia United Kingdom No DOREN 2 Cyprus/Turkey (FIR boundary), Australia Cyprus/Turkey (FIR boundary), Australia United States of America No DRAIN 2 United States of America, Australia United States of America No DUKES 3 Australia, New Zealand, United States of America United States of America No DUNES 3 Australia, Spain, United States of America, United States of America No DUNES 3 Australia, Philippines, United States of America United States of America No DUNIS 2 United States of America, Australia United States of America No DUNIS 2 United States of America, Australia United States of America No ENIDOR 2 Malaysia, Australia Malaysia No Reindor States of America, Australia United States of America No ENITRA 2 United States of America, Australia United States of America No ENINS 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No HAYES 2 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 4 United States of America, Australia United States of America No HIPPO 4 United States of	DALEY	3	Australia, United Kingdom, United States of America	United Kingdom	No
DENIS 3 Australia, China, Mali (ASECNA) Mali (ASECNA) No DIPSO 2 United Kingdom, Australia United Kingdom No DOREN 2 Cyprus/Turkey (FIR boundary), Australia Cyprus/Turkey (PIR boundary), Australia United States of America No DUKES 3 Australia, New Zealand, United States of America United States of America No DUKES 3 Australia, New Zealand, United States of America United States of America No DUNNES 3 Australia, Spain, United States of America, United States of America No DUNNE 2 United States (America, Australia United States of America No DUNNE 2 United States (America, Australia United States of America No DUNNE 2 United States of America No Australia, Philippines, United States of America United States of America No ENDOR 2 Malaysia, Australia Malaysia Malaysia No ENTRA 2 United States of America, Australia United States of America No ENTRA 2 United States of America, Australia United States of America No ENULY 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia	DAYBO	2	United States of America, Australia	United States of America	No
DIPSO 2 United Kingdom, Australia United Kingdom No DOREN 2 Cyprus/Turkey (FIR boundary), Australia Cyprus/Turkey (Draw) No DRAIN 2 United States of America, Australia United States of America No DUKES 3 Australia, New Zealand, United States of America United States of America No DUNES 3 Australia, Spain, United States of America, United States of America No DUNES 3 Australia, Spain, United States of America, United States of America No DUNES 2 United States of America, Australia United States of America No ELIZA 3 Australia, Philippines, United States of America United States of America No ENDOR 2 Malaysia, Australia United States of America No ENTRA 2 United States of America, Australia United States of America No ENTRA 2 United States of America, Australia United States of America No ENTRA 2 United States of America, Australia United States of America No EULY 2 United States of America, Australia United States of America No EULY 2 United States of America, Australia United States of America No EULY 2 United States of America, Australia United States of America No EULY 2 United States of America, Australia United States of America No EULY 2 United States of America, Australia United States of America No EULY 2 United States of America, Australia United States of America No EULY 2 United States of America, Australia United States of America No EULY 2 United States of America, Australia United States of America No EULY 2 United States of America, Australia United States of America No EULY 3 United States of America, Australia United States of America No EULY 3 United States of America, Australia United States of America No EULY 3 United States of America, Australia United States of America No EULY 4 United States of America, Australia United States of America No EULY 4 United States of America, Australia United States of America No EULY 4 United States of America, Australia United States of America No EULY 4 United States of America, Australia United States of America No EULY 5 United States of America, Austral	DEBAY	2	United States of America, Australia	United States of America	No
DOREN 2 Cyprus/Turkey (FIR boundary), Australia Cyprus/Turkey No DRAIN 2 United States of America, Australia United States of America No DUKES 3 Australia, New Zealand, United States of America United States of America No DUNES 3 Australia, Spain, United States of America, United States of America No DUNE 2 United States of America, Australia United States of America No DUNNE 2 United States of America, Australia United States of America No ENDOR 2 Malaysia, Australia United States of America No ENDOR 2 Malaysia, Australia United States of America No ENTRA 2 United States of America, Australia United States of America No FIKUL 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia Unite	DENIS	3	Australia, China, Mali (ASECNA)	Mali (ASECNA)	No
DRAIN 2 United States of America, Australia United States of America No DUKES 3 Australia, New Zealand, United States of America United States of America No DUNES 3 Australia, Spain, United States of America, United States of America No DUNNE 2 United States of America, Australia United States of America No DUNNE 2 United States of America, Australia United States of America No ELIZA 3 Australia, Philippines, United States of America United States of America No ENDOR 2 Malaysia, Australia Malaysia No ENTRA 2 United States of America, Australia United States of America No EIKUL 2 United States of America, Australia United States of America No EIKUL 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No HAYES 2 United States of America, Australia United States of America No HAYES 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of Ame	DIPSO	2	United Kingdom, Australia	United Kingdom	No
DUKES 3 Australia, New Zealand, United States of America United States of America No DUNES 3 Australia, Spain, United States of America, United States of America No DUNNE 2 United States of America, Australia United States of America No ELIZA 3 Australia, Philippines, United States of America United States of America No ELIZA 3 Australia, Philippines, United States of America United States of America No ENDOR 2 Malaysia, Australia Malaysia Malaysia No ENTRA 2 United States of America, Australia United States of America No FIKUL 2 United States of America, Australia United States of America No FINNS 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO	DOREN	2	Cyprus/Turkey (FIR boundary), Australia	Cyprus/Turkey	No
DUNES 3 Australia, Spain, United States of America, United States of America No DUNNE 2 United States of America, Australia United States of America No ELIZA 3 Australia, Philippines, United States of America United States of America No ENDOR 2 Malaysia, Australia Malaysia Malaysia No ENTRA 2 United States of America, Australia United States of America No FIKUL 2 United States of America, Australia United States of America No FIKUL 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HAPES 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia, China United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No JULLY 4 United States of America, Australia United States of America No KELLY 4 United States of America, Australia United States of America No KERRI 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia Germany No United States of America No Merica, Australia Germany United States of America No Merica, Australia United States	DRAIN	2	United States of America, Australia	United States of America	No
DUNNE 2 United States of America, Australia United States of America No ELIZA 3 Australia, Philippines, United States of America United States of America No ENDOR 2 Malaysia, Australia Malaysia United States of America, Australia United States of America No ENTRA 2 United States of America, Australia United States of America No FIKUL 2 United States of America, Australia United States of America No ENINS 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HAPRES 2 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia, China United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No JULIA 4 United States of America, Australia United States of America No KELLY 4 United States of America, Japan, New Zealand, Australia United States of America No KERRI 2 United States of America, United Kingdom, Japan, Australia United States of America No KERRS 2 United States of America, Australia United States of America No Mo KERRS 2 United States of America, Australia United States of America No Un	DUKES	3	Australia, New Zealand, United States of America	United States of America	No
ELIZA 3 Australia, Philippines, United States of America United States of America No ENDOR 2 Malaysia, Australia Malaysia No ENTRA 2 United States of America, Australia United States of America No FIKUL 2 United States of America, Australia United States of America No FIKUL 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HAYES 2 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia, China United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HORUS 2 United States of America, Australia United States of America No JELLI 2 United States of America, Australia United States of America No JULIA 4 United States of America, Australia United States of America No JULIA 4 United States of America, Japan, New Zealand, Australia United States of America No KELLY 4 United States of America, Japan, New Zealand, Australia United States of America No KELLY 4 United States of America, Australia United States of America No KELY 4 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No LANGL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia United States of America No LANGL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia United States of America No LANGL 2 United States of America, Australia United States of America No LANGL 2 United States of America, Australia United States of America No LANGL 2 United States of America, Australia United States of America No LANGL 2 United States of America, Australia United States of America No LANGL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia United States of America No LANGL 2 United States of America, Austr	DUNES	3	Australia, Spain, United States of America,	United States of America	No
ENDOR 2 Malaysia, Australia Malaysia No ENTRA 2 United States of America, Australia United States of America No FIKUL 2 United States of America, Australia United States of America No FIKUL 2 United States of America, Australia United States of America FIKUL 2 United States of America, Australia United States of America FIKUL 2 United States of America, Australia United States of America FIKUL 2 United States of America, Australia United States of America FIKUL 2 United States of America, Australia FIKUL 2 United States of America, Australia FIKUL 3 United States of America, Australia FIKUL 4 United States of America, Australia FIKUL 5 United States of America, Australia FIKUL 6 United States of America FIKUL 7 United States of America, Australia FIKUL 7 United States of America FIKUL 7 United States of America, Australia FIKUL 7 United States of America FIKUL 8 United States of America FIKUL 8 United States of America FIKUL 9 United States of	DUNNE	2	United States of America, Australia	United States of America	No
ENTRA 2 United States of America, Australia United States of America No FIKUL 2 United States of America, Australia United States of America No GILLY 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HORUS 2 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia United States of America No HIPPO 4 United States of America, Australia United States of America No HIPPO 5 United States of America, Australia United States of America No HIPPO 8 United States of America No HIPPO 9 United States of Ameri	ELIZA	3	Australia, Philippines, United States of America	United States of America	No
FIKUL 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia, China United States of America No HOPLA 2 United States of America, Australia, China United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 3 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Japan, New Zealand, Australia United States of America No HOPLA 4 United States of America, Japan, Australia Brazil No HOPLA 4 United States of America, United Kingdom, Japan, Australia United Kingdom No HOPLA 4 United States of America, Australia United States of America No HOPLA 5 United States of America, Australia United States of America No HOPLA 5 United States of America, Australia Germany No HOPLA 5 United States of America, Australia Germany No HOPLA 5 United States of America, Australia United States of America No HOPLA 5 United States of America, Australia United States of America No HOPLA 5 United States of America, Australia United States of America No HOPLA 5 United States of America, Australia United States of America No HOPLA 5 United States of America, Australia United States of America No HOPLA 5 United States of America, Australia United States of America No HOPLA 5 United States of America, Australia United States of America No HOPLA 5 United States of Ame	ENDOR	2	Malaysia, Australia	Malaysia	No
FINNS 2 United States of America, Australia United States of America No GULLY 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HAYES 2 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia, China United States of America No HOPLA 2 United States of America, Australia United States of America No HORUS 2 United States of America, Australia United States of America No HORUS 2 United States of America, Australia United States of America No JELLI 2 United States of America, Australia Bahamas No JELLI 2 United States of America, Australia United States of America No JULLY 4 United States of America, Australia United States of America No JULLY 4 United States of America, Brazil, Japan, Australia United States of America No KERLY 4 United States of America, United Kingdom, Japan, Australia Brazil No KERRI 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KEVIN 3 United States of America, Australia Germany No LAMSI 2 Germany, Australia Germany No LAMOL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia Kazakhstan/Uzbekistan No LAWER 2 United States of America, Australia United States of America No LAWER 2 United States of America, Australia United States of America No LAWER 2 United States of America, Australia United States of America No LAWER 2 United States of America, Australia United States of America No LAWER 2 United States of America, Australia United States of America No United States of America, Australia United States of America No United States of America, Australia United States of America No United States of America, Australia United States of America No United States of America, Australia United States of America No United Sta	ENTRA	2	United States of America, Australia	United States of America	No
GULLY 2 United States of America, Australia United States of America No HARRO 2 United States of America, Australia United States of America No HAYES 2 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia, China United States of America No HOPLA 2 United States of America, Australia United States of America No HORUS 2 United States of America, Australia United States of America No HORUS 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 2 United States of America, Australia United States of America No HOPLA 3 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 4 United States of America, Brazil, Japan, Australia United States of America No HOPLA 4 United States of America, United Kingdom, Japan, Australia United Kingdom No KERRI 2 United States of America, Australia United States of America No HOPLA 4 United States of America, Australia United States of America No HOPLA 5 United States of America, Australia United States of America No HOPLA 5 United States of Americ	FIKUL	2	United States of America, Australia	United States of America	No
HARRO 2 United States of America, Australia United States of America No HAYES 2 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia, China United States of America No HOPLA 2 United States of America, Australia United States of America No HORUS 2 United States of America, Australia United States of America No INDEE 2 Bahamas, Australia United States of America No JELLI 2 United States of America, Australia United States of America No JULIA 4 United States of America, Japan, New Zealand, Australia United States of America No JULIA 4 United States of America, Brazil, Japan, Australia Brazil No KELLY 4 United States of America, United Kingdom, Japan, Australia Brazil No KERRI 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KEVIN 3 United States of America, Australia, Republic of Korea United States of America No LAMSI 2 Germany, Australia Germany No LANOL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia Kazakhstan/Uzbekistan No LAVER 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America	FINNS	2	United States of America, Australia	United States of America	No
HAYES 2 United States of America, Australia United States of America No HIPPO 3 United States of America, Australia, China United States of America No HOPLA 2 United States of America, Australia United States of America No HORUS 2 United States of America, Australia United States of America No INDEE 2 Bahamas, Australia Bahamas No JELLI 2 United States of America, Australia United States of America No JOLLY 4 United States of America, Australia United States of America No JULIA 4 United States of America, Brazil, Japan, Australia United States of America No KELLY 4 United States of America, United Kingdom, Japan, Australia Brazil No KERRI 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KEVIN 3 United States of America, Australia, Republic of Korea United States of America No LAMSI 2 Germany, Australia Kazakhstan/Uzbekistan No LAVER 2 United States of America, Australia United States of America No LAVER 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No United States of America	GULLY	2	United States of America, Australia	United States of America	No
HIPPO 3 United States of America, Australia, China United States of America No HOPLA 2 United States of America, Australia United States of America No HORUS 2 United States of America, Australia United States of America No INDEE 2 Bahamas, Australia Bahamas No JELLI 2 United States of America, Australia United States of America No JOLLY 4 United States of America, Japan, New Zealand, Australia United States of America No JULIA 4 United States of America, Brazil, Japan, Australia Brazil No KELLY 4 United States of America, United Kingdom, Japan, Australia United Kingdom No KERRI 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KEVIN 3 United States of America, Australia, Republic of Korea United States of America No LAMSI 2 Germany, Australia Germany No LANOL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia Kazakhstan/Uzbekistan No LAVER 2 United States of America, Australia United States of America No LAWER 2 United States of America, Australia United States of America No LAWER 2 United States of America, Australia United States of America No LAWER 2 United States of America, Australia United States of America No LAWER 2 United States of America, Australia United States of America No United States of America	HARRO	2	United States of America, Australia	United States of America	No
HOPLA 2 United States of America, Australia United States of America No INDEE 2 Bahamas, Australia Bahamas No JELLI 2 United States of America, Australia United States of America No JOLLY 4 United States of America, Japan, New Zealand, Australia United States of America No JULIA 4 United States of America, Brazil, Japan, Australia Brazil No KELLY 4 United States of America, United Kingdom, Japan, Australia United Kingdom No KERRI 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KEVIN 3 United States of America, Australia, Republic of Korea United States of America No LAMSI 2 Germany, Australia Germany No LANOL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia Kazakhstan/Uzbekistan No LAVER 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America No Unit	HAYES	2	United States of America, Australia	United States of America	No
HORUS 2 United States of America, Australia United States of America No INDEE 2 Bahamas, Australia Bahamas No JELLI 2 United States of America, Australia United States of America No JOLLY 4 United States of America, Japan, New Zealand, Australia United States of America No JULIA 4 United States of America, Brazil, Japan, Australia Brazil No KELLY 4 United States of America, United Kingdom, Japan, Australia United Kingdom No KERRI 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KEVIN 3 United States of America, Australia, Republic of Korea United States of America No LAMSI 2 Germany, Australia Germany No LANOL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia Kazakhstan/Uzbekistan No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America	HIPPO	3	United States of America, Australia, China	United States of America	No
INDEE 2 Bahamas, Australia Bahamas No JELLI 2 United States of America, Australia United States of America No JOLLY 4 United States of America, Japan, New Zealand, Australia United States of America No JULIA 4 United States of America, Brazil, Japan, Australia Brazil No KELLY 4 United States of America, United Kingdom, Japan, Australia United Kingdom No KERRI 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KEVIN 3 United States of America, Australia, Republic of Korea United States of America No LAMSI 2 Germany, Australia Germany No LANOL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia Kazakhstan/Uzbekistan No LAVER 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No United States of America	HOPLA	2	United States of America, Australia	United States of America	No
JELLI 2 United States of America, Australia United States of America No JOLLY 4 United States of America, Japan, New Zealand, Australia United States of America No JULIA 4 United States of America, Brazil, Japan, Australia Brazil No KELLY 4 United States of America, United Kingdom, Japan, Australia United Kingdom No KERRI 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KEVIN 3 United States of America, Australia, Republic of Korea United States of America No LAMSI 2 Germany, Australia Germany No LANOL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia Kazakhstan/Uzbekistan No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States Of America No LAWNN	HORUS	2	United States of America, Australia	United States of America	No
JOLLY 4 United States of America, Japan, New Zealand, Australia United States of America No JULIA 4 United States of America, Brazil, Japan, Australia Brazil No KELLY 4 United States of America, United Kingdom, Japan, Australia United Kingdom No KERRI 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KEVIN 3 United States of America, Australia, Republic of Korea United States of America No LAMSI 2 Germany, Australia Germany No LANOL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia Kazakhstan/Uzbekistan No LAVER 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States Of America No LAWNN	INDEE	2	Bahamas, Australia	Bahamas	No
JULIA 4 United States of America, Brazil, Japan, Australia Brazil United Kingdom No KELLY 4 United States of America, United Kingdom, Japan, Australia United Kingdom No KERRI 2 United States of America, Australia United States of America No KERRS 2 United States of America, Australia United States of America No KEVIN 3 United States of America, Australia, Republic of Korea United States of America No LAMSI 2 Germany, Australia Germany No LANOL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia Kazakhstan/Uzbekistan No LAVER 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America	JELLI	2	United States of America, Australia	United States of America	No
KELLY4United States of America, United Kingdom, Japan, AustraliaUnited KingdomNoKERRI2United States of America, AustraliaUnited States of AmericaNoKERRS2United States of America, AustraliaUnited States of AmericaNoKEVIN3United States of America, Australia, Republic of KoreaUnited States of AmericaNoLAMSI2Germany, AustraliaGermanyNoLANOL2Kazakhstan/Uzbekistan (FIR boundary), AustraliaKazakhstan/UzbekistanNoLAVER2United States of America, AustraliaUnited States of AmericaNoLAWNN2United States of America, AustraliaUnited States of AmericaNo	JOLLY	4	United States of America, Japan, New Zealand, Australia	United States of America	No
KERRI2United States of America, AustraliaUnited States of AmericaNoKERRS2United States of America, AustraliaUnited States of AmericaNoKEVIN3United States of America, Australia, Republic of KoreaUnited States of AmericaNoLAMSI2Germany, AustraliaGermanyNoLANOL2Kazakhstan/Uzbekistan (FIR boundary), AustraliaKazakhstan/UzbekistanNoLAVER2United States of America, AustraliaUnited States of AmericaNoLAWNN2United States of America, AustraliaUnited States of AmericaNo	JULIA	4	United States of America, Brazil, Japan, Australia	Brazil	No
KERRI2United States of America, AustraliaUnited States of AmericaNoKERRS2United States of America, AustraliaUnited States of AmericaNoKEVIN3United States of America, Australia, Republic of KoreaUnited States of AmericaNoLAMSI2Germany, AustraliaGermanyNoLANOL2Kazakhstan/Uzbekistan (FIR boundary), AustraliaKazakhstan/UzbekistanNoLAVER2United States of America, AustraliaUnited States of AmericaNoLAWNN2United States of America, AustraliaUnited States of AmericaNo	KELLY	4	United States of America, United Kingdom, Japan, Australia	United Kingdom	No
KEVIN3United States of America, Australia, Republic of KoreaUnited States of AmericaNoLAMSI2Germany, AustraliaGermanyNoLANOL2Kazakhstan/Uzbekistan (FIR boundary), AustraliaKazakhstan/UzbekistanNoLAVER2United States of America, AustraliaUnited States of AmericaNoLAWNN2United States of America, AustraliaUnited States of AmericaNo	KERRI	2		United States of America	No
LAMSI 2 Germany, Australia Germany No LANOL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia Kazakhstan/Uzbekistan No LAVER 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No	KERRS	2	United States of America, Australia	United States of America	No
LAMSI2Germany, AustraliaGermanyNoLANOL2Kazakhstan/Uzbekistan (FIR boundary), AustraliaKazakhstan/UzbekistanNoLAVER2United States of America, AustraliaUnited States of AmericaNoLAWNN2United States of America, AustraliaUnited States of AmericaNo	KEVIN	3	United States of America, Australia, Republic of Korea	United States of America	No
LANOL 2 Kazakhstan/Uzbekistan (FIR boundary), Australia Kazakhstan/Uzbekistan No LAVER 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No	LAMSI	2		Germany	No
LAVER 2 United States of America, Australia United States of America No LAWNN 2 United States of America, Australia United States of America No				-	No
LAWNN 2 United States of America, Australia United States of America No		2		United States of America	No
· ·		2		United States of America	No
		2		Italy	No

LIZZI	2	United States of America, Australia	United States of America	No
LUFFY	2	Australia, Japan	Japan	No
LUVLY	2	United States of America, Australia	United States of America	No
MAIDS	2	United States of America, Australia	United States of America	No
MAJOR	2	United States of America, Australia	United States of America	No
MANLI	2	China, Australia	China	No
MARGO	2	Israel, Australia	Israel	No
MARLN	2	United States of America, Australia	United States of America	No
MAXEM	2	Canada, Australia	Canada	No
MEETA	2	United States of America, Australia	United States of America	No
MILLA	2	Australia, New Zealand	United States of America	No
MITSA	2	Netherlands, Australia	Netherlands	No
MONTY	4	United States of America, United Kingdom, Australia, Hong Kong China	United Kingdom	No
NEVIS	3	Australia, United Kingdom, United States of America	United Kingdom	No
NIKKI	2	United States of America, Australia	United States of America	No
ODALE	2	United States of America, Australia	United States of America	No
OKMEL	2	Russian Federation, Australia	Russian Federation	No
PAULA	3	United States of America, Brazil, Australia	United States of America	No
PORTA	3	Spain/Portugal (FIR boundary), Australia, Philippines	Spain/Portugal	No
PRAWN	4	Canada, Lybia, Hong Kong China, Australia	Canada	No
RAFFS	2	United States of America, Australia	United States of America	No
RISOL	2	Russian Federation, Australia	Russian Federation	No
RIXON	2	Bolivia (Plurinational State of), Australia	Bolivia (Plurinational State of)	No
ROSMO	2	Sweden, Australia	Sweden	No
RUDIE	2	United States of America, Australia	United States of America	No
RUSSL	2	United States of America, Australia United States of America, Australia	United States of America	No
SAILA	3	·	United States of America	
SALLY	2	Japan, Australia, United States of America	United States of America	No No
		United States of America, Australia		
SALTY	3	Japan, Australia, United States of America	United States of America	No
SANDR	2	United States of America, Australia	United States of America	No
SASRO	2	India, Australia/New Zealand (FIR boundary)	India	No
SAVER	2	Japan, Australia	Japan	No
SHOAL	3	Australia, New Zealand, United States of America	United States of America	No
SMALL	2	United States of America, Australia	United States of America	No
SOAPY	3	Australia, United States of America (2)	United States of America	No
STANZ	2	United States of America, Australia	United States of America	No
STEVO	2	United States of America, Australia	United States of America	No
TALAG	2	Honduras (COCESNA), Australia	Belize/Costa Rica/El Salvador/Guatemala/Honduras/Nicaragua	No
TAMMI	2	United States of America, Australia	United States of America	No
TANTA	2	Japan, Australia	Japan	No
TEMPL	3	United States of America, United Kingdom, Australia	United States of America	No
TONAR	4	Australia, Japan, Russian Federation, Argentina/Chile (FIR boundary)	Russian Federation	No
VICKI	2	United States of America, Australia	United States of America	No
WAREN	2	United States of America, Australia	United States of America	No
WENDY	4	Japan, Australia, United States of America, Portugal	United States of America	No
WHALE	5	Australia, Japan, Tonga, Lybia, Canada/United States of America (FIR boundary)	Canada/United States of America	No
WILDE	2	United States of America, Australia	United States of America	No
WOODY	4	Australia, China, Japan, Belgium/Netherlands (FIR boundary)	Belgium/Netherlands	Yes
ZIPPY	3	United States of America, Australia, China	United States of America	No
		·		

		Priority to be determined		
5LNC		States	Priority	Within 1000NM
ABBEY	2	Hong Kong China, Australia	To be determined by the 5LNC Duplicate Resolution Rules	No
BLACK	2	Australia, Fiji	To be determined by the 5LNC Duplicate Resolution Rules	No
DEENA	2	Australia, Israel	To be determined by the 5LNC Duplicate Resolution Rules	No
GLENN	3	Philippines, Australia, New Zealand	To be determined by the 5LNC Duplicate Resolution Rules	No
MANDA	2	Eritrea/Djibouti (FIR boundary), Australia	To be determined by the 5LNC Duplicate Resolution Rules	No
OPTIC	2	Australia, China	To be determined by the 5LNC Duplicate Resolution Rules	No
SIGUL	2	Australia, Argentina	To be determined by the 5LNC Duplicate Resolution Rules	No
UNDER	2	Australia, Albania	To be determined by the 5LNC Duplicate Resolution Rules	No

		In the process of being resolved	1	
5LNC		States	Note	Within 1000NM
ALORA	3	Jamaica, Spain, Australia	Australia replaced with VIRAP, but ICARD	No
ADCON	•	Aceteslia I I ann Kann Obina Dame	deletion request not yet submitted.	NI-
ARGON	3	Australia, Hong Kong China,Peru,	Australia replaced with DOMTI, but ICARD deletion request not yet submitted.	No
BIDAG	2	Australia, Singapore	Australia replaced with ONARA, but ICARD	No
DIDAG	_	Additalia, diligaporo	deletion request not yet submitted.	110
BOBET	2	India, Australia	Australia replaced with EKUNO, but ICARD	No
			deletion request not yet submitted.	
BORDA	3	Hong Kong China, Australia, United States of America	Australia replaced with MOMGI, but ICARD	No
			deletion request not yet submitted.	
COOPS	2	United States of America, Australia	Australia replaced with KARGI, but ICARD	No
	_		deletion request not yet submitted.	
DOSEL	3	Australia, Germany, United States of America	Removed from United States of America, but	No
			ICARD deletion request not yet submitted.	
EBONY	3	Australia, Indonesia, United States of America	Indonesia replaced EBONY.	No
EMLED	2	Canada, Australia	Canada released. Availablity date 30 Oct	No
	_		2020 to Australia, but ICARD registration	
			request not yet submitted.	
FALLS	3	Philippines, Australia, New Zealand	Philippines replaced with LALUR. Australia	No
			reported not the database. Priority given to	
			New Zealand.	
IDUNA	2	Australia, Singapore	Singapore to replace IDUNA in Q2 2024.	No
JORDY	2	United States of America, Australia	Australia replaced with OROLU, but ICARD	No
LATTY.	0	A 1 1 T T 1 1	deletion request not yet submitted.	
KITTY	2	Australia, Thailand	Thailand replacing KITTY, Priority given to Australia	No
MARUB	2	Australia, Japan	Japan replacing MARUB. Priority given to	No
WAROD	2	Australia, Japan	Australia.	INO
MORGA	2	United States of America, Australia	Australia replaced with LENBA, but ICARD	No
			deletion request not yet submitted.	
NINOB	2	Australia, India	Australia replaced with SINAM, but ICARD	No
			deletion request not yet submitted. Priority to	
			be given to India.	
POPET	3	India, Cambodia, Australia	Deleted from Cambodia AIP, but ICARD	No
011110	_		deletion request not yet submitted.	
QUINS	3	Australia, Republic of Korea, United States of America	Australia reported to have deleted, but	No
			ICARD deletion request not yet submitted	

RIPNA	2	Australia/Solomon Islands, Papua New Guinea	Australia deleted RIPNA, but ICARD deletion request not yet submitted. Priority to be given to Papua New Guinea.	No
RUSSO	2	Australia, United States of America	Australia replaced with OKODU, but ICARD deletion request not yet submitted.	No
TABAL	2	Algeria, Australia	Australia replaced with LENRI, but ICARD deletion request not yet submitted. Priority to be given to Algeria.	No
TOMAS	6	Australia, New Zealand, Brazil, Venezuela, Costa Rica (COCESNA), Denmark (Greenland)	Australia replaced with LEVRI, but ICARD deletion request not yet submitted.	No
TUMAN	2	Canada, Australia	No longer registered by Canada. Priority given to Australia.	No
VALDA	3	United States of America/Russian Federation (FIR boundary), United	e Australia replaced with ATSIN, but ICARD deletion request not yet submitted. Priority to be given to United States of America.	No
WONKA	2	Australia, Republic of Korea	Not published in AIP Republic of Korea. Priority given to Australia.	No

5LNC STATUS - BANGLADESH

Date: June 2024

	Total number of 5LNCs	100	
	Terminal Airspace (TA)	16	
	En-route (ENR)	28	
ICARD	FIR	15	
	Other	28	
	No Purpose	13	
	No Coordinates	0	
	Total number of duplicated 5LNCs	2	
	Priority allocated to Bangladesh	0	
Duplicated	Priority allocated to other States	0	
5LNCs	Priority to be determined	0	
	In the process of being resolved	1	
	Completely resolved 5LNCs	1	
	Priority allocated to Bangladesh		Within
5LNC	States	Priority	1000NN
	Priority allocated to other States		
5LNC	States	Priority	Within

ı		Priority to be determined		
	5LNC	States	Priority	Within 1000NM

	In the process of being resolved			
5LNC	States	Note	Within 1000NM	
	lada i - /Cia /FID based \	ALC THE TENTH OF THE TENTH OF THE		

TAROS 3 Indonesia/Singapore (FIR boundary), India/Bangladesh (FIR boundary), Mexico

Not published in AIP India. Mexico to release TAROS.

No

5LNC STATUS - BHUTAN

	Total number of 5LNCs	13
	Terminal Airspace (TA)	0
	En-route (ENR)	13
ICARD	FIR	0
	Other	0
	No Purpose	0
	No Coordinates	0
	Total number of duplicated 5LNCs	1
	Priority allocated to Bhutan	0
Duplicated	Priority allocated to other States	1
5LNCs	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	0
	District all a sate of the Dharton	
	Priority allocated to Bhutan	Within
5LNC	States	Priority 1000NM
	Driveth allocated to other Otate	
	Priority allocated to other States	Within
5LNC	States	Priority 1000NM
TAKTI 2	Saudi Arabia, Bhutan	Saudi Arabia No
	Priority to be determined	
5LNC	States	Priority Within
SLING	Glates	Priority 1000NM
	In the process of being resolved	
5LNC	States	Note Within 1000NM

5LNC STATUS - BRUNEI DARUSSALAM

	Total number of 5LNCs	8	
	Terminal Airspace (TA)	1	
	En-route (ENR)	6	
ICARD	FIR	0	
	Other	1	
	No Purpose	0	
	No Coordinates	0	
		·	
	Total number of duplicated 5LNCs	3	
	Priority allocated to Brunei Darussalam	0	
Duplicated	Priority allocated to other States	2	
5LNCs	Priority to be determined	0	
	In the process of being resolved	1	
	Completely resolved 5LNCs	0	
	Priority allocated to Brun	ei Darussalam	
5LNC	States	Priority	Within 1000NM
<u> </u>			
	Priority allocated to o	ther States	1
5LNC	States	Priority	Within 1000NM
OLMIR	2 Spain, Brunei Darussalam	Spain	No
RUSIL	New Zealand, Brunei Darussalam	New Zealand	No
			
	Priority to be dete	rmined	Within
5LNC	States	Priority	1000NM
	In the assess of host	ng roonlyed	
SINO	In the process of beir		Within
5LNC	States	Note	1000NM
SAMET	2 Thailand, Brunei Darussalam	Thailand to replace in 2024.	Yes

5LNC STATUS - CAMBODIA

	Total number of 5LNCs	131
	Terminal Airspace (TA)	70
	En-route (ENR)	34
ICARD	FIR	11
	Other	0
	No Purpose	16
	No Coordinates	2
	Total number of duplicated 5LNCs	25
	Priority allocated to Cambodia	0
Duplicated	Priority allocated to other States	0
5LNCs	Priority to be determined	0
	In the process of being resolved	14
	Completely resolved 5LNCs	11

	Priority allocated to Cambodia				
5LNC	С	States	Priority	Within 1000NM	

Priority allocated to other States				
5LNC	States	Priority	Within 1000NM	

I	Priority to be determined				
	5LNC	States	Priority	Within 1000NM	

	In the process of being resolved					
5LNC		States	Note	Within 1000NM		
LAVAN	2	United States of America, Cambodia/Lao People's Democratic Republic	Cambodia replaced with NILIS, but ICARD deletion request not yet submitted.	No		
AKATA	3	Canada, Russian Federation, Cambodia	Cambodia to replace/remove in Q1 2025	No		
BASAK	2	Russian Federation, Cambodia	Cambodia to replace/remove in Q1 2025	No		
BATEE	2	United States of America, Cambodia	Cambodia to replace/remove in Q1 2025	No		
BOSET	2	France (Guadeloupe), Cambodia	Cambodia to replace/remove in Q1 2025	No		
CONDA	2	Viet Nam, Cambodia	Cambodia to replace/remove in Q1 2025	Yes		
DAMAT	2	Turkey, Cambodia	Cambodia to replace/remove in Q1 2025	No		
KELEN	2	United States of America, Cambodia	Cambodia to replace/remove in Q1 2025	No		
MADAM	2	United States of America, Cambodia	Cambodia to replace/remove in Q1 2025	No		
OMLET	2	Japan/United States of America (FIR boundary), Cambodia	Cambodia to replace/remove in Q1 2025	No		
TAMEN	2	Canada, Cambodia	Cambodia to replace/remove in Q1 2025	No		
TANAK	2	Russian Federation, Cambodia	Cambodia to replace/remove in Q1 2025 Deleted from Malta. No longer published in	No		
DORAT	2	Malta, Cambodia	AIP Cambodia, but ICARD deletion request not yet submitted.	No		
POPET	3	India, Cambodia, Australia	No longer published in AIP Cambodia, but ICARD deletion request not yet submitted.	No		

5LNC STATUS - CHINA

	Total number of 5LNCs	1548
	Terminal Airspace (TA)	324
	En-route (ENR)	942
ICARD	FIR	18
	Other	6
	No Purpose	258
	No Coordinates	2

	Total number of duplicated 5LNCs	223
	Priority allocated to China	19
Duplicated	Priority allocated to other States	142
5LNCs	Priority to be determined	17
	In the process of being resolved	2
	Completely resolved 5LNCs	43

Priority allocated to China				
5LNC		States	Priority	Within 1000NM
AKAGI	2	China, Japan	China	No
AMURI	2	China, New Zealand	China	No
ATALA	2	China, Polynesie Française	China	No
BORDO	2	China/Japan FIR boundary, United States of America/Cuba	China/Japan	No
BRAVO	7	China, India, Syrian Arab Republic, United Kingdom, United Kingdom (Falkland Islands), Italy, Brazil	China	Yes
IKARU	2	China, Japan	China	No
KABDO	2	China, Mauritius	China	No
KAGRA	2	China, Japan	China	No
KIRIN	3	Thailand, China, Japan	China	Yes
LEDIM	2	China, Solomon Islands	China	No
LOVTA	2	China, New Zealand	China	No
MADEM	2	China (2)	China	Yes
MANLI	2	China, Australia	China	No
NOKAK	2	China, New Zealand	China	No
OBDEG	2	China, New Zealand	China	No
PONEN	2	China, Spain	China	No
SANKO	2	China, Japan	China	Yes
SAPUT	2	China, Thailand	China	No
TOMUD	2	China, Malaysia	China	Yes

	Priority allocated to other States				
5LNC		States	Priority	Within 1000NM	
ALDEL	2	Australia, China	Australia	No	
ANDIN	2	China, United States of America	United States of America	No	
ANDRE	4	Canada, Denmark (Greenland), Uganda, China	Denmark (Greenland)	No	
ANKLE	2	United States of America, China	United States of America	No	
ANNNA	2	United States of America, China	United States of America	No	
APRIL	3	United States, Thailand, China	United States of America	No	
ARBOK	2	Russian Federation, China	Russian Federation	No	
ARBOR	3	Philippines, China, United States of America	United States of America	No	
ARLEN	3	China, Russian Federation, Nicaragua (COCESNA)	Russian Federation	No	
ATAGA	2	United States of America, China	United States of America	No	
AUGUR	3	China, United States of America, Brazil	United States of America	No	
BACON	5	Brazil, United States, Japan, China, Phillippines	United States of America	Yes	
BAGEL	2	United States of America, China	United States of America	No	

BESOM	2	United States of America, China	United States of America	No
BESTO	2	Poland, China	Poland	No
BISON	6	China (2), Indonesia, Viet Nam, Australia, United States of America	United States of America	Yes
BOCCA	2	United States of America (Puerto Rico), China	United States of America	No
BRENT	3	Thailand, China, United States of America,	United States of America	No
BUSBY	2	United States of America, China	United States of America	No
BYWAY	2	United States of America, China	United States of America	No
CAMEO	2	United States of America, China	United States of America	No
CAROL	3	Japan, China, United States	United States of America	No
COMPA	2	• • •	United States of America	No
		United States of America, China		
COPRA	2	United States of America, China	United States of America	No
CUBIT	2	United States of America, China	United States of America	No
DALIN	2	Spain, China	Spain	No
DAVIE	2	United States of America, China	United States of America	No
DECOY	3	Republic of Korea, China, United States of America	United States of America	Yes
DEFOE	2	United States of America, China	United States of America	No
DENIS	3	Australia, China, Mali (ASECNA)	Mali (ASECNA)	No
DITTO	2	United States of America, China	United States of America	No
DOGAR	2	Australia/Sri Lanka (FIR boundary), China	Australia/Sri Lanka	No
DONNA	2	United Kingdom, China	United Kingdom	No
		Chile/Argentina, Costa Rica (COCESNA), United States of	G	
DRAKE	5	America, United Kingdom, China	United Kingdom	No
DUBAG	2	<u> </u>	Australia	No
		Australia, China		No
DULAN	2	Mongolia, China	Mongolia	No
DUMAS	2	Malaysia, China	Malaysia	No
DUPAR	2	Canada, China	Canada	No
EMILY	2	United States of America, China	United States of America	No
ERICA	3	China, United States of America, Venezuela,	United States of America	No
EXTRA	2	United States of America, China	United States of America	No
FIVER	2	United States of America, China	United States of America	No
FLASH	3	China, Brazil, United States of America	United States of America	No
FOSAN	2	United States of America, China	United States of America	No
FRANK	5	Japan, China, United States of America, Brazil, Panama	United States of America	No
GABBY	2	United States of America, China	United States of America	No
GAMMA	2	United States of America, China	United States of America	No
	2	·	United States of America	No
GENIE		United States of America, China		
GENUS	3	Brazil, United States of America, China	United States of America	No
GOGET	2	Republic of Korea, China	Republic of Korea	Yes
GORPI	2	Poland/Sweden (FIR boundary), China	Poland/Sweden	No
GRACE	4	United States of America, Brazil, China, Thailand	United States of America	No
GRADY	3	China, Liberia, United States of America	United States of America	No
GRATE	2	United States of America, China	United States of America	No
GUMBO	2	United States of America, Japan/China [FIR boundary]	United States of America	No
GUMMY	2	United States of America, China	United States of America	No
	_	United States of America, United Kingdom, Republic of Korea,		
HANKY	5	China, Australia	United Kingdom	Yes
HAPPY	2	Japan, China	Japan	No
HIPPO	3	United States of America, Australia, China	United States of America	No
1111110	0	Office Otales of Afficinea, Australia, Office		140
HOTEL	4	China Viet New Theiland County	Canada. To be determined by the 5LNC	V
HOTEL	4	China, Viet Nam, Thailand, Canada	Duplicate Resolution Rules if not used by	Yes
	_		Canada.	
HYDEE	2	United States of America, China	United States of America	No
IMAGE	2	United States of America, China	United States of America	No
INDIA	4	Indonesia, China, Spain, United States of America	United States of America	No
JESSY	3	Italy, United States of America, China	Italy	No
JINGO	2	United States of America, China	United States of America	No
JULLY	2	Canada, China	Canada	No
JUNTA	2	United States of America (Puerto Rico), China	United States of America	No
JUROR	2	United States of America, China	United States of America	No
KADET	2	New Zealand, China	New Zealand	No
KAPOK	2	United States of America (Guam), China	United States of America	No
KARAN	2	China, Viet Nam	Viet Nam	Yes
KARLI	2	Denmark/Norway (FIR boundary), China	Denmark/Norway	No
KEBAB	3	United States of America, Australia, China	United States of America	No
KERRY	2	United States of America (Guam), China	United States of America	No

KNISH	2	United States of America, China	United States of America	No
KNOCK	2	United States of America, China	United States of America	No
KRONA	2	United States of America, China	United States of America	No
LAGER	4	China , Japan,Republic of Korea, United Kingdom,	United Kingdom	Yes
LAPEN	2	Malaysia, China	Malaysia	No
LASSO	2	United States of America, China	United States of America	No
		Lao People's Democratic Republic/Viet Nam (FIR boundary),		
LAVOS	2	, , , , , , , , , , , , , , , , , , , ,	Lao People's Democratic Republic/Viet Nam	Yes
	_	China		
LEKOS	2	Russian Federation, China	Russian Federation	No
LENTO	3	Japan, China, Thailand	Japan	Yes
			Chile. To be determined by the 5LNC	
LOBAR	5	Chile, Bolivia, Peru, Spain, China	Duplicate Resolution Rules if not used by	Yes
LODAIN	J	Offile, Dolivia, Feru, Spairi, Offilia	•	163
			Chile.	
LOTOS	3	Spain, Saudi Arabia, China	Spain	No
LOTTO	2	United States of America, China	United States of America	No
	_	Costa Rica, Venezuela, Mexico, Brazil, Australia, China,		
LUCAS	7	Philippines	Venezuela	Yes
		Тішррінез		
MALAY	5	United States of America, Myanmar, China, Viet Nam, Phillippines	United States of America	Yes
		•		
MASON	4	Brazil, Australia, Thailand, China	Brazil	No
MATIS	2	United Kingdom (Cayman Islands)/Jamaica, China	Cayman Is. (U.K.)/Jamaica	No
MAYOR	3	United States of America, New Zealand, China	United States of America	No
	2			
MEDIT		Brazil, China	Brazil	No
MEEKY	2	United States of America, China	United States of America	No
MOODY	2	United States of America, China	United States of America	No
MUREX	2	United States of America, China	United States of America	No
NACRE	2	Brazil, China	Brazil	No
NEPAS	2		Chile	
		Chile, China		No
OASIS	2	Mexico, China	Mexico	No
OLIVE	5	China, Japan, Thailand, United States of America (American	United Kingdom	Yes
OLIVE	5	Samoa), United Kingdom	United Kingdom	165
		Philippines, China, Japan, Tonga, Italy, United States of America,		
ORION	8		United States of America	Yes
		Peru, Spain		
ORTIZ	3	United States of America, Colombia/Venezuela (FIR boundary),	United States of America	No
OTTIL	U	China	Office States of Afficined	110
OSCAR	3	Spain, United States of America, China	United States of America	No
PASTA	4	Australia, China, Pakistan, Brazil	Pakistan	No
	3			
PEARL		China, Japan, United States of America	United States of America	Yes
PEGDU	2	Malaysia, China	Malaysia	No
PETRA	3	Thailand, China, Jordan	Thailand	No
PIANO	3	Thailand, China, United States of America	United States of America	No
PINOT	2	France/Switzerland, China	France/Switzerland	No
POLAR	3	United States of America, Gabon, China	United States of America	No
			United States of America	
QUOTA	2			No
RAVIE		United States of America, China		
	2	Venezuela (Bolivarian Republic of), China	Venezuela (Bolivarian Republic of)	No
REGLE	2	·		
	2	Venezuela (Bolivarian Republic of), China United States of America, China	Venezuela (Bolivarian Republic of)	No No
RODEN	2 3	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation	Venezuela (Bolivarian Republic of) United States of America United States of America	No No No
	2	Venezuela (Bolivarian Republic of), China United States of America, China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece	No No
RODEN SALUN	2 3 2	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the	No No No No
RODEN	2 3	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand,	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece	No No No
RODEN SALUN	2 3 2	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the	No No No No
RODEN SALUN SANDY	2 3 2 6	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom,	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand.	No No No No Yes
RODEN SALUN	2 3 2	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used	No No No No
RODEN SALUN SANDY SARGO	2 3 2 6	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain	No No No Yes
RODEN SALUN SANDY SARGO SASHA	2 3 2 6 4 2	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America	No No No Yes No
RODEN SALUN SANDY SARGO SASHA SEDUM	2 3 2 6 4 2 2	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China Canada, China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America Canada	No No No Yes
RODEN SALUN SANDY SARGO SASHA	2 3 2 6 4 2	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America	No No No Yes No
RODEN SALUN SANDY SARGO SASHA SEDUM	2 3 2 6 4 2 2	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China Canada, China United States of America, Japan, China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America Canada United States of America	No No No Yes No No
SANDY SARGO SASHA SEDUM SENNA SEPIA	2 3 2 6 4 2 2 3 3	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China Canada, China United States of America, Japan, China China, Japan, Republic of Korea	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America Canada United States of America Japan	No No No Yes
SANDY SARGO SASHA SEDUM SENNA SEPIA SERVE	2 3 2 6 4 2 2 3 3 4	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China Canada, China United States of America, Japan, China China, Japan, Republic of Korea United States of America, Japan, Australia, China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America Canada United States of America Japan United States of America	No No No Yes No No No Yes Yes
SARGO SASHA SEDUM SENNA SEPIA SERVE SPICA	2 3 2 6 4 2 2 3 3 4 3	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China Canada, China United States of America, Japan, China China, Japan, Republic of Korea United States of America, Japan, Australia, China China, Japan, Canada	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America Canada United States of America Japan United States of America Canada	No No No Yes No No No Yes Yes Yes
SARGO SASHA SEDUM SENNA SEPIA SERVE SPICA SUPER	2 3 2 6 4 2 2 3 3 4 3 3	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China Canada, China United States of America, Japan, China China, Japan, Republic of Korea United States of America, Japan, Australia, China China, Japan, Canada United States of America, Australia, China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America Canada United States of America Japan United States of America Canada United States of America Canada United States of America Canada United States of America	No No No Yes No No No Yes Yes
SARGO SASHA SEDUM SENNA SEPIA SERVE SPICA	2 3 2 6 4 2 2 3 3 4 3	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China Canada, China United States of America, Japan, China China, Japan, Republic of Korea United States of America, Japan, Australia, China China, Japan, Canada	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America Canada United States of America Japan United States of America Canada	No No No Yes No No No Yes Yes Yes
SARGO SASHA SEDUM SENNA SEPIA SERVE SPICA SUPER	2 3 2 6 4 2 2 3 3 4 3 3	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China Canada, China United States of America, Japan, China China, Japan, Republic of Korea United States of America, Japan, Australia, China China, Japan, Canada United States of America, Australia, China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America Canada United States of America Japan United States of America Canada United States of America Canada United States of America Canada United States of America	No No No Yes No No No Yes Yes Yes
SARGO SASHA SEDUM SENNA SEPIA SERVE SPICA SUPER TABOR TAZAN	2 3 2 6 4 2 2 3 3 4 3 3 3 2	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China Canada, China United States of America, Japan, China China, Japan, Republic of Korea United States of America, Japan, Australia, China China, Japan, Canada United States of America, Australia, China Venezuela, Chile, China United States of America, China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America Canada United States of America Japan United States of America Canada United States of America Canada United States of America Canada United States of America Venezuela United States of America	No No No No No No No No Yes Yes No No No
SANDY SARGO SASHA SEDUM SENNA SEPIA SERVE SPICA SUPER TABOR TAZAN TENLI	2 3 2 6 4 2 2 3 3 4 3 3 2 2	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China Canada, China United States of America, Japan, China China, Japan, Republic of Korea United States of America, Japan, Australia, China China, Japan, Canada United States of America, Australia, China Venezuela, Chile, China United States of America, China Netherlands, China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America Canada United States of America Japan United States of America Canada United States of America Canada United States of America Canada United States of America Venezuela United States of America Netherlands	No No No No No No No Yes Yes No No No No No
SANDY SARGO SASHA SEDUM SENNA SEPIA SERVE SPICA SUPER TABOR TAZAN TENLI TEPID	2 3 2 6 4 2 2 3 3 4 3 3 2 2 2 2 2	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China Canada, China United States of America, Japan, China China, Japan, Republic of Korea United States of America, Japan, Australia, China China, Japan, Canada United States of America, Australia, China Venezuela, Chile, China United States of America, China Netherlands, China United States of America, China Netherlands, China United States of America, China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America Canada United States of America Japan United States of America Canada United States of America Canada United States of America Canada United States of America Venezuela United States of America Netherlands United States of America	No No No No No No No Yes Yes No No No No No No No No No No No No No
SANDY SARGO SASHA SEDUM SENNA SEPIA SERVE SPICA SUPER TABOR TAZAN TENLI TEPID TITUS	2 3 2 6 4 2 2 3 3 4 3 3 2 2 2 2 2 2 2	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China Canada, China United States of America, Japan, China China, Japan, Republic of Korea United States of America, Japan, Australia, China China, Japan, Canada United States of America, Australia, China Venezuela, Chile, China United States of America, China Netherlands, China United States of America, China Netherlands, China United States of America, China Onecee, China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America Canada United States of America Japan United States of America Canada United States of America Venezuela United States of America Venezuela United States of America Netherlands United States of America Refece	No No No No No No No Yes Yes No No No No No No No No No No No No No
SANDY SARGO SASHA SEDUM SENNA SEPIA SERVE SPICA SUPER TABOR TAZAN TENLI TEPID	2 3 2 6 4 2 2 3 3 4 3 3 2 2 2 2 2	Venezuela (Bolivarian Republic of), China United States of America, China China, United States of America, Russian Federation Egypt/Greece (FIR boundary), China China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom, United States of America, Spain, Argentina/Uruguay (FIR boundary), China United States of America, China Canada, China United States of America, Japan, China China, Japan, Republic of Korea United States of America, Japan, Australia, China China, Japan, Canada United States of America, Australia, China Venezuela, Chile, China United States of America, China Netherlands, China United States of America, China Netherlands, China United States of America, China	Venezuela (Bolivarian Republic of) United States of America United States of America Egypt/Greece New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand. Spain United States of America Canada United States of America Japan United States of America Canada United States of America Canada United States of America Canada United States of America Venezuela United States of America Netherlands United States of America	No No No No No No No Yes Yes No No No No No No No No No No No No No

TOMMY TONNY TOSAS	4 3 2	United States of America, Japan, China, Thailand Canada, Japan, China Australia/Papua New Guinea (FIR boundary), China	United States of America Canada Australia	No No No
TULIP	5	Netherlands, United States of America, China, Indonesia, Japan,	Netherlands	No
TUTOR	2	United States of America, China	United States of America	No
VANES	3	Greece, Brazil, China	Greece	No
VIOLA	4	United States of America, Australia, China, Thailand	United States of America	No
VIVID	2	United States of America, China	United States of America	No
WASPY	2	United States of America, China	United States of America	No
WOODY	4	Australia, China, Japan, Belgium/Netherlands (FIR boundary)	Belgium/Netherlands	Yes
WUSAN	2	United States of America, China	United States of America	No
ZAMBO	2	United States of America, China	United States of America	No
ZIPPY	3	United States of America, Australia, China	United States of America	No

		Priority to be determined		
5LNC		States	Priority	Within 1000NM
AKOMA	2	China, Malaysia	To be determined by the 5LNC Duplicate Resolution Rules	No
BASIR	3	China, Pakistan, Malaysia	To be determined by the 5LNC Duplicate Resolution Rules	No
BISUN	2	Fiji, Russian Federation/China (FIR boundary)	To be determined by the 5LNC Duplicate Resolution Rules	No
CANDY	3	Japan, China, Australia	To be determined by the 5LNC Duplicate Resolution Rules	No
CYRUS	2	Costa Rica (COCESNA), China	To be determined by the 5LNC Duplicate Resolution Rules	No
JOYCE	2	China, Philippines	To be determined by the 5LNC Duplicate Resolution Rules	Yes
LARGO	3	Cuba, Thailand, China	To be determined by the 5LNC Duplicate Resolution Rules	No
MACEL	2	Australia, China	To be determined by the 5LNC Duplicate Resolution Rules	No
MARCH	3	China, Japan, United States of America	To be determined by the 5LNC Duplicate Resolution Rules	No
MEZZO	2	China, Thailand	To be determined by the 5LNC Duplicate Resolution Rules	No
NOVAS	2	Spain, China	To be determined by the 5LNC Duplicate Resolution Rules	No
OPTIC	2	Australia, China	To be determined by the 5LNC Duplicate Resolution Rules	No
OTTER	3	Tonga, China, Canada	To be determined by the 5LNC Duplicate Resolution Rules	No
PEKAN	2	China, Japan	To be determined by the 5LNC Duplicate Resolution Rules	Yes
REPOL	2	China, New Zealand	To be determined by the 5LNC Duplicate Resolution Rules	No
TONGA	2	Viet Nam, China	To be determined by the 5LNC Duplicate Resolution Rules	Yes
VEMOS	2	China, Myanmar	To be determined by the 5LNC Duplicate Resolution Rules	No

	In the process of being resolved					
5LNC		States	Note	Within 1000NM		
BILAT	3	Polynesie Française, China, India	Polynesie Française released BILAT. There is no information that India is using BILAT. China to register.	No		
BIPOP	2	China, Singapore	Singapore to replace in Q2 2024	No		

5LNC STATUS - HONG KONG CHINA

	Total number of 5LNCs	127
	Terminal Airspace (TA)	83
	En-route (ENR)	29
ICARD	FIR	5
	Other	0
	No Purpose	10
	No Coordinates	0
	Total number of duplicated 5LNCs	69
	Priority allocated to Hong Kong China	10
Duplicated	Priority allocated to other States	49
5LNCs	Priority to be determined	1
	In the process of being resolved	2
	Completely resolved 5LNCs	7

	Priority allocated to Hong Kong China				
5LNC		States	Priority	Within 1000NM	
ALAPI	2	Hong Kong China, Samoa	Hong Kong China	No	
ATENA	2	Hong Kong China, Japan	Hong Kong China	No	
BETTY	3	Japan, Hong Kong China, India	Hong Kong China	Yes	
BREAM	3	Libya, Hong Kong China, Australia	Hong Kong China	No	
COLEY	2	Philippines, Hong Kong China	Hong Kong China	No	
COMBI	2	Japan, Hong Kong China	Hong Kong China	No	
LIMES	2	New Zealand, Hong Kong China	Hong Kong China	No	
LOTUS	4	Pakistan, China(Hong Kong), Japan,Peru	Hong Kong China	No	
MURRY	3	United States of America, Hong Kong China, Australia	Hong Kong China	No	
SOUSA	3	United States of America (2), Hong Kong China	Hong Kong China	Yes	

	Priority allocated to other States				
5LNC		States	Priority	Within 1000N M	
ALLEY	2	United States of America, Hong Kong China	United States of America	No	
BAKER	4	Hong Kong China, China, Australia, United Kingdom	United Kingdom	Yes	
BORDA	3	Hong Kong China, Australia, United States of America	United States of America	No	
CANTO	4	United States of America, Hong Kong China, Republic of Korea, Viet Nam	United States of America	No	
CHALI	3	China, Hong Kong China, United States	United States of America	Yes	
CONGA	3	Thailand, Hong Kong China, United States of America	United States of America	No	
COTON	3	Hong Kong China, Australia, United States of America	United States of America	No	
DASON	2	Mexico, Hong Kong China	Mexico	No	
FISHA	2	Australia, Hong Kong China	Australia	No	
GAMBA	4	Cabo Verde, Chile, Japan, Hong Kong China	Chile	No	
GOBBI	2	United States of America, Hong Kong China	United States of America	No	
GOODI	2	United States of America, Hong Kong China	United States of America	No	
GUAVA	2	Bahamas, Hong Kong China	Bahamas	No	
HAMOK	2	United States of America, Hong Kong China	United States of America	No	
HAZEL	3	Japan, Hong Kong China, United Kingdom	United Kingdom	No	
HOCKY	2	United States of America, Hong Kong China	United States of America	No	
LAKES	5	Canada, Japan, Hong Kong China, Australia, New Zealand	Canada	No	
LAMMA	3	Hong Kong China, United Kingdom, United States of America	United Kingdom	No	
LANDA	4	Egypt, Honduras (COCESNA), Argentina, China/Hong Kong China	Argentina	No	

MANGO	6	Hong Kong China, Republic of Korea, New Zealand, Angola, Nicaragua (COCESNA), United Kingdom	United Kingdom	No
MAPLE	5	United Kingdom, United States of America, Japan, Hong Kong China, Thailand	United Kingdom	No
MONTY	4	United States of America, United Kingdom, Australia, Hong Kong China	United Kingdom	No
MULET	2	United States of America, Hong Kong China	United States of America	No
MUSEL	2	United States of America, Hong Kong China	United States of America	No
NEDLE	2	United States of America, Hong Kong China	United States of America	No
PONTI	3	United States of America, Hong Kong China, Australia	United States of America	No
PORPA	2	Argentina, Hong Kong China	Argentina	No
PRAWN	4	Canada, Lybia, Hong Kong China, Australia	Canada	No
RAMEN	2	Italy, Hong Kong China	Italy	No
ROBBE	2	Canada, Hong Kong China	Canada	No
ROBIN	5	Japan, China, Hong Kong China, Australia, Mexico,	Japan	Yes
ROCCA	4	France, United States of America, Japan, Hong Kong China	France	No
ROMEO	4	United States of America, United Kingdom, Nepal, Hong Kong	United States of America. Nepal if not used	No
DOVED	_	China	by the USA.	
ROVER	2	United States of America, Hong Kong China	United States of America	No
RUMSY	2	United States of America, Hong Kong China	United States of America	No
SAMMI	2	United States of America, Hong Kong China	United States of America	No
SAMON	4	Thailand, Hong Kong China, Japan, United Kingdom/Ireland (FIR boundary)	United Kingdom/Ireland	No
SAMPU	2	Chile, Hong Kong China	Chile	No
SHELY	4	United States, Hong Kong China, Japan, Philippines,	United States of America	Yes
SIERA	3	United States of America, United Kingdom, Hong Kong China	United States of America	No
SILVA	4	Venezuela, United Kingdom, Italy, Hong Kong China	United Kingdom	No
SKATE	4	Hong Kong China, Philippines, Libya, United States of America	United States of America	Yes
SONNY	3	Norway, United States of America, Hong Kong China	Norway. USA if not used by Norway.	No
STELA	4	United States of America, Russian Federation, Japan, Hong Kong China	Russian Federation	Yes
TAMAR	4	Venezuela, Israel, Brazil, Hong Kong China	Brazil	No
TITAN	3	Spain, Japan, Hong Kong China	Spain	No
TONIC	2	United States of America, Hong Kong China	United States of America	No
TROUT	3	Hong Kong China, Japan, United States of America	United States of America	No
TUBBY	3	United States of America, Australia, Hong Kong China	United States of America	No

	Priority to be determined				
5LNC	States	Priority	Within 1000N M		
ABBEY	2 Hong Kong China, Australia	To be determined by the 5LNC Duplicate Resolution Rules	No		

	In the process of being resolved				
5LNC		States	Note	Within 1000N M	
ARGON	3	Australia, Hong Kong China,Peru,	Peru Not published in AIP Republic of Korea.	No	
OCEAN	2	Republic of Korea, Hong Kong China	Priority given to Hong Kong China. Hong Kong China to register.	Yes	

5LNC STATUS - MACAO CHINA

	Total number of 5LNCs	0	
	Terminal Airspace (TA)	0	
	En-route (ENR)	0	
ICARD	FIR	0	
	Other	0	
	No Purpose	0	
	No Coordinates	0	
			-
	Total number of duplicated 5LNCs	1	
	Priority allocated to Macao China	0	
Duplicated	Priority allocated to other States	0	
5LNCs	Priority to be determined	0	
	Resolving	0	
	Completely resolved 5LNCs	1	
	Priority allocated to Macao China		
5LNC	States	Priority	Within 1000NM
	Priority allocated to other States		Within
5LNC	States	Priority	1000NM
	Priority to be determined		
5LNC	States	Priority	Within
02.10		. nong	1000NM
	In the process of being resolved		
5LNC	States	Note	Within 1000NM
			. 300

5LNC STATUS - COOK ISLANDS

	Total number of 5LNCs	99			
	Terminal Airspace (TA)	98			
	En-route (ENR)	1			
ICARD	FIR	0			
	Other	0			
	No Purpose	0			
	No Coordinates	0			
•					
	Total number of duplicated 5LNCs	0			
	Priority allocated to Cook Islands	0			
Duplicated	Priority allocated to other States	0			
5LNCs	Priority to be determined	0			
	In the process of being resolved	0			
	Completely resolved 5LNCs	0			
	Priority allocated to Cook Islands	Within			
5LNC	States	Priority 1000NM			
-					
	Priority allocated to other States	Within			
5LNC	States	Priority Vitnin 1000NM			
	Priority to be determined				
5LNC	States	Priority Within 1000NM			
	In the process of being resolved				
5LNC	States	Note Within 1000NM			
		10001411			

5LNC STATUS - DPR KOREA

		Total number of 5LNCs	12	l
		Terminal Airspace (TA)	1	
		En-route (ENR)	0	
ICARD)	FIR	2	
		Other	0	
		No Purpose	9	
		No Coordinates	0	
		Total number of duplicated 5LNCs	5	
		Priority allocated to DPR Korea	1	
Duplicate	ed	Priority allocated to other States	4	
5LNCs	3	Priority to be determined	0	
		In the process of being resolved	0	
		Completely resolved 5LNCs	0	
		Priority allocated to DPR Korea		
5LNC		States	Priority	Within 1000NM
GASAN	2	Democratic People's Republic of Korea, Japan	Democratic People's Republic of Korea	Yes
		Priority allocated to other States		
51110				Within
5LNC		States	Priority	1000NM
CONAR	2	Mexico, Democratic People's Republic of Korea	Mexico	No
GUMSA	2	Russian Federation, Democratic People's Republic of Korea	Russian Federation	No
SAMAN	3	United States of America, Democratic People's Republic of Korea, F		No
SONDO	2	United Kingdom, Democratic People's Republic of Korea	United Kingdom	No
		Priority to be determined		
5LNC		States	Priority	Within
States Priority 100				
In the process of being resolved				
5LNC		States	Note	Within
SLING		Glales	Note	1000NM

5LNC STATUS - FIJI

	Total number of 5LNCs	209
	Terminal Airspace (TA)	83
	En-route (ENR)	40
ICARD	FIR	12
	Other	1
	No Purpose	73
	No Coordinates	3
	Total number of duplicated 5LNCs	36
	Priority allocated to Fiji	1
Duplicated	Priority allocated to other States	5
5LNCs	Priority to be determined	2
	In the process of being resolved	4
	Completely resolved 5LNCs	24

Priority allocated to Fiji				
5LNC		States	Priority	Within 1000NM
ATOLL	 Libva, Fiii, China 		Fiji	No

Priority allocated to other States				
5LNC	States		Priority	Within 1000NM
EMURI	2	Saudi Arabia, Fiji	Saudi Arabia	No
HAMAL	2	United States of America (Guam), Fiji	United States of America	No
LAMOK	2	Philippines, France (New Caledonia)/Fiji	Philippines	No
LANAT	2	Japan/Republic of Korea (FIR boundary), New Zealand/Fiji	Japan/Republic of Korea	No
ROWIN	2	United States of America, Fiji	United States of America	No

		Priority to be determined		
5LNC		States	Priority	Within 1000NM
BISUN	2	Fiji, Russian Federation/China (FIR boundary)	To be determined by the 5LNC Duplicate Resolution Rules	No
LAVEN	2	Fiji, Iraq	To be determined by the 5LNC Duplicate Resolution Rules	No

	In the process of being resolved			
5LNC		States	Note	Within 1000NM
DAKAM	2	Fiji/New Zealand, Viet Nam	Viet Nam to replace by PUMBA.	No
EXORA	2	Fiji, Philippines	Philippines to replace by EXOLO.	No
NEMAL	3	Austria, Colombia, Fiji	Deleted from Colombia. Fiji to resolve in Q3 2024.	No
PACKO	2	United States of America, Fiji	Fiji to reserve a new 5LNC.	No

5LNC STATUS - INDIA

	Total number of 5LNCs	1051
	Terminal Airspace (TA)	249
	En-route (ENR)	649
ICARD	FIR	58
	Other	78
	No Purpose	17
	No Coordinates	0
	Total number of duplicated 5LNCs	27
	Priority allocated to India	20
Duplicated	Priority allocated to other States	2
5LNCs	Priority to be determined	0
	In the process of being resolved	3
	Completely resolved 5LNCs	2

	Priority allocated to India			
5LNC		States	Priority	Within 1000NM
ASARI	2	India, Japan	India	No
BEDUX	2	India, Morocco	India	No
BIKEN	2	India, Tuvalu	India	No
DEMON	2	India, Brazil	India	No
EPDAD	2	India, Brazil	India	No
ERVIS	2	India, Brazil	India	No
GURAS	2	India, Nepal	India	Yes
LADER	2	India, Brazil/Argentina	India	No
LUKTI	2	India, Papua New Guinea	India	No
MADOG	3	Japan, India, Australia	India	No
MAGIL	2	Japan, India	India	No
MIPAK	2	India/Myanmar (FIR boundary), New Zealand	India/Myanmar	No
MONPI	2	India, Japan/United States of America (FIR boundary)	India	No
MOXET	2	India, New Zealand	India	No
NIXUM	2	India, New Zealand	India	No
NOMAG	2	India, Malaysia	India	No
OROTI	2	India, Japan	India	No
RASKI	3	India/Oman (FIR boundary), Suadi Arabia, Iraq	India/Oman	Yes
SAMAK	2	India/Malaysia, Libya	India/Malaysia	No
SASRO	2	India, Australia/New Zealand (FIR boundary)	India	No

	Priority allocated to other States				
	5LNC		States	Priority	Within 1000NM
•	PERRY	4	India/Mauritius/Seychelles (FIR boundary), Thailand, Sweden, Trinidad and Tobago	Sweden	No
	REBON	2	United States of America, India	United States of America	No

Priority to be determined			
5LNC	States	Priority	Within 1000NM

	In the process of being resolved			
5LNC		States	Note	Within 1000NM
BOBET	2	India, Australia	Australia replaced with EKUNO, but ICARD deletion request not yet submitted.	No
NINOB	2	Australia, India	Australia replaced with SINAM, but ICARD deletion request not yet submitted.	No
POPET	3	India, Cambodia, Australia	No longer published in AIP Cambodia, but ICARD deletion request not yet submitted.	No

5LNC STATUS - INDONESIA

Date: June 2024

2

8

	Total number of 5LNCs	2564
	Terminal Airspace (TA)	2052
	En-route (ENR)	444
ICARD	FIR	62
	Other	1
	No Purpose	5
	No Coordinates	0
	Total number of duplicated 5LNCs	15
	Priority allocated to Indonesia	5
Duplicated	Priority allocated to other States	0
5LNCs	Priority to be determined	0

	Priority allocated to Indonesia			
5LNC	States	Priority	Within 1000NM	
EMONA	2 Indonesia, Jamaica	Indonesia	No	
KADAR	2 Indonesia/Singapore (FIR boundary), Japan	Indonesia/Singapore	No	
MATRA	3 Brazil, Israel, Indonesia	Indonesia	No	
OKADA	2 Malaysia/Indonesia (FIR boundary), Japan	Malaysia/Indonesia	No	
SATNA	2 Australia/Indonesia (FIR boundary), Brazil	Australia/Indonesia	No	

In the process of being resolved

Completely resolved 5LNCs

I	Priority allocated to other States			
	5LNC	States	Priority	Within 1000NM

ı	Priority to be determined			
	5LNC	States	Priority	Within 1000NM

	In the process of being resolved				
5LNC	States	Note	Within 1000NM		
BORAS	3 Indonesia, Peru, Dominican Republic	Dominican Republic agreed to delete in ICARD, but deletion request not yet	No		
TAROS	3 Indonesia/Singapore (FIR boundary), India/Bangladesh (FIR boundary), Mexico	Mexico agreed to delete in ICARD, but deletion request not yet submitted	No		

5LNC STATUS - JAPAN

ICARD	Total number of 5LNCs	1182
	Terminal Airspace (TA)	421
	En-route (ENR)	621
	FIR	17
	Other	5
	No Purpose	118
	No Coordinates	10

Duplicated	Total number of duplicated 5LNCs	650
5LNCs	Priority allocated to Japan	37
	Priority allocated to other States	573
	Priority to be determined	6
	In the process of being resolved	25
	Completely resolved 5LNCs	9

	Priority allocated to Japan			
5LNC	States	Priority	Within 1000NM	
AMBER	3 Grenada, Pakistan, Japan	Japan	No	
AMITY	2 Australia, Japan	Japan	No	
ARIES	2 Japan, Tonga	Japan	No	
BANSU	3 Russian Federation, Japan, Viet Nam	Japan	No	
BEKKA	2 Japan, Australia	Japan	No	
BERRY	3 Japan, Australia, New Zealand	Japan	No	
BIKAN	2 Japan, Malaysia	Japan	No	
BIRDY	3 Japan, Thailand, Australia	Japan	No	
CHARA	3 Japan, Brazil, Venezuela	Japan	No	
CREEK	2 Japan, New Zealand	Japan	No	
HAPPY	2 Japan, China	Japan	No	
JAKAL	2 Japan, Namibia	Japan	No	
KARTA	2 Japan, Comoros	Japan	No	
KOMPI	2 Japan, Bolivia	Japan	No	
LANAT	2 Japan/Republic of Korea (FIR boundary), New Zealand/Fiji	Japan/Republic of Korea	No	
LENTO	3 Japan, China (Taiwan), Thailand	Japan	Yes	
LEVEE	2 Japan, United States of America	Japan	No	
MAGGY	2 Japan, United States of America	Japan	No	
MAGRO	2 Japan, Italy	Japan	No	
MAMOD	2 Japan, New Zealand	Japan	No	
MARCO	2 Japan, Ethiopia	Japan	No	
MASKU	2 Japan, New Zealand	Japan	No	
NISMO	2 Japan, France	Japan	No	
PAPAS	3 Japan, Thailand, Brazil	Japan	Yes	
RALPH	2 Japan, United States of America	Japan	No	
ROBIN	5 Mexico, Japan, China (Taiwan), China (Hong Kong), Australia	Japan	Yes	
SABRI	3 Chile, Japan, Saudi Arabia	Japan	No	
SAGRA	2 Japan, Philippines	Japan	No	
SANIT	2 Japan, Thailand	Japan	Yes	
SARTA	2 Japan, Brazil	Japan	No	
SAVER	2 Japan, Australia	Japan	No	
SEDNA	2 Japan, Malaysia	Japan	No	
SEPIA	3 China (Taiwan), Japan, Republic of Korea	Japan	No	
STORK	3 Japan, Australia, New Zealand	Japan	Yes	
TYLER	2 Japan, United States of America	Japan	No	
USUBA	2 Japan, Ethiopia	Japan	No	
VIRGO	3 Tonga, Japan, China (Taiwan)	Japan	No	

·	FLNO	Priority allocated to other Sta		/V(:YI
ABBOT 4 Mexico, United Kingdom, Japan, Pakistan NaBIRA 2 Rusakishara, Japan Nazakishan No ABUMI 2 Rusakishara (Japan United States of America, Japan United States of America, Japan United States of America, Japan United States of America No ACORD 2 United States of America, Japan United States of America No ACORD 2 United States of America, Japan United States of America No ACORD 2 United States of America, Japan United States of America No ADDUM 2 Japan, United States of America No Ontoles States of America No ADDUM 2 Japan, United States of America No Ontoles States of America No	5LNC	States	Priority	Within 1000NM
ABUMI 2 Russian Federation, Japan ACCELA 2 United States of America, Japan ACCROR 2 United States of America, Japan ACORD 2 United States of America, Japan ACORD 2 United States of America, Japan ACORD 3 United States of America, Japan ACORD 4 United States of America, Japan ADUM 2 Japan, United States of America No ADDUM 2 Japan, United States of America No ADUM 2 Japan, United States of America No ACATA 2 Russian Federation, Japan Russian Federation No ALEY 2 Japan, United States of America No AKASA 2 Japan, United States of America No AKASA 2 Japan, United States of America No AKASE 2 Japan, United States of America No AKASE 2 Japan, United States of America No AKASE 3 Japan, United States of America No ALCOR 2 Japan, United States of America No ALCOR 3 Japan, United States of America No ALCOR 3 Japan, United States of America No ALLER 3 Japan, United States of America No ALLER 3 Japan, United States of America No ALLER 4 United States of America, Japan No ALLER 5 United States of America, Japan No ALLER 6 United States of America, Japan No ALLER 7 United States of America, Japan No ALLER 8 United States of America, Japan No ALLER 9 United States of America, Japan No ALLER 1 United States of America No ALLER 2 United States of America No ALLER 1 United States of America No ALLER 2 United States of America No ALLER 1 United States of America No ALLER 2 United States of Amer		4 Mexico, United Kingdom, Japan, Pakistan	_	No
ACEILA 2 United States of America, Japan United States of America No ACTOR 2 United States of America, Japan United States of America, Japan United States of America No ACTOR 2 United States of America, Japan United States of America No ACATA 2 Quayan, United States of America United States of America No ACATA 2 Quayan, United States of America United States of America No ACATA 2 Quayan, United States of America United States of America No AKANA 2 Quayan, United States of America United States of America No AKANA 2 Quayan, United States of America United States of America No AKANA 2 Quayan, United States of America United States of America No AKANA 2 Quayan, United States of America United States of America No AKANA 2 Quayan, United States of America United States of America No AKANA 2 Quayan, United States of America United States of America No ALCOR 2 Japan, United States of America, Chile United States of America No ALCOR 2 Japan, United States of America, Chile United States of America No ALCOR 2 Japan, United States of America, Japan United States of America No ALLER 3 Japan, Australia, United States of America No United States of America No ALLER 2 United States of America, Japan United States of America No ALLER 2 United States of America, Japan United States of America No ALLER 2 United States of America, Japan United States of America No ALLER 2 United States of America, Japan United States of America No ALLER 2 United States of America No United States of America No ALLER 2 United States of America No United States of America No ALLER 2 United States of America No No ALLER 2 Japan, MexicoPleitz (COCESNA) No		· ·		
ACORD 2 United States of America, Japan ACTOR 3 Japan, United States of America No ADDUM 2 Japan, United States of America No ACAGTA 2 Japan, United States of America No ACAGTA 3 Ley 2 Japan, United States of America No ALEY 2 Japan, United States of America No ALEY 2 Japan, United States of America No ALEY 2 Japan, United States of America No AKASA 2 Japan, United States of America No AKASA 2 Japan, United States of America No AKASB 2 Japan, United States of America No AKASB 2 Japan, United States of America No AKASB 2 Japan, United States of America ALCOR 2 Japan, United States of America No ALCOR 3 Japan, United States of America No ALCER 3 Japan, United States of America No ALLEN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No AMAGA 2 Japan, Cyprus No AMAMAM 3 Netherlands Antilles (Netherlands), Japan United States of America No AMAMAM AMAMI		· •		
ACTOR 2 United States of America, Japan ADDUM 2 Japan, United States of America No AGATA 2 Russian Federation, Japan ALEY 2 Japan, United States of America No AKANA 2 Russian Federation, Japan AKASE 2 Japan, United States of America No AKASA 2 Japan, United States of America No AKASI 2 Russian Federation, Japan AKASE 3 Russian Federation, Japan ALCOR 2 Japan, United States of America No AKASI 2 Russian Federation, Japan ALCOR 2 Japan, United States of America ALDER 3 Japan, United States of America ALDER 3 Japan, United States of America ALLOR 4 United States of America, Alpia ALLOR 5 United States of America, Alpan ALLOR 6 United States of America, Japan ALLOR 7 United States of America, Japan ALLOR 9 United States of America, Japan ALLOR 9 United States of America, Japan ALLOR 1 United States of America, Japan ALLOR 2 Mexico, Japan, Mexico Coccessor, Vocyrus ANAMON 2 Lapan, Moxicofelize (COCESNA), Japan ALLOR 2 Japan, United States of America ANAMON 2 Japan, United States of America ANAMON 2 Japan, United States of America ANOBA 2 Japan, Holyride States of America, Japan ANAMON 2 United States of America, Japan ANAMON 2 United States of America, Japan ANAMON 2 Japan, Stovenia ANAMON 3		·		
ADDUM 2 Japan, United States of America No AGATA 2 Russian Federation, Apan Russian Federation, No AILEY 2 Japan, United States of America No AKANA 2 Russian Federation, Apan No AKANA 2 Russian Federation, Apan No AKASE 2 Japan, United States of America United States of America No AKASE 2 Japan, United States of America United States of America No AKASE 2 Japan, United States of America United States of America No AKASI 2 Japan, United States of America United States of America No ALCOR 2 Japan, United States of America United States of America No ALCOR 3 Japan, United States of America United States of America No ALCOR 2 Japan, United States of America United States of America No ALCOR 2 United States of America, Japan United States of America United States of America No ALCOR 2 United States of America, Japan United States of America No ALCOR 2 United States of America, Japan United States of America No ALCOR 2 United States of America, Japan United States of America No ALCOR 2 United States of America, Japan United States of America No ALCOR 2 Japan, Cyprus No AMAGA 2 Japan, Cyprus No AMAGA 2 Japan, Cyprus No AMAGA 2 Japan, Mexico Technica, Japan No AMAGA 2 Japan, Sioveria States of America, Japan No No AMAGA 2 Japan, Sioveria States of America, Japan No No AMAGA 2 Japan, Sioveria States of America, Japan No No AMAGA 2 Japan, Sioveria States of America, Japan No No AMAGA 2 Japan, Sioveria States of America, Japan No No No AMAGA 2 Japan, Sioveria States of America, Japan No No No AMAGA 2 Japan, Sioveria States of America, Japan No No No AMAGA 2 Japan, Sioveria States		• •		
AGATA 2 Russian Federation, Japan ALEY Japan, United States of America No AKANA 2 Russian Federation, Japan AKASÉ 3 Russian Federation, Japan AKASÉ 3 Russian Federation, Japan AKASÉ 3 Russian Federation, Japan AKOR 3 Russian Federation, Japan ALOR 3 Japan, United States of America ALDER 3 Japan, United States of America ALLEN 3 Japan, United States of America ALLEN 3 Japan, United States of America, Chile ALLEN 2 United States of America, Japan ALLEN 2 Japan, NevicorDelize (COCESNA), Japan AMARU 2 Japan, MexicorDelize (COCESNA), Japan AMARU 2 Japan, MexicorDelize (COCESNA), Japan AMARU 2 Japan, MexicorDelize (COCESNA), Mexicor		·		
ALEY 2 Japan, United States of America No AKANA 2 Russian Federation, Apan No AKASA 2 Russian Federation, Apan No AKASE 2 Japan, United States of America No AKASE 2 Japan, United States of America No AKASE 2 Russian Federation, Apan No AKASI 2 Russian Federation, Apan Russian Federation No ALCOR 2 Japan, United States of America No United States of America No ALCOR 3 Japan Australia United States of America No United States of America No ALLAN 2 United States of America, Japan United States of America No United States of America No ALLAN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No AMAGA 2 Japan, Cyprus No AMAGA 2 Japan, Cyprus No AMAGA 2 Japan, Cyprus No AMAGA 2 Japan, MoxicofBelize (COCESNA), Japan Russian Federation, No AMAGA 2 Japan, MoxicofBelize (COCESNA), Japan Russian R		• •		
AKANA 2 Russian Federation, Japan RAKASE 2 Japan, United States of America No AKASE 2 Japan, Linided States of America United States of America No AKASI 2 Russian Federation, Japan Russian Federation No AKASI 2 Russian Federation, Japan Russian Federation No AKASI 2 Russian Federation, Japan Russian Federation No ALCOR 2 Japan, United States of America United States of America No United States of America, Japan United States of America No United States of America, Japan United States of America No United States of America, Japan United States of America No United States of America, Japan United States of America No No ALCE 2 United States of America, Japan United States of America No No ALCE 2 United States of America, Japan United States of America No No ALCE 2 United States of America, Japan United States of America No No ALCE 2 United States of America, Japan United States of America No No ALCE 2 United States of America, Japan United States of America No No ALCE 2 Japan, Cyprus No No ALCE 2 Japan, Cyprus No No ALCE 2 United States of America, Japan United States of America No No ALCE 2 United States of America, Japan United States of America No No ALCE 2 United States of America, Japan No				
AKASI 2 Russian Federation, Japan AKESI 2 Russian Federation, Japan ALCOR 2 Japan, United States of America ALDER 3 Japan, Australia, United States of America ALLAN ALLAN A United States of America, Japan ALLAN ALLAN A United States of America, Japan ALLAN ALLAN ALLAN A United States of America, Japan ALLAN ALLE A United States of America, Japan ALLE A United States of America A No ANGEL A Dapan, Mexico/Belize (COCESNA) ANGEL A Dapan, Mexico/Belize A No ANGEL A Dapan, Mexico/B		• •		
AKESI 2 Russian Federation, Japan ALCOR 2 Japan, United States of America ALCOR 3 Japan, United States of America ALCOR 3 Japan, United States of America ALCOR 2 Japan, United States of America ALCOR 3 Japan, United States of America ALCOR 2 Japan, United States of America ALCOR 2 Japan, United States of America ALCOR 2 Japan, United States of America, Japan ALLEN 2 Japan, Cyrus ALLEN 2 Lucador/Peru ALLEN 2 Japan, Cyrus ALLEN 2 Lucador/Peru ALLEN 2 Japan, Cyrus ALLEN 2 Lucador/Peru ALLEN 2 Japan, Cyrus ALLEN 2 Lucador/Peru ALLEN	AKASE	2 Japan, United States of America	United States of America	No
ALCOR 2 Japan, United States of America United States of America No ALCER 3 Japan, Australia, United States of America United States of America No ALCER 3 Japan, Australia, United States of America United States of America No ALLEN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No AMAGA 2 Mexico, Japan Mexico No No AMAKO 2 Japan, Cyprus No AMAKO 2 Japan, Cyprus No AMAMAI 2 Netherlands Antilles (Netherlands), Japan Netherlands Antilles (Netherlands), Japan Netherlands Antilles (Netherlands), Japan Netherlands Antilles (Netherlands), Japan Netherlands Antilles (Netherlands), No AMANO 2 Italy, Japan Netherlands Antilles (Netherlands), Japan Netherlands Antilles (Netherlands), No AMARU 2 Guatemala (COCESNA), Japan Netherlands Antilles (Netherlands), No AMARU 2 Japan, Mexico/Belize (COCESNA) Mexico/Belize Device No ANCEL 5 Thailand, Phillippines, Japan, Honduras (COCESNA), Colombia/Ecuador (FIR boundary), Japan Netherlands Antilles (Netherlands), No APOLO 3 United States of America, Japan, Republic of Korea United States of America No APOLO 3 United States of America, Japan, Republic of Korea United States of America No APOLO 3 United States of America, Japan, Phillippines No ARINA 2 Japan, Slovenia No ARINA 2 Japan, Slovenia No ARINA 2 Malaysia, Japan Noterlands No No ARINA 2 Japan, Slovenia No ARINA 2 Malaysia, Japan Noterlands No No ARINA 2 Japan, Slovenia No No No ARINA 2 Japan, United States of America, Japan Noterlands No No No ARINA 2 Japan, United States of America, Japan Noterlands No No No ARINA 2 Japan, United States of America, Japan Noterlands No No No ARINA 2 Japan, United States of America, Japan Noterlands No No No No ARINA 2 Lapan Noterlands No	AKASI	2 Russian Federation, Japan	Russian Federation	No
ALDER 3 Japan, United States of America Chile United States of America No ALLAN 2 United States of America United States of America No ALLAN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No AMAGA 2 Mexico, Japan Mexico No AMAGA 2 Japan, Cyprus No Cyprus No AMAMACO 2 Japan, Cyprus No Cyprus No AMAMACO 2 Japan, Cyprus No AMAMACO 2 Netherlands Antillies (Netherlands), Japan Netherlands Antillies (Netherlands), No AMAMACO 2 Japan, Mexico/Delize (COCESNA), Japan Netherlands Antillies (Netherlands), No AMAGO 2 Japan, Netherlands Antillies (Netherlands), No AMAGO 2 Japan, Netherlands Antillies (Netherlands), No AMERICA 2 Japan, Netherlands No Mexico Mexic	AKESI	• •	Russian Federation	No
ALICE 3 Japan, Australia, United States of America United States of America No ALLAN 2 United States of America, Japan United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America No Aller 2 United States of America, Japan United States of America No AMARO 2 Mexico, Japan Mexico No AMARO 2 Japan, Cyprus Cyprus No AMARO 2 Japan, Cyprus No AMARO 2 Italy, Japan Netherlands Antilles (Netherlands), Japan Netherlands Antilles (Netherlands) No AMARO 2 Italy, Japan Netherlands Antilles (Netherlands), Japan Netherlands Antilles (Netherlands) No AMARO 2 Italy, Japan Nexico/Belize (COCESNA), Japan Nexico/Belize No AMERO 2 Japan, Mexico/Belize (COCESNA) Mexico/Belize No ANCEL 5 Thailand, Phillippines, Japan, Honduras (COCESNA), Colombia/Ecuador (FIR boundary), Japan Ecuador/Peru No Colombia/Ecuador (FIR boundary), Japan Ecuador/Peru No APOLO 3 United States of America, Japan, Republic of Korea United States of America No APOLO 3 United States of America, Japan, Republic of Korea United States of America No APOLO 3 United States of America, United Kingdom, Japan, Australia ARIKA 2 Japan, Equatorial Guinea (ASECNA) Equatorial Guinea (ASECNA) No ARENA 4 Spain/Morocco (Western Sahara), Brazil, Costa Rica, Japan New Zealand No ARIKA 2 New Zealand, Japan Honduras (COCESNA), No ARICHON 2 Japan, Slovenia No ARICHON 2 Japan, United States of America, Japan No ARICHON 2 Japan, United States of America No No ARICHON 2 Japan, United States of America No No ARICHON 2 Japan, United States of America No No ARICHON 2 Japan, United Kingdom, Japan ARICHON 2 Japan, United States of America No No ARICHON 2 Japan, United Kingdom, United States of America No No ARICHON 2 United States of America, Japan United States of America No No ARICHON 2 United States of America, Japan No United States of America No No ARI	ALCOR	• •		No
ALLAN 2 United States of America, Japan United States of America No ALLEN 2 United States of America, Japan United States of America, Japan United States of America No Mexico Mexico Description of Mexico Mexico Mexico Mexico Mexico Description of Mexico		·		
ALLEN 2 United States of America, Japan ALLE 2 United States of America, Japan AMAGA 2 Mexico, Japan Mexico No AMAGA 2 Mexico, Japan Mexico No AMAGA 2 Mexico, Japan Mexico No AMAMA 2 Jeapan, Cyprus No AMAMA 2 Jeapan, Cyprus No AMAMA 2 Lidy, Japan No AMAMA 2 Jeapan, Cyprus No AMAMA 2 Jeapan, Cyprus No AMAMA 2 Lidy, Japan No AMAMA 2 Jeapan, Merica, Japan Metherlands Antillies (Netherlands) No AMAMA AMARU 2 Guatemala (COCESNA), Japan Mexico/Belize No AMIDA 2 Japan, Mexico/Belize (COCESNA) AMIDA 2 Japan, Mexico/Belize (COCESNA) ANEMO 2 Japan, United States of America No ANIGEL 5 Thailand, Phillippines, Japan, Honduras (COCESNA), Colombia/Ecuador Thailand No ANPAL 2 Thailand, Japan ANPAL 2 Thailand, Japan ANPAL 2 Thailand, Japan ANPAL 2 Thailand, Japan ANPAL 3 United States of America, Japan, Republic of Korea ARASI 4 Spain/Morocco (Western Sahara), Brazil, Costa Rica, Japan ARIKA 2 New Zealand, Japan ARIKA 2 New Zealand, Japan ARIKA 2 New Zealand, Japan ARIKA 3 Honduras (COCESNA), Japan, Phillippines ARICA 3 Honduras (COCESNA), Japan ARICA 3 Honduras (COCESNA), Japan, Phillippines Honduras (COCESNA) No ARRINA 2 Malaysia, Japan Malaysia No ARRINA 2 Malaysia, Japan Malaysia No ARRINA 2 Malaysia, Japan Malaysia No ARRINA 2 Japan, Stovenia No ARRINA 2 Japan, Stovenia No ARRINA 2 Japan, United States of America No ARRINA 3 Honduras (COCESNA), Japan ARICA 2 Japan, United States of America No ARRINA 2 Japan, United States of America No ARRINA 2 Malaysia, Japan Malaysia No ARRINA 2 Malaysia, Japan Mexico No No No ARRINA 2 Malaysia, Japan Mexico No No No No ARRINA 2 Malaysia, Japan Mexico No No No No No ARRINA 2 Malaysia, Japan Mexico No				
ALLIE 2 United States of America, Japan Mexico (Nestern Sahara), Japan Mexico (Sprins), Japan		·		
AMAGA 2 Mexico, Japan (Sprus) (AMAKO 2 Japan, Cyprus) (AMAKO 2 Japan, Cyprus) (AMAKO 2 Japan, Cyprus) (AMAKO 2 Japan, Cyprus) (AMAKO 2 Netherlands Antillies (Netherlands), Japan (Bayeriands Antillies (Netherlands), Japan (Bayeriands Antillies (Netherlands)) (AMAKO 2 Italy, Japan (Buthy, Japan) (Buthwall) (AMAKO 2 Japan, Mexico/Belize (COCESNA)) (AMAKO 2 Japan, Mexico/Belize (COCESNA)) (AMEMO 2 Japan, Mexico/Belize (COCESNA)) (Mexico/Belize (AMAKO 2 Japan, Horlided States of America (Ditted States of America		, · ·		
AMAMO 2 Japan, Cyprus Cyprus Netherlands Antilles (Netherlands), Japan Netherlands Antilles (Netherlands) No AMANO 2 Italy, Japan Italy Netherlands Antilles (Netherlands) No AMARU 2 Guatemala (COCESNA), Japan Guatemala (No ANEMO 2 Japan, Mexico/Belize (COCESNA) Mexico/Belize No ANEMO 2 Japan, United States of America United States of America No ANEMO 2 Japan, United States of America United States of America No ANEMO 2 Japan, Honduras (COCESNA), Colombia/Ecuador (FIR boundary) ANPAL 2 Ecuador/Peru (FIR boundary) ANPAL 2 Ecuador/Peru (FIR boundary), Japan Becuador/Peru No APOLO 3 United States of America, Japan, Republic of Korea United States of America No APOLO 3 United States of America, Japan, Republic of Korea United States of America No APOLO 3 United States of America, Japan, Republic of Korea United States of America No ARASI 2 Japan, Equatorial Guinea (ASECNA) Equatorial Guinea (ASECNA) Equatorial Guinea (Malaysia, Japan Natralia) Spain/Morocco (Western Sahara), Brazil, Costa Rica, Japan Malaysia No ARIMA 2 New Zealand, Japan Philippines Honduras (COCESNA) No ARION 2 Japan, Slovenia No ARIMA 2 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARION 2 Japan, Slovenia No ARIMA 2 Japan, United States of America United States of America No ARIMA 2 Japan, United States of America United States of America No ARIMA 2 Japan, United States of America United States of America No ARIMA 2 Japan, United States of America United States of America No ARIMA 2 No ARIMA 2 No ARIMA 2 Japan, United States of America No ARIMA 2 No ARIMA 2 Japan, United States of America United States of America No ARIMA 2 No ARI		·		
AMAMI 2 Netherlands Antilles (Netherlands), Japan Italy No AMANO 2 Italy, Japan Italy No AMARU 2 Guatemala (COCESNA), Japan Guatemala (COCESNA) Mexico/Belize No AMARU 2 Japan, Mexico/Belize (COCESNA) Mexico/Belize (COCESNA) Mexico/Belize (COCESNA) No ANCEMO 2 Japan, Mexico/Belize of America United States of America No ANCEL 5 Thailand, Phillippines, Japan, Honduras (COCESNA), Colombia/Ecuador (FIR boundary). Japan Ecuador/Peru (FIR boundary). Japan Ecuador/Peru (FIR boundary). Japan Thailand No ANPAN 2 Thailand, Japan Thailand, Japan Thailand No APPLE 4 United States of America, Japan, Republic of Korea United States of America (ASECNA) Equatorial Guinea (ASECNA) No ARIKA 2 Naw Zealand, Japan Malaysia No ARIKA 2 Naw Zealand, Japan Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARIKA 2 Malaysia, Japan Malaysia No ARIKA 2 Malaysia, Japan Honduras (COCESNA) Honduras (COCESNA) No ARIKA 2 Malaysia, Japan Honduras (COCESNA) No ARIKA 2 Malaysia, Japan Honduras (COCESNA) No ARIKA 2 Japan, Slovenia Slovenia No ARIKA 2 Japan, United States of America United States of America No ARIKA 2 Japan, United States of America United States of America No ARIKI 2 United States of America, Japan India No ARIKA 2 India, Japan No Malaysia No No ARIKA 2 India, Japan Honduras (COCESNA) No ARIKA 2 India, Japan India No India No India Malaysia No No ARIKA 2 India, Japan India No India Malaysia No No ARIKA 2 India, Japan India No India Malaysia No No ARIKA 2 India, Japan India No India Malaysia No No ARIKA 2 India, Japan India No India Malaysia No No ARIKA 2 India, Japan India No India Malaysia No No ARIKA 2 India, Japan India No India Malaysia No No ARIKA 2 India, Japan No India Malaysia No No ARIKA 2 India, Japan No India Malaysia No No ARIKA 2 India, Japan No India Malaysia No		•		
AMARU 2 Italy, Japan (Suatemala (COCESNA), Japan (Suatemala (COCESNA), Japan (Suatemala (COCESNA), Japan (Suatemala (COCESNA), Mexico/Belize (COCESNA) (Mexico/Belize (DOCESNA)) (Mexico/Belize (DOCESNA), Mexico/Belize (DOCESNA), Mexico/Belize (DoCESNA), Colombia/Ecuador (FIR boundary) (Solombia/Ecuador (FIR boundary)) (Province)			71	
AMARU 2 Guatemala (COCESNA), Japan Guatemala No AMIDA 2 Japan, Mexico/Belize (COCESNA) Mexico/Belize No OANEMO 2 Japan, United States of America United States of America No ANEMO 2 Japan, United States of America United States of America No Colombia/Ecuador (Fire Boundary) (Fire Bounda		, , ,		
AMIDA ANEMO 2 Japan, Mexico/Belize (COCESNA) ANEMO 2 Japan, United States of America No ANCEL 5 Thailand, Phillippines, Japan, Honduras (COCESNA), Colombia/Ecuador (FIR boundary) ANPAL 2 Ecuador/Peru (FIR boundary), Japan ANPAN 2 Thailand, Japan APOLO 3 United States of America, Japan, Republic of Korea Hondural States of America, Japan, Republic of Korea ARSI 2 Japan, Equatorial Guinea (ASECNA) ARSI 2 Japan, Equatorial Guinea (ASECNA) ARRINA A Spain/Morocco (Western Sahara), Brazil, Costa Rica, Japan ARINA 2 New Zealand, Japan ARINA 3 Honduras (COCESNA), Japan, Philippines ARINA 3 Honduras (COCESNA), Japan, Philippines ARINA ARINA A Honduras (COCESNA), Japan, Philippines ARINA ARI			•	
ANEMO 2 Japan, United States of America United States of America Colombia/Ecuador (FIR boundary) ANPAL 2 Ecuador/Peru (FIR boundary), Japan Ecuador/Peru No ANPAN 2 Thailand, Japan Thailand Japan, Republic of Korea United States of America No APPLE 4 United States of America, Japan, Republic of Korea United States of America No APPLE 4 United States of America, United Kingdom, Japan, Australia ARASI 2 Japan, Equatorial Guinea (ASECNA) ARRINA 4 Spain/Morocco (Western Sahara), Brazil, Costa Rica, Japan New Zealand No ARIIMA 2 Malaysia, Japan New Zealand No ARIIMA 3 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARICON 2 Japan, United States of America United States of America No ARINA 2 India, Japan No ARIMA 2 Louited States of America No ARICON 2 Japan, United States of America United States of America No ARICON 2 Japan, United States of America United States of America No ARIMA 2 India, Japan United States of America United States of America No ARIMO 2 Japan, United States of America United States of America No ARIMO 2 India, Japan United Kingdom, United States of America No ASARI 2 India, Japan Arima India No ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ASPEN 3 Japan, United Kingdom, Japan, China (Hong Kong) ATAMI 2 Chile, Japan China (Hong Kong) ATENA 2 China (Hong Kong), Japan, NACC (Costa rica) United States of America No ATENA 2 China (Hong Kong), Japan, NACC (Costa rica) Hong Kong (Special Administrative Region o No ATENA 2 Canada, Japan United States of America, Japan United States of America No AVOLO 2 United States of America, Japan United States of America No AVIDIM 2 Mexico, Japan United States of America No AVIDIM 2 United States of America, Japan United States of America No AVIDIM 2 United States of America, Japan United States of America No AVIDIM 2 United States of America, Japan United States of America No AVIDIM 2 United States of America, Japan United States of America No AVASOX 2 Canada, Japan No AVAGU 2 United States of		77 1		
Colombia/Ecuador (FIR boundary) ANPAL 2 Ecuador/Peru (FIR boundary), Japan Ecuador/Peru Thailand No ANPAN 2 Thailand, Japan Thailand No APOLO 3 United States of America, Japan, Republic of Korea United Kingdom No APOLO 3 United States of America, Japan, Republic of Korea United Kingdom No ARASI 2 Japan, Equatorial Guinea (ASECNA) No ARENA 4 Spain/Morocco (Western Sahara), Brazil, Costa Rica, Japan New Zealand No ARIMA 2 Malaysia, Japan Malaysia No ARIMA 3 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARIMA 3 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARIMA 2 Japan, Slovenia Slovenia No ARIMOR 2 Japan, United States of America United States of America No ARIMOR 2 Japan, United States of America United States of America No ARIMOR 2 India, Japan United States of America, Japan India No ASPEN 3 Japan, United Kingdom, Japan, China (Hong Kong) United Kingdom No ASPEN 3 Japan, United Kingdom, Japan, China (Hong Kong) United Kingdom No ATAGO 2 United States of America, Japan United Kingdom No ATAMI 2 Chile, Japan AMERICA 2 China (Hong Kong), Japan, NACC (Costa rica) Hong Kong (Special Administrative Region o No ATENA 2 China (Hong Kong), Japan, NACC (Costa rica) Hong Kong (Special Administrative Region o No ATIMI 2 Mexico, Japan Canada No AVOLA 2 Canada, Japan Canada No AVAGO 2 United States of America, Japan United States of America No AVOLA 2 Canada, Japan Canada No AVAGO 2 United States of America, Japan United States of America No AVAGO 2 United States of America, Japan United States of America No AVAGO 2 United States of America, Japan United States of America No AVAGO 2 United States of America, Japan United States of America No AVAGO 2 United States of America, Japan United States of America No AVAGO 3 United State			United States of America	
ANPAL 2 Ecuador/Peru (FIR boundary), Japan Ecuador/Peru Thailand No ANPAN 2 Thailand, Japan Thailand No APOLO 3 United States of America, Japan, Republic of Korea United States of America No ARASI 2 Japan, Equatorial Guinea (ASECNA) United States of America No ARIKA 4 Spain/Morocco (Western Sahara), Brazil, Costa Rica, Japan New Zealand No ARIKA 2 New Zealand, Japan New Zealand No ARIKA 3 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARICA 3 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARICON 2 Japan, Slovenia Slovenia Slovenia No ARICA 2 United States of America United States of America No ARICA 2 India, Japan United States of America, Japan United States of America No ASARI 2 India, Japan India No ASPEN 3 Japan, United Kingdom, United States of America United States of America No ASTRA 4 Brazil, United Kingdom, United States of America United Kingdom No ASTRA 4 Brazil, United Kingdom, Japan, China (Hong Kong) United Kingdom No ATAGO 2 United States of America, Japan United States of America No ATAMI 2 Chile, Japan Chile United States of America United States of America No ATAMI 2 Chile, Japan Hong Kong (Special Administrative Region o No ATICA 2 United States of America, Japan United States of America No AVICA 2 Canada, Japan Canada No No AVICA 2 Canada, Japan Canada No No AVICA 2 Canada, Japan Canada No No AVICA 2 Canada, Japan United States of America No AVICA 2 Canada, Japan United States of America No No AVICA 2 Canada, Japan United States of America No No AVICA 2 Canada, Japan United States of America No No AVICA 2 Canada, Japan Canada No No AXELA 2 United States of America, Japan United States of America No No AXELA 2 Canada, Japan United States of America No No AXELA 2 United States of America, Japan United States of America No No AXELA 2 Canada, Japan United States of America No No AXELA 2 Canada, J	ANGEL		Colombia/Ecuador	Yes
APOLO 3 United States of America, Japan, Republic of Korea United Kingdom, APOLE 4 United States of America, United Kingdom, Japan, Australia 2 Japan, Equatorial Guinea (ASECNA) Expanorial Guinea (ASECNA) Equatorial Guinea (ASECNA) Expanorial Guinea (ASECNA) Expan	ANPAL		Ecuador/Peru	No
APPLE 4 United States of America, United Kingdom, Japan, Australia 2 Japan, Equatorial Guinea (ASECNA) Equatorial Guinea (ASECNA) Sepain/Morocco (Western Sahara) No ARENA 4 Spain/Morocco (Western Sahara), Brazil, Costa Rica, Japan New Zealand No ARIMA 2 New Zealand, Japan New Zealand No ARIMA 2 Malaysia, Japan Malaysia No ARITA 3 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARION 2 Japan, Slovenia No ARION 2 Japan, United States of America United States of America No ARION 2 Japan, United States of America United States of America No ARION 2 Japan, United States of America United States of America No ASARI 2 India, Japan India No ASIMO 2 Argentina/Chile (FIR boundary), Japan Argentina, Chile No ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ASIRA 4 Brazil, United Kingdom, United States of America United States of America No ATAMI 2 Chile, Japan United States of America United States of America No ATAMI 2 Chile, Japan China (Hong Kong) United States of America No ATENA 2 China (Hong Kong), Japan, NACC (Costa rica) Hong Kong (Special Administrative Region o No ATUMI 2 Mexico, Japan United States of America No ATUMI 2 Mexico, Japan United States of America No AVION 2 United States of America, Japan United States of America No AVION 2 Canada, Japan Canada No AVION 2 United States of America, Japan United States of America No AVION 2 United States of America, Japan United States of America No AVION 2 United States of America, Japan United States of America No AVION 2 United States of America, Japan United States of America No AVION 2 United States of America, Japan United States of America No AVION 2 United States of America, Japan United States of America No AVION 2 United States of America, Japan United States of America No AVION 2 United States of America, Japan United States of America No AVION 3 United States of America, Japan United States of America No AVION 4 United States of America, Japan United States of America No AVION 5 Brazil, United States of America, Japan	ANPAN	2 Thailand, Japan	Thailand	No
ARASI 2 Japan, Equatorial Guinea (ASECNA) Equatorial Guinea (ASECNA) Spain/Morocco (Western Sahara), Brazil, Costa Rica, Japan New Zealand, Japan Noe ARIMA 2 Malaysia, Japan Malaysia Honduras (COCESNA) No ARITA 3 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARITA 3 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARITA 2 Japan, Glovenia Slovenia No ARITO 2 Japan, United States of America United States of America No ARTIC 2 United States of America, Japan United States of America No ARITO 2 India, Japan Argentina/Chile (FIR boundary), Japan Argentina, Chile No ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ATAGO 2 United States of America, Japan United States of America No ATAMI 2 Chile, Japan Honduras (COCESNA) No ATAMI 2 Chile, Japan NACC (Costa rica) Hong Kong (Special Administrative Region on No ATITIC 2 United States of America, Japan Mexico No ATUMI 2 Mexico, Japan Mexico No ATUMI 2 Mexico, Japan United States of America No AVION 2 United States of America, Japan Canada No AVOLA 2 Canada, Japan Canada No AVOLA 2 Canada, Japan Canada No AVOLA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan Canada No Canada No AXELA 3 ANG AXELA 2 Canada, Japan Canada No C	APOLO	3 United States of America, Japan, Republic of Korea	United States of America	No
ARENA ARIMA 2 New Zealand, Japan ARIMA 2 Malaysia, Japan ARIMA 3 Honduras (COCESNA), Japan, Philippines ARIMA 3 Honduras (COCESNA), Japan, Philippines ARIMA ARIMA ARIMA 3 Honduras (COCESNA), Japan, Philippines ARIMA ARIMA ARIMA ARIMA 3 Honduras (COCESNA), Japan, Philippines ARIMA ARIMA ARIMA ARIMA ARIMA 3 Honduras (COCESNA), Japan, Philippines ARIMA AR			•	No
ARIKA 2 New Zealand, Japan New Zealand No ARIMA 2 Malaysia, Japan Malaysia No ARIMA 3 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARICA 3 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARICA 2 Japan, Slovenia Slovenia No ARMOR 2 Japan, United States of America United States of America No ARTIC 2 United States of America, Japan United States of America No ASARI 2 India, Japan India No ASIMO 2 Argentina/Chile (FIR boundary), Japan Argentina, Chile No ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ASTRA 4 Brazil, United Kingdom, United States of America United Kingdom No ATAGO 2 United States of America, Japan United Kingdom No ATAGO 2 United States of America, Japan Chile No ATENA 2 Chile, Japan Chile No ATENA 2 China (Hong Kong), Japan, NACC (Costa rica) Hong Kong (Special Administrative Region o No ATUMI 2 Mexico, Japan United States of America No ATUMI 2 Mexico, Japan United States of America No AVOLA 2 United States of America, Japan United States of America No AVOLA 2 Canada, Japan Canada No AVSOX 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AXELA 2 Canada, Japan United States of America No AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan United States of America No BABCON 5 Brazil, United States, Japan, China (Taiwan), Phillippines Canada No AZURE 2 Canada, Japan Canada No AZURE 2 Canada, Japan Canada No AZURE 2 United States of America, Japan United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines Canada No		· · · · · · · · · · · · · · · · · · ·	·	
ARIMA 2 Malaysia, Japan Malaysia No ARITA 3 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARITA 3 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARLON 2 Japan, Slovenia Slovenia No ARMOR 2 Japan, United States of America United States of America No ARTIC 2 United States of America, Japan United States of America No ASARI 2 India, Japan India No ASARI 2 India, Japan India No ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ASTRA 4 Brazil, United Kingdom, Japan, China (Hong Kong) United Kingdom No ATAGO 2 United States of America, Japan United States of America No ATENA 2 Chile, Japan United States of America, Japan United States of America No ATTIC 2 United States of America, Japan United States of America No ATUMI 2 Mexico, Japan United States of America, Japan United States of America No AVOLA 2 Canada, Japan United States of America No AVOLA 2 Canada, Japan Canada No AVSOX 2 Canada, Japan Canada No AVSOX 2 Canada, Japan United States of America No AVELA 2 Canada, Japan United States of America No AVELA 2 Canada, Japan Canada No AVELA 2 United States of America, Japan United States of America No AVELA 2 Canada, Japan United States of America No AVELA 2 Canada, Japan United States of America No AVELA 2 Canada, Japan United States of America No AVELA 2 Canada, Japan United States of America No AVELA 2 Canada, Japan United States of America No BABEL 3 United States of America, Japan United States of America No BABEL 2 Canada, Japan China (Taiwan), Phillippines United States of America No BALAS 3 Russian Federation, United States of America, Japan France No BAMBI 3 Japan, Australia, French Polynesia (France) France France			. ,	
ARITA 3 Honduras (COCESNA), Japan, Philippines Honduras (COCESNA) No ARLON 2 Japan, Slovenia Slovenia Slovenia No ARMOR 2 Japan, United States of America United States of America No ARTIC 2 United States of America, Japan United States of America No ASARI 2 India, Japan India No ASIMO 2 Argentina/Chile (FIR boundary), Japan Argentina, Chile No ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ASTRA 4 Brazil, United Kingdom, Japan, China (Hong Kong) United Kingdom No ATAGO 2 United States of America, Japan United Kingdom No ATAMI 2 Chile, Japan ANCC (Costa rica) United States of America No ATIC 2 United States of America, Japan United States of America No ATION 2 United States of America, Japan United States of America No AVION 2 United States of America, Japan United States of America No AVION 2 United States of America, Japan United States of America No AVOLA 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan Canada No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No BABEL 3 United States of America, Japan United States of America No BABEL 3 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines United States of America No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No		•		
ARLON 2 Japan, Slovenia Slovenia Slovenia United States of America United States of America No ARTIC 2 United States of America, Japan United States of America No ASARI 2 India, Japan India India No ASARI 2 India, Japan India India No ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ASTRA 4 Brazil, United Kingdom, Japan, China (Hong Kong) United Kingdom No ATAGO 2 United States of America, Japan United States of America United States of America No ATAMI 2 Chile, Japan Chile No ATENA 2 Chile, Japan Hong Kong), Japan, NACC (Costa rica) Hong Kong (Special Administrative Region o No ATIC 2 United States of America, Japan United States of America No ATUMI 2 Mexico, Japan Mexico No AVION 2 United States of America, Japan United States of America No AVION 2 Canada, Japan Canada United States of America No AVSOX 2 Canada, Japan Canada No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan Canada No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No BABEL 3 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America Yes BAGLE 2 Canada, Japan Canada United States of America No BALAN 2 France, Japan Canada United States of America No BALAN 3 Russian Federation, United States of America, Japan United States of America No BALAN 3 Japan, Australia, French Polynesia (France) France No Hong BAMBI 3 Japan, Australia, French Polynesia (France) France			•	
ARMOR ARTIC 2 United States of America ARTIC 2 United States of America, Japan United States of America No ASARI 2 India, Japan Argentina, Chile No ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ASTRA 4 Brazil, United Kingdom, Japan, China (Hong Kong) ATAGO 2 United States of America, Japan ATAMI 2 Chile, Japan ATAMI 2 Chile, Japan ATENA 2 China (Hong Kong), Japan, NACC (Costa rica) ATURIC 2 United States of America, Japan ATURIC 2 United States of America, Japan ATURIC 3 United States of America, Japan ATURIC 4 United States of America, Japan ATURIC 5 United States of America, Japan ARURIC 6 Canada AVOLA 7 Canada AVOLA 7 Canada AYAGU 7 United States of America, Japan AYAGU 8 Canada, Japan Canada No AYSOX 9 Canada, Japan Canada No AYAGU 9 United States of America, Japan Canada No AYAGU 9 United States of America, Japan Canada No AYAGU 9 United States of America, Japan Canada No AYAGU 9 United States of America, Japan Canada No AYAGU 9 United States of America, Japan Canada No AYAGU 9 United States of America, Japan Canada No AYAGU 9 United States of America, Japan Canada No AYAGU 9 United States of America, Japan Canada No AYAGU 1 United States of America, Japan Canada No AYAGU 1 United States of America, Japan Canada No AYAGU 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines BAGLAS 3 Russian Federation, United States of America, Japan United States of America No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No		, , , , , , , , , , , , , , , , , , , ,		
ARTIC 2 United States of America, Japan India No ASARI 2 India, Japan India No ASIMO 2 Argentina/Chile (FIR boundary), Japan Argentina, Chile No ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ASTRA 4 Brazil, United Kingdom, Japan, China (Hong Kong) United Kingdom No ATAGO 2 United States of America, Japan United States of America No ATAMI 2 Chile, Japan China (Hong Kong) United States of America No ATENA 2 China (Hong Kong), Japan, NACC (Costa rica) Hong Kong (Special Administrative Region o No ATTIC 2 United States of America, Japan United States of America No AVION 2 United States of America, Japan Mexico No AVION 2 United States of America, Japan United States of America No AVOLA 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AXELA 2 Canada, Japan United States of America No AVION 2 United States of America, Japan United States of America No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No AXELA 2 Canada, Japan United States of America No BABEL 3 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 2 Canada, Japan Federation, United States of America No BALAS 3 Russian Federation, United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No		·		
ASARI 2 India, Japan India No ASIMO 2 Argentina/Chile (FIR boundary), Japan Argentina, Chile (RIR boundary), Japan No ASTRA 4 Brazil, United Kingdom, United Kingdom No ATAGO 2 United States of America, Japan United States of America (RIR ATAMI 2 Chile, Japan Chile (Rong Kong), Japan, NACC (Costa rica) Hong Kong (Special Administrative Region o No ATTIC 2 United States of America, Japan United States of America (RIR ATUMI 2 Mexico, Japan Mexico (RIR ATUMI 2 Mexico, Japan Mexico (RIR ATUMI 2 United States of America, Japan (RIR ATUMI 2 Canada, Japan (RIR ATUMI 2 Canada) (RIR ATUMI 2 Canada, Japan (RIR ATUMI 2 Canada) (RIR ATUMI 2 Canada, Japan (RIR ATUMI 2 Canada) (RIR ATUMI 2 Canada, Japan (RIR ATUMI 2 Canada) (RIR ATUMI 2 Canada, Japan (RIR ATUMI 2 Canada) (RIR ATUMI 2 Canada, Japan (RIR ATUMI 2 Canada) (RIR ATUMI 2 Canada) (RIR ATUMI 2 Canada, Japan (RIR ATUMI 2 Canada) (RIR		• •		
ASIMO 2 Argentina/Chile (FIR boundary), Japan Argentina, Chile No ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ASTRA 4 Brazil, United Kingdom, Japan, China (Hong Kong) United Kingdom No ATAGO 2 United States of America, Japan United States of America No ATAMI 2 Chile, Japan China (Hong Kong) Hong Kong (Special Administrative Region o No ATTIC 2 United States of America, Japan United States of America No ATUMI 2 Mexico, Japan Mexico No AVION 2 United States of America, Japan United States of America No AVOLA 2 Canada, Japan United States of America No AXSOX 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AYAGU 2 United States of America, Japan United States of America No AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BAGLE 2 Canada, Japan Canada United States of America No BAGLE 3 United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 3 Russian Federation, United States of America, Japan United States of America No BALAN 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No		·		
ASPEN 3 Japan, United Kingdom, United States of America United Kingdom No ASTRA 4 Brazil, United Kingdom, Japan, China (Hong Kong) United Kingdom No ATAGO 2 United States of America, Japan United States of America No ATAMI 2 Chile, Japan China (Hong Kong), Japan, NACC (Costa rica) Hong Kong (Special Administrative Region o No ATTIC 2 United States of America, Japan United States of America No ATUMI 2 Mexico, Japan Mexico No AVION 2 United States of America, Japan United States of America No AVOLA 2 Canada, Japan Canada No AXSOX 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AXELA 2 Canada, Japan United States of America No AYAGU 2 United States of America, Japan United States of America No AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BAGLE 2 Canada, Japan Canada United States of America No BAGLE 2 Canada, Japan United States of America No BAGLE 3 United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 2 Canada, Japan France No BALAS 3 Russian Federation, United States of America, Japan United States of America No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No				
ASTRA 4 Brazil, United Kingdom, Japan, China (Hong Kong) United Kingdom No ATAGO 2 United States of America, Japan United States of America No ATAMI 2 Chile, Japan China (Hong Kong), Japan, NACC (Costa rica) Hong Kong (Special Administrative Region o No ATENA 2 United States of America, Japan United States of America No ATUMI 2 Mexico, Japan Mexico No ATUMI 2 Mexico, Japan United States of America, Japan United States of America No AVOLA 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AYAGU 2 United States of America, Japan United States of America No AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines Canada No Canada No Canada No Salaba 3 Russian Federation, United States of America, Japan United States of America No BALAN 2 France, Japan France No BAMBI 3 Japan, Australia, French Polynesia (France) France No				
ATAGO 2 United States of America, Japan Chile No ATAMI 2 Chile, Japan Chile No ATENA 2 China (Hong Kong), Japan, NACC (Costa rica) Hong Kong (Special Administrative Region o ATTIC 2 United States of America, Japan United States of America No ATUMI 2 Mexico, Japan Mexico No AVION 2 United States of America, Japan United States of America No AVOLA 2 Canada, Japan Canada No AVSOX 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AYAGU 2 United States of America, Japan United States of America No AYAGU 2 United States of America, Japan United States of America No AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 2 Canada, Japan Canada No BALAN 2 France, Japan France No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France		•	•	No
ATENA 2 China (Hong Kong), Japan, NACC (Costa rica) Hong Kong (Special Administrative Region o No ATTIC 2 United States of America, Japan United States of America No ATUMI 2 Mexico, Japan Mexico No AVION 2 United States of America, Japan United States of America No AVOLA 2 Canada, Japan Canada No AVSOX 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AYAGU 2 United States of America, Japan United States of America No AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 2 Canada, Japan Canada No BALAN 2 France, Japan France No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No	ATAGO		United States of America	No
ATTIC 2 United States of America, Japan United States of America No ATUMI 2 Mexico, Japan Mexico No AVION 2 United States of America, Japan United States of America No AVOLA 2 Canada, Japan Canada No AVSOX 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AYAGU 2 United States of America, Japan United States of America No AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 2 Canada, Japan Canada No BALAN 2 France, Japan France No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No	ATAMI	2 Chile, Japan	Chile	No
ATUMI 2 Mexico, Japan Mexico No AVION 2 United States of America, Japan United States of America No AVOLA 2 Canada, Japan Canada No AVSOX 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AYAGU 2 United States of America, Japan United States of America No AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 2 Canada, Japan Canada No BALAN 2 France, Japan France No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No	ATENA	2 China (Hong Kong), Japan, NACC (Costa rica)	Hong Kong (Special Administrative Region of	No
AVION 2 United States of America, Japan United States of America No AVOLA 2 Canada, Japan Canada No AVSOX 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AYAGU 2 United States of America, Japan United States of America No AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 2 Canada, Japan Canada No BALAN 2 France, Japan France No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No		• •		
AVOLA 2 Canada, Japan Canada No AVSOX 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AYAGU 2 United States of America, Japan United States of America No AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 2 Canada, Japan Canada No BALAN 2 France, Japan France No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No		·		
AVSOX 2 Canada, Japan Canada No AXELA 2 Canada, Japan Canada No AYAGU 2 United States of America, Japan United States of America No AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 2 Canada, Japan Canada No BALAN 2 France, Japan France No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No				
AXELA 2 Canada, Japan Canada No AYAGU 2 United States of America, Japan United States of America No AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 2 Canada, Japan Canada No BALAN 2 France, Japan France No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No				
AYAGU 2 United States of America, Japan United States of America No AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 2 Canada, Japan Canada No BALAN 2 France, Japan France No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No		· 1		
AZURE 2 United States of America, Japan United States of America No BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 2 Canada, Japan Canada No BALAN 2 France, Japan France No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No		•		
BABEL 3 United States of America, Japan, Australia United States of America No BACON 5 Brazil, United States, Japan, China (Taiwan), Phillippines United States of America Yes BAGLE 2 Canada, Japan Canada No BALAN 2 France, Japan France No BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No		• •		
BACON5 Brazil, United States, Japan, China (Taiwan), PhillippinesUnited States of AmericaYesBAGLE2 Canada, JapanCanadaNoBALAN2 France, JapanFranceNoBALAS3 Russian Federation, United States of America, JapanUnited States of AmericaNoBAMBI3 Japan, Australia, French Polynesia (France)FranceNo				
BAGLE2 Canada, JapanCanadaNoBALAN2 France, JapanFranceNoBALAS3 Russian Federation, United States of America, JapanUnited States of AmericaNoBAMBI3 Japan, Australia, French Polynesia (France)FranceNo				
BALAN2 France, JapanFranceNoBALAS3 Russian Federation, United States of America, JapanUnited States of AmericaNoBAMBI3 Japan, Australia, French Polynesia (France)FranceNo				
BALAS 3 Russian Federation, United States of America, Japan United States of America No BAMBI 3 Japan, Australia, French Polynesia (France) France No		•		
BAMBI 3 Japan, Australia, French Polynesia (France) France No				
	BAMBO	4 United States of America, Japan, Thailand, United Kingdom	United States of America	No

BANBA	2 Ireland/United Kingdom (FIR boundary), Japan	Ireland, United Kingdom	No
BANJO	2 United States of America, Japan	United States of America	No
BANKU	2 Germany, Japan	Germany	No
		•	
BARBA	3 Philippines, Japan, United States of America	United States of America	No
BASHO	3 Thailand, Japan, United States of America	United States of America	No
BASIL	3 Brazil, Japan, Australia	Brazil	No
BASIN	2 United States of America, Japan	United States of America	No
BATAK	2 Netherlands, Japan	Netherlands	No
BATIS	3 United States of America, Japan, Sri Lanka	Sri Lanka.	No
BAUER	2 United States of America, Japan	United States of America	No
	· '		
BEACH	4 United States of America, Nadi, Japan, Republic of Korea	United States of America	Yes
BEAST	2 United States of America, Japan	United States of America	No
BECKY	3 Japan, United States of America, New Zealand	United States of America	No
BEIGE	2 United States of America, Japan	United States of America	No
	·		
BEKEN	2 United States of America, Japan	United States of America	No
BENES	2 Guatemala (COCESNA), Japan	Belize, Costa Rica, El Salvador, Guatemala,	No
BENNY	2 United States of America, Japan	United States of America	No
BERTH	2 Bahamas/United States of America, Japan	Bahamas/United States of America	No
	·		Yes
BETTY	3 Japan, China (Hong Kong), India	India. To be determined by the 5LNC	res
		Duplicate Resolution Rules if not used by	
		India.	
		Hong kong	
DILLY	4 Aveterie Janen Lee Bearleis Democratic Benyblic United		NI-
BILLY	4 Australia, Japan, Lao People's Democratic Republic, United	United Kingdom	No
	Kingdom		
BINGO	3 Japan, United States of America, Virgin Islands (USA)	United States of America	No
BINKS	2 United States of America, Japan	United States of America	No
BIZEN	2 United States of America, Japan	United States of America	No
BLITZ	3 United States of America, Japan, Australia	United States of America	No
BLOND	2 United States of America, Japan	United States of America	No
BLOOM	2 United States of America, Japan	United States of America	No
BLUES	4 United States of America, Brazil, Thailand, Japan	United States of America	No
BLUSH	3 United States of America, Japan, Australia	United States of America	No
BOKSO	2 Germany, Japan	Germany	No
BONDO	2 United States of America, Japan	United States of America	No
		United States of America	
BONGO	5 United States of America, Venezuela, Burkina Faso/Ghana (FIR	United States of America	No
	boundary), Japan, Australia		
BONUS	2 United States of America, Japan	United States of America	No
BORDO	2 China (Taiwan)/Japan (FIR boundary), United States of	China/Japan	No
DONDO		Onina/dapan	110
	America/Cuba		
BOTAN	2 Afghanistan, Japan	Afghanistan	No
BOXER	4 Japan, Australia, United States of America, Peru	United States of America	No
BRAVE	2 United States of America, Japan	United States of America	No
BRIGE	· ·		
	2 United States of America, Japan	United States of America	No
BROOK	4 Japan, Australia, New Zealand, United States of America	United States of America	No
BRUIN	2 United States of America, Japan	United States of America	No
BRUTE	2 United States of America, Japan	United States of America	No
BUBLE	2 United States of America, Japan	United States of America	No
	·		
BUCKI	2 United States of America, Japan	United States of America	No
BUICK	2 Canada, Japan	Canada	No
BUMER	2 Russian Federation, Japan	Russian Federation	No
BURRI	2 United States of America, Japan	United States of America	No
	· ·		
CACAO	3 Costa Rica (COCESNA), Japan, Republic of Korea	Costa Rica (COCESNA)	No
CACHE	2 United States of America, Japan	United States of America	No
CAMAS	2 United States of America, Japan	United States of America	No
CANON	2 United States of America, Japan	United States of America	No
	·		
CANOP	3 Japan, Canada, Brazil	Canada	No
CARCO	2 United States of America, Japan	United States of America	No
CAROL	3 United States, Japan, China (Taiwan)	United States of America	No
CARRY	2 United States of America, Japan	United States of America	No
	·		
CASTR	2 Canada, Japan	Canada	No
CAVES	2 Spain, Japan	Spain	No
CECIL	2 United States of America, Japan	United States of America	No
CEDAR	6 Brazil, United Kingdom, Lebanon, Japan, Australia, China (Hong	United Kingdom	No
J_D/ 11 (JSa rangaom	. 10
051.50	Kong)	11.11.101.1.11.11	
CELES	2 United States of America, Japan	United States of America	No

CELLO	4 United States of America, Iceland, Japan, Thailand	Iceland	No
CHALK	2 United States of America, Japan	United States of America	No
CHEEZ	2 United States of America, Japan	United States of America	No
CHEVY	• •	United States of America	No
	2 United States of America, Japan		
CHILY	United States of America, Japan	United States of America	No
CHIMI	2 Costa Rica (COCESNA), Japan	Costa Rica	No
CHINO	2 Mexico, Japan	Mexico	No
CIDER	3 Brazil, Japan, Thailand	Brazil	No
	· · ·		
CLOAK	2 United States of America, Japan	United States of America	No
COLOR	3 Brazil, Costa Rica (COCESNA), Japan	Brazil	No
COMET	3 United States of America, Japan, Israel	United States of America	No
CORAL	9 China (Hong Kong), China (Taiwan), Japan, Australia, Brazil,	Brazil	Yes
OOTOL	France (French Polynesia), Cuba, Mexico, Honduras (COCESNA)		100
	riance (riench Folynesia), Cuba, Mexico, Floriduras (COCESINA)		
COSMO	United States of America, Japan	United States of America	No
COSTA	3 Guatemala (COCESNA), Paraguay, Japan	Paraguay	No
COUPE	2 United States of America, Japan	United States of America	No
CRANE	5 United States of America, Japan, Brazil, Republic of Korea,	United States of America	Yes
OIVAIVE	Australia	Office Otates of Afficinea	103
ODEAN		Heited Otatas of Associas	NI.
CREAM	United States of America, Japan	United States of America	No
CURRY	3 United States of America, Trinidad and Tobago, Japan	United States of America	No
CURVY	2 United States of America, Japan	United States of America	No
DAGDA	2 Solomon Islands, Japan	Solomon Islands	No
	· ·		
DAISY	2 United States of America, Japan	United States of America	No
DALMA	3 Venezuela, Brazil, Japan	Brazil	No
DANDE	2 United Kingdom (Anguilla)/United States of America, Japan	United Kingdom (Anguilla)/United States of A	No
DANDY	2 United States of America, Japan	United States of America	No
	2 Mexico, Japan	Mexico	
DANGO			No
DANTE	2 United States of America, Japan	United States of America	No
DARKS	2 United States of America, Japan	United States of America	No
DARTS	3 Australia, United States of America, Japan	United States of America	No
DATIS	2 France (Martinique), Japan	France	No
DAVID	4 Japan, Seychelles, Italy, United States of America	Italy	No
DEANE	United States of America, Japan	United States of America	No
DEGNA	2 Sudan, Japan	Sudan	No
DELFI	2 United States of America, Japan	United States of America	No
DELTA	10 Suriname, Japan, Italy, Vanuatu, Syrian Arab Republic, Bhutan,	Suriname	Yes
	Liberia, Lao People's Democratic Republic, India, Sri Lanka		
DENNY	United States of America, Japan	United States of America	No
DENSA	2 Iran (Islamic Republic of), Japan	Iran (Islamic Republic of)	No
DERBY	2 United States of America, Japan	United States of America	No
	• •		
DIANA	2 Brazil, Japan	Brazil	No
DIKAN	2 Russian Federation, Japan	Russian Federation	No
DINGO	3 United States of America, Japan, Australia	United States of America	No
DISCO	3 Thailand, Canada, Japan	Canada	No
	2 United States of America, Japan	United States of America	
DODGE			No
DORIS	3 Australia, United States of America, Japan	United States of America	No
DOVER	3 United States of America, Japan, Israel	United States of America	No
DOYLE	2 United States of America, Japan	United States of America	No
DUFFY	3 United States of America, United Kingdom, Japan	United Kingdom	No
		-	
DUGON	2 Thailand, Japan	Thailand	No
EMIKO	2 United Arab Emirates, Japan	United Arab Emirates	No
ENDER	2 Turkey, Japan	Turkey	No
ESPAN	2 United States of America, Japan	United States of America	No
		Ireland	
ETARI	2 Ireland, Japan		No
FENDI	2 United States of America, Japan	United States of America	No
FINCH	3 United States of America, United Kingdom, Japan	United Kingdom	No
FINGA	2 United States of America, Japan	United States of America	No
FLUTE	5 Brazil, United States of America, Germany/Denmark (FIR	United States of America	No
ILUIL		Siniod States of America	140
=	boundary), Thailand, Japan		
FOGEL	2 United States of America, Japan	United States of America	No
FRANK	5 Japan, China (Taiwan), United States of America, Brazil, Panama	United States of America	No
FREDY	4 Australia, Japan, Seychelles, Bahamas	Bahamas	No
FREED	2 United States of America, Japan	United States of America	No
INCED	2 Office Otates of Afficia, Japan	Office Otates of Afficiled	INO

FROST	2 Jamaica, Japan	Jamaica	No
GABAN	2 Jamaica, Japan	Jamaica	No
GAKTO	2 New Zealand, Japan	New Zealand	No
GALAS	2 Comoros, Japan	Comoros	No
GAMAR	2 Sudan, Japan	Sudan	No
GAMBA	4 Cabo Verde, Chile, Japan, China (Hong Kong)	Chile	No
GANDO	2 Senegal, Japan	Senegal	No
GASAN	2 Democratic People's Republic of Korea, Japan	Democratic People's Republic of Korea	Yes
GATSU	2 United Kingdom, Japan	United Kingdom	No
GEMIN	2 United States of America, Japan	United States of America	No
GEMMA	2 Italy, Japan	Italy	No
GEMNI	2 Canada/United States of America (FIR boundary), Japan	Canada/United States of America	No
GENKO	2 Brazil, Japan	Brazil	No
GENOA	3 United States of America, Thailand, Japan	United States of America	No
GINGA	3 Thailand, Japan, United Kingdom	United Kingdom	No
GLARE	2 United States of America, Japan	United States of America	No
GLOVR	• •	United States of America	No
	2 United States of America, Japan		
GOLDO	2 Greece/Turkey (FIR boundary), Japan	Greece/Turkey	No
GOMES	2 Thailand, Japan	Thailand	No
GONBE	2 United States of America, Japan	United States of America	No
GORIN	2 Russian Federation, Japan	Russian Federation	No
GOSEN	2 Canada, Japan	Canada	No
GOSKI	2 Afghanistan, Japan	Afghanistan	No
GOTEN	2 Russian Federation, Japan	Russian Federation	No
GOTON	2 Canada, Japan	Canada	No
GRASE	2 Canada, Japan	Canada	No
GREBE	2 United States of America, Japan	United States of America	No
	·	United States of America	
GUMBO	2 United States of America, Japan/China (Taiwan) [FIR boundary]		No
GUPPY	3 Japan, United States of America, Benin/Nigeria (FIR boundary)	Benin/Nigeria	No
HABIK	2 United States of America, Japan	United States of America	No
HABSI	2 United States of America, Japan	United States of America	No
HAGAR	2 United States of America, Japan	United States of America	No
HAGEN	United States of America, Japan	United States of America	No
HALKI	2 United States of America, Japan	United States of America	No
HALNA	2 United States of America, Japan	United States of America	No
HAMAR	2 United States of America (Puerto Rico), Japan	United States of America	No
HANNA	3 United States of America, Australia, Japan	United States of America	No
HARIS	2 United States of America, Japan	United States of America	No
HARPS	2 United States of America, Japan	United States of America	No
HARRY	• •	United States of America	No
	2 United States of America, Japan		
HASSA	2 United States of America, Japan	United States of America	No
HASSY	2 United States of America, Japan	United States of America	No
HATIS	2 United States of America, Japan	United States of America	No
HAZEL	3 Japan, China (Hong Kong), United Kingdom	United Kingdom	No
HELEN	4 Australia, Japan, Belgium/Netherlands (FIR boundary), Thailand	Belgium/Netherlands	No
HERON	4 United Kingdom, Japan, China (Hong Kong), Australia	United Kingdom	No
HESEN	2 United States of America, Japan	United States of America	No
HIBIS	2 United States of America, Japan	United States of America	No
HIGMA	2 United States of America, Japan	United States of America	No
HILLS	3 United States of America, Australia, Japan	United States of America	No
HIMRO	2 United States of America, Japan	United States of America	No
	·		No
HOLLY	4 Japan, United Kingdom, United States of America, Tonga	United Kingdom	
HOPPS	2 United States of America, Japan	United States of America	No
HOSEN	2 United States of America, Japan	United States of America	No
HOVER	2 United States of America, Japan	United States of America	No
ICORO	2 United States of America, Japan	United States of America	No
IGENO	2 France (Polynesie Française), Japan	Polynesie Française (France)	No
IHEYA	2 United States of America, Japan	United States of America	No
IKARU	2 China, Japan	China	No
IMORE	2 United States of America, Japan	United States of America	No
INABA	2 Barbados, Japan	Barbados	No
INOBE	2 United States of America, Japan	United States of America	No
IRUKA	2 Panama, Japan	Panama	No
ISEKI	2 Brazil, Japan	Brazil	No
IOLIN	z Diazii, vapaii	DIGE	NO

IZUMI	2 United States of America, Japan	United States of America	No
JACKY	3 Japan, Maldives, Canada	Canada	No
JACOB	2 United States of America, Japan	United States of America	No
JANET	2 United States of America, Japan	United States of America	No
JANGO	2 United States of America, Japan	United States of America	No
JANUS	3 United States of America/Bahamas, Australia, Japan	United States of America/Bahamas	No
JELLY	2 United States of America, Japan	United States of America	No
	• •		
JERID	2 United States of America, Japan	United States of America	No
JOKER	3 Japan, Australia, United States of America	United States of America	No
JOLLY	4 United States of America, Japan, New Zealand, Australia	United States of America	No
JOMMY	United States of America, Japan	United States of America	No
JULIA	4 United States of America, Brazil, Japan, Australia	Brazil	No
KABIL	3 Japan, Chile, New Zealand	New Zealand	No
KABOS	2 Colombia, Japan	Colombia	No
KABTO	2 Malaysia, Japan	Malaysia	No
KADAR	2 Indonesia/Singapore (FIR boundary), Japan	Indonesia/Singapore	No
KAFRI	2 Israel, Japan	Israel	No
KAGRA	·	China	No
	2 China, Japan		
KAIFU	2 Papua New Guinea, Japan	Papua New Guinea	No
KAMAR	2 Afghanistan/Iran (Islamic Republic of) [FIR boundary], Japan	Afghanistan/Iran (Islamic Republic of)	No
KAMIS	2 Colombia, Japan	Colombia	No
KANEK	2 Canada, Japan	Canada	No
KANNA	2 Mexico/United States of America (FIR boundary), Japan	Mexico/United States of America	No
KAPPA	2 United States of America, Japan	United States of America	No
KELLY	4 United States of America, United Kingdom, Japan, Australia	United Kingdom	No
KENDI	3 Japan, Canada, Indonesia	Canada	No
KENGU	2 Canada, Japan	Canada	No
	3 United States of America, Chile, Japan	United States of America	
KENNY			No
KENTO	2 United States of America, Japan	United States of America	No
KIKOL	2 Panama, Japan	Panama	No
KILLY	3 China (Taiwan), Japan, United States of America	United States of America	No
KINEN	2 Jordan, Japan	Jordan	No
KISHA	2 Ireland, Japan	Ireland	No
KOGAR	2 Burkina Faso, Japan	Burkina Faso	No
KONAN	2 Belgium/United Kingdom (FIR boundary), Japan	Belgium/United Kingdom	No
KONGO	3 Democratic Republic of the Congo, United States of America,	United States of America	No
RONGO		Childa Clatos of America	140
KOCAK	Japan	Lilizaino	No
KOSAK	2 Ukraine, Japan	Ukraine	No
KOSHI	2 United States of America, Japan	United States of America	No
KOTAN	2 Georgia, Japan	Georgia	No
KUKUI	2 United States of America, Japan	United States of America	No
KUMIK	2 Germany, Japan	Germany	No
KURIS	2 France, Japan	France	No
LABEL	2 United States of America, Japan	United States of America	No
LAGER	4 China (Taiwan), Japan, United Kingdom, Republic of Korea	United Kingdom	Yes
LAGNA	2 Zambia, Japan	Zambia	No
LAKES	5 Canada, Japan, China (Hong Kong), Australia, New Zealand	Canada	No
LANCE		Brazil	
	3 Japan, Spain, Brazil		No
LAPIS	2 Malaysia, Japan	Malaysia	No
LARCH	2 United States of America, Japan	United States of America	No
LARKS	2 United States of America, Japan	United States of America	No
LAURA	2 United States of America, Japan	United States of America	No
LEMON	6 United States of America, Italy, Thailand, China (Hong Kong),	United States of America	Yes
	Japan, Republic of Korea		
LEONA	4 Japan, Australia, Venezuela, United States of America	United States of America	No
LIVET	2 Bolivia, Japan	Bolivia (Plurinational State of)	No
LOTUS	4 Pakistan, Peru, China(Hong Kong), Japan	China (Hong Kong)	No
		· • • • · · · · · · · · · · · · · · · ·	
LOVER	2 United States of America, Japan	United States of America	No
LUCKY	3 Norway, United States of America, Japan	Norway. USA if not used by Norway.	No
LUNAR	3 Italy, Japan, Australia	Italy	No
MACKY	2 United States of America, Japan	United States of America	No
MADOG	3 Japan, India, Australia	India	No
MADON	3 Indonesia, Lao People's Democratic Republic, Japan	Lao People's Democratic Republic	No
MADRA	2 France, Japan	France	No
	Z France, Japan	Tance	
MAGIL	2 Japan, India	India	No

MAGNA	3 Brazil, Lybia, Japan	Brazil	No
MAKBU	2 Colombia, Japan	Colombia	No
MAKRA	2 Chile, Japan	Chile	No
	, · ·	Thailand	No
MALKI	2 Thailand, Japan		
MALTS	2 United States of America, Japan	United States of America	No
MALUS	2 Russian Federation, Japan	Russian Federation	No
MAMBO	3 Japan, Thailand, United States of America	United States of America	No
MAMOL	2 Montenegro, Japan	Serbia and Montenegro	No
MANAG	3 France, Japan, Indonesia	France	No
	•		
MAPLE	5 United Kingdom, United States of America, Japan, China (Hong	United Kingdom	No
	Kong), Thailand		
MARIA	5 United States of America, Japan, Thailand, Brazil,	United States of America	Yes
	Argentina/Bolivia (FIR boundary)		
MARIM	2 Portugal, Japan	Portugal	No
MARIX	2 Mexico, Japan	Mexico	No
MARNY	2 United States of America, Japan	United States of America	No
	• •		
MARON	3 Japan, Australia, Italy	Italy	No
MARPE	2 United States of America, Japan	United States of America	No
MARRY	United States of America, Japan	United States of America	No
MASAN	2 Canada, Japan	Canada	No
MASAT	2 Canada, Japan	Canada	No
MATSU	2 Malaysia, Japan	Malaysia	No
		•	
MATUN	2 Canada, Japan	Canada	No
MAYON	2 United States of America, Japan	United States of America	No
MAZDA	3 China (mainland), Japan, United States of America	United States of America	Yes
MEDIC	2 United States of America, Japan	United States of America	No
MELDY	2 United States of America, Japan	United States of America	No
MELON	4 Bahamas, Spain, Japan, Indonesia	Bahamas	No
		Pakistan	
MENOK	3 Indonesia, Japan, Pakistan		No
MERCY	2 United States of America, Japan	United States of America	No
MIKAN	United States of America, Japan	United States of America	No
MIKAS	2 Chile, Japan	Chile	No
MIKNI	2 Norway, Japan	Norway	No
MILAN	5 Japan, Thailand, Italy, Canada, United States of America	United States of America	No
MILKY	2 United States of America, Japan	United States of America	No
	· •		
MINAM	2 United States of America, Japan	United States of America	No
MINAT	2 Malaysia, Japan	Malaysia	No
MINNE	2 United States of America, Japan	United States of America	No
MINTO	2 United States of America, Japan	United States of America	No
MISEN	2 United States of America, Japan	United States of America	No
MISMI	2 Russian Federation, Japan	Russian Federation	No
	· •		
MITCH	4 United States of America, Seychelles, Japan, Australia	United States of America	No
MITOH	2 United States of America, Japan	United States of America	No
MIURA	2 Mexico, Japan	Mexico	No
MIXER	2 United States of America, Japan	United States of America	No
MIYOS	2 United States of America, Japan	United States of America	No
MIZAR	2 United States of America, Japan	United States of America	No
MODEL	2 United States of America, Japan	United States of America	No
	, I		
MOMOT	2 Cameroon, Japan	Cameroon	No
MONKY	3 Japan, Republic of Korea, United States of America	United States of America	Yes
MORAY	2 United States of America, Japan	United States of America	No
MOTEG	Azerbaijan/Russian Federation (FIR boundary), Japan	Azerbaijan/Russian Federation	No
MUGEN	2 New Zealand, Japan	New Zealand	No
MUROT	2 Russian Federation, Japan	Russian Federation	No
	· •		
NADAR	3 Russian Federation, Brazil, Japan.	Russian Federation. Brazil if not used by Rus	No
NADIA	2 United States of America, Japan	United States of America	No
NALLY	3 Japan, Australia, United States of America	United States of America	No
NAMPU	2 Canada, Japan	Canada	No
NANCY	2 France, Japan	France	No
NANSO	2 Canada, Japan	Canada	No
NAPRO	2 Germany/Netherlands (FIR boundary), Japan	Germany	No
		•	
NARAH	2 United States of America, Japan	United States of America	No
NASSY	2 Croatia, Japan	Croatia	No
NATCH	2 United States of America, Japan	United States of America	No
NEGMA	2 Tunisia, Japan	Tunisia	No

NESIC	2 United States of America, Japan	United States of America	No
NESKO	2 Chile, Japan	Chile	No
	•		
NEXUS	2 United Kingdom, Japan	United Kingdom	No
NICHE	2 United States of America, Japan	United States of America	No
NIFTY	2 Canada, Japan	Canada	No
NINJA	2 United States of America, Japan	United States of America	No
NITRO	4 Republic of Moldova, Thailand, Japan, Brazil	Brazil. To be determined by the 5LNC Duplic	No
NOBEL	4 Thailand, Indonesia, Japan, Brazil	Brazil	No
NOMAS	2 United States of America, Japan	United States of America	No
NONOC	2 United States of America, Japan	United States of America	No
	· · ·		
NOTAK	2 Mexico, Japan	Mexico	No
OBAKO	2 Israel, Japan	Israel	No
OBAMA	2 Kazakhstan, Japan	Kazakhstan	No
ODORI	2 Kazakhstan/Uzbekistan (FIR boundary), Japan	Kazakhstan/Uzbekistan	No
	· · · · · · · · · · · · · · · · · · ·		
OGURA	2 Russian Federation, Japan	Russian Federation	No
OHANA	2 United States of America, Japan	United States of America	No
OHMAR	2 Germany, Japan	Germany	No
OKADA	2 Malaysia/Indonesia (FIR boundary), Japan	Malaysia/Indonesia	No
		•	
OKATU	2 Russian Federation, Japan	Russian Federation	No
OKESA	2 Turkey, Japan	Turkey	No
OKUNI	2 Russian Federation, Japan	Russian Federation	No
	· •		
OLIVE	5 China (Taiwan), Japan, Thailand, United States of America	United Kingdom	Yes
	(American Samoa), United Kingdom		
OMOGO	2 Russian Federation, Japan	Russian Federation	No
OMOTI	2 Canada, Japan	Canada	No
	• •		
ONUMA	2 Australia, Japan	Australia	No
OPERA	4 Thailand, Japan, Spain, Brazil	Brazil. To be determined by the 5LNC Duplic	No
ORION	8 Philippines, China (Taiwan), Japan, Tonga, Italy, United States of	United States of America	Yes
	America, Peru, Spain		
ODOTI		L., al! -	NI.
OROTI	2 India, Japan	India	No
ORVIL	2 United States of America, Japan	United States of America	No
OSAMU	2 Brazil, Japan	Brazil	No
OTABE	·	United States of America	No
	2 United States of America, Japan		
OWLET	2 United States of America, Japan	United States of America	No
OZORA	2 United States of America, Japan	United States of America	No
PADDY	3 Japan, Australia, United States of America	United States of America	No
	•		
PADRE	3 Philippines, Japan, United States of America	United States of America	No
PANDA	6 United States of America, Japan, China (Taiwan), Brazil,	United States of America	Yes
	Philippines, Indonesia		
PAULO	2 Canada, Japan	Canada	No
	· · · · · · · · · · · · · · · · · · ·		
PEARL	3 China (Taiwan), Japan, United States of America	United States of America	Yes
PEARS	2 United States of America, Japan	United States of America	No
PEGAS	2 Russian Federation, Japan	Russian Federation	No
PEPAR	2 Belarus, Japan	Belarus	No
PERCH	3 Japan, United States of America, United Kingdom	United Kingdom	No
PERID	2 Russian Federation, Japan	Russian Federation	Yes
PHLOX	2 United States of America, Japan	United States of America	No
PINNE	2 United States of America, Japan	United States of America	No
	• •		
PIONE	2 United States of America, Japan	United States of America	No
PLUTO	4 United States of America, Australia, Thailand, Japan	United States of America	No
PRADA	4 Japan, Republic of Korea, Canada, Spain	Canada	Yes
PRIUS	2 United States of America, Japan	United States of America	No
	· •		
PUTER	2 United States of America, Japan	United States of America	No
QUAIL	3 United States of America, Japan, New Zealand	United States of America	No
QUEST	2 United States of America, Japan	United States of America	No
	·		
RADIS	2 Denmark, Japan	Denmark	No
RANDY	4 Sierra Leone, Seychelles, Japan, United States of America	United States of America	No
RIBON	3 Japan, Canada, Cominican Republic	Canada	No
RIDER	3 United States of America, Spain, Japan	United States of America	No
	· · ·		
RIDGE	4 United States, Australia, New Zealand, Japan	United States of America	No
RINDO	2 Uzbekistan, Japan	Uzbekistan	No
RIVER	4 Thailand, China (Hong Kong), Japan, Netherlands	Netherlands	No
ROCCA	4 France, United States of America, Japan, China (Hong Kong)	France	No
ROCKY	6 China (Hong Kong), China (Taiwan), Japan, New Zealand, United	United States of America	Yes
	States of America, Venezuela		

ROKGO 2 United States of America, Japan ROMAN A Thalland, Japan, United States of America, Japan ROSIE 3 Demmark (Greenland), United States of America, Japan ROSIE 3 Demmark (Greenland), United States of America, Japan ROSIE 3 Demmark (Greenland), United States of America, Japan ROSIE 3 Demmark (Greenland), United States of America, Japan ROSIE 3 Demmark (Greenland), United States of America, Japan ROSIE 2 Linked States of America, Japan ROSIE 2 Russian Federation, Japan ROSIE 2 Russian Federation, Japan ROSIE 3 Linked States of America, Japan ROSIE 3 Linked States of America, Japan ROSIE 3 Linked States of America, Japan ROSIE 3 Japan, Australia, United States of America ROSIAL 4 Russian Federation, Japan ROSIAL 4 Russian Federation, Japan, Thalland, Indonesia ROSIAL 4 Russian Federation, Japan, Linked Kingdomilreland ROSIAL 4 United States of America, Japan ROSIAL 4 United States of America, Japan ROSIAL 5 United States of Ameri				
ROUSE 3 Demmark (Greenland) United States of America, Japan (Orece America No ROUSY 2 Bolglum/France/Luxembourg) Japan Russian Foderation, Japan United States of America No Japan, Australia, United States of America United States of America No Japan, Australia, United States of America United States of America No Japan, Australia, United States of America United States of America No Japan, Australia, United States of America United States of America No Japan, Australia, United States of America No Japan, Varian, Japan, United States of America No Japan, Varian, Japan, United States of America No Japan, Varian, Hong Kong), Japan, United Kingdorn/Ireland (Fire Boundary) United States of America No Japan, Varian, Japan, Varian, Japan, United States of America No Japan, Varian, Japan, Narian, China (Talwan) United States of America No Japan, Varian, Japan, Narian, China (Talwan) United States of America No Japan, Varian, Japan, Narian, China (Talwan) United States of America No Japan, Varian, Japan, Narian, China (Talwan) United States of America No Japan, Varian, Japan, Narian, China (Talwan) United States of America No Japan, Varian, Japan, United States of America No Japan, Varian, Japan, Narian, Japan, United States of America No Japan, Varian, Japan, United S	ROKGO	2 United States of America, Japan	United States of America	No
ROUSY 2 Belglum/Franco-Luxembourg, Japan Belglum/Franco-Luxembourg, Japan ROUSY 2 Russian Federation, Japan RUSS 2 Russian Federation, Japan Holied States of America, Japan United States of America, No No SABAR 2 United States of America, Japan United States of America No SABAR 2 United States of America, Japan United States of America No SABAR 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Cambodis, Volt Mam, Japan, Thalland, Indonesia RAIN No (FIR boundard), Japan, United States of America United States of America No GANON (FIR boundard), Japan, United States of America United States of America No SAINON (FIR boundard), Japan, Japan, Delide Kingdom/Ireland (FIR boundard), Japan, Japan, Sail Maria No SAINON (FIR boundard), Japan, Japan, Delide Kingdom/Ireland (FIR boundard), Japan Sail Maria No SAINON (FIR boundard), Japan, Japan, Sail Maria No SAINON (FIR boundard), Japan (FIR boundard), Japan (FIR boundard), Japan (FIR boundard), Japan, Sail Maria No SAINON (FIR boundard), Japan, Japan, Nustralia, United States of America No No SAINON (FIR boundard), Japan, Japan, Nustralia, United States of America (Mexico No No SAINON (FIR Delide), Japan, Australia, China (Talwan) United States of America (Mexico No No SAINON (FIR Delide), Japan, Japan, Nustralia, China (Talwan) United States of America (Mexico No No SAINON (FIR Delide), Japan, Libya, New Zealand United States of America (Mexico No No SAINON (FIR Delide), Japan (FIR Delide), Japan (FIR De	ROMAN	4 Thailand, Japan, United States of America, Mexico	United States of America	No
ROUSY 2 Belglum/Franco-Luxembourg, Japan Belglum/Franco-Luxembourg, Japan ROUSY 2 Russian Federation, Japan RUSS 2 Russian Federation, Japan Holied States of America, Japan United States of America, No No SABAR 2 United States of America, Japan United States of America No SABAR 2 United States of America, Japan United States of America No SABAR 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Japan, Australia, United States of America United States of America No SAIL 3 Cambodis, Volt Mam, Japan, Thalland, Indonesia RAIN No (FIR boundard), Japan, United States of America United States of America No GANON (FIR boundard), Japan, United States of America United States of America No SAINON (FIR boundard), Japan, Japan, Delide Kingdom/Ireland (FIR boundard), Japan, Japan, Sail Maria No SAINON (FIR boundard), Japan, Japan, Delide Kingdom/Ireland (FIR boundard), Japan Sail Maria No SAINON (FIR boundard), Japan, Japan, Sail Maria No SAINON (FIR boundard), Japan (FIR boundard), Japan (FIR boundard), Japan (FIR boundard), Japan, Sail Maria No SAINON (FIR boundard), Japan, Japan, Nustralia, United States of America No No SAINON (FIR boundard), Japan, Japan, Nustralia, United States of America (Mexico No No SAINON (FIR Delide), Japan, Australia, China (Talwan) United States of America (Mexico No No SAINON (FIR Delide), Japan, Japan, Nustralia, China (Talwan) United States of America (Mexico No No SAINON (FIR Delide), Japan, Libya, New Zealand United States of America (Mexico No No SAINON (FIR Delide), Japan (FIR Delide), Japan (FIR De	ROSIE	3 Denmark (Greenland), United States of America, Japan	Denmark (Greenland)	No
ROUSY 2 Belgium/France/Luxembourg. Japan (Puls) Service 2 Russian Federation, Japan (Puls) SABAE 2 United States of America, Japan (United States of America) No ASABA 2 United States of America, Japan (United States of America) No ASABAR 3 Japan, Australia, United States of America (No SAILA 3 Japan, Australia, United States of America (United States of America) No ASAKAR 2 Papua New Guinea, Japan (Puls) SAILA 3 Japan, Australia, United States of America (No SAILA 3 Japan, Australia, United States of America (United States of America) No ASAKAR 2 Papua New Guinea, Japan (United States of America) No ASALTV 3 Japan, Australia, United States of America (United States of America) No ASALTV 3 Japan, Australia, Japan (United States of America) No ASAMBA 4 Russian Federation, Japan, United States of America (No SAIMA) 3 Cambodia, Viet Nam, Japan (Viet Nam, Japan (Viet Nam)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	
RUSIS 2 Russian Federation		·		
SABAR 2 United States of America, Japan United States of America No SABAR 3 Japan, Australia, United States of America No SAILA 3 Japan, Australia, United States of America United States of America No SAILA 3 Japan, Australia, United States of America United States of America No SAILA 3 Japan, Australia, United States of America United States of America No SAILA 4 Japan November		J. 1	3	
SABAR 2 United States of America Japan United States of America No SAILS 3 Japan, Australia, United States of America No SAILS 3 Japan, Australia, United States of America No SAILY 3 Japan, Australia, United States of America No SAILY 3 Japan, Australia, United States of America No SAILY 3 Japan, Australia, United States of America No United States of America No SAILY 3 Japan, Australia, Japan United States of America No United States of America No SAIMBA 4 Russian Federation, Japan, Thailand, Indonesia Russian Federation, Japan, Thailand, Indonesia No SAIMBA 4 Russian Federation, Japan, Thailand, Indonesia No Cambodia, Vet Nam, Japan Vet Nam, Japan Viet Nam (Fit Boundary) SAMNO 4 Thailand, Australia, Japan, United States of America United States of America No United States of America No United States of America No Cambodia (Fit Boundary) SANDA 4 Thailand, China (Hong) Kong), Japan, United Kingdom/Ireland (Fit Boundary) SANDA 2 United States of America, Japan United States of America No United States of America No Cambodia Validad States of America No Cambodia Validad States of America No No SAVOM 2 Maxico, Japan United States of America No No Maxico No No Maxico No No No Maxico No		• •		
SAILS 3 Japan, Australia, United States of America No SAKAR 2 Papua New Guinea, Japan No SAKAR 2 Papua New Guinea, Japan No SAKAR 2 Papua New Guinea, Japan No SALTY 3 Japan, Australia, United States of America No SALTY 3 Japan, Australia, United States of America No SALTY 4 Japan New Guinea, Japan United States of America No SALTY 4 SAMBA 4 Russian Federation, Japan, Thaland, Indonesia Russian Federation, Japan New Guinea, Japan United States of America No SAMBO 3 Cambodia, Viet Nam, Japan United States of America No SAMMO 4 Thaliand, China (Hong Kong), Japan, United Kingdom/Ireland (FIR boundary) SANDA 4 United States of America, Angola, Japan, Cambodia United States of America No SANGO 2 United States of America, Angola, Japan, Cambodia United States of America No SANGO 2 United States of America, Japan United States of America No SANGO 2 China, Japan SARUK SANGO 2 China, Japan Numbra Nambra Namb	SABAE	· ·	United States of America	No
SAKIAR 2 Papua New Guinea Japan (Papua New Guinea No SAKAR 2 Papua New Guinea No SALTY 3 Japan, Australia, United States of America United States of America No SALTY 3 Japan, Australia, Japan (Indonesia Rusian Federation Japan, Thalland, Indonesia Rusian Federation Japan, Thalland, Indonesia Rusian Federation No SAMBA 4 Rusian Federation Japan, Thalland, Indonesia Rusian Federation No SAMBA 4 Rusian Federation Japan, Thalland, Indonesia Rusian Federation No SAMBO 3 Cambodia, Work Nam. Japan United States of America United States of America No GAMMO 4 Thalland, China (Hong Kong), Japan, United Kingdom/Ireland (Fish boundary) SAMDA 4 Thalland, China (Hong Kong), Japan, United Kingdom/Ireland (Fish boundary) SAMDA 2 United States of America, Japan United Kingdom/Ireland (Fish boundary) SANKO 2 United States of America, Japan United States of America United States of America No China Yes SARKU 2 Saudi Arabia, Japan Saudi Arabia (Papan) United States of America No China Yes SARYU 2 United States of America, Japan Nastralia, United States of America United States of America No China Yes SERNE 4 United States of America, Japan, Australia, United States of America No Mexico No China Yes SERVE 4 United States of America, Japan, Australia, United States of America Ves SERVE 4 United States of America, Japan, Libya, New Zealand United States of America No United States of America (Mariana Islands), Japan United States of America No No	SABAR	2 United States of America, Japan	United States of America	No
SANLS 3 Japan, Australia, United States of America No SAKAR 2 Papua New Guinea No SALTY 3 Japan, Australia, United States of America No SALTY 3 Japan, Australia, United States of America No SAMBA 4 Russian Federation Japan, Thailand, Indonesia Russian Federation No SAMBA 4 Russian Federation Japan, Thailand, Indonesia Russian Federation No SAMBA 4 Russian Federation Japan, Thailand, Indonesia Russian Federation No SAMBO 3 Cambodia, Vert Nam. Japan Wite Nam. Japan Wite Nam. Ves SAMMY 4 Thailand, Chinia (Hong Kong), Japan, United Kitegdom/Ireland (Fit Boundary) SANDA 4 Thailand, Chinia (Hong Kong), Japan, United Kingdom/Ireland (Fit Boundary) SANDA 4 United States of America, Angola, Japan, Cambodia United States of America No SANGO 2 United States of America, Japan Chinia States of America No United States of America No China Yes SARUK 2 Saudi Arabia, Japan Saudi Arabia, Japan Saudi Arabia No SANGO 2 United States of America, Japan United States of America No China Yes SASY 2 United States of America, Japan (Australia, United States of America No Mexico No SANGO 2 Mexico, Japan Australia, United States of America No Mexico No SANGO 2 Mexico, Japan Australia, United States of America No Mexico No No Mexico No	SAILA	3 Japan, Australia, United States of America	United States of America	No
SAKAR 2 Papua New Guinea, Japan Papua New Guinea, Japan New Sultry 3 Japan, Austrialia, United States of America No SALVO 2 United States of America, Japan United States of America No SAMBA 4 Russian Federation, Japan, Thaland, Indonesia Viet Nam Ves United States of America No SAMBO 3 Cambodia, Viet Nam, Japan Viet Nam Viet Nam Ves Candodia, Viet Nam, Japan Viet Nam Vi	SAILS	·	United States of America	No
SALTY 3 Japan Australia, United States of America United States of America No SAMBA 4 Russian Federation, Japan United States of America, Japan Yes SAMBO 3 Cambodia, Viet Nam, Japan Yes SAMBO 4 Russian Federation, Japan, Thailand, Indonesia Russian Federation No Wes SAMBO 3 Cambodia, Viet Nam, Japan Yes SAMMO 4 Thailand, Chibna (Hong Kong), Japan, United States of America United States of America No United States of America, Japan United States of America No United States of America, Japan United States of America No United States of America, Japan United States of America, Japan United States of America, Japan United States of America No China (Yes SANKO 2 United States of America, Japan Saudi Arabia, Japan Saudi Arabia, Japan Saudi Arabia, Japan United States of America, Japan United States of America, Japan United States of America No United States of America, Japan Nustralia, United States of America, Japan United States of America, Japan Nustralia, United States of America, Japan United States of America, No No SIRON 2 United States of America, Japan United States of America, No No SIRON 2 United States of America, Japan United States of America, No No SIRON 2 United States of America, Japan United States of America, No N				
SALVO 2 United States of America, Japan SAMBA A Russian Federation No SAMBO 3 Cambodia, Viet Nam, Japan Viet Nam Yes SAMMY 4 Thailand, China (Hong Kong), Japan, United Kingdom/Ireland United States of America No GER Vasian (Hong Kong), Japan, United Kingdom/Ireland United States of America No SANKO 2 United States of America, Japan China (Takaba) United States of America No SANKO 2 United States of America, Japan SARUK 2 United States of America, Japan No United States of America No United States of America No SANKO 2 United States of America, Japan No United States of America No United States of America No United States of America United States of America United States of America No United States of America No United States of America No United States of America United States of America United States of America No		·	•	
SAMBA 4 Russian Federation, Japan, Thailand, Indonesia Russian Federation Nec SAMMY 4 Thailand, Australia, Japan United States of America United States of America No SANKO 2 United States of America, Japan United States of America No United States of America No SANKO 2 United States of America, Japan United States of America No SANKO 2 United States of America, Japan No SASSY 2 United States of America, Japan No SASSY 2 United States of America, Japan No SANGO No Mexico No No SCOTT 4 Republic of Korea, Japan, Australia, United States of America No SERNA 3 United States of America, Japan, China (Taiwan) United States of America No SERTME 2 United States of America, Japan, United States of America No SHELL 4 United States of America, Japan United States of America No SHELL 4 United States of America, Japan United States of America No SHELL 4 United States of America, Japan United States of America No SHELL 4 United States of America, Japan United States of America No SHELY 4 United States of America, Japan United States of America No SHELY 4 United States of America, Japan United States of America No SHODA 2 United States of America, Mariana Islands), Japan United States of America No SHODA 2 United States of America, Mariana Islands), Japan United States of America No SHODA 2 United States of America, Japan United States of America No SHODA 2 United States of America, Japan United States of America No SHODA 2 United States of America, Japan United States of America No SHODA 2 United States of America, Japan United States of America No No SHAS 2 United States of America, Japan United States of America No No SHAS 2 United States of America, Japan United States of America No No SHAS 2 United States of America, Japan United States of America				
SAMMY 4 Thailand, Lviet Nam, Japan United States of America United States of America (No SAMON) 4 Thailand, Lvina (Hong Kong), Japan, United Kingdom/Ireland United States of America (PiR boundary) (IFIR boundary) (United States of America, Angola, Japan, Cambodia United States of America (No Canadary) (United States of America, Angola, Japan, Cambodia United States of America (No SANCO) 2 United States of America, Japan (China (Hong Kong), Japan, Cambodia United States of America (No SANCO) 2 United States of America, Japan (China (States of America), Japan, Ja		·		
SAMMY 4 Thailand, Australia, Japan, United States of America No (FIR boundary) SAMON 4 Thailand, China (Hong Kong), Japan, United Kingdom/Ireland (FIR boundary) SANICA 2 United States of America, Angola, Japan, Cambodia United States of America No SANICO 2 United States of America, Japan China (Hong Kong) SARIK 2 Saudi Arabia, Japan Sawo United States of America No United States of America No SANICO 2 United States of America, Japan Savid Arabia United States of America No SASY 2 United States of America, Japan Savid Arabia No SASY 2 United States of America, Japan Schward 2 Mexico, Japan Australia, United States of America No Mexico No Mos SCOTT 4 Republic of Krea, Japan, Australia, United States of America No SETNE 2 United States of America, Japan, Australia, China (Taiwan) United States of America No SETNE 2 United States of America, Japan, Australia, China (Taiwan) United States of America No SHELL 4 United States of America, Japan, Australia, China (Taiwan) United States of America No SHELL 4 United States of America, Japan United States of America No SHELL 4 United States of America, Japan United States of America No SHELY 4 United States of America, Japan United States of America No SHELY 4 United States of America (Mariana Islands), Japan United States of America No SHODA 2 United States of America (Mariana Islands), Japan United States of America (Mariana Islands), Japan United States of America (Mariana Islands), Vo SHRAK 2 United States of America, Japan United States of America (Mariana Islands), Vo SHRAK 2 United States of America, Japan United States of America No SINGO 2 Saudi Arabia, Japan United States of America No SINGO 2 United States of America, Japan United States of America No SINGO 2 United States of America, Japan United States of America No SINGO 2 United States of America, Japan United States of America No No SINGO 2 United States of America, Japan United States of America No No SINGO 2 United States of America, Japan United States of America No No SINGO 2 United States of America	SAMBA		Russian Federation	No
SAMON 4 Thailand, China (Hong Kong), Japan, United Kingdom/Ireland (FIR boundary) SANDA 4 United States of America, Angola, Japan, Cambodia United States of America No SANCO 2 United States of America, Japan United States of America No China Yes SARUK 2 Saudi Arabia, Japan United States of America No China Yes SARUK 2 Saudi Arabia, Japan United States of America No China Yes SARUK 2 Saudi Arabia, Japan United States of America No SAVOM 2 Mexico, Japan United States of America No SAVOM 2 Mexico, Japan, Australia, United States of America No Mexico No SAVOM 3 United States of America, Japan, Australia, United States of America No SERVE 4 United States of America, Japan, Australia, China (Talwan) United States of America No SERVE 4 United States of America, Japan, Australia, China (Talwan) United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELL 4 United States of America, Japan, United States of America No United States of America No SHELL 4 United States of America No United States of America No SHELL 4 United States of America No United States of America No SHELL 4 United States of America No United States of America No SHEAL 4 United States of America No United States of America No SHEAL 4 United States of America (Mariana Islands), Japan United States of America No SHEAL 4 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No No SIRON 2 Israel, Japan United States of America No No SIRON 2 Israel, Japan United States of America No No SIRON 2 United States of America, Japan United States of America No No SIRON 2 United States of America, Japan United States of America No No SIRON 2 United States of America, Japan United States of America No No SIRON 2 United States of America, Japan United States of America No No SIRON 2	SAMBO	3 Cambodia, Viet Nam, Japan	Viet Nam	Yes
SAMON 4 Thailand, China (Hong Kong), Japan, United Kingdom/Ireland (FIR boundary) SANDA 4 United States of America, Angola, Japan, Cambodia United States of America No SANCO 2 United States of America, Japan United States of America No China Yes SARUK 2 Saudi Arabia, Japan United States of America No China Yes SARUK 2 Saudi Arabia, Japan United States of America No China Yes SARUK 2 Saudi Arabia, Japan United States of America No SAVOM 2 Mexico, Japan United States of America No SAVOM 2 Mexico, Japan, Australia, United States of America No Mexico No SAVOM 3 United States of America, Japan, Australia, United States of America No SERVE 4 United States of America, Japan, Australia, China (Talwan) United States of America No SERVE 4 United States of America, Japan, Australia, China (Talwan) United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELL 4 United States of America, Japan, United States of America No United States of America No SHELL 4 United States of America No United States of America No SHELL 4 United States of America No United States of America No SHELL 4 United States of America No United States of America No SHEAL 4 United States of America No United States of America No SHEAL 4 United States of America (Mariana Islands), Japan United States of America No SHEAL 4 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No No SIRON 2 Israel, Japan United States of America No No SIRON 2 Israel, Japan United States of America No No SIRON 2 United States of America, Japan United States of America No No SIRON 2 United States of America, Japan United States of America No No SIRON 2 United States of America, Japan United States of America No No SIRON 2 United States of America, Japan United States of America No No SIRON 2	SAMMY	4 Thailand, Australia, Japan, United States of America	United States of America	No
(FIR boundary) SANDA 4 United States of America, Angola, Japan, Cambodia United States of America No SANCO 2 United States of America, Japan Chambodia United States of America No China Agam China, Japan Saudi Arabia, Japan Saudi Arabia No SASSY 2 United States of America, Japan Mexico No SASSY 2 United States of America, Japan Mexico No SCOTT 4 Republic of Korea, Japan, Australia, United States of America No SCOTT 4 Republic of Korea, Japan, Australia, United States of America No United States of America No United States of America, Japan, China (Taiwan) United States of America No SERVE 4 United States of America, Japan, China (Taiwan) United States of America No SERTME 2 United States of America, Japan, Libya, New Zealand United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELY 4 United States of America, Japan, Libya, New Zealand United States of America No SHELY 4 United States of America No United States of America No SHELY 4 United States of America Republic of the Congo (FiR boundary), Japan Agola/Democratic Republic of the Congo (FiR boundary), Japan United States of America (Mariana Isiands), No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of Am	SAMON		United Kingdom/Ireland	Nο
SANDA 4 United States of America, Angola, Japan, Cambodia United States of America No SANKO 2 China, Japan Cambodia United States of America No China Stark V 2 China, Japan SARUK 2 China, Japan SARUK 2 China, Japan SARUK 2 Saudi Arabia, Japan United States of America No SASSY 2 United States of America, Japan United States of America No SAVOM 2 Mexico, Japan Australia, United States of America No Mexico No SAVOM 3 Wexico, Japan, Australia, United States of America No Mexico No SAVOM 4 Republic of Korea, Japan, Australia, United States of America No United States of America, Japan, Lybra No SERVE 4 United States of America, Japan, Lybra No SERVE 4 United States of America, Japan, Lybra No SERVE 4 United States of America, Japan, Lybra No SHELL 4 United States of America, Japan, Lybra No SHELL 4 United States of America, Japan, Lybra No SHELL 4 United States of America, Japan, Lybra No SHELL 4 United States of America, Japan, Lybra No SHELL 4 United States of America, Japan, Lybra No SHELL 4 United States of America No SHELL 4 United States of America (Mariana Islands), Japan United States of America No SHEAK 2 United States of America (Mariana Islands), Japan United States of America No SILVI 2 Canada, Japan United States of America No SILVI 2 Canada, Japan United States of America No SILVI 2 Canada, Japan United States of America No No SIRON 2 Israel, Japan United States of America No No SIRON 2 Israel, Japan United States of America No No SIRON 2 Israel (Bolivarian Republic of), Japan United States of America No No SIRON 2 Israel (Bolivarian Republic of), Japan United States of America No No SIRON 2 Israel (Bolivarian Republic of) No No SIRON 2 Israel (Bolivarian No Moriana No	O/ WIOTT		omica rangacin, notana	110
SANKO 2 United States of America, Japan Chine Arabica No SANKO 2 China, Japan China Yess SARUK 2 Saudi Arabia, Japan Saudi Arabia No SASSY 2 United States of America, Japan United States of America No SASYOM 2 Mexico, Japan United States of America No SAVOM 2 Mexico, Japan United States of America No SCOTT 4 Republic of Korea, Japan, Australia, United States of America No SERNA 3 United States of America, Japan, China (Taiwan) United States of America No SERVE 4 United States of America, Japan, Australia, China (Taiwan) United States of America No SERVE 2 United States of America, Japan, Australia, China (Taiwan) United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELL 4 United States, Japan, Philippines, China (Hong Kong) United States of America No SHELL 4 United States, Japan, Philippines, China (Hong Kong) United States of America No SHELY 4 United States, Japan, Philippines, China (Hong Kong) United States of America No SHAWA 2 United States of America (Mariana Islands), Japan United States of America (Mariana Islands), Japan United States of America (Mariana Islands), Japan United States of America (Mariana Islands), No SIMFO 2 United States of America, Japan United States of America (Mariana Islands), No SIMFO 2 United States of America, Japan United States of America No SIMFO 2 Saudi Arabia, Japan Saudi Arabia No SIMFO 2 United States of America, Japan United States of America No SIMFO 2 United States of America, Japan United States of America No SIMFO 2 United States of America, Japan United States of America No SIMFO 2 United States of America, Japan United States of America No SIMFO 2 United States of America, Japan United States of America No SIMFO 2 United States of America, Japan United States of America No No SIMFO 2 United States of America, Japan United States of America No No SIMFO 2 United States of America, Japan United States of America No SIMFO 2 United States of America, Japan United States of America No SIMFO 2 United State	CANDA		United States of America	Na
SANIKO 2 China, Japan SARUK 2 Saudi Arabia, Japan SARUK 2 Saudi Arabia, Japan SASSY 2 United States of America, Japan SAVOM 2 Mexico, Japan SAVOM 2 Mexico, Japan SAVOM 3 Mexico, Japan SAVOM 3 Mexico, Japan SAVOM 4 Republic of Korea, Japan, China (Taiwan) SERVE 4 United States of America, Japan, China (Taiwan) SUBIE 2 United States of America, Japan, China (Taiwan) United States of America No Mexico No United States of America No No SERVE 4 United States of America, Japan, China (Taiwan) United States of America No SHELL Vinited States of America, Japan United States of America No SHELL Vinited States of America No SHELL Vinited States of America No SHELY Vinited States, Japan, Philippines, China (Hong Kong) Vinited States of America No SHINB Vinited States, Japan, United States of America No SHINB Vinited States of America No SHARA Vinited States of America No SHODA United States of America United States of America Ves No SHARA Vinited States of America No No SHARA Vinited States of America No No SHARA Vinited States of America No No SHARA Vinit				
SARUK 2 Saudi Arabia, Japan SASSY 2 United States of America, Japan Mexico, Japan SCOTT 4 Republic of Korea, Japan, Australia, United States of America SENNA 3 United States of America, Japan, China (Taiwan) SENNA 3 United States of America, Japan, Australia, United States of America SETME 4 United States of America, Japan, Australia, China (Taiwan) SETME 2 United States of America, Japan, Australia, China (Taiwan) SETME 2 United States of America, Japan, Australia, China (Taiwan) SHELL 4 United States of America, Japan, Libya, New Zealand SHELL 4 United States, Japan, Philippines, China (Hong Kong) SHELL 4 United States, Japan, Philippines, China (Hong Kong) SHIMA 2 Angola/Democratic Republic of the Congo (FIR boundary), Japan SHIMA 2 Angola/Democratic Republic of the Congo (FIR boundary), Japan SHINE 3 Republic of Korea, Japan, United states of America SHODA 2 United States of America, Japan SHRAK 2 United States of America, Japan United States of America (Mariana Islands), Japan United States of America SILVI 2 Canada, Japan United States of America No SINFO 2 United States of America, Japan SILVI 2 Canada, Japan SIRON 2 Saudi Arabia, Japan SIRON 2 United States of America, Japan United States of America No SUNKE SIRON 2 United States of America, Japan United States of America No SUNKE SIRON 2 United States of America, Japan United States of America No SURICA SIRON 2 United States of America, Japan United States of America No SURICA SIRON 2 United States of A				
SASSY 2 United States of America, Japan Wexico No SAVOM 2 Mexico, Japan Wexico No SCOTT 4 Republic of Korea, Japan, Australia, United States of America Australia United States of America Yes SENNA 3 United States of America, Japan, Australia, United States of America Yes SETME 2 United States of America, Japan, Libya, New Zealand United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELY 4 United States of America, Japan, Libya, New Zealand United States of America No SHELY 4 United States of America, Japan, Libya, New Zealand United States of America Yes SHIMA 2 Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (FIR boundary), Japan United States of America Yes SHINE 3 Republic of Korea, Japan, United States of America United States of America (Mariana Islands), Japan United States of America (Mariana Islands), Japan United States of America No SILVI 2 United States of America, Japan United States of America No SILVI 2 Canada, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 U	SANKO	2 China, Japan	China	Yes
SASSY 2 United States of America, Japan Wexico No SAVOM 2 Mexico, Japan Wexico No SCOTT 4 Republic of Korea, Japan, Australia, United States of America Australia United States of America Yes SENNA 3 United States of America, Japan, Australia, United States of America Yes SETME 2 United States of America, Japan, Libya, New Zealand United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELY 4 United States of America, Japan, Libya, New Zealand United States of America No SHELY 4 United States of America, Japan, Libya, New Zealand United States of America Yes SHIMA 2 Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (FIR boundary), Japan United States of America Yes SHINE 3 Republic of Korea, Japan, United States of America United States of America (Mariana Islands), Japan United States of America (Mariana Islands), Japan United States of America No SILVI 2 United States of America, Japan United States of America No SILVI 2 Canada, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 U	SARUK	2 Saudi Arabia, Japan	Saudi Arabia	No
SAVOM 2 Mexico, Japan Mexico No SCOTT 4 Republic of Korea, Japan, Australia, United States of America United States of America United States of America Ves SENNA 3 United States of America, Japan, China (Taiwan) United States of America Yes SETME 2 United States of America, Japan, Australia, China (Taiwan) United States of America Yes SETME 2 United States of America, Japan United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELL 4 United States, Japan, Philippines, China (Hong Kong) United States of America No SHIMA 2 Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (FIR boundary), Japan United States of America (Mariana Islands), Japan United States of America (Mariana Islands), Japan United States of America, Japan United States of America (Mariana Islands), Japan United States of America, Japan United States of America, Japan United States of America (Mariana Islands), Japan United States of America, Japan United States of America No SUNTY 2 United States of America, Japan United States of America No SUNTY 2 United States of America, Japan United States of America No SUNTY 2 United States of America, Japan United States of America No SUNTY 2 United States of America, Japan United States of America No SUNTY 2 United States of America, Japan United States of America No SUNTY 2 United States of America, Japan United States of America No SUNTY 2 United States of America, Japan United States of America No SUNTY 2 United States	SASSY		United States of America	Nο
SCOTT 4 Republic of Korea, Japan, Australia, United States of America SENNA 3 United States of America, Japan, China (Taiwan) SERVE 4 United States of America, Japan, Australia, China (Taiwan) United States of America No SHELL United States of America United States of America No SHELLY United States of America United States of America United States of America No SHIMA 2 Angola/Democratic Republic of the Congo (FIR boundary), Japan SHIMA 3 Republic of Korea, Japan, United states of America No SHRAK 2 United States of America, Japan United States of America No SILVI 2 Canada, Japan United States of America No SILVI 2 Canada, Japan United States of America No SIRFO 2 United States of America, Japan United States of America No SIRFO 2 United States of America, Japan United States of America No SIRFO 2 United States of America, Japan United States of America No SIRFO 2 United States of America No SUDICA 2 United States of America No SIRFO 3 United States o				
SERNA 3 United States of America, Japan, China (Taiwan) United States of America Yes SETME 2 United States of America, Japan, Australia, China (Taiwan) United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELLY 4 United States, Japan, Philippines, China (Hong Kong) United States of America Yes SHIMA 2 Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (No SHIMA 2 United States of America (Mariana Islands), Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 Saudi Arabia, Japan United States of America No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Venezuela (Bolivarian Republic of), Japan Venezuela (Bolivarian Republic of), SIRON 2 Israel, Japan United States of America No SINGN 2 Israel, Japan United States of America No SINGN 2 United States of America, Japan United States of America No SINGN 2 United States of America, Japan United States of America No SINGN 2 United States of America, Japan United States of America No SINGN 2 United States of America, Japan United States of America No SINGN 2 United States of America, Japan United States of America No SINGN 2 United States of America, Japan United States of America No SINGN 2 United States of America, Japan United States of America No SINGN 2 United States of America, Japan United States of America No SINGN 2 United States of America, Japan United States of America No SINGN 2 United States of America, Japan United States of America No SINGN 2 United States of America, Japan Uni		·		
SETWE 4 United States of America, Japan, Australia, China (Taiwan) United States of America Yes SETME 2 United States of America, Japan United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELY 4 United States of America, Japan, China (Hong Kong) United States of America Yes SHIMA 2 Angola/Democratic Republic of the Congo (FIR boundary), Japan United States of America (Mariana Islands), Japan United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America, Japan Israel No SIRON 2 Israel, Japan United States of America, Japan United States of America No SIRON 2 Israel, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America Yes SOLON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America No SIRON 2 United States of America, Japan United States of America				
SETIME 2 United States of America, Japan United States of America No SHELL 4 United States of America, Japan, Libya, New Zealand United States of America No SHELY 4 United States, Japan, Philippines, China (Hong Kong) United States of America Yes SHIMA 2 Angola/Democratic Republic of the Congo (FIR boundary), Japan United States of America (Mariana Islands) No SHRAK 2 United States of America (Mariana Islands), Japan United States of America (Mariana Islands) No SIMIM 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Israel No SIRAS 2 Venezuela (Bolivarian Republic of), Japan United States of America No SIRAS 2 United States of America, Japan United States of America No SIRAS 2 United States of America, Japan United States of America No SIRAS 3 Republic of Korea, Japan, United states of America No SIRAS 3 Republic of Korea, Japan United States of America No SIRAS 3 Republic of Korea, Japan United States of America No SIRAS 4 Republic of Korea, Japan United States of America No SIRAS 4 Republic of Korea, Japan United States of America No SIRAS 4 Republic of Korea, Japan United States of America No SIRAS 4 Republic of Korea, Japan United States of America No SIRAS 5 Republic of Korea, Japan No SIRAS 5 Republic of Korea, Japan United States of America No SIRAS 5 United States of America, Japan United States of America No SIRAS 5 United States of America, Japan United States of America No SIRAS 5 United	SENNA			No
SHELL 4 United States of America, Japan, Libya, New Zealand United States of America Yes SHINA 2 Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (No SHRAK 2 United States of America (Mariana Islands), Japan United States of America (Mariana Islands), No SHRAK 2 United States of America (Mariana Islands), Japan United States of America (Mariana Islands), No SHRAK 2 United States of America, Japan United States of America (Mariana Islands), No SILMI 2 United States of America, Japan United States of America (No SILVI 2 Canada, Japan United States of America (No SINFO 2 United States of America, Japan United States of America (No SINGO 2 Saudi Arabia, Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Venezuela (Bolivarian Republic of) No SIRON 2 Israel, Japan Israel No SIRON 2 Israel, Japan United States of America, Japan United States of America (No SITYY 2 United States of America, Japan United States of America (No SITYY 2 United States of America, Japan United States of America (No SITYY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United State	SERVE	4 United States of America, Japan, Australia, China (Taiwan)	United States of America	Yes
SHELY 4 United States, Japan, Philippines, China (Hong Kong) United States of America Yes SHIMA 2 Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (No SHINE) 3 Republic of Korea, Japan, United states of America United States of America (Mariana Islands) No SHRAK 2 United States of America, Japan United States of America (Mariana Islands) No SHRAK 2 United States of America, Japan United States of America (No SIMI) 2 United States of America, Japan United States of America No SIMI) 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 Saudi Arabia, Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Saudi Arabia No SIRON 2 Israel, Japan Israel No SIRON 2 Israel, Japan Israel States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 3 United States of America, Japan United States of America No SINTY 3 United States of America, Japan United States of America	SETME	2 United States of America, Japan	United States of America	No
SHELY 4 United States, Japan, Philippines, China (Hong Kong) United States of America Yes SHIMA 2 Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (No SHINE) 3 Republic of Korea, Japan, United states of America United States of America (Mariana Islands) No SHRAK 2 United States of America, Japan United States of America (Mariana Islands) No SHRAK 2 United States of America, Japan United States of America (No SIMI) 2 United States of America, Japan United States of America No SIMI) 2 United States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINFO 2 Saudi Arabia, Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Saudi Arabia No SIRON 2 Israel, Japan Israel No SIRON 2 Israel, Japan Israel States of America, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 2 United States of America, Japan United States of America No SINTY 3 United States of America, Japan United States of America No SINTY 3 United States of America, Japan United States of America	SHELL	4 United States of America, Japan, Libva, New Zealand	United States of America	No
SHIMA 2 Angola/Democratic Republic of the Congo (FIR boundary), Japan Angola/Democratic Republic of the Congo (No SHINE 3 Republic of Korea, Japan, United states of America United States of America (Mariana Islands), Japan United States of America No SILMI 2 United States of America, Japan United States of America No SILMI 2 Canada, Japan United States of America No SINFO 2 United States of America, Japan United States of America No SIRGO 2 Saudi Arabia, Japan United States of America No SIRGO 2 Saudi Arabia, Japan Saradi Republic of), Japan Saradi Republic of) No SIRON 2 Israel, Japan Israel No SIRON 2 Israel, Japan United States of America, Japan United States of America No SULDE 2 United States of America, Japan United States of America No SULDE 2 United States of America, Japan United States of America No SNAKE 3 Republic of Korea, Japan, United States of America United States of America Yes SOLON 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOPHA 2 United States of America, Japan United States of America No SOUKA 2 France, Japan United States of America No SOUKA 2 France, Japan United States of America No SPICA 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SOUGA 2 United States of America, Japan United States of America No SOUGA 2 United States of America, Japan United States of America No SOUGA 2 United States of America, Japan United States of America No SOUGA 2 United States of America, Japan United States of America No SOUGA 2 United States of America, Japan United States of America No SOUGA 2 United States of America, Japa				
SHINE 3 Republic of Korea, Japan, United states of America United States of America (Mariana Islands), Japan United States of America No SILVI 2 Canada, Japan United States of America No SINCO 2 United States of America, Japan United States of America No SINGO 2 Saudi Arabia, Japan Saudi Arabia, Japan Saudi Arabia, Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Venezuela (Bolivarian Republic of) No SIRON 2 Israel, Japan Inted States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No SUDE 2 United Kingdom, Japan Russian Federation No SPICA 3 China (mainland), Japan, Canada Canada Yes United Kingdom, Japan United States of America No SPIDE 2 United States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No SUDE 2 United States of America, Japan United States of America No STEED 3 Japan, United States of America, Japan United States of America No STEED 3 United States of America, Japan United States of America No STEEL 3 Australia, Japan, United Stat				
SHODA 2 United States of America (Mariana Islands), Japan United States of America (Mariana Islands) No SHRAK 2 United States of America, Japan United States of America No SULVI 2 Canada, Japan United States of America No SILVI 2 Canada, Japan Canada United States of America No SINGO 2 Saudi Arabia, Japan Saudi Arabia No SINGO 2 Saudi Arabia, Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Venezuela (Bolivarian Republic of) No SIRON 2 Israel, Japan United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 Russian Federation, Japan Russian Federation No SIRICON 2 Russian Federation, Japan United States of America No SIRICON 3 China (mainland), Japan, Canada Canada Yes SIRICON 3 China (mainland), Japan, Canada Canada No SIRICON 3 China (mainland), Japan, Canada Canada No SIRICON 3 United States of America, Japan United States of America No SIRICON 3 United States of America No No SIRICON 3	OI IIIVIA	2 Angola/Democratic Republic of the Congo (Fire boundary), Japan	Angola/Democratic Nepublic of the Congo	NO
SHODA 2 United States of America (Mariana Islands), Japan United States of America (Mariana Islands) No SHRAK 2 United States of America, Japan United States of America No SULVI 2 Canada, Japan United States of America No SILVI 2 Canada, Japan Canada United States of America No SINGO 2 Saudi Arabia, Japan Saudi Arabia No SINGO 2 Saudi Arabia, Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Venezuela (Bolivarian Republic of) No SIRON 2 Israel, Japan United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 United States of America, Japan United States of America No SIRICON 2 Russian Federation, Japan Russian Federation No SIRICON 2 Russian Federation, Japan United States of America No SIRICON 3 China (mainland), Japan, Canada Canada Yes SIRICON 3 China (mainland), Japan, Canada Canada No SIRICON 3 China (mainland), Japan, Canada Canada No SIRICON 3 United States of America, Japan United States of America No SIRICON 3 United States of America No No SIRICON 3				
SHRAK 2 United States of America, Japan United States of America No SIJMI 2 United States of America, Japan United States of America, Japan Canada No SINFO 2 United States of America, Japan United States of America No SINGO 2 Saudi Arabia, Japan United States of America No SINGO 2 Saudi Arabia, Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Israel No SIRON 2 Israel, Japan Israel No SKIPE 2 United States of America, Japan United States of America No SKIPE 2 United States of America, Japan United States of America No SMITY 2 United States of America, Japan United States of America No SMITY 2 United States of America, Japan United States of America No SMAKE 3 Republic of Korea, Japan, United states of America United States of America Yes SOLON 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOUKA 2 France, Japan Federation, Japan Russian Federation No SPEAR 2 United Kingdom, Japan United Kingdom No SPEAR 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STEEL 3 Japan, United States of America No STEEL 4 United States of America, Japan United States of America No STOUT 2 United States of America, Japan United States of America No STEEL 5 Japan, Thalland,	SHINE	·		Yes
SIJMI 2 United States of America, Japan Canada No SILVI 2 Canada, Japan Canada No SINFO 2 United States of America, Japan United States of America No SINGO 2 Saudi Arabia, Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Venezuela (Bolivarian Republic of) No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Israel No SKIPE 2 United States of America, Japan Israel No SKIPE 2 United States of America, Japan United States of America No SLIDE 2 United States of America, Japan United States of America No SMTTY 2 United States of America, Japan United States of America No SMAKE 3 Republic of Korea, Japan, United states of America Yes SOLON 2 United States of America, Japan United States of America Yes SOLON 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOUKA 2 France, Japan Russian Federation, Japan Russian Federation No SOUKA 2 France, Japan United States of America No SPEAR 2 United Kingdom, Japan Fore No SPICA 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SPIDR 3 Australia, Japan, United States of America No SQUAD 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STEEL 4 United States of America, Japan, Now Zealand United States of America No STEEL 3 Japan, Thalland, Brazil, Australia, United States of America United States of America No STEEL 4 United States of America, Japan, Now Zealand United States of America No STEEL 4 United States of America, Japan, Lonited States of America No STEEL 5 Japan, Thalland, Brazil, Australia, United States of America No United States of America No STOUT 2 United States of America, Japan United States of America No Uni	SHODA	2 United States of America (Mariana Islands), Japan	United States of America (Mariana Islands)	No
SILVI 2 Canada, Japan United States of America (No SINFO 2 United States of America, Japan United States of America (No SINGO 2 Saudi Arabia, Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Venezuela (Bolivarian Republic of) No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Israel No SIRON 2 Israel, Japan United States of America, Japan United States of America No SLIDE 2 United States of America, Japan United States of America No SIRTY 2 United States of America, Japan United States of America No SMITTY 2 United States of America, Japan United States of America (No SNAKE 3 Republic of Korea, Japan, United States of America United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan (No SOPHY 2 United States of America, Japan (No SOPHA 2 France, Japan (No SOPHA 2 France, Japan (No SOPHA 2 France, Japan (No SPICA 3 China (mainland), Japan, Canada (No SPICA 3 China (mainland), Japan, Canada (No SPICA 3 United States of America, Japan (United States of America (No SQUAD 2 United States of America, Japan (United States of America (No SQUAD 2 United States of America, Japan (United States of America (No STAGE 2 United States of America, Japan (United States of America (No STEEL 3 Australia, Japan, United States of America (United States of America (No STEEL 3 Australia, Japan, United States of America (United States of America (No STEEL 3 Australia, Japan, United States of America (United States of America (No STOUT 2 United States of America, Japan (United States of America (No STOUT 2 United States of America, Japan (United States of America (No STOUT 2 United States of America, Japan (United States of America (No STOUT 2 United States of America, Japan (United States of America (No STOUT 2 United States of America, Japan (United States of America (No STOUT 2 United States of	SHRAK	2 United States of America, Japan	United States of America	No
SILVI 2 Canada, Japan United States of America (No SINFO 2 United States of America, Japan United States of America (No SINGO 2 Saudi Arabia, Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Venezuela (Bolivarian Republic of) No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Israel No SIRON 2 Israel, Japan United States of America, Japan United States of America No SLIDE 2 United States of America, Japan United States of America No SIRTY 2 United States of America, Japan United States of America No SMITTY 2 United States of America, Japan United States of America (No SNAKE 3 Republic of Korea, Japan, United States of America United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan United States of America (No SOPHY 2 United States of America, Japan (No SOPHY 2 United States of America, Japan (No SOPHA 2 France, Japan (No SOPHA 2 France, Japan (No SOPHA 2 France, Japan (No SPICA 3 China (mainland), Japan, Canada (No SPICA 3 China (mainland), Japan, Canada (No SPICA 3 United States of America, Japan (United States of America (No SQUAD 2 United States of America, Japan (United States of America (No SQUAD 2 United States of America, Japan (United States of America (No STAGE 2 United States of America, Japan (United States of America (No STEEL 3 Australia, Japan, United States of America (United States of America (No STEEL 3 Australia, Japan, United States of America (United States of America (No STEEL 3 Australia, Japan, United States of America (United States of America (No STOUT 2 United States of America, Japan (United States of America (No STOUT 2 United States of America, Japan (United States of America (No STOUT 2 United States of America, Japan (United States of America (No STOUT 2 United States of America, Japan (United States of America (No STOUT 2 United States of America, Japan (United States of America (No STOUT 2 United States of	SIJMI	2 United States of America, Japan	United States of America	No
SINFO 2 United States of America, Japan Saudi Arabia No SINGO 2 Saudi Arabia, Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Venezuela (Bolivarian Republic of) No SIRON 2 Israel, Japan Israel No SKIPE 2 United States of America, Japan United States of America No SLIDE 2 United States of America, Japan United States of America No SMTTY 2 United States of America, Japan United States of America No SNAKE 3 Republic of Korea, Japan, United states of America On United States of America Yes SOLON 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOUKA 2 France, Japan Russian Federation No SPEAR 2 United Kingdom, Japan Russian Federation No SPEAR 2 United Kingdom, Japan France No SPIDR 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SQUAD 2 United States of America, Japan United States of America No SQUAD 2 United States of America, Japan United States of America No SQUAD 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan United States of America No STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 4 United States of America, Japan, New Zealand United States of America No STEEL 4 United States of America, Japan United States of America No STEEL 4 United States of America, Japan United States of America No STEEL 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STEEL 5 Japan, Thailand, Brazil, Australia, United States of America No United States of America No STEEL 5 United States of America, Japan United States of America No STEEL 5 Japan, Thailand, Brazil, Australia, United States of America No United States of America No S		·		
SINGO 2 Saudi Arabia, Japan Saudi Arabia No SIRAS 2 Venezuela (Bolivarian Republic of), Japan Venezuela (Bolivarian Republic of) No SIRON 2 Israel, Japan Israel United States of America, Japan United States of America No SLIDE 2 United States of America, Japan United States of America No SMTTY 2 United States of America, Japan United States of America No SMTTY 2 United States of America/Bahamas, Japan United States of America No SNAKE 3 Republic of Korea, Japan, United states of America United States of America Yes SOLON 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOTOM 2 Russian Federation, Japan Russian Federation No SOUKA 2 France, Japan France No SPICA 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SPIDR 3 Australia, Japan, United States of America United States of America No SQUAD 2 United States of America, Japan United States of America No SQUAD 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STEEL 4 United States of America, Japan, New Zealand United States of America No STEEL 4 United States of America, Japan, New Zealand United States of America No STEEL 4 United States of America, Japan, New Zealand United States of America No STEEL 4 United States of America, Japan, New Zealand United States of America No STEEL 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STEEL 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STEAM 2 United States of America, Japan United States of America No STEAM 2 United States of America, Japan United States of America No STEAM 2 United States of Ameri				
SIRAS 2 Venezuela (Bolivarian Republic of), Japan Israel (Solivarian Republic of) No SIRON 2 Israel, Japan Israel (Solivarian Republic of) No SKIPE 2 United States of America, Japan United States of America (Solited States of America, Japan United States of America (Solited States of America, Japan United States of America (Solited States of America, Japan, United States of America (Solited States of America, Japan, United States of America (Solited States of America) (Solited States of America, Japan (Solited States of America)		·		
SIRON 2 Israel, Japan Israel No SKIPE 2 United States of America, Japan United States of America No SLIDE 2 United States of America, Japan United States of America/Bahamas, Japan United States of America/Bahamas, Japan United States of America/Bahamas No SNAKE 3 Republic of Korea, Japan, United states of America United States of America Yes SOLON 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOTOM 2 Russian Federation, Japan Russian Federation No SOUKA 2 France, Japan Russian Federation No SOUKA 2 France, Japan France No SPEAR 2 United Kingdom, Japan France No SPICA 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SPIDR 3 Australia, Japan, United States of America United States of America No SQUAD 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STEEL 4 United States of America, Japan, New Zealand United States of America No STEEL 4 United States of America, Japan, New Zealand United States of America No STEEL 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STELA 4 United States of America, Japan United States of America No STELA 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STEAR 2 United States of America, Japan United States of America No STEAR 5 Japan, Thailand, Brazil, Australia, United States of America No United States of A		, ,		
SKIPE 2 United States of America, Japan United States of America No SLIDE 2 United States of America, Japan United States of America No SMTTY 2 United States of America, Japan United States of America Shahamas No SNAKE 3 Republic of Korea, Japan, United states of America United States of America Yes SOLON 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOTOM 2 Russian Federation, Japan Russian Federation No SOUKA 2 France, Japan United Kingdom No SPEAR 2 United Kingdom, Japan United Kingdom No SPICA 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SPIDR 3 Australia, Japan, United States of America United States of America No SQUID 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan United States of America No STEEL 4 United States of America, Japan, New Zealand United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No United States of Amer	SIRAS	2 Venezuela (Bolivarian Republic of), Japan	Venezuela (Bolivarian Republic of)	No
SLIDE 2 United States of America, Japan United States of America No SMTTY 2 United States of America/Bahamas, Japan United States of America/Bahamas No SNAKE 3 Republic of Korea, Japan, United states of America United States of America Yes SOLON 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOTOM 2 Russian Federation, Japan Russian Federation No SOUKA 2 France, Japan Russian Federation No SPEAR 2 United Kingdom, Japan France No SPEAR 2 United Kingdom, Japan United Kingdom No SPICA 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SQUAD 2 United States of America, Japan United States of America No SQUAD 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No Un	SIRON	2 Israel, Japan	Israel	No
SLIDE 2 United States of America, Japan United States of America No SMTTY 2 United States of America/Bahamas, Japan United States of America/Bahamas No SNAKE 3 Republic of Korea, Japan, United states of America United States of America Yes SOLON 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOTOM 2 Russian Federation, Japan Russian Federation No SOUKA 2 France, Japan Russian Federation No SPEAR 2 United Kingdom, Japan France No SPEAR 2 United Kingdom, Japan United Kingdom No SPICA 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SQUAD 2 United States of America, Japan United States of America No SQUAD 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No Un	SKIPE	2 United States of America, Japan	United States of America	No
SMTTY 2 United States of America/Bahamas, Japan United States of America/Bahamas No SNAKE 3 Republic of Korea, Japan, United states of America United States of America Yes SOLON 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOTOM 2 Russian Federation, Japan Russian Federation No SOUKA 2 France, Japan France No SPEAR 2 United Kingdom, Japan France No SPICA 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SPIDR 3 Australia, Japan, United States of America United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STEEL 3 Australia, Japan, United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No United States of America No SUBIE 2 United States of America, Japan United States of America No United States of America No SUBIE 2 United States of America, Japan United States of America No United Sta	SLIDE	2 United States of America, Japan	United States of America	Nο
SNAKE 3 Republic of Korea, Japan, United states of America United States of America No SOPHY 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOTOM 2 Russian Federation, Japan Russian Federation No SOUKA 2 France, Japan France No SOUKA 2 France, Japan France No SPEAR 2 United Kingdom, Japan United Kingdom No SPICA 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SPIDR 3 Australia, Japan, United States of America United States of America No SQUAD 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No United State		· •		
SOLON 2 United States of America, Japan United States of America No SOPHY 2 United States of America, Japan United States of America No SOTOM 2 Russian Federation, Japan Russian Federation No SOUKA 2 France, Japan France No SPEAR 2 United Kingdom, Japan United Kingdom No SPICA 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SPIDR 3 Australia, Japan, United States of America United States of America No SQUAD 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No United States of Ame				
SOPHY 2 United States of America, Japan United States of America No SOTOM 2 Russian Federation, Japan Russian Federation No SOUKA 2 France, Japan France No SPEAR 2 United Kingdom, Japan United Kingdom No SPICA 3 China (mainland), Japan, Canada Yes SPIDE 2 United States of America, Japan United States of America No SQUAD 2 United States of America, Japan United States of America No SQUAD 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan United States of America No STEEL 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No United States of America No SUBIE 2 United States of America, Japan United States of America No United States of America No SUBIE 2 United States of America, Japan United States of America No United States of America No SUBIE 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No United States of America				
SOTOM 2 Russian Federation, Japan Russian Federation No SOUKA 2 France, Japan France No SPEAR 2 United Kingdom, Japan United Kingdom No SPICA 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SPIDR 3 Australia, Japan, United States of America United States of America No SQUAD 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No United States of America No SUBIE 2 United States of America, Japan United States of America No United States of America No SUBIE 2 United States of America, Japan United States of America No United States of America No SUBIE 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No United S		·		No
SOUKA 2 France, Japan France No SPEAR 2 United Kingdom, Japan United Kingdom No SPICA 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SPIDR 3 Australia, Japan, United States of America United States of America No SQUAD 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STRAW 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No	SOPHY	2 United States of America, Japan	United States of America	No
SPEAR 2 United Kingdom, Japan United Kingdom No SPICA 3 China (mainland), Japan, Canada Yes SPIDE 2 United States of America, Japan United States of America No SPIDR 3 Australia, Japan, United States of America United States of America No SQUAD 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No	SOTOM	2 Russian Federation, Japan	Russian Federation	No
SPEAR 2 United Kingdom, Japan United Kingdom No SPICA 3 China (mainland), Japan, Canada Yes SPIDE 2 United States of America, Japan United States of America No SPIDR 3 Australia, Japan, United States of America United States of America No SQUAD 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No	SOUKA	2 France, Japan	France	No
SPICA 3 China (mainland), Japan, Canada Canada Yes SPIDE 2 United States of America, Japan United States of America No SPIDR 3 Australia, Japan, United States of America United States of America No SQUAD 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STOUT 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No		·	United Kingdom	Nο
SPIDE 2 United States of America, Japan United States of America No SPIDR 3 Australia, Japan, United States of America United States of America No SQUAD 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STOUT 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No			•	
SPIDR 3 Australia, Japan, United States of America United States of America No SQUAD 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STOUT 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No				
SQUAD 2 United States of America, Japan United States of America No SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STOUT 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No		· •		
SQUID 2 United States of America, Japan United States of America No STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STOUT 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No				No
STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STOUT 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No	SQUAD	2 United States of America, Japan	United States of America	No
STAGE 2 United States of America, Japan United States of America No STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STOUT 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No	SQUID	2 United States of America, Japan	United States of America	No
STEED 3 United States of America, Japan, New Zealand United States of America No STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STOUT 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No		· · ·		
STEEL 3 Australia, Japan, United States of America United States of America No STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STOUT 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No				
STELA 4 United States of America, Russian Federation, Japan, China (Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No				
(Hong Kong) STONE 5 Japan, Thailand, Brazil, Australia, United States of America United States of America No STOUT 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No				
STONE5 Japan, Thailand, Brazil, Australia, United States of AmericaUnited States of AmericaNoSTOUT2 United States of America, JapanUnited States of AmericaNoSTRAW2 United States of America, JapanUnited States of AmericaNoSUBIE2 United States of America, JapanUnited States of AmericaNo	STELA		Russian Federation	Yes
STOUT 2 United States of America, Japan United States of America No STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No		(0 0)		
STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No	STONE	5 Japan, Thailand, Brazil, Australia, United States of America	United States of America	No
STRAW 2 United States of America, Japan United States of America No SUBIE 2 United States of America, Japan United States of America No	STOUT	2 United States of America, Japan	United States of America	No
SUBIE 2 United States of America, Japan United States of America No		· ·		
		·		
The states of Afficina, Norway Norway		· •		
	JUUAN	o dapan, onlice states of America, Norway	Notway	140

SUNNS	United States of America, Japan	United States of America	No
SUNNY	4 Australia, Japan, Republic of Korea, United States of America	United States of America	Yes
SURFU	2 United States of America, Japan	United States of America	No
SURIB	2 Spain, Japan	Spain	No
SUSAK	2 Australia, Japan	•	
	·	Australia	No
SUSAR	2 Singapore, Japan	Singapore	No
SWALO	3 Australia, Japan, United States of America	United States of America	No
SWAMP	2 United States of America, Japan	United States of America	No
SWEET	3 New Zealand, Japan, United States of America	United States of America	No
SWING	2 United States of America, Japan	United States of America	No
TACHI	2 United States of America, Japan	United States of America	
	• •		No
TADIR	2 Mexico, Japan	Mexico	No
TAGOK	2 Russian Federation, Japan	Russian Federation	No
TAKAS	France/Ireland/United Kingdom (FIR boundary), Japan	France/Ireland/United Kingdom	No
TALES	2 United Kingdom (Cayman Islands), Japan	Cayman Is. (U.K.)	No
TALMI	2 Israel, Japan	Israel	No
TAMAK	2 Russian Federation/Ukraine, Japan	Russian Federation/Ukraine	No
TAMAN	2 Canada, Japan	Canada	No
	·		
TAMER	2 Turkey, Japan	Turkey	No
TAMPO	3 United States of America, Indonesia, Japan	United States of America	No
TANNO	United States of America, Japan	United States of America	No
TANRE	2 United States of America, Japan	United States of America	No
TARAA	2 United States of America, Japan	United States of America	No
TARAH	2 United States of America, Japan	United States of America	No
	· · ·		
TAVIS	2 France (Polynesie Française), Japan	Polynesie Française (France)	No
TECHI	2 United States of America, Japan	United States of America	No
TEMIS	2 Australia, Japan	Australia	No
TENSI	2 Latvia, Japan	Latvia	No
TENSO	2 United Kingdom, Japan	United Kingdom	No
TERAS	3 Algeria, Ecuador/Peru (FIR boundary), Japan	Ecuador/Peru	No
TIBRI	2 Croatia/Serbia and Montenegro (FIR boundary), Japan	Croatia/Serbia and Montenegro	No
		_	
TIGER	6 Lao People's Democratic Republic, Thailand, Japan, Pakistan/India (FIR boundary), United Kingdom, United States of	United Kingdom	Yes
	America		
TIGRA	2 Greece/Italy (FIR boundary), Japan	Greece/Italy	No
TITAN	3 Spain, Japan, China (Hong Kong)	Spain	No
TOADS	2 United States of America, Japan	United States of America	No
TOBBY	· · ·	United States of America	
	3 Philippines, Japan, United States of America		No
TOMIE	2 United States of America, Japan	United States of America	No
TOMMY	4 United States of America, Japan, China (Taiwan), Thailand	United States of America	No
TOMRI	2 Russian Federation, Japan	Russian Federation	No
TONAR	4 Australia, Japan, Russian Federation, Argentina/Chile (FIR	Russian Federation	No
	boundary)		
TONBI	2 Qatar, Japan	Qatar	No
TONDA	2 Italy, Japan	Italy	No
TONNY	3 Canada, Japan, China (Taiwan)	Canada	No
TOPAZ	2 United States of America, Japan	United States of America	No
TOPOS	2 Mexico, Japan	Mexico	No
TOSAR	2 Brazil, Japan	Brazil	No
TRACY	2 United States of America, Japan	United States of America	No
TRIKE	2 United States of America, Japan	United States of America	No
TROUT	3 China (Hong Kong), Japan, United States of America	United States of America	No
TUBAS	2 United States of America, Japan	United States of America	No
TULIP	5 Netherlands, United States of America, Japan, China (Taiwan),	Netherlands	No
TOLIF	Indonesia	netilellalius	NO
TWINS	2 United States of America, Japan	United States of America	No
UMAKA	2 Belize, Costa Rica, El Salvador, Guatemala, Honduras,	Belize, Costa Rica, El Salvador, Guatemala,	No
	Nicaragua/Jamaica (FIR boundary), Japan	, , , , , , , , , , , , , , , , , , , ,	
UMAKI	2 Canada, Japan	Canada	No
UMEDA	2 Canada, Japan	Canada	No
	·		
URAGA	2 Ecuador, Japan	Ecuador	No
URESI	2 Russian Federation, Japan	Russian Federation	No
URESY	2 United States of America, Japan	United States of America	No
UTASI	2 Malawi, Japan	Malawi	No
UTIMA	2 Russian Federation, Japan	Russian Federation	No
	7 · 1		

2 Switzerland, Japan	Switzerland	No
2 United Kingdom, Japan	United Kingdom	No
2 United States of America, Japan	United States of America	No
2 United States of America, Japan	United States of America	No
2 Ukraine, Japan	Ukraine	No
2 United States of America, Japan	United States of America	No
2 United States of America, Japan	United States of America	No
2 United States of America, Japan	United States of America	No
2 United States of America, Japan	United States of America	No
3 United States of America, Japan, New Zealand	United States of America	No
4 Japan, Australia, United States of America, Portugal	United States of America	No
	Canada/United States of America	No
`	United States of America	Yes
2 United States of America, Japan	United States of America	No
2 United States of America, Japan	United States of America	No
3 Japan, Australia, United States of America	United States of America	No
4 Australia, China (mainland), Japan, Belgium/Netherlands (FIR boundary)	Belgium/Netherlands	Yes
2 United States of America, Japan	United States of America	No
2 United States of America, Japan	United States of America	No
2 United States of America, Japan	United States of America	No
4 France, Namibia, Japan, Indonesia	France	No
2 United States of America, Japan	United States of America	No
	 2 United Kingdom, Japan 2 United States of America, Japan 2 United States of America, Japan 2 Ukraine, Japan 2 United States of America, Japan 3 United States of America, Japan 3 United States of America, Japan, New Zealand 4 Japan, Australia, United States of America, Portugal 5 Japan, Australia, Tonga, Lybia, Canada/United States of America (FIR boundary) 3 Canada, United States of America, Japan 2 United States of America, Japan 2 United States of America, Japan 3 Japan, Australia, United States of America 4 Australia, China (mainland), Japan, Belgium/Netherlands (FIR boundary) 2 United States of America, Japan 4 France, Namibia, Japan, Indonesia 	2 United Kingdom, Japan 2 United States of America, Japan 3 United States of America, Japan 4 United States of America 5 United States of America, Japan 5 United States of America, Japan 6 United States of America 7 United States of America, Japan 7 United States of America 8 United States of America, Japan 8 United States of America 9 United States of America

	Priority to be determ	ined	
5LNC	States	Priority	Within 1000NM
CANDY	3 Japan, China (Taiwan), Australia	To be determined by the 5LNC Duplicate Resolution Rules	No
COMBI	2 Japan, China (Hong Kong)	To be determined by the 5LNC Duplicate Resolution Rules	No
JENNY	2 Japan, Liberia	To be determined by the 5LNC Duplicate Resolution Rules	No
MARCH	3 China (Taiwan), United States of America, Japan	To be determined by the 5LNC Duplicate Resolution Rules	No
NORAN	3 Republic of Korea, Japan, Jamaica	To be determined by the 5LNC Duplicate Resolution Rules	Yes
TAMBA	5 Liberia, Mexico, Japan, Indonesia (2)	To be determined by the 5LNC Duplicate Resolution Rules	Yes

	In the process of being resolved			
5LNC	States	Note	Within 1000NM	
ASANO	2 Japan, Colombia	Japan to register.	No	
AWASI	2 Japan, Indonesia	Japan to register.	No	
DAMBO	3 Japan, Indonesia, New Zealand	Japan to register.	No	
DARIO	2 Brazil, Japan	Japan replacing DARIO	No	
HANKA	2 Japan, Indonesia	Japan to register.	No	
HAYAT	2 Japan, Indonesia	Japan to register.	No	
INAWA	2 Japan, Nepal	Japan replacing INAWA	No	
JOMON	2 Japan, Philippines	Japan replacing JOMON	No	
KIRIN	3 Thailand, China (Taiwan), Japan	Japan replacing KIRIN	Yes	
LALAH	2 Japan, Philippines	Japan replacing LALAH	No	
MARIN	3 Brazil, Japan, Indonesia	Japan to register.	No	
MARUB	2 Australia, Japan	Japan replacing MARUB	No	
MONPI	2 India, Japan/United States of America (FIR boundary)	Japan replacing MONPI	No	
MONTA	3 Japan, China (Hong Kong), Philippines	Japan to register.	Yes	
NORMA	2 Australia, Japan	Japan replacing NORMA	No	
OKURA	2 Japan, New Zealand	Japan replacing OKURA	No	
OMLET	2 Japan/United States of America (FIR boundary), Cambodia	Cambodia to replaced/removed in Q1 2025.	No	
OTAKI	2 Japan, New Zealand	Japan replacing OTAKI	No	
PANAP	2 Brazil, Japan	Japan to register.	No	

PONTE	3 Japan, Spain, Brazil	Japan replacing PONTE	No
SANJO	3 Japan, Philippines, Thailand	Japan to register.	No
SIMON	4 Brazil, Denmark (Greenland), Australia, Japan	Japan to register.	No
TALBA	2 Canada, Japan	Japan replacing TALBA	No
TEGAR	3 China (mainland), Indonesia, Japan	Japan to register.	No
TONIK	2 Japan, Thailand	Japan replacing TONIK	No

5LNC STATUS - KIRIBATI

	Total number of 5LNCs	23
	Terminal Airspace (TA)	8
	En-route (ENR)	15
ICARD	FIR	0
	Other	0
	No Purpose	0
	No Coordinates	0
	Total number of duplicated 5LNCs	4
	Priority allocated to Kiribati	0
Duplicated	Priority allocated to other States	4
5LNCs	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	0
	Priority allocated to Kiribati	L semis
5LNC	States	Priority Within 1000NM
	Driverity allocated to ather Chate	
	Priority allocated to other States	Within
5LNC	States	Priority 1000NM
DECOR 2	- ,	United States of America No
MATER 2	•	France No
NADAN 2		Saudi Arabia No United States of America No
WESLI 2	United States of America, Kiribati	United States of America No
	Priority to be determined	
5LNC	States	Priority Within 1000NM
	la tha marana (1)	
	In the process of being resolved	\/\/ithin
5LNC	States	Note 1000NM

5LNC STATUS - LAO PDR

ICAR	П	Total number of 5LNCs	444	
ICAR	U		144	
		Terminal Airspace (TA) En-route (ENR)	93	
		FIR	18	
			11	
		Other	2	
		No Purpose	20	
		No Coordinates	9	
Duplica	ted	Total number of duplicated 5LNCs	11	
5LNC		Priority allocated to Lao PDR	4	
JLING	,3	Priority allocated to cate Port Priority allocated to other States	0	
		Priority to be determined	0	
		In the process of being resolved		
		Completely resolved 5LNCs	5	
		Completely resolved 3LINCS	3	
		Priority allocated to Lao PDR		
5LNC		States	Priority	Within 1000NM
ALPHA	11	Lao People's Democratic Republic, Vanuatu, China, India, Italy,	Lao People's Democratic Republic	Yes
		Russian Federation, Turkey, United Kingdom (2), United Kingdom (Gibraltar), United Kingdom (Falkland Islands)		
LAVOS	2	Lao People's Democratic Republic/Viet Nam (FIR boundary), China	Lao People's Democratic Republic/Viet Nam	Yes
MADON	2	Lao People's Democratic Republic, Japan	Lao People's Democratic Republic	No
TARAD	2	Lao People's Democratic Republic, Thailand	Lao People's Democratic Republic	Yes
		Priority allocated to other States		
5LNC		States	Priority	Within
			,	1000NM
		Priority to be determined		
5LNC		States	Priority	Within
				1000NM
FLNC	1	In the process of being resolved		\A/:4b-:
5LNC		States	Note	Within 1000NM
BUTRA	2	2 Tajikistan/Uzbekistan (FIR boundary), Lao People's Democratic Republic/Thailand (FIR boundary)	Lao PDR replacing BUTRA, but deletion request has not been submitted. Priority	No
		republic, maliana (i iit boundary)	given to Tajikistan/Uzbekistan.	
LAVAN	2	2 United States of America, Cambodia/Lao People's Democratic	Lao PDR/Cambodia replacing LAVEN,, but	No
		Republic	deletion request has not been submitted.	
			Priority given to USA.	

5LNC STATUS - MALAYSIA

	Total number of 5LNCs	982
	Terminal Airspace (TA)	763
	En-route (ENR)	134
ICARD	FIR	21
	Other	2
	No Purpose	62
	No Coordinates	2

	Total number of duplicated 5LNCs	53
	Priority allocated to Malaysia	22
Duplicated	Priority allocated to other States	16
5LNCs	Priority to be determined	3
	In the process of being resolved	4
	Completely resolved 5LNCs	8

	Priority allocated to Malaysia		
5LNC	States	Priority	Within 1000NM
ADBAD	2 Malaysia, New Zealand	Malaysia	No
ARIMA	2 Malaysia, Japan	Malaysia	No
DUMAS	2 Malaysia, China (mainland)	Malaysia	No
ELPOX	2 Malaysia, India	Malaysia	No
EMSAR	2 Malaysia, New Zealand	Malaysia	No
ENDOR	2 Malaysia, Australia	Malaysia	No
GEMAS	3 Spain, Malaysia, Brazil/Paraguay	Malaysia	No
GITOR	2 Malaysia, New Zealand	Malaysia	No
IKONO	3 Nigeria, Malaysia, Australia	Malaysia	No
KABTO	2 Malaysia, Japan	Malaysia	No
LAPEN	2 Malaysia, China	Malaysia	No
LAPIS	2 Malaysia, Japan	Malaysia	No
LATUK	2 Malaysia, Russian Federation	Malaysia	No
MALIM	2 Malaysia, Thailand	Malaysia	No
MATSU	2 Malaysia, Japan	Malaysia	No
MINAT	2 Malaysia, Japan	Malaysia	No
MITOS	4 Malaysia, Indonesia, Spain, Peru	Malaysia	No
OKADA	2 Malaysia/Indonesia (FIR boundary), Japan	Malaysia/Indonesia	No
PEGDU	2 Malaysia, China	Malaysia	No
PEGSA	2 Malaysia, New Zealand	Malaysia	No
SAMAK	2 India/Malaysia, Libya	India/Malaysia	No
TAMOS	2 Malaysia/Thailand (FIR boundary), Spain	Malaysia/Thailand	No

	Priority allocated to other States		
5LNC	States	Priority	Within 1000NM
BARAT	2 France, Malaysia	France	No
BIKAN	2 Japan, Malaysia	Japan	No
EGOBA	2 Republic of Korea, Malaysia	Republic of Korea	No
KALAX	2 Brazil, Malaysia	Brazil	No
KASTA	2 Spain, Malaysia	Spain	No
LAPUG	2 China (Hong Kong), Malaysia	China	No
MININ	2 Russian Federation, Malaysia	Russian Federation	No
NOMAG	2 India, Malaysia	India	No
OKTON	2 Australia, Malaysia	Australia	No
SADAR	2 Australia, Malaysia	Australia	No
SEDNA	2 Japan, Malaysia	Japan	No
TAPIS	2 Afghanistan, Malaysia	Afghanistan	No

TIMOR	3 Peru, Spain, Malaysia	Spain	No
TOMUD	2 China, Malaysia	China	Yes
UPRAP	2 Papua New Guinea, Malaysia	Papua New Guinea	No
VIDAD	2 Viet Nam, Malaysia	Viet Nam	No

	Priority to be determined		
5LNC	States	Priority	Within 1000NM
		To be determined by the 5LNC Duplicate	
AKOMA	2 China, Malaysia	Resolution Rules	No
		To be determined by the 5LNC Duplicate	
BASIR	3 China (Taiwan), Pakistan, Malaysia	Resolution Rules	No
	•	To be determined by the 5LNC Duplicate	
BOGIM	2 Malaysia, Myanmar	Resolution Rules	No

	In the process of being resolved		
5LNC	States	Note	Within 1000NM
LEPNA	2 Malaysia, Singapore	Singapore replacing LEPNA	Yes
MABAL	2 Sri Lanka, Malaysia/Singapore	Singapore to replace MABAL in Q2 2024.	No
NYLON	2 Japan, Malaysia/Singapore	Singapore to replace NYLON in Q2 2024.	No
URIGO	2 Norway, Singapore/Malaysia (FIR boundary)	Singapore to replace URIGO in Q2 2024.	No

5LNC STATUS - MALDIVES

Date: June 2024

	Total number of 5LNCs	139
	Terminal Airspace (TA)	57
	En-route (ENR)	56
ICARD	FIR	9
	Other	1
	No Purpose	16
	No Coordinates	0
	Total number of duplicated 5LNCs	10
	Priority allocated to Maldives	0
Duplicated	Priority allocated to other States	8
5LNCs	Priority to be determined	0
	In the process of being resolved	1
	Completely resolved 5LNCs	1

	Priority allocated to Maldives			
5LNC	States	Priority	Within 1000NM	

	Priority allocated to other States				
5LNC		States	Priority	Within 1000NM	
ATURU	2	Canada, Maldives	Canada	No	
BIKSI	2	Republic of Korea, Maldives	Republic of Korea	No	
IKODA	2	Australia, Maldives	Australia	No	
JACKY	3	Japan, Maldives, Canada	Canada	No	
LEDUP	2	Viet Nam, Maldives	Viet Nam	No	
NASIM	2	Turkey, Maldives	Turkey	No	
RAXON	2	Polynesie Française, Maldives	Polynesie Française (France)	No	
TOGAM	2	Australia, Maldives	Australia	No	

Priority to be determined			
5LNC	States	Priority	Within 1000NM

	In the process of being resolved			
5LNC		States	Priority	Within 1000NM
KUMAD	2	India, Maldives	Maldives to register	No

5LNC STATUS - MARSHALL ISLANDS

	Total mumb on of ELNICo	20
	Total number of 5LNCs	36
	Terminal Airspace (TA)	0
	En-route (ENR)	0
ICARD	FIR	0
	Other	0
	No Purpose	36
	No Coordinates	0
	Total number of duplicated 5LNCs	0
	Priority allocated to Marshall Islands	0
Duplicated	Priority allocated to other States	0
5LNCs	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	0
	Priority allocated to Marshall Island	
5LNC	States	Priority Within 1000NM
	Priority allocated to other States	
5LNC	States	Priority Within 1000NM
	Priority to be determined	
5LNC	States	Priority Within 1000NM
	In the process of being resolved	
		D : : Within

5LNC STATUS - MICRONESIA

	T		
	Total number of 5LNCs	70	
	Terminal Airspace (TA)	0	
	En-route (ENR)	0	
ICARD	FIR	0	
	Other	0	
	No Purpose	70	
	No Coordinates	0	
	Total number of duplicated 5LNCs	0	
	Priority allocated to Micronesia	0	
Duplicated	Priority allocated to other States	0	
5LNCs	Priority to be determined	0	
	In the process of being resolved	0	
	Completely resolved 5LNCs	0	
	Priority allocated to Micronesia		\ \ / (: 4 la : -a
5LNC	States	Priority	Within 1000NM
	Priority allocated to other States		
51.110	·		Within
5LNC	States	Priority	1000NM
	Priority to be determined		
5LNC	States	Priority	Within 1000NM
			100014101
	In the process of being resolved		
5LNC	States	Priority	Within 1000NM
			100014101

5LNC STATUS - MONGOLIA

		Total number of 5LNCs	250	
		Terminal Airspace (TA)	17	
		En-route (ENR)	219	
ICAF	RD	FIR	14	
		Other	0	
		No Purpose	0	
		No Coordinates	0	
_				
		Total number of duplicated 5LNCs	43	
		Priority allocated to Mongolia	4	
Duplic	ated	Priority allocated to other States	2	
5LN	Cs	Priority to be determined	0	
		In the process of being resolved	0	
		Completely resolved 5LNCs	37	
		Priority allocated to Mongolia	1	
5LNC		States		Within 1000NM
BAYAN	3	Bahrain/Qatar, Mongolia, Philippines	Mongolia	No
DULAN	2	Mongolia, China	Mongolia	No
DARNO	2	Russian Federation/Mongolia (FIR boundary), Thailand	Russian Federation/Mongolia	No
SERNA	2	Mongolia/Russian Federation (FIR boundary), Spain	Mongolia/Russian Federation	No
		Drianity allocated to other Ctate		
		Priority allocated to other Stat		Within
5LNC		States		1000NM
ALDAR	2	Mongolia, Australia	Australia	No
BATUK	2	Turkey, Mongolia	Turkey	No
		Districts to be determined		
		Priority to be determined		Within
5LNC		States	Priority	1000NM
		In the process of being resolve	ed	1000
5LNC		In the process of being resolve	Note	Within 1000NM

5LNC STATUS - MYANMAR

Date: June 2024

		Total number of 5LNCs	174	
		Terminal Airspace (TA)	121	
		En-route (ENR)	9	
ICARD		FIR	21	
		Other	0	
		No Purpose	23	
		No Coordinates	0	
		Total number of duplicated 5LNCs	11	
		Priority allocated to Myanmar	2	
Duplica	ated	Priority allocated to other States	8	
5LN0	Cs	Priority to be determined	0	
		In the process of being resolved	1	
		Completely resolved 5LNCs	0	
		Priority allocated to Myan	mar	VA Cale in
5LNC		States	Priority	Within 1000NM
KAKIP	2	Myanmar, New Zealand	Myanmar	No
MIPAK	2	India/Myanmar (FIR boundary), New Zealand	India/Myanmar	No
		Priority allocated to other S	States	
5LNC		States	Priority	Within
BOGIM	2	Malaysia, Myanmar	Malaysia	1000NM No
GUTEL	2	New Zealand, Myanmar	New Zealand	No
LALAT	2	France, Myanmar	France	No
LAMIN	2	Myanmar, Russian Federation	Russian Federation	No
MALAY	5	United States of America, Myanmar, China, Viet Nam, Phillippines	United States of America	Yes
OROGA	2	Republic of Korea, Myanmar	Republic of Korea	No
SANAR	2	Russian Federation, Myanmar	Russian Federation	No
VEMOS	2	China, Myanmar	China	No
		Priority to be determine	ed	
5LNC		States	Priority	Within 1000NM
		In the process of being res	olved	Within
5LNC		States	Priority	1000NM
IBONA	2	New Zealand, Myanmar	New Zealand. Deleted	No

Myanmar to register in ICARD

5LNC STATUS - NAURU

	Total number of 5LNCs	27	
	Terminal Airspace (TA)	6	
	En-route (ENR)	0	
ICARD	FIR	6	
	Other	10	
	No Purpose	5	
	No Coordinates	0	
	Total number of duplicated 5LNCs	1	
	Priority allocated to Nauru	0	
Duplicated	Priority allocated to other States	1	
5LNCs	Priority to be determined	0	
	In the process of being resolved	0	
	Completely resolved 5LNCs	0	
	Priority allocated to Naur	'U	VA/iAlaina
5LNC	States	Priority	Within 1000NM
	Priority allocated to other St	rates	
51 NO	States		Within
5LNC		Priority	1000NM
MARTI 2	2 Turkey, United States of America/Nauru (FIR boundary)	Turkey	No
	Priority to be determined	d	
5LNC	States	Priority	Within 1000NM
	In the process of being reso	lved	
5LNC	States	Priority	Within 1000NM

5LNC STATUS - NEPAL

	Total number of 5LNCs	117	
	Terminal Airspace (TA)	78	
	En-route (ENR)	27	
ICARD	FIR	9	
IOAIND	Other	0	
	No Purpose	3	
	No Coordinates	0	
	THE COOLUMN TO SEE THE SECOND TO SEC	· · · · · · · · · · · · · · · · · · ·	
	Total number of duplicated 5LNCs	6	
	Priority allocated to Nepal	1	
Duplicated	Priority allocated to other States	3	
5LNCs	Priority to be determined	0	
<u> </u>	Resolving	0	
	Completely resolved 5LNCs	2	
	Priority allocated to Nepal		
5LNC	States	Priority	Within 1000NM
RATAN	2 Nepal, Nigeria	Nepal	No
	Priority allocated to other States		
	•		Within
5LNC	States	Priority	vviinin
		·	1000NM
	2 India, Nepal	India	1000NM Yes
PARSI	2 Australia, Nepal	India Australia	1000NM Yes No
PARSI		India	1000NM Yes
PARSI	Australia, Nepal United States of America, Nepal, China (Hong Kong), United	India Australia United States of America. Nepal if not used	1000NM Yes No
PARSI	2 Australia, Nepal4 United States of America, Nepal, China (Hong Kong), United Kingdom	India Australia United States of America. Nepal if not used	1000NM Yes No No
PARSI ROMEO	Australia, Nepal United States of America, Nepal, China (Hong Kong), United Kingdom Priority to be determined	India Australia United States of America. Nepal if not used by the USA.	1000NM Yes No No
PARSI ROMEO	Australia, Nepal United States of America, Nepal, China (Hong Kong), United Kingdom Priority to be determined	India Australia United States of America. Nepal if not used by the USA. Priority	1000NM Yes No No

5LNC STATUS - NEW CALEDONIA

-				
		Total number of 5LNCs	45	
		Terminal Airspace (TA)	24	
		En-route (ENR)	1	
ICAR	D	FIR	0	
		Other	1	
		No Purpose	19	
		No Coordinates	2	
		Total number of duplicated 5LNCs	5	
		Priority allocated to New Caledonia	0	
Duplica	ited	Priority allocated to other States	4	
5LNC	s	Priority to be determined	1	
		In the process of being resolved	0	
		Completely resolved 5LNCs	0	
		Priority allocated to New Caledor		Within
5LNC		States	Priority	1000NM
		Priority allocated to other State:	s	
5LNC		States	Priority	Within
BEDON	2	Pakistan, France (New Caledonia)	Pakistan	1000NM No
LAMOK	2	Philippines, France (New Caledonia)/Fiji	Philippines	No
PIROG	2	Azerbaijan, France (New Caledonia)	Azerbaijan	No
SARAM	2	Republic of Korea, France (New Caledonia)	Republic of Korea	No
		Priority to be determined		
5LNC		States	Priority	Within
JENO		Class	To be determined by the 5LNC Duplicate	1000NM
BASSA	2	France (New Caledonia), Liberia	Resolution Rules	No
		In the process of being resolved	d	
5LNC		States	Note	Within
JLINO		Otatoo	14016	1000NM

5LNC STATUS - NEW ZEALAND

	Total number of 5LNCs	1752
	Terminal Airspace (TA)	1247
	En-route (ENR)	381
ICARD	FIR	27
	Other	23
	No Purpose	74
	No Coordinates	2

	Total number of duplicated 5LNCs	174
	Priority allocated to New Zealand	18
Duplicated	Priority allocated to other States	122
5LNCs	Priority to be determined	5
	In the process of being resolved	2
	Completely resolved 5LNCs	27

	Priority allocated to New Zealand			
5LNC	States	Priority	Within 1000NM	
AKAMO	2 New Zealand, Italy	New Zealand	No	
ARIKA	2 New Zealand, Japan	New Zealand	No	
BUPKA	2 New Zealand (2)	New Zealand	Yes	
DOXIN	2 New Zealand, India	New Zealand	No	
GAKTO	2 New Zealand, Japan	New Zealand	No	
GUTEL	2 New Zealand, Myanmar	New Zealand	No	
KABIL	3 Japan, Chile, New Zealand	New Zealand	No	
KADET	2 New Zealand, China (Taiwan)	New Zealand	No	
KRILL	2 New Zealand/France (Polynesie Française) [FIR boundary], Chile/Argentina	New Zealand/France (Polynesie Française)	No	
LEGER	2 New Zealand, Canada	New Zealand	No	
MABEK	2 New Zealand, Russian Federation	New Zealand	No	
MADOK	2 New Zealand, Brazil	New Zealand	No	
MUGEN	2 New Zealand, Japan	New Zealand	No	
PABRA	2 New Zealand, Chile	New Zealand	No	
PEPPE	2 Italy, New Zealand	New Zealand	No	
RUSIL	2 New Zealand, Brunei Darussalam	New Zealand	No	
TARIB	2 New Zealand, Brazil/Colombia (FIR boundary)	New Zealand	No	
TENIX	2 New Zealand, Philippines	New Zealand	No	

	Priority allocated to other States			
5LNC	States	Priority	Within 1000NM	
ADBAD	2 Malaysia, New Zealand	Malaysia	No	
AFTON	2 Netherlands Antilles (Netherlands), New Zealand	Netherlands Antilles (Netherlands)	No	
ALMAN	2 Canada, New Zealand	Canada	No	
AMURI	2 China (mainland), New Zealand	China	No	
ARROW	3 United States of America, New Zealand, China (Hong Kong)	United States of America	No	
AUBRY	2 United States of America, New Zealand	United States of America	No	
BECKY	3 Japan, United States of America, New Zealand	United States of America	No	
BERRY	3 Japan, Australia, New Zealand	Japan	No	
BIDEV	2 Brazil, New Zealand	Brazil	No	
BIGUL	2 Angola, New Zealand	Angola	No	
BIKOS	2 Ghana, New Zealand	Ghana	No	

BLUNT	2 United States of America, New Zealand	United States of America	No
BRETT	2 United States of America, New Zealand	United States of America	No
BRILL	2 United Kingdom, New Zealand	United Kingdom	No
BROAD	3 United States of America, Australia, New Zealand	United States of America	No
BROOK	4 Japan, Australia, New Zealand, United States of America	United States of America	No
BROWN	3 New Zealand, Thailand, United States of America	United States of America	No
BUSTA	2 United Kingdom, New Zealand	United Kingdom	No
BUTIN	2 Bolivia, New Zealand	Bolivia (Plurinational State of)	No
CHARR	2 United States of America, New Zealand	United States of America	No
CLARK	•	United States of America	
	4 Australia, New Zealand, United States of America, Brazil		No
COAST	2 United States of America, New Zealand	United States of America	No
COOKS	2 United States of America, New Zealand	United States of America	No
CREEK	2 Japan, New Zealand	Japan	No
DABAP	2 Sri Lanka, New Zealand	Sri Lanka	No
DAKAM	2 Fiji/New Zealand, Viet Nam	Fiji/New Zealand	No
DAMIL	2 Australia, New Zealand	Australia	No
DOGGY	Denmark (Greenland), New Zealand	Greenland (Denmark)	No
DOMON	2 Russian Federation, New Zealand	Russian Federation	No
DUKES	3 Australia, New Zealand, United States of America	United States of America	No
DULEX	2 China (mainland), New Zealand	China	No
ELAND	2 Swaziland, New Zealand	Swaziland	No
ELBOW	2 Bahamas, New Zealand	Bahamas	No
ELMER	2 United States of America, New Zealand	United States of America	No
EMSAR	2 Malaysia, New Zealand	Malaysia	No
EWOOD	2 United States of America, New Zealand	United States of America	No
FERNS	2 United States of America, New Zealand	United States of America	No
GENDA	2 Russian Federation, New Zealand	Russian Federation	No
GIBON	United States of America, New Zealand	United States of America	No
GITOR			No
	2 Malaysia, New Zealand	Malaysia	
GOLDY	4 Indonesia, Australia, New Zealand, United States of America	United States of America	No
GONAX	2 Republic of Korea, New Zealand	Republic of Korea	No
GOOSE	3 United States of America, Canada, New Zealand	United States of America	No
GOSPA	2 Kazakhstan, New Zealand	Kazakhstan	No
GOSTI	2 The former Yugoslav Republic of Macedonia, New Zealand	The former Yugoslav Republic of Macedonia	No
GRETA	2 Iceland, New Zealand	Iceland	No
GROVE	4 New Zealand, United Kingdom, United States of America, Brazil	United Kingdom	No
GUKON	2 Australia, New Zealand	Australia	No
HALEN	2 United States of America, New Zealand	United States of America	No
HARVO	United States of America, New Zealand	United States of America	No
HAWKE	3 United Kingdom, Australia, New Zealand	United Kingdom	No
HOBBS	3 United States of America, Australia, New Zealand	United States of America	No
HOKEE	2 United States of America, New Zealand	United States of America	No
HOOKS	3 United States of America, Australia, New Zealand	United States of America	No
JACKS	3 United States of America, Australia, New Zealand	United States of America	No
JAMIE	2 United States of America, New Zealand	United States of America	No
JOLLY	4 United States of America, Japan, New Zealand, Australia	United States of America	No
KAKIP	2 Myanmar, New Zealand	Myanmar	No
KARRL	2 United States of America, New Zealand	United States of America	No
KELSO	2 Barbados, New Zealand	Barbados	No
KINGS	3 United States of America, Australia, New Zealand	United States of America	No
KYLIE	3 New Zealand, United States of America, Venezuela	United States of America	No
LAKES	5 Canada, Japan, China (Hong Kong), Australia, New Zealand	Canada	No
LANAT	2 Japan/Republic of Korea (FIR boundary), New Zealand/Fiji		No
	· · · · · · · · · · · · · · · · · · ·	Japan/Republic of Korea	
LEDOR	2 Russian Federation, New Zealand	Russian Federation	No
LEECH	2 United States of America, New Zealand	United States of America	No
LOVTA	2 China, New Zealand	China	No
MAMOD	2 Japan, New Zealand	Japan	No
MANGA	4 New Zealand, Philippines, Viet Nam, Colombia	Colombia	Yes
MANGO	6 China (Hong Kong), Republic of Korea, United Kingdom, New	United Kingdom	No
	Zealand, Angola, Nicaragua (COCESNA)		
MASKU	2 Japan, New Zealand	Japan	No

	- II '' I O '		
MAYOR	3 United States of America, New Zealand, China (Taiwan)	United States of America	No
MEBKA	2 Australia, New Zealand	Australia	No
MILLA	2 Australia, New Zealand	United States of America	No
MIPAK	2 India/Myanmar (FIR boundary), New Zealand	India/Myanmar	No
MITRE	2 United States of America, New Zealand	United States of America	No
MOKER	2 Burkina Faso, New Zealand	Burkina Faso	No
MOOSE	3 Thailand, New Zealand, United States of America	United States of America	No
MOXET	2 India, New Zealand	India	No
NEDDY	2 United States of America, New Zealand	United States of America	No
NESTA	2 United Kingdom, New Zealand	United Kingdom	No
NIPIR	2 Afghanistan, New Zealand	Afghanistan	No
NIXUM	2 India, New Zealand	India	No
NOBAR	2 Australia, New Zealand	Australia	No
OBDEG	2 China, New Zealand	China	No
OMARU	2 Russian Federation, New Zealand	Russian Federation	No
ORAKA	2 Croatia, New Zealand	Croatia	No
ORBEL	2 Libya, New Zealand	Libya	No
PEAKS	2 United States of America, New Zealand	United States of America	No
PEGSA	Malaysia, New Zealand		No
PERAS	•	Malaysia	
	2 Russian Federation, New Zealand	Russian Federation United States of America	No
PINES	2 United States of America, New Zealand		No
PINKY	3 United states of America, New Zealand, Philippines	United States of America	No
QUAIL	3 United States of America, Japan, New Zealand	United States of America	No
RIDGE	4 United States, Australia, New Zealand, Japan	United States of America	No
RIDLA	2 Russian Federation, New Zealand	Russian Federation	No
RILEY	3 United States of America, Australia, New Zealand	United States of America	No
ROCKY	6 China (Hong Kong), China (Taiwan), Japan, New Zealand, United States of America, Venezuela	United States of America	Yes
SADEM	2 Spain, New Zealand	Spain	No
SASRO	2 India, Australia/New Zealand (FIR boundary)	India	No
SCARY	2 United States of America, New Zealand	United States of America	No
SHELL	4 United States of America, Japan, Libya, New Zealand	United States of America	No
SHOAL	3 Australia, New Zealand, United States of America	United States of America	No
SHORE	3 Australia, New Zealand, United States of America	United States of America	No
SNAPA	3 Papua New Guinea, Australia, New Zealand	Papua New Guinea	No
STEED	3 United States of America, Japan, New Zealand	United States of America	No
STONY	3 United States of America, New Zealand, Kenya	United States of America	No
STORK	3 Japan, Australia, New Zealand	Japan	No
SUPRA	2 Chile, New Zealand	Chile	No
SWEET	3 New Zealand, Japan, United States of America	United States of America	No
TAKMI	2 Yemen, New Zealand	Yemen	No
TAYLA	2 United States of America, New Zealand	United States of America	No
TEVUC	2 United States of America, New Zealand	United States of America	No
TOMAS	6 Australia, Denmark (Greenland), New Zealand, Brazil, Venezuela,		No
	Costa Rica (COCESNA)	·	
TOTRA	3 New Zealand, Lithuania, Viet Nam	Lithuania	No
TUSOK	2 Russian Federation, New Zealand	Russian Federation	No
UDUMA	2 France (Polynesie Française), New Zealand	Polynesie Française (France)	No
WARDS	2 Canada/United States of America, New Zealand	Canada/United States of America	No
WEBER	3 United States of America, Japan, New Zealand	United States of America	No
WINCH	3 United States of America, Australia, New Zealand	United States of America	No
YARRO	2 Canada, New Zealand	Canada	No
ZORBA	3 Spain, New Zealand, Australia	Spain	No

	Priority to be determined		
5LNC	States	Priority	Within 1000NM
GLENN	3 Philippines, Australia, New Zealand	To be determined by the 5LNC Duplicate Resolution Rules	No
LIMES	2 New Zealand, China (Hong Kong)	To be determined by the 5LNC Duplicate Resolution Rules	No

NOSAM	2 New Zealand, Trinidad and Tobago/Dominica [Non-ICAO Member	To be determined by the 5LNC Duplicate	No
	State]	Resolution Rules	
OKURA	2 Japan, New Zealand	To be determined by the 5LNC Duplicate	No
		Resolution Rules	
REPOL	2 China, New Zealand	To be determined by the 5LNC Duplicate	No
		Resolution Rules	

	In the process of being resolved			
5LNC	States	Note	Within 1000NM	
FALLS	3 Philippines, Australia, New Zealand	New Zealand to register.	No	
RUGVI	2 Singapore, New Zealand	New Zealand replaicng RUGVI.	No	

5LNC STATUS - PAKISTAN

	Total number of 5LNCs	337	
	Terminal Airspace (TA)	104	
	En-route (ENR)	194	
ICARD		30	
	Other	0	
	No Purpose	9	
	No Coordinates	4	
	Total number of duplicated 5LNCs	10	
	Priority allocated to Pakistan	4	
Duplicate	-	0	
5LNCs		0	
	In the process of being resolved	0	
	Completely resolved 5LNCs	6	
	Priority allocated to Pakistan		1000
5LNC	States	Priority	Within 1000NM
BEDON	2 Pakistan, France (New Caledonia)	Pakistan	No
MENOK	3 Indonesia, Japan, Pakistan	Pakistan	No
PASTA	4 Australia, China (Taiwan), Pakistan, Brazil 2 Pakistan, Samoa	Pakistan Pakistan	No No
PONAT	2 Pakistan, Samoa	Pakistan	No
	Priority allocated to other State	es	1000
5LNC	States	Priority	Within 1000NM
			TOOOTNIVI
	Priority to be determined		
=1.1.5	·		Within
5LNC	States	Priority	1000NM
	In the process of being resolve	ed	
5LNC	States	Note	Within 1000NM
			MINIOUUI

5LNC STATUS - PALAU

	Total number of 5LNCs	11
	Terminal Airspace (TA)	0
	En-route (ENR)	0
ICARD	FIR	0
	Other	0
	No Purpose	11
	No Coordinates	0
	Total number of duplicated 5LNCs	0
	Priority allocated to Palau	0
Duplicated	Priority allocated to other States	0
5LNCs	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	0
	Priority allocated to Palau	
5LNC	States	Priority Within 1000NM
	Priority allocated to other States	
5LNC	States	Priority Within 1000NM

Ī		Priority to be determined		
	5LNC	States	Priority	Within 1000NM

5LNC STATUS - PAPUA NEW GUINEA

Date: June 2024

	Total number of 5LNCs	238	
	Terminal Airspace (TA)	1	
	En-route (ENR)	125	
ICARD	FIR	11	
	Other	74	
	No Purpose	27	
<u> </u>	No Coordinates	9	
	Total number of duplicated 5LNCs	13	
	Priority allocated to Papua New Guinea	6	
Duplicated	Priority allocated to other States	6	
5LNCs	Priority to be determined	0	
	In the process of being resolved	1	
	Completely resolved 5LNCs	0	_
	Priority allocated to Papua New Guir	nea	
5LNC	States	Priority	Within 1000NM
CHAMB 2	2 Papua New Guinea, United States of America	Papua New Guinea	No
	·	Papua New Guinea	No
	·	Australia/Papua New Guinea	No
		Papua New Guinea	No
	·	Papua New Guinea	No
UPRAP 2	2 Papua New Guinea, Malaysia	Papua New Guinea	No
	Priority allocated to other States		
5LNC	States	Priority	Within 1000NM
BORAM 2	2 Bolivia, Papua New Guinea	Bolivia (Plurinational State of)	No
GUARI :	3 Brazil, Paraguay, Papua New Guinea United States of America/Papua New Guinea (FIR boundary),	Paraguay	No
KALIN 2	2 Kyrgyzstan	United States of America	No
LUKTI 2	2 India, Papua New Guinea	India	No
	2 Russian Federation, Papua New Guinea/United States of America	Russian Federation	No
TOSAS 2	2 Australia/Papua New Guinea (FIR boundary), China	Australia	No
	Priority to be determined		

In the process of being resolved			
5LNC	States	Note	Within 1000NM

2 Australia/Solomon Islands, Papua New Guinea RIPNA

Australia deleting from ICARD

1000NM

5LNC STATUS - PHILIPPINES

	Total number of 5LNCs	329
	Terminal Airspace (TA)	222
	En-route (ENR)	86
ICARD	FIR	19
	Other	2
	No Purpose	0
	No Coordinates	0
	Total number of duplicated 51 MCs	246

	Total number of duplicated 5LNCs	216
	Priority allocated to Philippines	5
Duplicated	Priority allocated to other States	40
5LNCs	Priority to be determined	3
	ResolvingIn the process of being resolved	86
	Completely resolved 5LNCs	82

	Priority allocated to Philippines		
5LNC	States	Priority	Within 1000NM
LAMOK	2 Philippines, France (New Caledonia)/Fiji	Philippines	No
PUSIT	2 Philippines, Thailand	Philippines	No
TAPAP	2 Philippines, France (Polynesie Française)	Philippines	No
TAPER	2 Philippines, Mauritius	Philippines	No
VILAR	2 Philippines, Spain	Philippines	No

Priority allocated to other States			
5LNC	States	Priority	Within 1000NM
ABERA	2 Russian Federation, Philippines	Russian Federation	No
AMORE	2 United States of America, Philippines	United States of America	No
ANDRO	2 United States of America, Philippines	United States of America	No
ANGEL	5 Thailand, Philippines, Japan, Honduras (COCESNA), Colomb		Yes
BANGA	2 Burkina Faso/Niger (FIR boundary), Philippines	Burkina Faso/Niger	No
BARBA	3 Philippines, Japan, United States of America	United States of America	No
BERON	2 Norway, Philippines	Norway	No
CALDO	3 Philippines, Italy/Switzerland, United States of America	Italy/Switzerland	No
CHRIS	4 United States of America, Liberia, Philippines, Australia	United States of America	No
DELRO	2 United States of America, Philippines	United States of America	No
DEMSA	2 Cuba, Philippines	Cuba	No
GARED	2 United States of America, Philippines	United States of America	No
HARBO	2 United States of America, Philippines	United States of America	No
JINET	2 United States of America, Philippines	United States of America	No
LATRO	2 Spain, Philippines	Spain	No
MAGEL	2 Israel, Philippines	Israel	No
MINDO	3 United States of America, Ecuador, Philippines	United States of America	No
MINOR	2 Russian Federation, Philippines	Russian Federation	No
MONTE	5 Costa Rica (COCESNA), United States of America, Spain, ph	ilippir United States of America	No
NADUM	2 Canada, Philippines	Canada	No
NESTY	2 United States of America, Philippines	United States of America	No
ORLIE	2 United States of America, Philippines	United States of America	No
PALOS	3 United States of America, Spain, Philippines	United States of America	No
PIKAN	3 Philippines, Russian Federation/Kazakhstan (FIR boundary),	Unite Russian Federation/Kazakhstan	No

RAMOS	3 Philippines, Brazil, United States of America	United States of America	No
REGOR	2 United States of America, Philippines	United States of America	No
RINAL	2 Russian Federation, Philippines	Russian Federation	No
ROLEX	2 United Kingdom, Philippines	United Kingdom	No
ROWAN	3 Australia, Philippines, United Kingdom	United Kingdom	No
SAGRA	2 Japan, Philippines	Japan	No
SIKIN	2 Bolivia (Plurinational State of), Philippines	Bolivia (Plurinational State of)	No
SIMAR	2 France, Philippines	France	No
TABBY	2 United States of America, Philippines	United States of America	No
TANSA	3 Egypt/Greece (FIR boundary), Pakistan, Philippines	Egypt/Greece	No
TAREM	2 Democratic Republic of the Congo/Uganda (FIR boundary), Philipp	p Democratic Republic of the Congo/Uganda	No
TENIX	2 New Zealand, Philippines	New Zealand	No
TINDO	2 Sweden, Philippines	Sweden	No
VERDE	4 Philippines, United States of America, Spain, Brazil	United States of America	No
YELOW	2 United States of America, Philippines	United States of America	No
ZEDIK	2 United States of America, Philippines	United States of America	No

	Priority to be d	etermined	
5LNC	States	Priority	Within 1000NM
		To be determined by the 5LNC Duplicate	
GLENN	3 Philippines, Australia, New Zealand	Resolution Rules	No
		To be determined by the 5LNC Duplicate	
JABAR	3 Philippines, Pakistan, China (Taiwan)	Resolution Rules	No
		To be determined by the 5LNC Duplicate	
PABLO	3 Costa Rica, Philippines, Namibia	Resolution Rules	No

In the process of being resolved			
5LNC	States	Note	Within 1000NM
ADOLE	2 United States of America, Philippines	Phlippines replacing ADOLE.	No
ALMAR	2 Russian Federation, Philippines	Phlippines replacing ALMAR	No
ALPOS	2 United States of America, Philippines	Phlippines replacing ALPOS	No
ANDAN	3 Venezuela, Philippines, Indonesia	Phillipines replacing ANDAN	No
ARCHI	2 United States of America, Philippines	Phlippines replacing ARCHI.	No
BARAS	2 Russian Federation, Philippines	Phlippines replacing BARAS.	No
BELEN	3 France/Spain (FIR boundary), Costa Rica (COCESNA), Philippin	ne։ Phlippines replacing BELEN.	No
BENTO	4 Philippines, Indonesia, Italy, United States of America	Phlippines replacing BENTO.	No
BOYER	2 United States of America, Philippines	Phlippines replacing BOYER.	No
BUTAN	2 Colombia, Philippines	Phlippines replacing BUTAN.	No
CABAL	2 Argentina, Philippines	Phlippines replacing CABAL.	No
CADIZ	3 United States of America, Pakistan, Philippines	Phlippines replacing CADIZ.	No
CAREB	2 United States of America, Philippines	Phlippines replacing CAREB.	No
CARLO	5 United States of America, Mexico, Spain, Pakistan, Philippines	Phlippines replacing CARLO.	No
CEDEN	2 United States of America, Philippines	Phlippines replacing CEDEN.	No
COBOL	2 United States of America, Philippines	Phlippines replacing COBOL.	No
DANRI	2 Brazil, Philippines	Phlippines replacing DANRI.	No
DARAG	2 Saudi Arabia, Philippines	Phlippines replacing DARAG.	No
DAROD	2 Canada, Philippines	Phlippines replacing DAROD.	No
DEEPS	2 United States of America, Philippines	Phlippines replacing DEEPS.	No
DELOR	2 Nigeria/Cameroon (FIR boundary), Philippines	Phlippines replacing DELOR.	No
DIANN	2 United States of America, Philippines	Phlippines replacing DIANN.	No
DIKES	2 United States of America, Philippines	Phlippines replacing DIKES.	No
DIMLO	2 Austria/Hungary/Slovenia (FIR boundary), Philippines	Phlippines replacing DIMLO.	No
EDDIE	2 United States of America, Philippines	Phlippines replacing EDDIE.	No
EDWAR	2 United States of America, Philippines	Phlippines replacing EDWAR.	No
EXORA	2 Fiji, Philippines	Phlippines replacing EXORA.	No
FELIP	3 Venezuela, United States of America, Philippines	Phlippines replacing FELIP.	No

FOLEN	2 United States of America, Philippines	Phlippines replacing FOLEN.	No
GABRE	2 United States of America, Philippines	Phlippines replacing GABRE.	No
GASSI	3 Philippines, United States of America, Bahrain	Phlippines replacing GASSI.	No
GOLDA	2 United States of America, Philippines	Phlippines replacing GOLDA.	No
IRENE	2 United States of America, Philippines	Phlippines replacing IRENE.	No
JODEM	2 United States of America, Philippines	Phlippines replacing JODEM.	No
JUBAL	2 United States of America, Philippines	Phlippines replacing JUBAL.	No
JULUS	2 United States of America, Philippines	Phlippines replacing JULUS.	No
KANON	3 Philippines, Russian Federation, United States of America	Phlippines replacing KANON.	No
KIMPO	2 Guinea/Liberia, Philippines	Phlippines replacing KIMPO.	No
KLAIR	2 United States of America, Philippines	Phlippines replacing KLAIR.	No
LIBON	2 United States of America, Philippines	Phlippines replacing LIBON.	No
LIPOT	2 Indonesia, Philippines	Phlippines replacing LIPOT.	No
LOPEZ	3 Costa Rica (COCESNA), United States of America, Philippines	Phlippines replacing LOPEZ.	No
LORIE	2 United States of America, Philippines	Phlippines replacing LORIS.	No
MADOL	2 United States of America, Philippines	Phlippines replacing MADOL.	No
MAGAR	2 Russian Federation, Philippines	Phlippines replacing MAGAR.	No
MALIB	2 Russian Federation, Philippines	Phlippines replacing MALIB.	No
MANOK	2 Greece, Philippines	Phlippines replacing MANOK.	No
MARVI	3 United States of America, Pakistan, Philippines	Phlippines replacing MARVI.	No
MASUN	2 Germany/Poland/Sweden, Philippines	Phlippines replacing MASUN.	No
WIXCON	Philippines, Venezuela/Guyana/Trinidad and Tobago (FIR	Timppines replacing W/NOON.	140
MINDA	2 boundary)	DUI: 1 1 1 MINDA	No
	• /	Phlippines replacing MINDA.	No
MOLOC	2 Netherlands (Netherlands Antilles), Philippines	Phlippines replacing MOLOC.	No
MUNDE	3 United States of America, Philippines, Australia	Phlippines replacing MUNDE.	No
NALIG	2 Romania, Philippines	Phlippines replacing NALIG.	No
NANDO	3 Philippines, Spain, Guatemala (COCESNA)	Phlippines replacing NANDO.	No
NATIB	2 Russian Federation, Philippines	Phlippines replacing NATIB.	No
NELPA	2 Czech Republic, Philippines	Phlippines replacing NELPA.	No
NIXON	2 United States of America, Philippines	Phlippines replacing NIXON.	No
OLGAR	2 Portugal, Philippines	Phlippines replacing OLGAR.	No
OLIVA	3 United States of America, Philippines, Seychelles	Phlippines replacing OLIVIA.	No
PADRE	3 Philippines, Japan, United States of America	Phlippines replacing PADRE.	No
PARAL	5 Saudi Arabia, Mongolia, Guatemala (COCESNA), Chile, Philippin		No
PATTY	4 United States of America (Puerto Rico), Seychelles, India, Philipp		No
PETER	4 United States of America, Italy, Philippines, Seychelles	Phlippines replacing PETER.	No
PINKY	3 United states of America, New Zealand, Philippines	Phlippines replacing PINKY.	No
PONSO	2 Chile, Philippines	Phlippines replacing PONSO.	No
POTON	2 United Kingdom, Philippines	Phlippines replacing POTON.	No
RANAS	2 Iceland, Philippines	Phlippines replacing RANAS.	No
ROLIN	2 Georgia/Turkey (FIR boundary), Philippines	Phlippines replacing ROLIN.	No
ROMEX	2 Venezuela (Bolivarian Republic of), Philippines	Phlippines replacing ROMEX.	No
ROXAN	2 Italy, Philippines	Phlippines replacing ROXAN.	No
SABEL	2 Oman/Yemen (FIR boundary), Philippines	Phlippines replacing SABEL.	No
SALVA	2 Japan, Philippines	Phlippines replacing SALVA.	Yes
SANJO	3 Japan, Philippines, Thailand	Phlippines replacing SANJO.	No
SILAG	2 Serbia, Philippines	Phlippines replacing SILAG.	No
SIMBO	2 United Kingdom (Virgin Islands), Philippines	Phlippines replacing SIMBO.	No
SIRMO	2 Norway, Philippines	Phlippines replacing SIRMO.	No
SUNGA	2 Uruguay, Philippines	Phlippines replacing SUNGA.	No
SUSIE	2 United States of America, Philippines	Phlippines replacing SUSIE.	No
TABLA	2 Venezuela (Bolivarian Republic of), Philippines	Phlippines replacing TABLA.	No
TABUL	2 Canada, Philippines	Phlippines replacing TABUL.	No
TAMSI	2 Canada, Philippines 2 Canada, Philippines	Phlippines replacing TABOL. Phlippines replacing TAMSI.	No
TIMMI	3 United States of America, Australia, Philippines	Phlippines replacing TIMMI.	No
TOBBY	3 Philippines, Japan, United States of America	Phlippines replacing TOBBY.	No
TORNE	2 United States of America, Philippines	Phlippines replacing TOBBT. Phlippines replacing TORNE.	No
TUBIG	2 Canada, Philippines	Phlippines replacing TUBIG.	No
VINSO	2 United States of America, Philippines	Phlippines replacing VINSO.	No
V 11 400	2 omica otates of America, i illippines	i imperios replacing virto.	140

5LNC STATUS - Polynesie Française

		-	
	Total number of 5LNCs	249	
	Terminal Airspace (TA)	135	
	En-route (ENR)	37	
ICARD	FIR	17	
	Other	42	
	No Purpose	18	
	No Coordinates	0	
	Total number of duplicated 5LNCs	19	
	Priority allocated to Polynesie Française	10	
Duplicate		3	
5LNCs	Priority to be determined	0	
	In the process of being resolved	0	
	Completely resolved 5LNCs	6	
	Priority allocated to Polynesie Fra	ınçaise	
5LNC	States	Priority	Within 1000NM
BAMBI	3 Japan, Australia, Polynesie Française (France)	Allocated to PYF on 28/4/2014.	No
BOKAL	2 France (Polynesie Française), Algeria	Polynesie Française (France)	No
CORAL	9 China (Hong Kong), China (Taiwan), Japan, Australia, Brazil, France (Polynesie Française), Cuba, Mexico, Honduras (COCESNA)	Brazil	Yes
IGENO	2 France (Polynesie Française), Japan	Polynesie Française (France)	No
KARNO	2 France (Polynesie Française), United Kingdom	Polynesie Française (France)	No
KRILL	2 New Zealand/France (Polynesie Française) [FIR boundary], Chile/Argentina	New Zealand/France (Polynesie Française)	No
MAEVA	2 France (Polynesie Française)/United States of America [FIR boundary], Madagascar	Polynesie Française (France)/United States of America	No
RAXON	2 France (Polynesie Française), Maldives	Polynesie Française (France)	No
TAVIS	2 France (Polynesie Française), Japan	Polynesie Française (France)	No
UDUMA	2 France (Polynesie Française), New Zealand	Polynesie Française (France)	No
	Duisville cated to ather Cha		
	Priority allocated to other Sta		Within
5LNC	States	Priority	1000NM
MARBA	2 Peru, France (Polynesie Française)	Peru	No
TAPAP	2 Philippines, France (Polynesie Française)	Philippines	No
MOANA	3 France (Polynesie Française), Indonesia, United States of Amer	rica United States of America	No
	Priority to be determined		
5LNC	States	Priority	Within
		,	1000NM
	In the process of being resolv	red	
5LNC	States	Note	Within 1000NM
			TOOUTHIN

5LNC STATUS - REPUBLIC OF KOREA

	Total number of 5LNCs	548	
	Terminal Airspace (TA)	391	
	En-route (ENR)	142	
ICARD	FIR	6	
	Other	0	
	No Purpose	9	
	No Coordinates	0	
		•	
	Total number of duplicated 5LNCs	11	
	Priority allocated to Republic of Korea	9	
Duplicated	Priority allocated to other States	0	
5LNCs	Priority to be determined	0	
	In the process of being resolved	0	
	Completely resolved 5LNCs	2	
	Priority allocated to Republic of	Korea	
5LNC	States	Priority	Within 1000NM
	Republic of Korea, Syrian Arab Republic, Australia	Republic of Korea	No
	Republic of Korea, Maldives	Republic of Korea	No
	Republic of Korea, Malaysia	Republic of Korea	No
	Republic of Korea, China (Taiwan)	Republic of Korea	Yes
	Republic of Korea, New Zealand	Republic of Korea	No
	Japan/Republic of Korea (FIR boundary), New Zealand/Fiji	Japan/Republic of Korea	No
	Republic of Korea, Myanmar	Republic of Korea	No
	Republic of Korea, United States of America Republic of Korea, France (New Caledonia)	Republic of Korea Republic of Korea	No No
SAIVAIVI Z	Republic of Rolea, France (New Galedonia)	Republic of Rolea	NO
	Priority allocated to other Sta	tes	
5LNC	States	Priority	Within
JENO	Gialos	1 Hority	1000NM
	Priority to be determined		
5LNC	States	Priority	Within 1000NM
			,
	In the process of being resolv	red	
5LNC	States	Note	Within 1000NM

5LNC STATUS - SAMOA

	Total number of 5LNCs	9
	Terminal Airspace (TA)	8
	En-route (ENR)	1
ICARD	FIR	0
	Other	0
	No Purpose	0
	No Coordinates	0
	Total number of duplicated 5LNCs	7
	Priority allocated to Samoa	2
Duplicated	Priority allocated to other States	3
5LNCs	Priority to be determined	0
	In the process of being resolved	2
	Completely resolved 5LNCs	0

		Priority allocated to Samoa		
5LNC		States	Priority	Within 1000NM
APRAN	2	United States of America (American Samoa), Russian Federation	American Samoa (U.S.)	No
JONAS	2	United States of America (American Samoa), Phillipines	American Samoa (U.S.)	No

	Priority allocated to other States			
5LNC		States	Priority	Within
JLIVO		Citates		1000NM
ALAPI	2	Hong Kong China, Samoa	Hong Kong, China	No
FALFA	2	United States of America, Samoa	United States of America	No
PONAT	2	Pakistan, Samoa	Pakistan	No

Priority to be determined			
5LNC	States	Priority	Within 1000NM

	In the process of being resolved			
5LNC	States	Note	Within 1000NM	
OLIVE	5 China (Taiwan), Japan, Thailand, United States of America (American Samoa), United Kingdom	Samoa deleting from ICARD	Yes	
AROXA	2 Hong Kong China, Samoa	Samoa to register.	No	

5

5LNC STATUS - SINGAPORE

Date: June 2024

	Total number of 5LNCs	272
	Terminal Airspace (TA)	165
	En-route (ENR)	69
ICARD	FIR	31
	Other	0
	No Purpose	7
	No Coordinates	0
	Total number of duplicated 5LNCs	19
	Priority allocated to Singapore	5
Duplicated	Priority allocated to other States	0
5LNCs	Priority to be determined	0
	Resolving	9

		Priority allocation	ated to Singapore	
5LNC		States	Priority	Within 1000NM
LAPOL	2	Singapore, Chile	Singapore	No
RUGVI	2	Singapore, New Zealand	Singapore	No
SUSAR	2	Singapore, Japan	Singapore	No
TAROS	3	Indonesia/Singapore (FIR boundary), India/Bang	ladesh (FIR boundaIndonesia/Singapore	No
TODAM	2	Singapore, China	Singapore	No

Completely resolved

	Priority allocated to other States			
5LNC	States	Priority	Within 1000NM	

Priority to be determined			
5LNC	States	Priority	Within 1000NM

	In the process of being resolved			
5LNC		States	Note	Within 1000NM
AKOMA	2	China, Malaysia/Singapore	China replacing AKOMA and delete from ICARD.	No
BIPOP	2	China, Singapore	Singapore to replace BIPOP in Q2 2024.	No
DONDI	3	India, Singapore, Australia	Singapore to delete DONDI after 21 March 2024.	No
IDUNA	2	Australia, Singapore	Singapore to replace IDUNA in Q2 2024.	No
KADAR	2	Indonesia/Singapore (FIR boundary), Japan	Singapore to remove as coordinating State.	No
LEPNA	2	Malaysia, Singapore	Malaysia deleting LEPNA	Yes
MABAL	2	Sri Lanka, Malaysia/Singapore	Singapore to replace MABAL in Q2 2024.	No
NYLON	2	Japan, Malaysia/Singapore	Singapore to replace NYLON in Q2 2024.	No
URIGO	2	Norway, Singapore/Malaysia (FIR boundary)	Singapore to replace URIGO in Q2 2024.	No

5LNC STATUS - SOLOMON ISLANDS

Date: June 2024

	Total number of 5LNCs	88	
	Terminal Airspace (TA)	53	
	En-route (ENR)	17	
ICARD	FIR	12	
	Other	1	
	No Purpose	5	
	No Coordinates	0	
	Total number of duplicated 5LNCs	4	
	Priority allocated to Solomon Islands	1	
Duplicated	Priority allocated to other States	2	
5LNCs	Priority to be determined	0	
	In the process of being resolved	1	
	Completely resolved 5LNCs	0	
	Priority allocated to Solomon I	lelande	
	·		Within
5LNC	States	Priority	1000NM
DAGDA 2	Solomon Islands, Japan	Solomon Islands	No
	Priority allocated to other St	tates	
5LNC	States	Priority	Within 1000NM
LAMON 3	United States of America, Solomon Islands, Indonesia	United States of America	No
LEDIM 2	China, Solomon Islands	China	No
	Priority to be determined	d	
5LNC	States	Priority	Within
320			1000NM

States

5LNC

Australia/Solomon Islands to deleted ICARD

Note

Within

1000NM

5LNC STATUS - SRI LANKA

		Total number of 5LNCs	115	
		Terminal Airspace (TA)	41	
		En-route (ENR)	47	
ICARD		FIR	20	
		Other	3	
		No Purpose	4	
		No Coordinates	0	
		Total number of duplicated 5LNCs	5	
		Priority allocated to Sri Lanka	2	
Duplicate	ed	Priority allocated to other States	0	
5LNCs		Priority to be determined	0	
		In the process of being resolved	1	
		Completely resolved 5LNCs	5	
		Priority allocated to Sri Lanka	T	Within
5LNC		States	Priority	1000NM
DABAP	2	Sri Lanka, New Zealand	Sri Lanka	No
DOGAR	2	Australia/Sri Lanka (FIR boundary), China	Australia/Sri Lanka	No
		Priority allocated to other States	S	
5LNC		States	Priority	Within 1000NM
				TOUUINIVI
		Priority to be determined		1460
5LNC		States	Priority	Within 1000NM
		In the process of being resolved	i	
5LNC		States	Note	Within
	_			1000NM
MABAL	2	Sri Lanka, Malaysia/Singapore	Singapore to replace MABAL in Q2 2024.	No

5LNC STATUS - THAILAND

	Total number of 5LNCs	1109
	Terminal Airspace (TA)	653
	En-route (ENR)	243
ICARD	FIR	32
	Other	152
	No Purpose	29
	No Coordinates	0
	Total number of duplicated 5LNCs	186

	Total number of duplicated 5LNCs	186
	Priority allocated to Thailand	8
Duplicated	Priority allocated to other States	162
5LNCs	Priority to be determined	1
	In the process of being resolved	12
	Completely resolved 5LNCs	3

	Priority allocated	to Thailand	
5LNC	States	Priority	Within 1000NM
ANPAN	2 Thailand, Japan	Thailand	No
DUGON	2 Thailand, Japan	Thailand	No
GOMES	2 Thailand, Japan	Thailand	No
MALKI	2 Thailand, Japan	Thailand	No
PANTA	2 Thailand, Peru	Thailand	No
PETRA	3 Thailand, China (mainland), Jordan	Thailand	No
SURIX	2 Thailand, Peru	Thailand	No
TAMOS	2 Malaysia/Thailand (FIR boundary), Spain	Malaysia/Thailand	No

	Priority allocated to other Sta	ites	
5LNC	States	Priority	Within 1000NM
ANGEL	5 Thailand, Phillippines, Japan, Honduras (COCESNA),	Colombia/Ecuador	Yes
	Colombia/Ecuador (FIR boundary)		
APRIL	3 United States, Thailand, China (Taiwan)	United States of America	No
ARMUS	2 Kazakhstan, Thailand	Kazakhstan	No
ARSHA	2 United States of America, Thailand	United States of America	No
BALAD	2 Austria, Thailand	Austria	No
BAMBO	4 United States of America, Japan, Thailand, United Kingdom	United States of America	No
BAMBU	3 Thailand, United States of America, Norway	Norway	No
BARBY	3 United States of America, Italy, Thailand	Italy	No
BAROK	2 Morocco/Portugal (FIR boundary), Thailand	Morocco/Portugal	No
BARON	4 United States of America, Australia, Thailand, Israel	United States of America	No
BASHO	3 Thailand, Japan, United States of America	United States of America	No
BEATS	2 United States of America, Thailand	United States of America	No
BIGGY	2 United States of America, Thailand	United States of America	No
BILEY	2 United States of America, Thailand	United States of America	No
BINLA	2 Canada, Thailand	Canada	No
BIRDY	3 Japan, Thailand, Australia	Japan	No
BLUES	4 United States of America, Brazil, Thailand, Japan	United States of America	No
BOGIE	2 United States of America, Thailand	United States of America	No
BORNA	2 Nigeria, Thailand	Nigeria	No
BRENT	3 Thailand, United States of America, China (Taiwan)	United States of America	No

BROWN	3 New Zealand, Thailand, United States of America	United States of America	No
BUTRA	2 Tajikistan/Uzbekistan (FIR boundary), Lao People's Democratic	Tajikistan/Uzbekistan	No
	Republic/Thailand (FIR boundary)	•	
CARAT	2 United States of America, Thailand	United States of America	No
CELLO	4 United States of America, Iceland, Japan, Thailand	Iceland	No
CHANG	3 United States of America, Thailand, Costa Rica (COCESNA)	United States of America	No
CHETA	2 United States of America, Thailand	United States of America	No
CIDER	3 Brazil, Japan, Thailand	Brazil	No
COBRA	3 United States of America, Australia, Thailand	United States of America	No
CONGA	3 Thailand, United States of America, China (Hong Kong)	United States of America	No
DAMUN	2 Libya, Thailand	Libya	No
DARBY	2 United States of America, Thailand	United States of America	No
DARNO	2 Russian Federation/Mongolia (FIR boundary), Thailand	Russian Federation/Mongolia	No
DIRAX	2 France, Thailand	France	No
DISCO	3 Thailand, Canada, Japan	Canada	No
DRAGO	3 Spain, Thailand, Canada	Spain	No
EASTE	2 United States of America, Thailand	United States of America	No
FERDO	2 United States of America, Thailand	United States of America	No
FLUTE	5 Brazil, United States of America, Germany/Denmark (FIR	United States of America	No
. 2012	boundary), Thailand, Japan	Simon States of America	110
FORTE	3 Spain, Canada, Thailand	Spain. Canada if not used by Spain.	No
FUNKY	2 United States of America, Thailand	United States of America	No
GENOA	3 United States of America, Thailand, Japan	United States of America	No
GINGA	3 Thailand, Japan, United Kingdom	United Kingdom	No
GRACE	4 United States of America, Brazil, Thailand, China (Taiwan)	United States of America	No
HARDY	3 Thailand, Brazil, United Kingdom	United Kingdom	No
HELEN	4 Australia, Japan, Belgium/Netherlands (FIR boundary), Thailand	Belgium/Netherlands	No
HOMLY	2 United States of America, Thailand	United States of America	No
INNDY	2 United States of America, Thailand 2 United States of America, Thailand	United States of America	No
INTRO	2 Israel, Thailand	Israel	No
JIMMY	2 United States of America, Thailand	United States of America	No
JUMPA		United States of America	
KALIM	3 Thailand, Australia, United States of America		No No
KATIB	2 Argentina, Thailand 2 Sudan, Thailand	Argentina Sudan	No No
KEETA	·	United States of America	No No
KIMET	2 United States of America, Thailand		No No
KOKAM	2 Kenya, Thailand 2 Cameroon, Thailand	Kenya Cameroon	No No
LAMMY	2 United States of America, Thailand	United States of America	No No
	•		No No
LAMPA	2 Spain, Thailand	Spain	No No
LANNA	2 United States of America, Thailand	United States of America	No No
LASON	2 Turkey, Thailand	Turkey	No No
LATIN	2 United States of America, Thailand 6 United States of America, Italy, Thailand, China (Hong Kong)	United States of America	No Yee
LEMON	6 United States of America, Italy, Thailand, China (Hong Kong),	United States of America	Yes
LENTO	Japan, Republic of Korea	lanan	V
LENTO	3 Japan, China (Taiwan), Thailand	Japan	Yes
LEVIN	2 Canada, Thailand	Canada	No
LEXIS	2 Canada, Thailand	Canada	No
LIBRA	3 Thailand, Brazil, United States of America	United States of America	No
LINZY	2 United States of America, Thailand	United States of America	No
LONEE	2 United States of America, Thailand	United States of America	No
LOUIS	2 Italy, Thailand	Italy	No
MAKOM	3 France (Polynesie Française), Australia, Thailand	Polynesie Française (France)	No
MALIM	2 Malaysia, Thailand	Malaysia	No
MALIN	3 United States of America, Thailand, China (Taiwan)	United States of America	No
MAMBO	3 Japan, Thailand, United States of America	United States of America	No
MAMOR	2 Germany, Thailand	Germany	No
MANEE	2 United States of America, Thailand	United States of America	No
MAPLE	5 United Kingdom, United States of America, Japan, China (Hong	United Kingdom	No
	Kong), Thailand		
MAREE	2 United States of America, Thailand	United States of America	No

MARIA	5 United States of America, Japan, Thailand, Brazil,	United States of America	Yes
	Argentina/Bolivia (FIR boundary)		
MASON	4 Brazil, Australia, Thailand, China (Taiwan)	Brazil	No
MATAN	2 United States of America, Thailand	United States of America	No
MAYSA	2 United States of America, Thailand	United States of America	No
MICKY	2 United States of America, Thailand	United States of America	No
MILAN	5 Japan, Thailand, Italy, Canada, United States of America	United States of America	No
MINDI	4 Indonesia, Thailand, United States of America, France	France	No
MINTA	2 Portugal/Spain (FIR boundary), Thailand	Portugal/Spain	No
MODON	2 Canada, Thailand	Canada	No
MOONY	2 United States of America, Thailand	United States of America	No
MOOSE	3 Thailand, New Zealand, United States of America	United States of America	No
MOTIF	2 United States of America, Thailand	United States of America	No
NABON	2 Canada, Thailand	Canada	No
NADON	2 United Kingdom (Cayman Islands), Thailand	Cayman Is. (U.K.)	No
NAKON	2 Netherlands, Thailand	Netherlands	No
NAKOT	2 Russian Federation, Thailand	Russian Federation	No
NASTY	2 United States of America, Thailand	United States of America	No
NEWLY	2 United States of America, Thailand	United States of America	No
NITRO	4 Republic of Moldova, Thailand, Japan, Brazil	Brazil. To be determined by the 5LNC	No
		Duplicate Resolution Rules if not used by	
		Brazil.	
NOBEL	4 Thailand, Indonesia, Japan, Brazil	Brazil	No
NORAR	2 Mexico, Thailand	Mexico	No
NORDY	3 Thailand, Norway, United States of America	Norway	No
NORTA	2 Germany, Thailand	Germany	No
NOVEM	2 Australia, Thailand	Awaiting confirmation for 5LNC release to	No
NOVEIN	Z Australia, Malianu	APAC from EUR/NAT	140
OLIVE	5 China (Taiwan), Japan, Thailand, United States of America	United Kingdom	Yes
OLIVL	(American Samoa), United Kingdom	Office Kingdom	163
OPERA	4 Thailand, Japan, Spain, Brazil	Brazil. To be determined by the 5LNC	No
OI LIVA	4 Maliana, Japan, Opalii, Diazii	-	140
		Dunlicate Resolution Pulse if not used by	
		Duplicate Resolution Rules if not used by	
OSAKI	2 Deru/Faueder (FID houndam). Theiland	Brazil.	No
OSAKI	2 Peru/Ecuador (FIR boundary), Thailand	Brazil. Peru/Ecuador	No
OSITO	2 Panama, Thailand	Brazil. Peru/Ecuador Panama	No
OSITO PABEK	2 Panama, Thailand2 Chile, Thailand	Brazil. Peru/Ecuador Panama Chile	No No
OSITO PABEK PACER	2 Panama, Thailand2 Chile, Thailand2 United States of America, Thailand	Brazil. Peru/Ecuador Panama Chile United States of America	No No No
OSITO PABEK PACER PALAT	2 Panama, Thailand2 Chile, Thailand2 United States of America, Thailand2 Brazil, Thailand	Brazil. Peru/Ecuador Panama Chile United States of America Brazil	No No No No
OSITO PABEK PACER PALAT PANIN	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile	No No No No No
OSITO PABEK PACER PALAT PANIN PAPAS	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan	No No No No No
OSITO PABEK PACER PALAT PANIN	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile	No No No No No
OSITO PABEK PACER PALAT PANIN PAPAS PERRY	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden	No No No No No No
OSITO PABEK PACER PALAT PANIN PAPAS	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador,	No No No No No
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica	No No No No No No
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America	No No No No No No
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand, Chile 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica	No No No No No No
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America	No No No No No No No
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO PINTO	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand, Chile 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America United States of America	No No No No No No No
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO PINTO PLATU	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand, Chile 2 United States of America, Thailand 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America United States of America United States of America	No No No No No No No
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO PINTO PLATU PLUTO	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand, Chile 2 United States of America, Australia, Thailand, Japan 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America	No No No No No No No No
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO PINTO PLATU PLUTO POOMA	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand, Chile 2 United States of America, Australia, Thailand, Japan 2 United States of America, Thailand 4 United States of America, Thailand 5 United States of America, Thailand 6 United States of America, Thailand 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America	No No No No No No No No No No
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO PINTO PLATU PLUTO POOMA PUSIT	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand, Chile 2 United States of America, Australia, Thailand, Japan 2 United States of America, Thailand 2 Philippines, Thailand 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America Philippines	No N
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO PINTO PLATU PLUTO POOMA PUSIT RABEE	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand 4 United States of America, Australia, Thailand, Japan 2 United States of America, Thailand 2 Philippines, Thailand 2 United States of America, Thailand 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America	No N
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO PINTO PLATU PLUTO POOMA PUSIT RABEE RATLE	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand, Chile 2 United States of America, Australia, Thailand, Japan 2 United States of America, Thailand 2 Philippines, Thailand 2 United States of America, Thailand 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America	No N
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO PINTO PLATU PLUTO POOMA PUSIT RABEE RATLE RIVER	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand, Chile 2 United States of America, Australia, Thailand, Japan 2 United States of America, Thailand 2 Philippines, Thailand 2 United States of America, Thailand 3 Thailand, China (Hong Kong), Japan, Netherlands 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America Notherlands	No N
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO PINTO PLATU PLUTO POOMA PUSIT RABEE RATLE RIVER RIZZO	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand, Chile 2 United States of America, Australia, Thailand, Japan 2 United States of America, Thailand 4 Thailand, China (Hong Kong), Japan, Netherlands 2 United States of America, Thailand 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America	No N
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO PINTO PLATU PLUTO POOMA PUSIT RABEE RATLE RIVER RIZZO ROBBY	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand, Chile 2 United States of America, Australia, Thailand, Japan 2 United States of America, Thailand 4 Thailand, China (Hong Kong), Japan, Netherlands 2 United States of America, Thailand 3 Thailand, Japan, United States of America, Mexico 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America	No N
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO PINTO PLATU PLUTO POOMA PUSIT RABEE RATLE RIVER RIZZO ROBBY ROMBO	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand, Chile 2 United States of America, Australia, Thailand, Japan 2 United States of America, Thailand 4 Thailand, China (Hong Kong), Japan, Netherlands 2 United States of America, Thailand 4 Thailand, Japan, United States of America, Mexico 2 Honduras (COCESNA), Thailand 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America	No N
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO PINTO PLATU PLUTO POOMA PUSIT RABEE RATLE RIVER RIZZO ROBBY ROMAN ROMBO RONAL	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand, Chile 2 United States of America, Australia, Thailand, Japan 2 United States of America, Thailand 4 Thailand, China (Hong Kong), Japan, Netherlands 2 United States of America, Thailand 4 Thailand, China (Hong Kong), Japan, Netherlands 2 United States of America, Thailand 4 Thailand, Japan, United States of America, Mexico 2 Honduras (COCESNA), Thailand 3 Thailand, Spain, Kazakhstan 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America	No N
OSITO PABEK PACER PALAT PANIN PAPAS PERRY PESTO PIANO PINTO PLATU PLUTO POOMA PUSIT RABEE RATLE RIVER RIZZO ROBBY ROMBO	 2 Panama, Thailand 2 Chile, Thailand 2 United States of America, Thailand 2 Brazil, Thailand 2 Chile, Thailand 3 Japan, Thailand, Brazil 4 India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden, Trinidad and Tobago 2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua (COCESNA)/Jamaica, Thailand 3 Thailand, China (Taiwan), United States of America 4 Spain, United States of America, Thailand, Chile 2 United States of America, Australia, Thailand, Japan 2 United States of America, Thailand 4 Thailand, China (Hong Kong), Japan, Netherlands 2 United States of America, Thailand 4 Thailand, Japan, United States of America, Mexico 2 Honduras (COCESNA), Thailand 	Brazil. Peru/Ecuador Panama Chile United States of America Brazil Chile Japan Sweeden Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/Jamaica United States of America	No N

SALMA	2 Algeria/France, Thailand	Algeria/France	No
SAMBA	4 Russian Federation, Japan, Thailand, Indonesia	Russian Federation	No
SAMMY	4 Thailand, Australia, Japan, United States of America	United States of America	No
SAMON	4 Thailand, China (Hong Kong), Japan, United Kingdom/Ireland (FIR boundary)	United Kingdom/Ireland	No
SAMOS	2 United States of America, Thailand	United States of America	No
SANIT	2 Japan, Thailand	Japan	No
SARIO	2 Mexico, Thailand	Mexico	No
SONPA	2 Sweden, Thailand	Sweden	No
SONYA	2 United States of America, Thailand	United States of America	No
SOPON	2 Russian Federation, Thailand	Russian Federation	No
STARS	2 United States of America, Thailand	United States of America	No
STONE	5 Japan, Thailand, Brazil, Australia, United States of America	United States of America	No
SURIN	2 Russian Federation, Thailand	Russian Federation	No
TALLY	2 United States of America, Thailand	United States of America	No
TAMOS	2 Malaysia/Thailand (FIR boundary), Spain	Malaysia/Thailand	No
TANAR	2 Russian Federation, Thailand	Russian Federation	No
TANGO	7 Spain, Syrian Arab Republic, Pakistan, India, Thailand, Lao	Spain	Yes
	People's Democratic Republic, Viet Nam	- F	
TANON	3 Thailand, Cameroon, Nigeria	Cameroon	Yes
TAPPA	2 United States of America, Thailand	United States of America	No
TARAD	2 Lao People's Democratic Republic, Thailand	Lao People's Democratic Republic	Yes
TEMPO	2 United States of America, Thailand	United States of America	No
TIGER	6 Lao People's Democratic Republic, Thailand, Japan,	United Kingdom	Yes
	Pakistan/India (FIR boundary), United Kingdom, United States of America		
TIKAL	3 United States of America (Puerto Rico)/United Kingdom (Anguilla) [FIR boundary], Thailand, Philippines	United States of America/United Kingdom	No
TOMMY	4 United States of America, Japan, China (Taiwan), Thailand	United States of America	No
TUMBA	2 Turkmenistan, Thailand	Turkmenistan	No
VIOLA	4 United States of America, Australia, China (Taiwan), Thailand	United States of America	No
VOLVO	2 Republic of Moldova, Thailand	Republic of Moldova	No
WADEE	2 United States of America, Thailand	United States of America	No
WANDY	2 United States of America, Thailand	United States of America	No
WATTY	2 United States of America, Thailand	United States of America	No
WEEWA	2 United States of America, Thailand	United States of America	No
WIGGY	2 United States of America, Thailand	United States of America	No
WILLA	2 United States of America, Thailand	United States of America	No
WISTA	2 United States of America, Thailand	United States of America	No
WISUT	2 United States of America, Thailand	United States of America	No

	Priority to be determined		
5LNC	States	Priority	Within 1000NM
HOTEL	4 China (Taiwan), Viet Nam, Thailand, Canada	Canada.	Yes

	In the process of	being resolved	
5LNC	States	Note	Within 1000NM
BARTO	2 Indonesia, Thailand	Thailand to register in ICARD, Priority given to Thailand	No
GODUM	2 New Zealand, Thailand	Thailand to register.	No
KIRIN	3 Thailand, China (Taiwan), Japan	Thailand replacing KIRIN in 2024.	Yes
KITTY	2 Australia, Thailand	Thailand replacing KITTY in 2024.	No
MARWA	2 Thailand, Bahrain	Thailand replacing MARWA in 2024. Priority	No
PADAM	2 Brazil, Thailand	Thailand replacing PADAM.	No
ROONY	2 Australia, Thailand	Thailand replacing ROONY in 2024.	No

SAMET	2 Thailand, Brunei Darussalam	Thailand replacing SAMET in 2024 .	Yes
SAPUT	2 China, Thailand	Thailand replacing SAPUT.	No
SELKA	2 New Zealand, Thailand	Thailand replacing SELKA,	No
TSTWF	2 Australia, Thailand	Thailand replacing TSTWF , unpronounceable	No
VOBOT	2 Canada, Thailand	Thailand replacing VOBOT in 2024.	No

5LNC STATUS - TIMOR LESTE

	Total number of 5LNCs	83
	Terminal Airspace (TA)	58
	En-route (ENR)	11
ICARD	FIR	11
	Other	1
	No Purpose	2
	No Coordinates	0
	Total number of duplicated 5LNCs	0
	Priority allocated to Timor Leste	0
Duplicated	Priority allocated to other States	0
5LNCs	Priority to be determined	0
	Resolving	0
	Completely resolved 5LNCs	0
	Priority allocated to Timor Leste	
5LNC	States	Priority Within 1000NM
	Priority allocated to other States	
5LNC	States	Priority Within 1000NM
	Priority to be determined	
5LNC	States	Priority Within 1000NM

5LNC STATUS - TONGA

	Total number of ELNCs	44
	Total number of 5LNCs	44
	Terminal Airspace (TA)	44
	En-route (ENR)	0
ICARD	FIR	0
	Other	0
	No Purpose	0
	No Coordinates	0
	Total number of duplicated 5LNCs	10
	Priority allocated to Tonga	0
Duplicated	Priority allocated to other States	9
5LNCs	Priority to be determined	1
	In the process of being resolved	0
	Completely resolved 5LNCs	0

Priority allocated to Tonga			
5LNC	States	Priority	Within 1000NM

		Priority allocated to other State	es	
5LNC		States	Priority	Within 1000NM
ARIES	2	Japan, Tonga	Japan	No
HOLLY	4	Japan, United Kingdom, United States of America, Tonga	United Kingdom	No
KATOL	2	Canada, Tonga	Canada	No
LEWIS	2	Australia, Tonga	Australia	No
ORION	8	Philippines, China, Japan, Tonga, Italy, United States of America,	P United States of America	Yes
SHARK	4	United States of America, Trinidad and Tobago, United Kingdom,	T≀United Kingdom	No
			Brazil. To be determined by the 5LNC	
			Duplicate Resolution Rules if not used by	
VENUS	3	Mexico, Brazil, Tonga	Brazil.	No
VIRGO	3	Tonga, Japan, China	Japan	No
WHALE	5	Australia, Japan, Tonga, Lybia, Canada/United States of America (FI Canada/United States of America	No

	Priority to be determined			
5LNC		States	Priority	Within 1000N M
OTTER	3 Tonga, China, Canada		To be determined by the 5LNC Duplicate Resolution Rules	No

5LNC STATUS - TUVALU

	Total number of 5LNCs	0
		_
	Terminal Airspace (TA)	0
10455	En-route (ENR)	0
ICARD	FIR	0
	Other	0
	No Purpose	0
	No Coordinates	0
	Total number of duplicated 5LNCs	3
	Priority allocated to Tuvalu	0
Duplicate	d Priority allocated to other States	2
5LNCs	Priority to be determined	0
	In the process of being resolved	1
	Completely resolved 5LNCs	0
	Priority allocated to Tuvalu	
5LNC	States	Priority Within 1000NM
	Priority allocated to other States	
51.110	·	Within
5LNC	States	Priority 1000NM
APATI	2 Ghana, Tuvalu	Ghana No
BIKEN	2 India, Tuvalu	India No
	Priority to be determined	
5LNC	States	Priority Within 1000NM
		TOOMIN
	In the process of being resolved	
5LNC	States	Note Within
JLING	Clato	1000NM

5LNC STATUS - VANUATU

Date: June 2024

Within 1000NM

Note

	Total number of 5LNCs	13	
	Terminal Airspace (TA)	0	
	En-route (ENR)	13	
ICARD	FIR	0	
	Other	0	
	No Purpose	0	
	No Coordinates	0	
	Total number of duplicated 5LNCs	3	
	Priority allocated to Vanuatu	0	
Duplicated	Priority allocated to other States	3	
5LNCs	Priority to be determined	0	
	In the process of being resolved	0	
	Completely resolved 5LNCs	0	
	Priority allocated to Vanuatu	1	Within
5LNC	States	Priority	1000NM
	Priority allocated to other States		
5LNC	States	Priority	Within 1000NM
<u>'</u>	Lao People's Democratic Republic, Vanuatu, China, India, Italy,		
ALDUA 44	Russian Federation, Turkey, United Kingdom (2), United Kingdom	Las Bassisis Bassasis Bassisis	
ALPHA 11	(Gibraltar), United Kingdom (Falkland Islands) Suriname, Italy, Vanuatu, Syrian Arab Republic, Liberia, Bhutan,	Lao People's Democratic Republic	Yes
DELTA 10	· · · · · · · · · · · · · · · · · · ·	Suriname	Yes
	Priority to be determined		
5LNC	States	Priority	Within 1000NM

In the process of being resolved

States

5LNC

5LNC STATUS - VIET NAM

	Total number of 5LNCs	423
	Terminal Airspace (TA)	250
	En-route (ENR)	87
ICARD	FIR	21
	Other	1
	No Purpose	64
	No Coordinates	9
	Total number of duplicated 5LNCs	49
	Priority allocated to Viet Nam	8
Duplicated	Priority allocated to other States	0
5LNCs	Priority to be determined	0
	In the process of being resolved	37
	Completely resolved 5LNCs	4

	Priority allocated to Viet Nam			
5LNC	States	Priority	Within 1000NM	
DONGI	2 Viet Nam, Brazil	Viet Nam	No	
KARAN	3 China (Taiwan), Viet Nam, Indonesia	Viet Nam	Yes	
LAVOS	2 Lao People's Democratic Republic/Viet Nam (FIR boundary), China	Lao People's Democratic Republic/Viet Nam	Yes	
LEDUP	2 Viet Nam, Maldives	Viet Nam	No	
LITAM	2 Viet Nam, Burkina Faso	Viet Nam	No	
SAMBO	3 Cambodia, Viet Nam, Japan	Viet Nam	Yes	
SAMOG	2 Viet Nam, Nicaragua (COCESNA)	Viet Nam	No	
VIDAD	2 Viet Nam, Malaysia	Viet Nam	No	

Priority allocated to other States			
5LNC	States	Priority	Within 1000NM

	Priority to be determined			
5LNC	States	Priority	Within 1000NM	

In the process of being resolved			
5LNC	States	Note	Within 1000NM
ANTRI	2 Viet Nam, United States of America	Viet Nam to replace ANTRI.	No
BALOV	2 Norway, Viet Nam	Viet Nam to replace BALOV.	No
BANCO	2 United States of America, Viet Nam	Viet Nam to replace BANCO.	No
BANSU	3 Russian Federation, Japan, Viet Nam	Viet Nam to replace BANSU.	No
BIBAN	2 Italy/Switzerland (FIR boundary), Viet Nam	Viet Nam to replace BIBAN.	No
BISON	6 China (Taiwan), China (mainland), Indonesia, Viet Nam, Australia,	Viet Name to replace BISON.	Yes
BITIS	2 Argentina, Viet Nam	Viet Nam to replace BITIS.	No
CANTO	4 United States of America, Republic of Korea, China (Hong Kong),	Viet Nam to replace CANTO.	No
CONDA	2 Viet Nam, Cambodia	Cambodia to replace/remove in Q1 2025.	Yes
DAKAM	2 Fiji/New Zealand, Viet Nam	Viet Nam to replace DAKAM.	No
DONMO	3 United States of America, Lao People's Democratic Republic, Viet	Viet Nam to replace DONMON.	Yes
FINAM	2 Spain, Viet Nam	Viet Nam to replace FINAM.	No

HALAN	2 United States of America, Viet Nam	Viet Nam to replace HALAN.	No
HOBIN	2 Republic of Korea, Viet Nam	Viet Nam to request HOBIN.	No
KANGU	2 Turkey, Viet Nam	Viet Nam to replace KANGU.	No
MADEN	3 Viet Nam, Panama, United States of America	Viet Nam to replace MADEN.	No
MALAY	5 United States of America, Myanmar, China (Taiwan), Viet Nam, Pl	hViet Nam to replace MALAY.	Yes
MANGA	4 New Zealand, Philippines, Viet Nam, Colombia	Viet Nam to replace MANGA.	Yes
MAREL	2 Italy, Viet Nam	Viet Nam to replace MAREL.	No
MISAN	2 Yemen, Viet Nam	Viet Nam to replace MISAN	No
MOLAN	3 Mauritania, Côte d'Ivoire, Viet Nam	Viet Nam to replace MOLAN.	Yes
NAMBI	3 Brazil, Saudi Arabia, Viet Nam	Viet Nam to replace NAMBI.	No
NITOM	2 Australia, Viet Nam	Viet Nam to replace NITOM.	No
SOKAN	2 Jordan/Syrian Arab Republic (FIR boundary), Viet Nam	Viet Nam to replace SOKAN.	No
SONTA	2 Spain, Viet Nam	Viet Nam to replace SONTA.	No
SUDON	2 Russian Federation, Viet Nam	Viet Nam to replace SUDON.	No
TALAP	2 Russian Federation, Viet Nam	Viet Nam to replace TALAP.	No
TAMDA	2 Belize (COCESNA), Viet Nam	Viet Nam to replace TAMADA.	No
TANGO	7 Spain, Syrian Arab Republic, Pakistan, India, Thailand, Lao People	ε Viet Nam to replace TANGO.	Yes
TANNA	2 United States of America, Viet Nam	Viet Nam to replace TANNA.	No
TANOS	2 Liberia/Sierra Leone/Guinea, Viet Nam	Viet Nam to replace TANOS.	No
TINLY	2 United States of America, Viet Nam	Viet Nam to replace TINLY.	No
TONGA	2 Viet Nam, China (Taiwan)	Viet Nam to replace TONGA.	Yes
TOTRA	3 New Zealand, Lithuania, Viet Nam	Viet Nam to replace TOTRA.	No
VINLO	2 Canada, Viet Nam	Viet Nam to replace VINLO.	No
VITRA	2 Congo, Viet Nam	Viet Nam to replace VITRA.	No
ZATON	3 Russian Federation, United States of America, Viet Nam	Viet Nam to replace ZATON.	No

Attachment A: Proposed Amendment to Asia/Pacific Regional Plan for Collaborative AIM

Amend paragraph:

Volume II Part VII Section 3.

- 3.1 The priority regional requirements for AIM implementation are:
 - a) Establishment of AIS either as a separate entity within or, ideally, separated from the civil aviation administration in accordance with the guidance provided in ICAO Doc 8126 AIS Manual Chapter 3.
 - b) Implementation of Quality Management Systems for aeronautical information;
 - c) Establishment of formal agreements between AIS providers and aeronautical data originators specifying the content, quality, maintenance and timing of provision of aeronautical data that is required to be promulgated in AIP, and the quality management process that shall be applied.
 - d) Implementation of internet-accessible electronic AIP generated from a digital database of aeronautical information.
 - Note: some existing aeronautical information products may not be suitable for migration into digital datasets.
 - e) The taking of all necessary measures to develop and implement AIM training programs for AIS personnel, including training in digital data management, and end-to-end quality management processes.
 - f) Provision of full access to the relevant ICAO Annexes and Documents to all personnel having responsibility for the origination, reception, management and/or distribution of aeronautical information and aeronautical data.

Note: The reference to ANP Vol II Part HVII Section 3 paragraph 3.1, above, will be updated to refer to the latest relevant Doc 8126 (7th Edition) guidance after formal processing of the related Proposal for Amendment (PfA) to the ANP.

Amend and delete paragraphs as follow:

Aviation System Block Upgrades (ASBU)

- 5.4 In the AIM field, the main ASBU blocks thread and elements which are relevant for Seamless ANS are as follows:
 - B0-DATM Service Improvement through Digital Aeronautical Information Management (AIM);

- B1-DATM Service Improvement through Integration of all Digital AIM Information (2019-2025)
- B1-SWIM Performance Improvement through the application of SWIM applications and infrastructure (2019-2025); and
- B2-SWIM Enabling Airborne Participation in Collaborative ATM through SWIM (2025-2031).

ASBU	ASBU	Title	
Thread	Element		
	DAIM-B1/1	Provision of quality-assured aeronautical data and information	
	DAIM-B1/2	Provision of digital Aeronautical Information Publication (AIP)	
		data sets	
	DAIM-B1/3	Provision of digital terrain data sets	
	DAIM-B1/4	Provision of digital obstacle data sets	
	DAIM-B1/5	Provision of digital aerodrome mapping data sets	
	DAIM-B1/6	Provision of digital instrument flight procedure data sets	
DAIM	DAIM-B1/7	NOTAM improvements	
	DAIM-B2/1	Dissemination of aeronautical information in a SWIM	
		environment	
	DAIM-B2/2	Daily Airspace Management information to support flight and	
		flow	
	DAIM-B2/3	Aeronautical information to support higher airspace operations	
	DAIM-B2/4	Aeronautical information requirements tailored to UTM	
	DAIM-B2/5	NOTAM replacement	
	SWIM-B2/1	Information service provision	
	SWIM-B2/2	Information service consumption	
SWIM	SWIM-B2/3	SWIM registry	
SWIM	SWIM-B2/4	Air/Ground SWIM for non-safety critical information	
	SWIM-B2/5	Global SWIM processes	
	SWIM-B3/1	Air/Ground SWIM for safety critical information	

5.5 The ASBU are undergoing a major re structure, which will be presented for approval at the 40th Triennial ICAO Assembly, to be held in Montreal, Canada, from 24 September to 04 October 2019. Future amendment of this document will include relevant ASBU references, and any related regional priorities and performance expectations.

Re-number subsequent paragraphs.

Amend paragraphs

Implementation Status Monitoring

- 5.45 It is expected that the relevant AIM expert/s in each Administration will be responsible for the detailed reporting in the Regional AIM Plan Monitoring and Reporting Form, and that these experts will then liaise closely with their Administration's Seamless ANS reporting point of contact to ensure the accuracy of the higher level reporting and consistency between the separate reporting levels.
- 5.46 The Regional AIM Plan Monitoring and Reporting Form is provided at **Appendix C**, and is available on the ICAO Asia/Pacific Regional Office eDocuments web-page at:

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

Amend and delete paragraphs as follow:

Asia/Pacific AIM Compliance Analysis - USOAP Audit

6.9 According to the assessment of Effective Implementation (EI) of 16 AIS/CHART-related PQs in May 2018 March 2024 in APAC Region, an overall EI was 62%59%. After analysing, the EI for 4 AIS/CHART-related PQs was below 50% (Figure 5 refers):

• 37%	Cartographic inspector periodic training plan established;
40%	Effective State oversight of service provision (charts);
43%	AIS data quality and resolution - Annexes 15 and 4 (AIS);
	Cartographic inspector's formal training programme developed and
	-Implemented;
• 46%	States adoption of International Standards and Procedures;
	AIS inspector periodic training plan established;
	AIS inspector formal training programme implemented;
-	Mechanism for deficiency review and elimination;
-	Effective State oversight of service provision (AIS); and
• 49%	AIS data quality and resolution (Annex 15 and 4) (Charts)

ID	Questions	EI
7.281 CE-4	Is the training programme appropriately implemented for AIS inspectors?	47%
7.289 CE-8	Has the State established and implemented a mechanism/system with time frame for the elimination of deficiencies identified by AIS inspectors?	46%
7.303 CE-7	Does the State ensure that the technical staff of AIS and cartographic service providers' personnel possess the competencies required to perform the assigned functions and tasks?	49%
7.311 CE-7	Does the State ensure that aeronautical data and information are provided in accordance with the data quality specifications?	34%

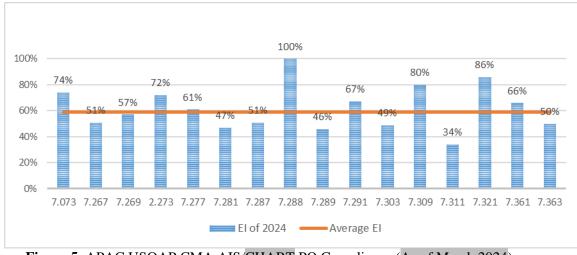


Figure 5: APAC USOAP CMA AIS/CHART PQ Compliance (As of March 2024)

6.10 The following summarizes the Asia/Pacific Regional implementation performance in the four priority areas of AIRAC adherence, monitoring of States' differences to Annex 4 and Annex 15, WGS 84 implementation, and quality management:

PQ 7.309: Does the State ensure that the Aeronautical Information Regulation and Control (AIRAC) system is used to notify the establishment, withdraw and premeditated significant changes of circumstances listed in accordance with Chapter 6 and Appendix 4 Part 2 of Annex 15?

• Average Effective Implementation (EI) of PQ 7.309 for APAC region was 83%.

PQ 7.011: Has the State implemented procedures for amending its ANS specific regulations as well as for identifying and notifying differences, taking into consideration ICAO provisions and their amendments?

• Average Effective Implementation (EI) of PQ 7.011 for APAC region was 46%.

PQ 7.109: If the State has initiated the implementation of performance based navigation (PBN), are the prescribed navigation specifications appropriate to the level of communication, navigation and air traffic services? (Where applicable, review documented evidences that the safety of the system is assured with WGS 84 implementation)

• Average Effective Implementation (EI) of PQ 7.109 for APAC region was 79%.

PQ 7.311: Has the State established a mechanism to ensure that aeronautical data quality requirements related to publication resolution and data integrity are I accordance with the provisions of Annex 15, Appendix 7, Tables A7–1 to A7–5?

PQ 7.359: Has the State established a mechanism to ensure that aeronautical data quality requirements related to the data integrity and charting resolution are in accordance with the provisions of Tables 1 to 6 in Appendix 6 of Annex 4? (CE-5)

PQ 7.267: Does the State ensure that a properly organized quality management system in the AIS has been established? (CE-7)

- Average Effective Implementation (EI) of PQ 7.311 for APAC region was 43%.
- Average Effective Implementation (EI) of PQ 7.359 for APAC region was 49%.
- Average Effective Implementation (EI) of PQ 7.267 for APAC region was 54%.

Amend paragraph

Structure of the Performance Improvement Plan

- 7.1 Regional collaborative AIM performance objectives are arranged in *Regional AIM Capability* phases aligned, where practicable, with the implementation phases of the Seamless ANS Plan:
 - Regional AIM Capability Phase I, expected to be implemented immediately;
 - Regional AIM Capability Phase II, expected to be implemented by 7 November 2019, and

• Regional AIM Capability Phase III, expected to be implemented by 3 November 2022 27 November 2025 (to be developed).

Amend paragraphs

Asia/Pacific Seamless ANS Plan – Performance Expectations

7.3 The Seamless ANS Plan includes the following performance expectations in the field of AIS/AIM:

Preferred ATM Service Levels (PASL) Phase I (expected implementation by 12 November 2015)

7.46 ATM systems should be supported by digitally-based AIM systems through implementation of Phase 1 and 2 of the AIS AIM Roadmap in adherence with ICAO and regional AIM planning and guidance material.

PASL Phase II (expected implementation by 07 November 2019)

7.61 ATM systems should be supported by complete implementation of AIM Phase 3 (using at a minimum, version AIXM 5.1).

7.40 ATM systems should be supported by digitally-based AIM systems consistent with **DAIM-B1/1 – 6**, in adherence with ICAO and regional AIM planning and guidance material. ATM systems should be supported by aeronautical information digital data exchange of at a minimum, version AIXM 5.1 (Priority 1).

PASL Phase III (expected implementation by 03 November 2022)

7.55 ATM systems should be supported by digitally-based NOTAM consistent with **DAIM-B1/7**.

PASL Phase IV (expected implementation by 27 November 2025)

NIL.

Amend paragraph

Quality Management

7.11 Formal agreements arrangement, as required to be established between AIS providers and aeronautical data originators under the relevant SARPs in Annex 15², should specify the content, quality, maintenance and timing of the provision of aeronautical data that is required to be promulgated in AIP, and the quality management process that shall be applied.

² Annex 15 Section 2.15

.....

INTERNATIONAL CIVIL AVIATION ORGANIZATION

DRAFT



ASIA/PACIFIC REGIONAL PLAN

FOR

COLLABORATIVE AERONAUTICAL INFORMATION MANAGEMENT

Version 3.1, September 2024

This Plan was developed by the Asia/Pacific AIS-AIM Implementation Task Force (AAITF)

Approved by the ATM Sub-Group of APANPIRG (ATM/SG/12) and published by the ICAO Asia and Pacific Office, Bangkok

CONTENTS

SCOPE OF THE PLAN	
PLAN OBJECTIVES	0
EXECUTIVE SUMMARY	7
ABBREVIATIONS AND ACRONYMS	9
BACKGROUND INFORMATION	12
Principles	.12
Aviation System Block Upgrades (ASBU)	12
Quality Management Guidance	.14
Selection and Training Guidelines for AIS	14
Operating Procedures for AIS Dynamic Data (OPADD)	15
SNOWTAM Guidance	16
Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services	16
ICAO Location Indicators	16
International Codes and Routes Designators	.17
Implementation Status Monitoring	18
CURRENT SITUATION	19
PERFORMANCE IMPROVEMENT PLAN	23

LIST OF APPENDICES

Appendix A:	APAC Regional AIM Principles	A-1
Appendix B:	ICARD Procedures	B-1
Appendix C:	Implementation Status Reporting Form	C -1

SCOPE OF THE PLAN

Asia/Pacific Regional AIM Planning and Guidance

- 1.1 Asia/Pacific (APAC) Regional requirements and existing guidance material for aeronautical information management (AIM) are found in the following documents:
 - Asia/Pacific Air Navigation Plan, (APAC ANP) providing agreed regional requirements considered to be the minimum necessary for effective planning and implementation of Aeronautical Information Services (AIS) and AIM.
 - Asia/Pacific Seamless ANS Plan, providing background information, analyses and performance objectives to facilitate seamless ANS operations in the APAC Region; and
 - This document, the *Asia/Pacific Regional Plan for Collaborative AIM*.

Note: The APAC ANP, Seamless ANS Plan and Asia/Pacific Regional Plan for Collaborative AIM are available on the ICAO APAC Regional Office eDocuments webpage at https://www.icao.int/APAC/Pages/eDocs.aspx.

Asia/Pacific Air Navigation Plan

- 1.2 The Asia/Pacific Air Navigation Plan (APAC ANP) provides for the planning and implementation of air navigation systems, in accordance with the agreed global and regional planning framework. They are developed to meet those needs of specific areas not covered in the worldwide provisions. The development and maintenance of the ANP is undertaken by the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) with the assistance of the ICAO Secretariat.
- 1.3 The ANPs are used as a repository Document for the assignment of responsibilities to States for the provision of air navigation facilities and services within a specified area in accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300), and contain requirements related to the facilities and services to be implemented by States in accordance with regional air navigation agreements.
- 1.4 The APAC ANP Volume I includes general regional requirements for States relating to the provision of aeronautical data and aeronautical information within their territory and those areas over the high seas for which it is responsible for the provision of air traffic services.
- 1.5 APAC ANP Volume II includes dynamic plan elements related to the assignment of responsibilities to States for the provision of aerodrome and air navigation facilities and services, and mandatory requirements related to aerodrome and air navigation facilities and services to be implemented by States in accordance with regional air navigation agreements.
- 1.6 APAC ANP Volume II Part VII assigns responsibility for the provision of AIS/AIM facilities and services in the Asia/Pacific Region, and for the production of sheets of the World Aeronautical Chart or Aeronautical Chart. It also includes the following specific regional requirements, proposed by AAITF, agreed by APANPIRG and formalized by regional air navigation agreement:

Volume II Part VII Section 3.

- 3.1 The priority regional requirements for AIM implementation are:
 - a) Establishment of AIS either as a separate entity within or, ideally, separated from the civil aviation administration in accordance with the guidance provided in ICAO Doc 8126 AIS Manual Chapter 3.
 - b) Implementation of Quality Management Systems for aeronautical information;
 - c) Establishment of formal agreements between AIS providers and aeronautical data originators specifying the content, quality, maintenance and timing of provision of aeronautical data that is required to be promulgated in AIP, and the quality management process that shall be applied.
 - d) Implementation of internet-accessible electronic AIP generated from a digital database of aeronautical information.
 - Note: some existing aeronautical information products may not be suitable for migration into digital datasets.
 - e) The taking of all necessary measures to develop and implement AIM training programs for AIS personnel, including training in digital data management, and end-to-end quality management processes.
 - f) Provision of full access to the relevant ICAO Annexes and Documents to all personnel having responsibility for the origination, reception, management and/or distribution of aeronautical information and aeronautical data.

Note: The reference to ANP Vol II Part WVII Section 3 paragraph 3.1, above, will be updated to refer to the latest relevant Doc 8126 (7th Edition) guidance after formal processing of the related Proposal for Amendment (PfA) to the ANP.

1.7 The APAC ANP is available on the ICAO Asia/Pacific Regional Office eDocuments webpage.

Beijing Declaration

1.8 The *Declaration of the Asia/Pacific Ministerial Conference on Civil Aviation* (Beijing Declaration, Beijing, China, 31 January to 01 February 2018), included the following items indicating the direction agreed by the Ministers responsible for civil aviation in the Asia/Pacific Region in relation to AIM planning and implementation:

2.0 Air Navigation Services

- 2.1 Commit to implementation by 2022 of the Asia/Pacific Seamless Air Traffic Management (ATM) Plan to enhance ATM capacity and harmonization in the Region, including a focus on:
 - (a) Transitioning from Aeronautical Information Service (AIS) to Aeronautical Information Management;

(g) Air navigation in national planning frameworks such as National Development Plans (NDPs) supported by National Air Navigation Plans

4.0 Human Resource Development

- 4.1 In line with the ICAO initiative on "Next Generation of Aviation Professionals" (NGAP), accord priority to professionals to support the Region's growing needs, including where appropriate:
- (a) Establish access to quality training; and
- (b) Encourage sharing of resources bilaterally and/or multi-laterally, as well as with industry partners
- 1.9 The commitments agreed in the Beijing Declaration are supported by performance expectations in Section 7 of this document.

Asia/Pacific Plan for Collaborative AIM

- 1.10 The 11th Meeting of the Asia/Pacific Region AIS-AIM Implementation Task Force (AAITF/11, Bangkok, Thailand 05 to 09 June 2017), identified a near term objective to review and update the quality management guidance and sample quality manual provided in the *Guidance Manual for AIS in the Asia/Pacific Region*. It was noted that while the current information provided in the Guidance Manual remained relevant and valuable to the region, there was a need for the information to be updated to take into account the transition to AIM.
- 1.11 Following AAITF/11, ICAO established the Aeronautical Information Management Steering Group (AIM SG), to support global implementation of AIM and to accelerate the development and finalization of guidance material including *inter alia* the new quality management manual and AIM training manual. AIM SG has since been established as the AIM Working Group of the Information Management Panel (IMP/WG-A).
- 1.12 This document, the Asia/Pacific Plan for Collaborative AIM (the AIM Plan), is intended to provide information, guidance and regional performance objectives supporting improvement of AIS and the transition to AIM. The document is not intended to duplicate or pre-empt global guidance in documents developed by IMP/WG-A or other relevant technical panels of the ICAO Air Navigation Commission.

AIM Plan Structure

- 1.13 The AIM Plan forms part of a suite of global and regional air navigation planning documents relevant to the Asia/Pacific Region.
- 1.14 Global vision and strategy perspectives are provided by the *Global ATM Operational Concept* (Doc 9854), *Global Air Navigation Plan* (GANP), and *Global Aviation Safety Plan* (GASP, Doc 10004). The GANP includes the Aviation System Block Upgrade (ASBU) framework, its Modules and its associated technology Roadmaps.
- 1.15 Beneath this level is regional planning primarily provided by the *Asia/Pacific Air Navigation Plan* and the *Asia/Pacific Seamless ANS Plan* which, together with its contributory documents, including this Plan, define goals and the means of meeting State planning objectives.

1.16 The AIM Plan includes background information and general guidance, analysis of the current status of AIS and AIM implementation in the Asia/Pacific Region, and a performance improvement plan. The plan also provides a central repository for information and procedures relating to items of aeronautical information coordinated between States and ICAO, including Proposals for Amendment (PfAs) to the Regional Air Navigation Plan, allocation and implementation of ATS routes that form part of the regional network of ATS routes, registration of 5-letter name codes identifying significant points, ICAO location indicators, and 3-letter and radiotelephony designators for aircraft operating agencies.

Performance Improvement Plan

- 1.17 The performance objectives of the Plan are expected to be implemented in phases aligned, where practicable, with those of the Seamless ANS Plan. Having considered a range of performance expectations including those relating ICAO Standards and Recommended Practices (SARPs) (that have been applicable for many years) and Procedures for Air Navigation Services (PANS), Regional AIM Capability is expected to be implemented in the following phases:
 - Phase I, expected to be implemented immediately;
 - Phase II, expected to be implemented by 7 November 2019, and
 - Phase III, expected to be implemented by 27 November 2025.
- 1.18 Except where required under State obligations to implement SARPs and relevant regional requirements communicated in the ANP, the phases and performance expectations are not binding any State, but should be considered as a planning framework. The Plan itself is therefore guidance material. Where any performance expectation has been included to emphasize the obligation of States to implement ICAO SARPs and PANS, reference is made to the relevant sections of Annex 15 or PANS-AIM.
- 1.19 It is important to note that the AIM Plan's commencement dates are planning targets, and should not be treated as 'hard' implementation dates. However, States should consider the impact of not achieving target implementation dates on the required improvement in the safety and efficiency of international aviation in the region.

Review

1.20 The Global Air Navigation Plan review cycle has been updated to include the facility for frequent minor updates, and a major update coinciding with every second meeting of the ICAO Assembly commencing in 2019. APANPIRG/34, to be held in December 2023, was expected to approve a revised update schedule for the Asia/Pacific Seamless ANS Plan, to be conducted in the year immediately following the year of each meeting of the Assembly. The Tenth Meeting of the ATM Sub-Group of APANPIRG (ATM/SG/10, 17 – 21 October 2022) agreed that ATM-related documents including this Plan would then be reviewed in the year following the update of the Seamless ANS Plan (**Figure 1**). Reviews should include examination of relevant new or amended ICAO Annexes, PANS and guidance material to ensure the minimization of duplication, and alignment with global direction.

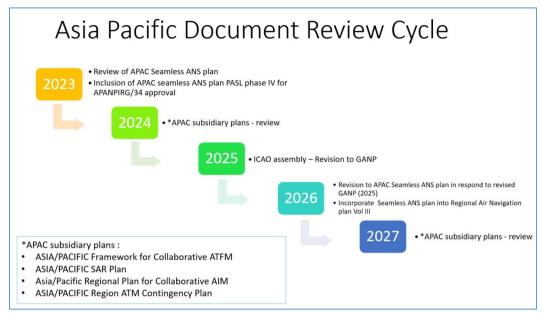


Figure 1: Proposed ATM-Related Document Review Cycle

1.21 The next scheduled update of this Plan is in 2027. Ad hoc updates may be considered in response to significant changes affecting AIS in the Asia/Pacific Region.

.....

PLAN OBJECTIVES

Objective of the Plan

- 2.1 The objective of the Plan is to facilitate the improvement and harmonization of AIS in the APAC Region, and the harmonized implementation of interoperable AIM systems.
- 2.2 The Plan provides a framework for a transition to a collaborative regional AIM environment, in order to meet current and future global and regional performance requirements.

Guidance for the Plan

2.3 The Plan is neither isolated from, nor in conflict with, other global and regional plans or strategies. It takes the availability of the following into account:

Global and Regional Framework

- Doc 9750 Global Air Navigation Plan
- Doc 10004 Global Aviation Safety Plan
- Asia/Pacific Regional Air Navigation Plan
- Asia/Pacific Seamless ANS Plan (Version 3.0, September 2019)

Air Navigation Services

- Annex 4 Aeronautical Charts
- Annex 10 Aeronautical Telecommunications
- Annex 11 *Air Traffic Services* (particularly Chapter 2 [2.1 and 2.30], and Attachment C)
- Annex 15 Aeronautical Information Services
- Doc 4444 Procedures for Air Navigation Services Air Traffic Management (PANS ATM)
- Doc 10066 Procedures for Air Navigation Services Aeronautical Information Management (PANS AIM)

EXECUTIVE SUMMARY

- 3.1 The Asia and Pacific Region has become the world's largest aviation market in terms of available seat-kilometres (30% of ASK in 2015) and generates the world's second largest share of international revenue passenger-kilometres (28% of international RPK as of 2015).
- 3.2 Underpinning safe, efficient air transport is the Aeronautical Information Service (AIS) of each State, which collates, maintains and publishes aeronautical information of lasting character essential to air navigation, including details of regulations, procedures and other information pertinent to the operation of aircraft within the area of responsibility of the State.

The Need for a Regional Collaborative Plan for AIM

- 3.3 The AIS of each State, and its transition to the AIM environment, is a key enabler of all current and future air navigation activities. To satisfy new requirements for air navigation in a collaborative decision-making (CDM) environment the transition to AIM will provide aeronautical data and information in a digital format that facilitates graphical display, complies with international standards and agreed, common exchange formats and is accessible system-wide by all stakeholders in real-time.
- 3.4 This plan, the *Asia/Pacific Plan for Collaborative Aeronautical Information Management*, was developed to guide and assist Asia/Pacific Administrations in meeting the challenges of transitioning to from legacy paper-based AIPs to the digital world of AIM, as envisioned in the GANP and in the *ICAO Roadmap for Transition from AIS to AIM*.
- 3.5 While noting the need for revision and restructure of the (then) Regional AIS guidance manual, this Plan was developed to avoid divergence from, or duplication of, ICAO global guidance material that was expected be provided in the near to medium term. Such global guidance material included the updated Doc 8126, and new quality management and AIM training manuals.
- 3.6 The plan is also the repository for information and guidance on procedures for Asia/Pacific Administrations relating to Regional aeronautical data managed by the ICAO Regional Office, including:
 - Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services (ICAO Doc 8585);
 - Location Indicators (ICAO Doc 7910); and
 - International Codes and Routes Designators (ICARD).
- 3.7 Quality-managed, timely aeronautical information is fundamental in supporting current and future aviation systems, supported by collaboration between States to improve the harmonization and interoperability of all processes and systems supporting air navigation. Collaboration in the provision of aeronautical information and data will benefit States facing resource challenges, and the broader Asia/Pacific Region through the overall improvement in the availability, timeliness and quality of aeronautical information. Future development of this document may include Regional planning for multi-State or sub-Regional AIP, shared aeronautical information databases, and collaborative efforts in AIM training.

Performance Improvement Plan

A key feature of the Plan is the Performance Improvement Plan which was initially, in version 1.0 of the Plan, aligned with Phases 1 and 2 of the ICAO Roadmap for Transition from AIS to AIM, supporting States in the transition to digital databases of aeronautical information and the implementation of electronic AIP (eAIP). The Performance Improvement Plan is arranged in Regional AIM Capability Phases I, II and III, listing fundamental AIS performance elements expected to be implemented either immediately (Phase I), in the case of elements that have been reflected ICAO SARPs for many years, or by 7 November 2019 (Phase II), or 27 November 2025 (Phase III).

Global AIM Implementation Dashboards

- 3.9 ICAO Headquarters is developing a scheme of dashboards to monitor and report global, regional and State progress in AIM implementation. The dashboards will include the implementation status of:
 - 1. Quality Management Systems;
 - 2. World Geodetic System 1984 (WGS-84);
 - 3. Earth Gravitational Model 1996 (EGM-96); and
 - 4. Terrain and Obstacle Datasets.

3.10 The Performance Improvement Plan in Section 7 of this document includes performance expectations in each of these areas.

.....

ABBREVIATIONS AND ACRONYMS

To facilitate readability, abbreviations have been largely omitted throughout the document. Most abbreviations were defined when introduced. The following provides an alphabetic listing of all abbreviations.

AAITF AIS-AIM Implementation Task Force

AATIP ASEAN Air Transport Integration Project

A-CDM Airport Collaborative Decision Making

ADS-B Automatic Dependent Surveillance - Broadcast

AFTN Aeronautical Fixed Telecommunication Network

AI Aeronautical Information

AIC Aeronautical Information Circular

AICM Aeronautical Information Conceptual Model

AIM Aeronautical Information Management

AIMSG Aeronautical Information Management Sub-Group

AIP Aeronautical Information Publication

AIRAC Aeronautical Information Regulation and Control

AIS Aeronautical Information Service

AIXM Aeronautical Information eXchange Model

AMDB Aeronautical Mapping Database

ANSP Air Navigation Service Provider

AOC Airline Operations Centre

APANPIRG Asia Pacific Air Navigation Planning and Implementation Regional Group

ASBU Aviation System Block Upgrades

ASEAN Association of Southeast Asian Nations

ATFM Air Traffic Flow Management

ATC Air Traffic Control

ATM Air Traffic Management

ATMRPP Air Traffic Management Requirements and Performance Panel

ATSA-SURF Enhanced Traffic Situational Awareness on the Airport Surface

CANSO Civil Air Navigation Services Organization

CARATS Collaborative Action for Renovation of Air Transport Systems

CCO Continuous Climb Operations

CDM Collaborative Decision Making

CDO Continuous Descent Operations

CMA Continuous Monitoring Approach

CNS Communication, Navigation, Surveillance

CRC Cyclic Redundancy Check

DBMS Database Management System

DSS Decision Support System

eAIP Electronic Aeronautical Information Publication

EFF Electronic Flight Folder

EFOD Electronic Filing of Differences

ERAM En-Route Automation Modernization

eTOD Electronic Terrain and Obstacle Data

EUROCAE European Council of Aerospace Engineering

FMS Flight Management System

GANP Global Air Navigation Plan

GASP Global Aviation Safety Plan

IATA International Air Transportation Association

ICAO International Civil Aviation Organization

ICARD ICAO Five-Letter Name Code and Route Designator

IFATCA International Federation of Air Traffic Control Association

IFAIMA International Federation of AIM Associations

IFR Instrument Flight Rules

IM Information Management

IP Internet Protocol

ISO International Standards Organization

JAP Joint Acceptance Plan

KPI Key Performance Indicator

MET Meteorological Services

METAR Aerodrome Routine Meteorological Report

NAS National Airspace System

NCLB No Country Left Behind

NOTAM Notice To Airmen

PAIMS Preferred Aeronautical Information Management Specifications

PIB Pre-flight Information Bulletin

PQ Protocol Questions

QA Quality Assurance

QMS Quality Management System

SARP Standards And Recommended Practices

SESAR Single European Sky Air Traffic Management Research

SIGMET Significant meteorological weather phenomena

SWIM System Wide Information Management

TIS-B Traffic Information Services – Broadcast

TBO Trajectory Based Operations

USOAP Universal Safety Oversight and Audit Programme

WXXM Weather eXchange Model

XML eXtensible Markup Language

5LNC 5 Letter Name Code

BACKGROUND INFORMATION

Principles

5.1 This Plan considers four major categories of AIM principles:

Legislation, Policy and Regulation;

Human Performance;

Quality Management;

AIM Systems and Processes;

5.2 AIM principles form the basis for the provision of background guidance information, development of guidance material and identification of performance improvement objectives. The APAC Regional AIM Principles are provided in **Appendix A**.

Aviation System Block Upgrades (ASBU)

- 5.3 At the Global level the ASBU initiative was included in Doc 9750 Global Air Navigation Plan as a programme framework that developed a set of aviation system solutions or upgrades intended to exploit current aircraft equipage, establish a transition plan and enable global interoperability. The ASBU framework is heavily dependent on AIM, which is a critical prerequisite for the implementation of any current or future ATM or air navigation concept that relies on the accuracy, integrity and timeliness of aeronautical data.
- 5.4 In the AIM field, the main ASBU blocks thread and elements which are relevant for Seamless ANS are as follows:
 - B0-DATM Service Improvement through Digital Aeronautical Information Management (AIM);
 - B1-DATM Service Improvement through Integration of all Digital AIM Information (2019-2025)
 - B1-SWIM Performance Improvement through the application of SWIM applications and infrastructure (2019-2025); and
 - B2-SWIM Enabling Airborne Participation in Collaborative ATM through SWIM (2025-2031).

ASBU	ASBU	Title
Thread	Element	
	DAIM-B1/1	Provision of quality-assured aeronautical data and information
	DAIM-B1/2	Provision of digital Aeronautical Information Publication (AIP)
		data sets
	DAIM-B1/3	Provision of digital terrain data sets
	DAIM-B1/4	Provision of digital obstacle data sets
	DAIM-B1/5	Provision of digital aerodrome mapping data sets
DAIM	DAIM-B1/6	Provision of digital instrument flight procedure data sets
	DAIM-B1/7	NOTAM improvements
	DAIM-B2/1	Dissemination of aeronautical information in a SWIM environment
	DAIM-B2/2	Daily Airspace Management information to support flight and flow
	DAIM-B2/3	Aeronautical information to support higher airspace operations
	DAIM-B2/4	Aeronautical information requirements tailored to UTM
	DAIM-B2/5	NOTAM replacement
SWIM	SWIM-B2/1	Information service provision
S W IIVI	SWIM-B2/2	Information service consumption

SWIM-B2/3	SWIM registry
SWIM-B2/4	Air/Ground SWIM for non-safety critical information
SWIM-B2/5	Global SWIM processes
SWIM-B3/1	Air/Ground SWIM for safety critical information

5.5 The ASBU are undergoing a major re structure, which will be presented for approval at the 40th-Triennial ICAO Assembly, to be held in Montreal, Canada, from 24 September to 04 October 2019. Future amendment of this document will include relevant ASBU references, and any related regional priorities and performance expectations.

Quality Management Guidance

- 5.6 Global guidance for the quality management of aeronautical information is provided in ICAO Doc 9839 *Manual on the Quality Management System for Aeronautical Information Services*, available on the ICAO Secure Portal at https://portal.icao.int/icao-net/Pages/Documents.aspx.
- 5.7 A key component of any quality management process for aeronautical information is the establishment of formal agreements between the originators of aeronautical data and the AIS. Such agreements specify the content, quality, maintenance and timing of the provision of aeronautical data or aeronautical information that is required to be promulgated in AIP, and the quality management processes that shall be applied.
- 5.8 Originators of aeronautical data may include State regulatory authorities, airport operators, geospatial information agencies, air traffic services units, flight procedure design authorities, military authorities, police or other public safety or emergency service organizations.
- 5.9 A sample Data Provision Agreement is provided in Doc 8126 Chapter 2 Appendix, containing information introductory elements of such agreements, data provision service, procedural provisions, and additional considerations on aeronautical data and aeronautical information to be provided including timeliness requirements, metadata requirements, and data distribution and data exchange format.

Selection and Training Guidelines for AIS

- 5.10 Global guidance for AIM training is provided in ICAO Doc 9991 *Manual on Aeronautical Information Services Training*, also available on the ICAO Secure Portal.
- 5.11 The following additional guidance for AIS staff selection principles and processes is drawn from the former regional guidance document, the *Guidance Manual for Aeronautical Information Services in the Asia/Pacific Region*:

Selection Principles

- 5.12 Recruitment and selection of staff for the AIS should be made based on merit and relative efficiency, the requirements of the position, in fair and open competition to ensure that the best qualified applicant gets the job.
- 5.13 In assessing the relative efficiency of candidates consideration should be given to the abilities, qualifications, experience, standard of work performance and personal qualities of each applicant, to the extent that those matters are relevant to the efficient performance or potential to efficiently perform the duties.

The First Step

- 5.14 A number of documents must be in place before the Selection Process can commence to clearly identify the work to be done. Normally these would consist of:
 - a) Position Description;
 - b) Duty Statement; and
 - c) Selection Criteria against which applicants will be assessed.
- 5.15 The Position Description and the Duty Statement set the scene about what the position is required to do, what the reporting arrangements are, and how the position fits in with the other work areas.

5.16 The Selection Criteria is the part that sets out how the applicants will be measured for the job of work to be done.

The Selection Process

- 5.17 A Selection Committee will usually be established with a minimum of two people to determine the most suitable applicant.
- 5.18 When necessary, a shortlist of applicants most suitable for further consideration may be made by the committee based on claims against the selection criteria and/or on referee comment.
- 5.19 When there is only one applicant for the position the applicant may be recommended for direct promotion or employment without the establishment of a Selection Committee.
- 5.20 The Selection Committee should decide the procedures to be followed and the sources of information to be used in assessing applicants against the selection criteria. Sources of information may include:
 - a) application;
 - b) interview;
 - c) referee reports;
 - d) work samples; and/or
 - e) performance tests.
- 5.21 The Selection Committee is responsible to ensure that the field of applicants is of sufficient calibre for assessment to proceed. The procedures that the Selection Committee follows will enable a thorough investigation of the claims and merits of the applicants to be assessed against the selection criteria.
- 5.22 The selection report will provide an accurate account of the Committee's assessment of applicants and enough information for the decision-maker to make a decision. The report will be used as the basis for counselling unsuccessful employees and for review requests arising from the selection decision.
- 5.23 An appropriate delegate will usually formally approve the Selection Committee's recommendation.
- 5.24 All unsuccessful applicants interviewed for the job should be notified in writing of the outcome and should be given the opportunity to obtain verbal feedback on their performance if they so desire. Applicants not listed for interview should be advised accordingly.

Operating Procedures for AIS Dynamic Data (OPADD)

The Operating Procedures for AIS Dynamic Data (OPADD) provides regional guidance for common procedures for NOTAM. The Asia/Pacific OPADD had, until 2021, been adapted from the EUROCONTROL OPADD at each update of that document, usually on a four-year cycle, and incorporated in an update of the former Guidance Manual for AIS in the Asia/Pacific Region. AAITF/16 (07 to 11 June 2021) was informed that, for the purpose of maintaining the integrity of the document and their intellectual property, EUROCONTROL agreed to permit the Asia/Pacific Region to utilize their OPADD document but would no longer permit any modification. The use of the EUROCONTROL OPADD in the Asia/Pacific Region was supported by the Ninth Meeting of the Air Traffic Management Sub-Group of APANPIRG (ATM/SG/9, 01 to 05 November 2021) under Conclusion ATM/SG/9-5: Update Asia/Pacific OPADD.

5.26 The OPADD is maintained as a separate document on the ICAO Asia/Pacific eDocuments web-page in order to facilitate its update without the need to also update this Plan.

SNOWTAM Guidance

- 5.27 Amendment 39B to Annex 15, applicable from 04 November 2021, introduced the new SNOWTAM format based on the recommendations of the Friction Task Force of the Aerodrome Design and Operations Panel (ADOP) relating to the use of the global reporting format (GRF) for assessing and reporting runway surface conditions. The SNOWTAM Provisions and format were later moved to PANS-AIM.
- 5.28 The ICAO EUR/NAT Office, in collaboration with EUROCONTROL, prepared the Guidance on the Issuance of SNOWTAM to provide explanation and examples for issuing SNOWTAM in the new format. The use of this guidance in the Asia/Pacific Region was initially supported by Conclusion AAITF/15-1: Guidance on the Issuance of SNOWTAM (as empowered by Conclusion APANPIRG/29/28).
- 5.29 The Guidance on the Issuance of SNOWTAM is maintained as a separate document on the ICAO Asia/Pacific eDocuments web-page in order to facilitate its update without the need to also update this Plan.

Note: SNOWTAM is the applicable aeronautical information product for promulgating information on runway surface conditions under the NOTAM system. For example, AAITF/15 (June 2020) noted that standing water of greater than 3mm depth on a runway would be reported by SNOWTAM regardless of whether it was associated with snow/ice or not. This was a significant change for many Asia/Pacific Administrations, introducing the use of SNOWTAM in locations where snow and ice conditions did not normally exist.

Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services

- 5.30 ICAO Doc 8585 Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services contains the ICAO-approved three-letter designators intended for use on the international aeronautical telecommunications service, and which form part of the Aeronautical Fixed Service (AFS, formerly AFTN) address for connected agencies, authorities and services.
- 5.31 The allocation, amendment and withdrawal of these designators and the updating of Doc 8585 is managed by ICAO Headquarters through the ICAO 3LD website. This arrangement was communicated to States in State Letter AN 2/16. 1014/72.
- 5.32 The ICAO 3LD website is located at https://www4.icao.int/3ld. A copy of the State Letter may be obtained from the ICAO Asia/Pacific Regional Office.

ICAO Location Indicators

- 5.33 ICAO Doc 7910 Location Indicators lists four-letter location indicators, which are assigned by States and checked by ICAO for conformity with the procedures relating to the formulation and assignment of location indicators, as set out in that document. The following process is used to assign location indicators:
 - 1. The State formulates the new four letter location indicator for the location/airport;
 - 2. The State writes to the ICAO Asia/Pacific Regional Director, requesting registration of the location indicator;
 - The ICAO Regional Office coordinates with ICAO Headquarters.
 - 3. The following information is required to be included in the State's request:
 - a. location/Airport Name;

Only provide the airport name if relevant, or if different from the location name, e.g. BANGKOK/DON MUEANG INTL AIRPORT, BRISBANE/BRISBANE INTL, BRISBANE/ARCHERFIELD

- b. requested Location Indicator (e.g. NTKU);
- c. IATA location identifier code, if any; and
- d. Indication of whether the location is, or is intended to be, connected to the AFS.
- 5.34 ICAO Regional Office will formally notify the State when the location indicator has been registered for inclusion in Doc 7910.

International Codes and Routes Designators

5.35 Annex $11-Air\ Traffic\ Services$ defines a significant point as a specified geographical location used in defining an ATS route or the flight path of an aircraft and for other navigation and ATS purposes. It further states that significant points shall be established and identified in accordance with the principles set forth in Annex 11 Appendix 2. Where a significant point is required at a position not marked by the site of a radio navigation, and is used for ATC purposes, it shall be designated by a unique five-letter pronounceable name-code. This name-code designator then serves as the name as well as the coded designator of the significant point.

Rules ensuring the uniqueness of five-letter name-codes (5LNC) are provided in Annex 11 Appendix 2

- 5.36 States' requirements for unique fine-letter pronounceable name-code designators shall be notified to the Regional Offices of ICAO for coordination.
- 5.37 The International Codes and Routes Designators (ICARD) application, administered by ICAO and accessible through the ICAO Secure Portal (https://portallogin.icao.int/) is the sole repository of 5LNCs ensuring global uniqueness, and is the only means by which the requirements of Annex 11 Appendix 2 paragraph 3.5 may be met.

The ICARD application is being adapted for the future management of the assignment of ATS Route Designators

- All States and Administrations with any responsibility for, or involvement in, the design, implementation and/or regulation of ATS routes and instrument flight procedures must have suitable employees registered in ICARD. In all cases where any personnel of a State Regulator or Air Navigation Service Provider are responsible for the allocation of 5LNC for ATS routes, Standard Instrument Departures (SIDs), Standard Terminal Arrival Routes (STARS) or Instrument Approach and Landing (IAL, including RNAV/RNP approaches), at least one person, and preferably two or more, must be registered as an ICARD_5LNC_PLANNER.
- 5.39 ICARD procedures are provided in the *ICARD 5LNC Guidelines*, available on request from the ICAO Asia/Pacific Regional Office. The process for registering as an ICARD_5LNC_PLANNER, and a flow-chart of the ICARD process, is provided in **Appendix B**.
- 5.40 An ICAO-coordinated global project has been established to register all AIP-published 5LNC in ICARD, and to eliminate all duplicated 5LNCs. The details of the project, and the rules applicable to duplicate resolution, were promulgated in State Letter AN 11/45.5-17/101. A copy of the State Letter is available on request from Regional Office.

Implementation Status Monitoring

- 5.41 The Asia/Pacific Regional Plan for Collaborative AIM is one of several important plans that are subsidiary to the Seamless Air Navigation Services (ANS) Plan, namely:
 - Asia/Pacific Search and Rescue (SAR) Plan;
 - Asia/Pacific Region ATM Contingency Plan; and
 - Asia/Pacific Regional Framework for Collaborative ATFM;
- 5.42 States report implementation of the performance expectations of the Seamless ANS Plan using an online reporting form. Monitoring and reporting schemes for subsidiary plans enhance the current Seamless ANS monitoring and reporting scheme.
- 5.43 The monitoring and reporting scheme for Regional collaborative AIM implementation measures State implementation of the performance expectations specified in Section 7 of this document.
- Asia/Pacific Administrations should report their implementation status to the ICAO Asia/Pacific Regional Office at least once annually, by no later than 28 February each year. Reported implementation status will be examined each year by the AAITF, or other appropriate Regional body designated by APANPIRG, to measure, report and advance Regional implementation progress, and to recommend priority AIM elements to be added to the Seamless ANS monitoring and reporting scheme.
- 5.45 It is expected that the relevant AIM expert/s in each Administration will be responsible for the detailed reporting in the Regional AIM Plan Monitoring and Reporting Form, and that these experts will then liaise closely with their Administration's Seamless ANS reporting point of contact to ensure the accuracy of the higher level reporting and consistency between the separate reporting levels.
- 5.46 The Regional AIM Plan Monitoring and Reporting Form is provided at **Appendix C**, and is available on the ICAO Asia/Pacific Regional Office eDocuments web-page at:

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

CURRENT SITUATION

Current Status of Transition from AIS to AIM

- 6.1 The performance objectives of the Asia/Pacific Seamless ANS Plan are expected to be implemented in phases of Regional AIM Capability 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 implemented by 27 November 2025.
- 6.2 As of 07 June 2023, regional implementation of Regional AIM Capability Phase I is summarized as follows: 2 Administrations (5%) have completed implementation, 36 Administrations (\approx 84%) have partly implemented, 5 Administrations (\approx 11%) have not implemented any Phase I performance expectations, overall regional implementation of Phase I \approx 58%.
- 6.3 **Figure 2** illustrates current Asia/Pacific Region progress towards completion of Phase I.

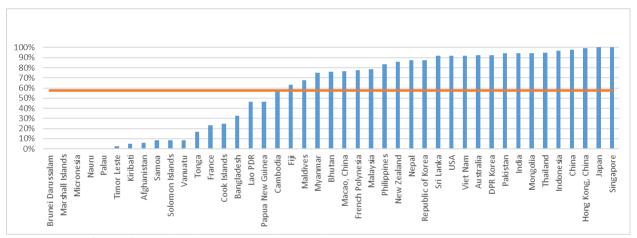


Figure 2: Regional Phase I Implementation Progress (updated on 07 June 2023)

- Regional implementation of Regional AIM Capability Phase II is summarized as follows: 1 Administrations (2%) have completed implementation, 35 Administrations (\approx 81%) have partly implemented, 7 Administrations (\approx 17%) have not implemented any Phase II performance expectations, overall regional implementation of Phase II \approx 42%.
- 6.5 **Figure 3** illustrates current Asia/Pacific Region progress towards completion of Phase II.

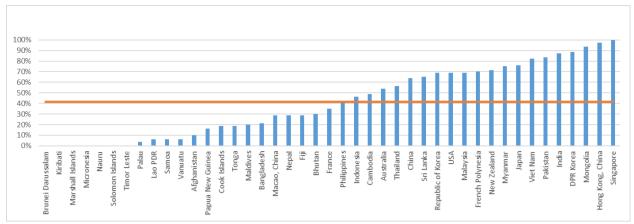
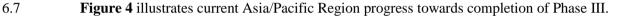


Figure 3: Regional Phase II Implementation Progress (updated on 07 June 2023)

Regional implementation of Regional AIM Capability Phase III is summarized as follows: No Administrations has completed implementation of Phase III, 19 Administrations (\approx 44%) have partly implemented, 24 Administrations (\approx 56%) have not implemented any Phase III performance expectations, overall regional implementation of Phase III \approx 15%.



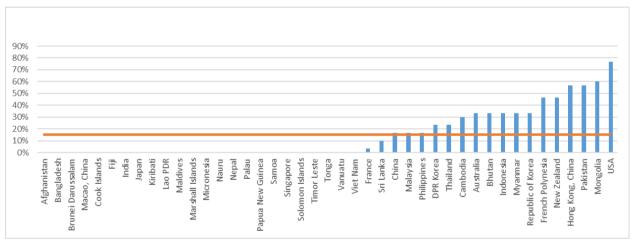


Figure 4: Regional Phase III Implementation Progress (updated on 07 June 2023)

Asia/Pacific AIM Compliance Analysis – USOAP Audit

- 6.8 Protocol Questions (PQs) are the primary tool used in the ICAO Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA) for assessing the effective implementation of ICAO Standards and Recommended Practices (SARPs), Procedures for Air Navigation Services (PANS) and ICAO guidance material.
- According to the assessment of Effective Implementation (EI) of 16 AIS/CHART-related PQs in May 2018 March 2024 in APAC Region, an overall EI was 62%59%. After analyzing, the EI for 4 AIS/CHART-related PQs was below 50% (Figure 5 refers):
 - 37% Cartographic inspector periodic training plan established;
 - 40% Effective State oversight of service provision (charts);
 - 43% AIS data quality and resolution—Annexes 15 and 4 (AIS);

Cartographic inspector's formal training programme developed and

	— Implemented;
• 46%	States adoption of International Standards and Procedures;
	AIS inspector periodic training plan established;
	AIS inspector formal training programme implemented;
	Mechanism for deficiency review and elimination;
	Effective State oversight of service provision (AIS); and
49%	AIS data quality and resolution (Annex 15 and 4) (Charts)

ID	Questions	EI
7.281	Is the training programme appropriately implemented for AIS inspectors?	47%
CE-4		4 / 70
7.289	Has the State established and implemented a mechanism/system with time frame	46%
CE-8	for the elimination of deficiencies identified by AIS inspectors?	40%
7.303	Does the State ensure that the technical staff of AIS and cartographic service	
CE-7	providers' personnel possess the competencies required to perform the assigned	49%
	functions and tasks?	
7.311	Does the State ensure that aeronautical data and information are provided in	34%
CE-7	accordance with the data quality specifications?	J T /0

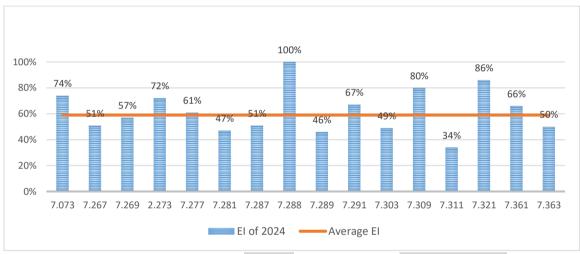


Figure 5: APAC USOAP CMA AIS/CHART PQ Compliance (As of March 2024)

6.10 The following summarizes the Asia/Pacific Regional implementation performance in the four priority areas of AIRAC adherence, monitoring of States' differences to Annex 4 and Annex 15, WGS 84 implementation, and quality management:

PQ 7.309: Does the State ensure that the Aeronautical Information Regulation and Control (AIRAC) system is used to notify the establishment, withdraw and premeditated significant changes of circumstances listed in accordance with Chapter 6 and Appendix 4 Part 2 of Annex 15?

• Average Effective Implementation (EI) of PQ 7.309 for APAC region was 83%.

PQ 7.011: Has the State implemented procedures for amending its ANS specific regulations as well as for identifying and notifying differences, taking into consideration ICAO provisions and their amendments?

Average Effective Implementation (EI) of PQ 7.011 for APAC region was 46%.

PQ 7.109: If the State has initiated the implementation of performance based navigation (PBN), are the prescribed navigation specifications appropriate to the level of communication, navigation and air traffic services? (Where applicable, review documented evidences that the safety of the system is assured with WGS 84 implementation)

• Average Effective Implementation (EI) of PQ 7.109 for APAC region was 79%.

PQ 7.311: Has the State established a mechanism to ensure that aeronautical data quality requirements related to publication resolution and data integrity are I accordance with the provisions of Annex 15, Appendix 7, Tables A7 1 to A7 5?

PQ 7.359: Has the State established a mechanism to ensure that aeronautical data quality requirements related to the data integrity and charting resolution are in accordance with the provisions of Tables 1 to 6 in Appendix 6 of Annex 4? (CE-5)

PQ 7.267: Does the State ensure that a properly organized quality management system in the AIS has been established? (CE 7)

- Average Effective Implementation (EI) of PQ 7.311 for APAC region was 43%.
- Average Effective Implementation (EI) of PQ 7.359 for APAC region was 49%.
- Average Effective Implementation (EI) of PQ 7.267 for APAC region was 54%.

.....

PERFORMANCE IMPROVEMENT PLAN

Structure of the Performance Improvement Plan

- 7.1 Regional collaborative AIM performance objectives are arranged in *Regional AIM Capability* phases aligned, where practicable, with the implementation phases of the Seamless ANS Plan:
 - Regional AIM Capability Phase I, expected to be implemented immediately;
 - Regional AIM Capability Phase II, expected to be implemented by 7 November 2019, and
 - Regional AIM Capability Phase III, expected to be implemented by 3 November 2022 27 November 2025 (to be developed).
- 7.2 Performance expectations are presented under the following general structure for each Regional AIM Capability phase, where relevant:
 - Legislation, Policy and Regulation;
 - Human Performance;
 - Quality Management;
 - AIM Systems and Processes;

Asia/Pacific Seamless ANS Plan – Performance Expectations

7.3 The Seamless ANS Plan includes the following performance expectations in the field of AIS/AIM:

Preferred ATM Service Levels (PASL) Phase I (expected implementation by 12 November 2015)

7.46 ATM systems should be supported by digitally-based AIM systems through implementation of Phase 1 and 2 of the AIS AIM Roadmap in adherence with ICAO and regional AIM planning and guidance material.

PASL Phase II (expected implementation by 07 November 2019)

7.61 ATM systems should be supported by complete implementation of AIM Phase 3 (using at a minimum, version AIXM 5.1).

7.40 ATM systems should be supported by digitally-based AIM systems consistent with **DAIM-B1/1 – 6**, in adherence with ICAO and regional AIM planning and guidance material. ATM systems should be supported by aeronautical information digital data exchange of at a minimum, version AIXM 5.1 (Priority 1).

PASL Phase III (expected implementation by 03 November 2022)

7.55 ATM systems should be supported by digitally-based NOTAM consistent with **DAIM-B1/7**.

PASL Phase IV (expected implementation by 27 November 2025)

NIL.

Structure of the Performance Improvement Plan

7.4 The performance improvement Plan includes performance expectations based on relevant implementation steps from the ICAO Roadmap for Transition from AIS to AIM.

REGIONAL AIM CAPABILITY PHASE I

Expected to be implemented immediately

Legislation, Policy and Regulations

- 7.5 States should develop policy, and enact primary legislation and supporting regulations for Annex 4 and Annex 15 SARPs and PANS-AIM Procedures including:
 - i. Establishment of an organizational structure for the safety oversight of aeronautical information service providers;
 - ii. Requirements for monitoring of differences from Annex 4 and Annex 15 SARPs;
 - iii. Requirements for aeronautical information/data originators;
 - iv. Requirement for AIS quality management systems and processes to be established by all entities in the end-to-end AIS data chain.
- 7.6 National Air Navigation Plans developed in accordance with the Beijing Declaration, and the provisions of the Asia/Pacific Seamless ANS Plan, should include the implementation planning for each of the performance expectations of the Regional Plan for Collaborative AIM.
- 7.7 AIS should be established either as a separate entity within or, ideally, separated from the civil aviation administration in accordance with the guidance provided in ICAO Doc 8126 AIS Manual Chapter 2 (2.4.1.2 and 2.4.1.3).

Human Performance

- 7.8 Competency requirements for AIS personnel should be developed, including English language proficiency requirements, supported by a program of regular performance assessment.
- 7.9 Regular programs of engagement with all stakeholders should be established, including education on:
 - i. State, organization and individual obligations under the Chicago Convention;
 - ii. State Legislation and State Regulations;
 - iii. AIM-related ICAO Annexes to the Chicago Convention, Procedures for Air Navigation Services and guidance material.

Quality Management

- 7.10 Quality management processes for aeronautical information services, as are required to be established under the SARPs in Annex 15¹, should include processes for:
 - i. Data quality monitoring;

¹ Annex 15 Aeronautical Information Services Section 3.6

- ii. AIRAC adherence monitoring; and
- iii. Quality checking
- 7.11 Formal agreements arrangement, as required to be established between AIS providers and aeronautical data originators under the relevant SARPs in Annex 15², should specify the content, quality, maintenance and timing of the provision of aeronautical data that is required to be promulgated in AIP, and the quality management process that shall be applied.

AIM Systems

- 7.12 Full access to relevant ICAO Annexes and Documents should be provided to all personnel having responsibility for the origination, reception, management, publication and/or distribution of aeronautical information and aeronautical data.
- 7.13 States should ensure full compliance of all aeronautical information products³ with the following common reference systems in accordance with the relevant SARPs and procedures in Annex 15 and PANS-AIM⁴:
 - i. Horizontal reference system World Geodetic System 1984 (WGS-84);
 - ii. Vertical reference system Mean Sea Level (MSL) datum and Earth Gravitational Model 1996 (EGM-96);
 - iii. Temporal reference system UTC.

Note: Conclusion ATM/SG/10-9: Revalidation of Coordinate Data urged States to ensure that all surveyed and calculated coordinate data published in AIP or used in Instrument Flight Procedure Design be revalidated:

- 1. Each five years; or
- 2. After a major natural event such as an earthquake or volcanic eruption; or
- 3. Following construction of critical airport elements;

whichever is the sooner, by ground survey, Light Detection and Ranging (LIDAR) survey, or imagery collection.

² Annex 15 Section 2.15 2.1.5

³ Annex 15 defines *Aeronautical Information Products* as aeronautical data and aeronautical information provided either as digital data sets or as a standardized presentation in paper or electronic media, including AIP (including Amendments and Supplements), AIC, aeronautical charts, NOTAM and digital data sets.

⁴ Annex 15 Section 1.2, and Doc 10066 *Procedures for Air Navigation Services – Aeronautical Information Management* (PANS-AIM) Section 2.1

REGIONAL AIM CAPABILITY PHASE II

Expected to be implemented by 7 November 2019

Legislation, Policy and Regulations

- 7.14 Policy, primary legislation and supporting regulations for Annex 4, Annex 15 SARPs and PANS-AIM should be adapted as necessary to support transition to AIM, including:
 - i. Requirements for the implementation of digital databases of aeronautical information, from which digital data sets may be generated;
 - ii. Requirements for production of electronic AIP and other Aeronautical Information Products⁵ derived from digital databases of aeronautical information.

Human Performance

7.15 Training, competency development and performance assessment of AIS personnel should be adapted as necessary to the needs of transition to AIM, including the establishment and maintenance of digital databases and generation of data sets of aeronautical information, quality management systems, and electronic AIP

Quality Management

7.16 Quality management systems should be implemented and maintained encompassing all functions of an aeronautical information service.

AIM Systems

- 7.17 All Administrations should establish and maintain digital databases of aeronautical information as specified in PANS-AIM Appendix 1 Aeronautical Data Catalogue Tables A1-1 to A1-10, where applicable.
- 7.18 Terrain, Obstacle and Aerodrome Mapping Data should be managed through the establishment of:
 - i. A terrain database, from which terrain data sets conforming with Annex 15 Section 5.3.3.3 may be generated;
 - ii. An obstacle database, from which obstacle data sets conforming with Annex 15 Section 5.3.3.4 may be generated; and
 - iii. An aerodrome mapping database, from which aerodrome mapping data sets conforming with Annex 15 Section 5.3.4 may be generated.

⁵ Annex 15 defines *Aeronautical Information Products* as aeronautical data and aeronautical information provided either as digital data sets or as a standardized presentation in paper or electronic media, including AIP (including Amendments and Supplements), AIC, aeronautical charts, NOTAM and digital data sets.

7.18 All Administrations should implement internet-accessible electronic AIP generated from a digital database of aeronautical information

REGIONAL AIM CAPABILITY PHASE III

Expected to be implemented by 27 November 2025

Legislation, Policy and Regulations

- 7.19 Policy, primary legislation and supporting regulations for Annex 4 and Annex 15 SARPs, and PANS-AIM procedures, should be adapted as necessary to support the automated exchange of aeronautical data in a SWIM environment, including requirements for:
 - i. Interoperability with meteorological products;
 - ii. Communications networks for the exchange of aeronautical data; and
 - iii. Electronic aeronautical charts.

Human Performance

7.20 Training, competency development and performance assessment of AIS personnel should be adapted as necessary to support the automated exchange of aeronautical data in a SWIM environment, and the generation of electronic aeronautical charts.

AIM Systems and Processes

- 7.21 All Administrations should
 - i. exchange digital data sets of aeronautical information in a SWIM environment, aligned with ASBU DAIM-B2/1.
 - ii. provide Aeronautical Information briefing with integrated meteorological information;
 - iii. provide Electronic aeronautical charts.

Note 1: The Asia/Pacific Seamless ANS Plan PASL Phase III includes the expectation that ATM systems should be supported by digitally-based NOTAM aligned with ASBU DAIM-B1/7, replacing paper product-based NOTAM with digital NOTAM.

Note 2: Aeronautical briefing with integrated meteorological information, and electronic charts, are subject to the review of the ICAO Roadmap for Transition from AIS to AIM.

.....

APPENDIX A - REGIONAL COLLABORATIVE AIM PLANNING PRINCIPLES

People: Cultural and Political Background

1. High-level political support (including development of educational information for decision-makers) to support Seamless ANS initiatives, including military cooperation and AIM.

Source: Asia/Pacific Seamless ANS Plan - Principles

Technology and Information: Aeronautical Data

2. Early implementation of AIM, including cooperative development of aeronautical databases and SWIM to support interoperable operations.

Source: Asia/Pacific Seamless ANS Plan - Principles

Legislation, Policy and Regulation

- 3. Legislation supporting the signatory State obligations under the Chicago Convention provides the legal basis and compulsion for engagement of all stakeholders in the AIS.
- 4. Regulations establish requirements for all stakeholders in the AIS including information and data originators, the AIS and its users
- 5. The role of an AIS regulator (AIS & Charts inspectorate) is not to check and approve every item of aeronautical information promulgated by the AIS.
- 6. The role of an AIS regulator (AIS & Charts inspectorate) is to oversight the processes of AIS, such as quality management and safety management.

Human Performance

- 7. Clear accountabilities for the quality and timeliness of aeronautical information should be established.
- 8. English language proficiency requirements for quality-managed AIS translation of information and data received from originators.
- 9. Standardization where practicable of English language expressions used in aeronautical information
- 10. Establishment of competency criteria for information/data originators and AIS personnel, supported by regular performance assessment.
- 11. Contextual understanding of aeronautical information or data received by AIS, brought about through an appropriate mixture of knowledge, experience and skills among AIS personnel.
- 12. IT capability to ensure AIM capability.

- 13. Relationships between all stakeholders are built through consultation, inclusion, and cooperative education activities.
- 14. Human factors considerations include training, competency assessment, human-machine interfaces and environment.

Quality Management

- 15. Quality management applies to the entire aeronautical information/data chain
- 16. Quality management of aeronautical data requires the establishment of formal agreements between originators of aeronautical information/data and the AIS.

AIM Systems and Processes

- 17. Maintenance regulations and procedures ensure the regular updating, correction and, when redundant, removal of aeronautical information.
- 18. The use of contemporary technology to improve the quality and timeliness of aeronautical information, and the efficiency of its publication.
- 19. Migration of aeronautical information into digital databases requires the establishment of a project team and the application of quality and safety management processes.

20.	Integration of safety management and quality management systems

APPENDIX B

- ICARD REGISTRATION PROCEDURE - AUTHORIZED USERS

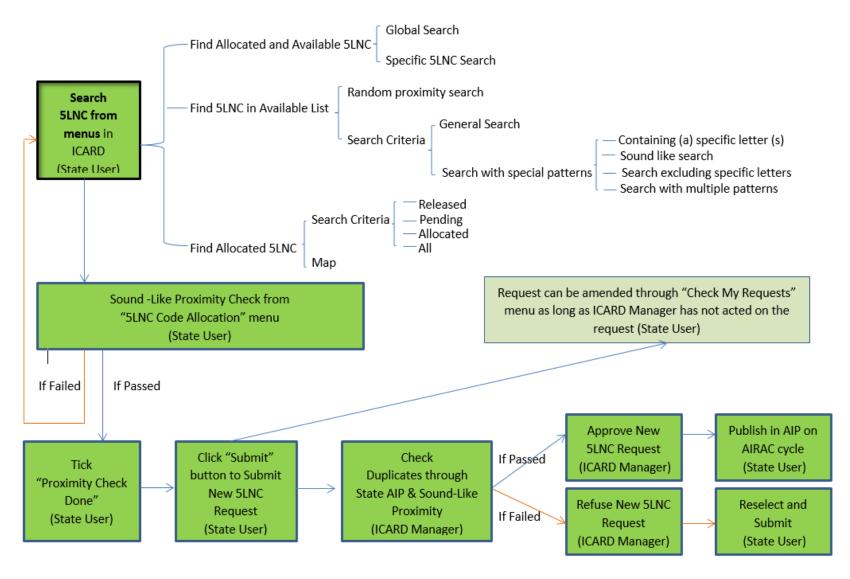
- ICARD PROCESS FLOW CHART

ICARD REGISTRATION PROCESS

There are **three** steps to registration as an ICARD 5LNC Planner.

- If you do not yet have user access to the ICAO Secure Portal, complete all three steps.
- If you already have access to the ICAO Secure Portal but not to ICARD, go to Step 2.
- If you already have access to ICARD, but are not registered as an ICARD_5LNC_PLANNER, go to Step 3.
- 1. Register for access to the ICAO Secure Portal (you may already have this access. If so, proceed directly to step 2.)
 - i. Go to http://portal.icao.int/
 - ii. Click on Request an account
 - iii. Follow the instructions. You will be notified when your registration for access to the ICAO Secure Portal is approved.
- 2. Log in to the ICAO Secure Portal http://portal.icao.int with your secure login credentials, then register for ICARD as follows:
 - i. Click on the **PROFILE** link in your Secure Portal home page
 - ii. A new window will open. In the menu on the left of the new window, click on the **GROUP SUBSCRIBE/UNSUSCRIBE** link.
 - iii. Enter the group name **ICARD** in the **SUBSCRIBE TO** field, and add the justification for your request in the **JUSTIFICATION** field.
 - iv. Click the **SUBMIT CHANGES** button.
- 3. Register for ICARD_5LNC_PLANNER in the same manner as described in step 2: Log in to the ICAO Secure Portal http://portal.icao.int with your secure login credentials, then register for ICARD 5LNC PLANNER as follows:
 - i. Click on the **PROFILE** link in your Secure Portal home page
 - ii. A new window will open. In the menu on the left of the new window, click on the **GROUP SUBSCRIBE/UNSUSCRIBE** link.
 - iii. Enter the group name ICARD_5LNC_PLANNER in the SUBSCRIBE TO field, and add the justification for your request in the JUSTIFICATION field.

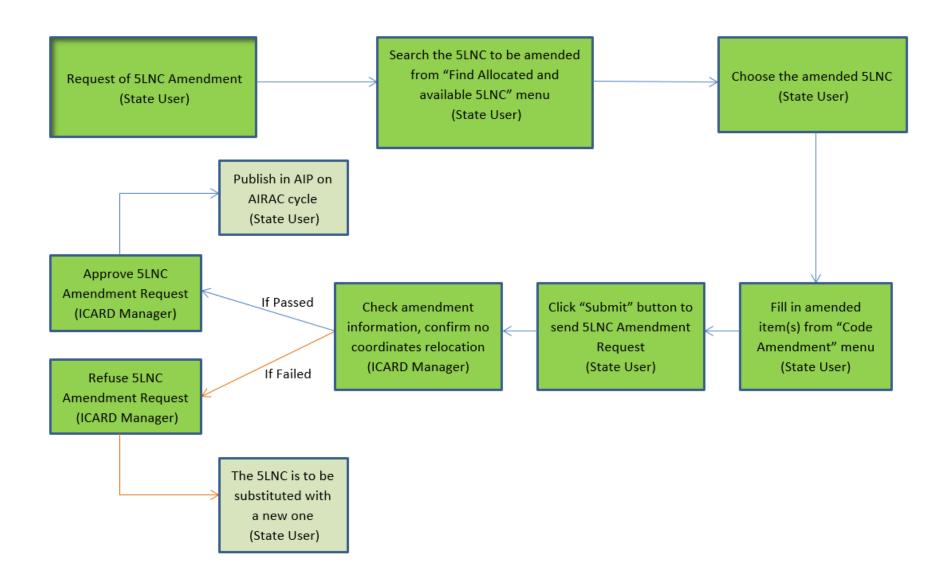
iv.	Click the SUBMIT CHANGES button.



Flow Chart for New 5LNC Request

Notes:

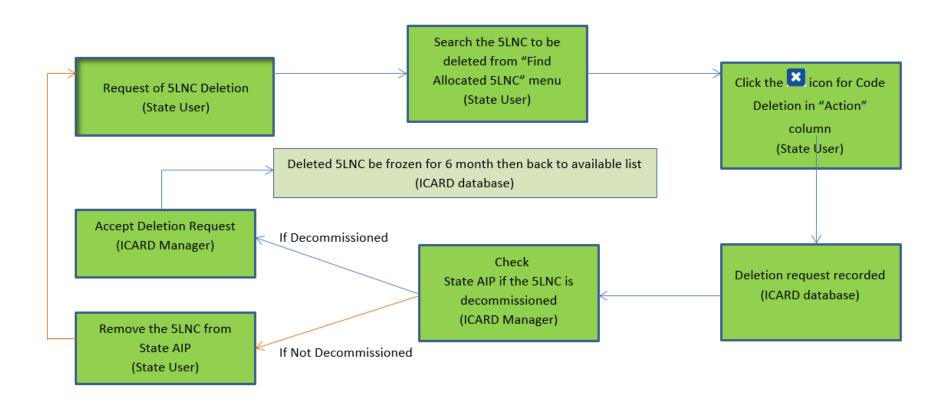
- In all cases, the coordinates of the requested new 5LNC must be within the territory or any FIR of the requesting State. If this is not the case, the request will be refused.
- For 5LNCs on FIR boundaries, the requesting State has to coordinate with all State(s) concerned before the new 5LNCs are requested, implemented and published in relevant AIPs, in accordance with the AIRAC cycle and prior notification requirement of Annex 15.
- After the submission of new 5LNC request, State User's request has been successfully recorded BUT NOT YET approved by ICARD Regional Data Manager. States must wait for Notification of approval by the ICARD Regional Data Manager before proceeding to publication in AIP. If requests are urgent, ICARD Users should inform the ICARD Regional Data Manager by e-mail to expedite processing.



Flow Chart for 5LNC Amendment

Notes:

- There are many types of amendments requested by State users, eg. changes of coordinates, comments, purpose, addition or deletion of coordinating States, etc. It is advised to add reason and purpose of the amendment in the "comment box".
- If the request is the change of coordinates not published yet in States AIP, after proximity checking, if the result is fine, the request can be approved.
- For an implemented 5LNC is to be relocated, it must be substituted with a new 5LNC drawn from ICARD (Annex 11 Appendix 2 paragraph 3.4); and
- For 5LNCs on FIR boundaries, the State/Administration requesting State must coordinate with the State(s) concerned before the submission of amendment request.



Flow Chart for 5LNC Deletion

Note:

- **Serior** Before the submission of a 5LNC deletion request, the 5LNC must be deleted from relevant State AIP(s):
- For the 5LNC deletion which is at FIR boundary, make sure it has been coordinated between all States concerned and removed from all State AIPs involved; and
- Deleted 5LNC will remain frozen for a period of 6 months. After that time, it will automatically return to the reserve list of the ICARD database of the same ICAO Region.

.....

Asia/Pacific Regional Plan for Collaborative AIM Appendix C

REGIONAL AIM PLAN MONITORING AND REPORTING FORM AIM PERFORMANCE INDICATORS

The following indicators are based on the Performance Improvement Plan of the Asia/Pacific Regional Framework for Collaborative AIM, which should be read in conjunction with this form. The information provided will be used by the relevant Regional bodies to assess individual Administration and overall regional compliance with the AIM Plan and may be used by Administrations to internally evaluate their implementation status.

INSTRUCTIONS

1. Use the drop-down menu to input a value corresponding to each question.
1. Ose the drop-down mend to input a value corresponding to each question.

2. Forward the completed form in MS Excel format to apac@icao.int.

Indicate whether your administration has:

Regional AIM Capability Phase I

		Transfer of the state of the st	
1		Developed policy and enacted primary legislation and supporting regulations for Annex 4 and Annex 15 SARPS, and PANS-AIM	
1		Procedures including:	
	1a	establishment of an organizational structure for the safety oversight of aeronautical information service providers;	0%
	1b	requirements for monitoring of differences from Annex 4 and Annex 15 SARPS;	0%
	1c	requirements for aeronautical information/data originators;	0%
	1d	requirement for AIS quality management systems and processes to be established by all entities in the end-to-end AIS data chain.	0%
2		Ensured National Air Navigation Plans include implementation planning for each of the performance expectations of the Regional Plan	00/
2		for Collaborative AIM.	0%
3		Established AIS either as a separate entity within, or separated from the civil aviation administration.	0%
4		Developed competency requirements for AIS personnel, including English language proficiency requirements, supported by a program	0%
4		of regular performance assessment.	0%
5		Established regular programs of engagement with all stakeholders.	0%
6		Established quality management processes for aeronautical information.	0%
7		Established formal agreements between AIS providers and aeronautical data originators.	0%
Q		Provided full access to relevant ICAO Annexes and Documents to all personnel having responsibility for the reception, management,	0%
8		publication and/or distribution of aeronautical information and aeronautical data	

Asia/Pacific Regional Plan for Collaborative AIM Appendix C

9	Ensured compliance of all aeronautical products with common reference systems WGS-84, MSL/EGM-96 and UTC	0%
	Regional AIM Capability Phase II	
10	Adapted policy, primary legislation and supporting regulations to support digital data sets of aeronautical information and associated products	0%
11	Adapted training, competency and performance assessment of AIS personnel for digital data sets and eAIP	0%
12	Implemented and maintained quality management systems encompassing all functions of the AIS	0%
13	Established and maintained digital databases of aeronautical information (PANS-AIM Appendix 1)	0%
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	0%
14b	an obstacle database, from which obstacle data sets conforming with Annex 15 Section 5.3.3.4 may be generated	0%
14c	e an aerodrome mapping database, from which aerodrome mapping data sets conforming with Annex 15 Section 5.3.4 may be generated	0%
15	Implemented internet-accessible electronic AIP generated from digital database of aeronautical information	0%
	Regional AIM Capability Phase III	
16	Adapted policy, primary legislation and supporting regulations to support automated exchange of aeronautical data in a SWIM environment	0%
17	Adapted competency development and performance assessment of AIS personnel to support the automated exchange of aeronautical data and production of electronic charts in a SWIM environment.	0%
18	Commenced aeronautical information exchange through digital data sets, integrated briefing and electronic charts in a SWIM environment.	0%
		0%

INTERNATIONAL CIVIL AVIATION ORGANIZATION

European and North Atlantic Office



EUR Doc 041 GUIDANCE ON THE ISSUANCE OF SNOWTAM

(Applicable from 4 November 2021)

- First Edition – (V.1.1)

December 2020

EUROPEAN AND NORTH ATLANTIC OFFICE OF ICAO

International Civil Aviation Organization (ICAO)

European and North Atlantic (EUR/NAT) Office 3 bis, Villa Emile Bergerat 92522, Neuilly-sur-Seine CEDEX FRANCE

e-mail : icaoeurnat@paris.icao.int

Tel : +33 1 46 41 85 85 Fax : +33 1 46 41 85 00

web: http://www.icao.int/EURNAT

EXCLUSION OF LIABILITY

A printed or electronic copy of this documentation is provided to the recipient as is and without any warranties as to its description, condition, quality, fitness for purpose or functionality and for use by the recipient solely for guidance only. Any implied conditions terms or warranties as to the description, condition, quality, fitness for purpose or functionality of the software and associated documentation are hereby excluded. This Document is for guidance only not to replace the SARPs provisions; SARPs relating to GRF and SNOWTAM are contained in relevant ICAO Annexes and Documents (Annex14, PANS-Aerodrome, PANS-AIM, Circular 355, etc.), which should be read in conjunction with the material contained in this Document. The information published by ICAO in this document is made available without warranty of any kind; the Organization accepts no responsibility or liability whether direct or indirect, as to the currency, accuracy or quality of the information, nor for any consequence of its use. The designations and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area of its authorities, or concerning the delimitation of its frontiers or boundaries.

There is no objection to the reproduction of extracts of information contained in this Document if the source is acknowledged.

RECORD OF AMENDMENTS

Edition Number	Edition Date	Description	Pages Affected
1.0	February 2020	First Edition	All
		Endorsed by EASPG (through correspondence)	
1.1	December 2020	Endorsed by EASPG (through correspondence) - Applicability date changed to 4 November 2021 - Assignment of EUR Doc number (041) - Some editorial amendments	All

TABLE OF CONTENTS

1. INTRODUCTION6
2. PURPOSE OF THE DOCUMENT6
3. GENERAL PROVISIONS OF SNOWTAM7
4. DESCRIPTIONS OF SNOWTAM ITEMS10
SECTION 1: AEROPLANCE PERFORMANCE CALCULATION SECTION11
SECTION 2: SITUATIONAL AWARENESS SECTION15
5. EXAMPLES OF SNOWTAM17
6. CONCLUSIONS19
REFERENCES20
ATTACHMENT A: FREQUENTLY ASKED QUESTIONS/ISSUES AND EAD POLICY/APPROACH21
ATTACHMENT B: SAMPLE AIC TEMPLATE31

1. INTRODUCTION

- 1.1. The adoption of Amendment 39 to Annex 15 was issued on 1 April 2016 (State Letter Ref.: AN 2/2.4-16/18) with the effective date of 11 July 2016. The second part of the amendment (39B) is related to the new SNOWTAM format with applicability date 4 November 2021.
- 1.2. Amendment 39B introduced the new SNOWTAM format, based on the recommendations of the Friction Task Force of the Aerodrome Design and Operations Panel (ADOP) relating to the use of a global reporting format for assessing and reporting runway surface conditions. The SNOWTAM provisions/format was later moved to PANS-AIM (ICAO DOC 10066).

2. PURPOSE OF THE DOCUMENT

- 2.1 The ICAO EUR/NAT Office in collaboration with the EUROCONTROL (AIM/SWIM Team and EAD) prepared this document to provide explanation and examples for issuing SNOWTAM in the new format (as of 4 November 2021).
- 2.2 List of issues identified by the AIM/SWIM Team (joint cooperation ICAO EUR/NAT Office, EUROCONTROL, EAD) including the details of the EAD policy/approach for addressing the issues is at **Attachment A**.
- 2.3 First Edition of the guidance material was endorsed by the European Aviation System Planning Group (EASPG) in February 2020. The current revision of the guidance material was endorsed by the EASPG, as EUR Doc 041, in December 2020.
- 2.4 Submit any comments, observations or suggestions on this document to the ICAO EUR/NAT Office: icaoeurnat@paris.icao.int

3. GENERAL PROVISIONS OF SNOWTAM

Definition of SNOWTAM: A special series NOTAM given in a standard format providing a surface condition report notifying the presence or cessation of hazardous conditions due to snow, ice, slush, frost, standing water or water associated with snow, slush, ice or frost on the movement area. (PANS-AIM)

3.1. Metric units shall be used in SNOWTAM and the unit of measurement (e.g. mm, cm, m, etc.) should not be reported.

Example: 09/15/30 (item F): means that the depth of the contaminant in the first part of runway is 9mm, in the second part 15mm and in the third part 30mm. Units of measurement are metric but is not reported in the message.

3.2. As of 4 November 2021, the maximum validity of SNOWTAM is 8 hours.

Note 1 – when no SNOWTAM is issued after 8 hours of a previous SNOWTAM for an aerodrome, the old SNOWTAM is expired and it is assumed that there is no more significant runway surface condition to be reported.

- Note 2 For the European Commission Implementing Regulation (EU) 2020/1177 of 7 August 2020 amending Implementing Regulation (EU) 2020/469 concerning applicability date and other details in the EU, please visit: https://eur-lex.europa.eu/eli/reg_impl/2020/1177/oj
- 3.3. New SNOWTAM shall be issued whenever a new runway condition report (RCR) is received from the aerodrome operator.
- Note 1- prior arrangement between AIS (NOTAM Office) and the aerodrome authority is required to specify the means and process of submission of the Runway Condition Report (RCR)/initiation of SNOWTAM.
- Note 2 If there is a valid SNOWTAM in the old format (with 24 hours validity) issued on 3 November 2021, it is recommended to issue a new SNOWTAM with the new format, right after 0000 UTC on 4 November 2021 to replace the old format SNOWTAM.
- 3.4. A SNOWTAM cancels the previous SNOWTAM. When a new SNOWTAM is issued for a specific aerodrome that has another valid SNOWTAM, the new one automatically replaces the older SNOWTAM (there is no need to reference the older SNOWTAM in the new SNOWTAM, as what we do for NOTAM).
- 3.5. With reference to the SNOWTAM template (see paragraph 4), the letters used to indicate items (A to T; third column of the SNOWTAM template) are only used for reference purpose and should not be included in the messages. The letters, M (mandatory), C (conditional) and O (optional) (second column of the SNOWTAM template) mark the usage and information.

Example: items B) to G) below without the letters indicating items (separated by one space):

01150915 12L 5/2/2 100/50/75 NR/06/06 WET/SLUSH/SLUSH

3.6. The abbreviated heading "TTAAiiii CCCC MMYYGGgg (BBB)" is included to facilitate the automatic processing of SNOWTAM messages in computer data banks. The explanation of these symbols is:

TT = data designator for SNOWTAM = SW;

AA = geographical designator for States, e.g. LF = FRANCE, EG = United Kingdom (see Location Indicators (Doc 7910), Part 2, Index to Nationality Letters for Location Indicators);

iiii = SNOWTAM serial number in a four-digit group;

CCCC = four-letter location indicator of the aerodrome to which the SNOWTAM refers (see Location Indicators (Doc 7910));

MMYYGGgg = date/time of observation/measurement, whereby:

MM = month, e.g. January = 01, December = 12

 $YY = \text{day of the month}^{1}$

GGgg = time in hours (GG) and minutes (gg) UTC;

(*BBB*) = optional group for correction, in the case of an error, to a SNOWTAM message previously disseminated with the same serial number = COR.

Note 1.— Brackets in (BBB) are used to indicate that this group is optional.

Note 2.— See Attachment A, item 6, for more information on the EAD recommendation regarding geographical designator for States (AA).

Note 3.— When reporting on more than one runway and individual dates/times of observation/assessment are indicated by repeated Item B, the latest date/time of observation/assessment is inserted in the abbreviated heading (MMYYGGgg).

Example: Abbreviated heading of SNOWTAM No. 149 from Zurich, measurement/observation of 7 November at 0620 UTC: SWLS0149 LSZH 11070620

Note 3.— The information groups are separated by a space, as illustrated above.

3.7. The text "SNOWTAM" in the SNOWTAM Format and the SNOWTAM serial number in a four-digit group shall be separated by a space, for example: **SNOWTAM 0124**.

Note 1.— The SNOWTAM serial number resets at the beginning of each calendar year (begins with SNOWTAM 0001 on January 1 at 0000 UTC).

3.8. Repeating information in the aeroplane performance calculation section for more than one runway: when a SNOWTAM is reporting on more than one runway of the aerodrome for which the SNOWTAM is issued, Items B to H (aeroplane performance calculation section) should be repeated.

Example:

02170135 09R 5/2/2 100/75/75 NR/06/06 WET/SLUSH/SLUSH
02170225 09C 2/3/3 75/100/100 06/12/12 SLUSH/WET SNOW/WET SNOW 35
02170225 09L 3/3/3 50/50/75 08/15/10 WET SNOW/WET SNOW/WET SNOW 40

3.9. **Repeating information in the situational awareness section:** When reported, the information in the situational awareness section could be repeated, as applicable, for each runway, taxiway and apron.

Note 1.— Option 1: it is recommended that the items of situational awareness section be kept in alphabetical order when repeated (item I) to S)). It means that item I) should be repeated for several runways (if applicable) and then item J), then item K), etc. and item T) ends the SNOWTAM message. Example:

DRIFTING SNOW. RWY 09L LOOSE SAND. RWY 09R LOOSE SAND. RWY 09L CHEMICALLY TREATED. RWY 09R CHEMICALLY TREATED. RWY 09C CHEMICALLY TREATED.)

1 SNOWTAM coding in this guidance material is reproduced from PANS AIM, Appendix 4. Attention should be paid to "day of the month" abbreviated with YY.

Note 2.— Option 2: repeat all relevant items of the same runway (item I) to M)) for each runway, then to continue with the rest of the items (item N) to T)). Example:

DRIFTING SNOW. RWY 09L LOOSE SAND. RWY 09L CHEMICALLY TREATED. RWY 09R LOOSE SAND.RWY 09R CHEMICALLY TREATED. RWY 09C CHEMICALLY TREATED.)

Note 3— since there is no specific guideline/rule for repeating items in the situational awareness section, NOTAM systems should be flexible to receive and process situational awareness information in any order.

Note 4.— items in the situational awareness section are separated by a full stop and a space (item L. item M. item N. etc.).

- 3.10. For readability purposes of the SNOWTAM message, include a line feed after the SNOWTAM serial number, after Item A, and after the aeroplane performance calculation section.
- 3.11. Mandatory information in SNOWTAM is:
 - 1) AERODROME LOCATION INDICATOR;
 - 2) DATE AND TIME OF ASSESSMENT;
 - 3) LOWER RUNWAY DESIGNATOR NUMBER;
 - 4) RUNWAY CONDITION CODE FOR EACH RUNWAY THIRD; and
 - 5) CONDITION DESCRIPTION FOR EACH RUNWAY THIRD (when runway condition code (RWYCC) is reported 1–5)

Note 1.— See Attachment A, item 8, for more information on the EAD implementation policy/approach regarding reporting Condition description for each runway third.

Note 2.— When no information is to be reported, insert "NR" at its relevant position in the message to indicate to the user that no information exists (/NR).

Example: a SNOWTAM with the minimum (mandatory) information

GG EADBZTZX ...
111045 EADDYNYX
SWEA0124 EADD 01111035
(SNOWTAM 0124
EADD

01111035 09R 5/5/5 NR/NR/NR NR/NR/NR FROST/FROST/FROST)

4. DESCRIPTION OF SNOWTAM ITEMS

This section provides description and examples for each item of the SNOWTAM format, as shown in the following template:

(COM	(PRIORITY (ADDRESSES) (COM INDICATOR)							<≡								
heading)	(DATE AND TIME OF FILING)			NATOR'S (ATOR)												<≣
(Abbreviated	(SWAA* SERIAL	NUMBER)		(LOCATION DATE/TIME OF ASSESMENT INDICATOR)				T (OPT			AL GR	OUP)				
heading)	S W * *															<≡(
SNOWTAM	(Serial numb	er)		<≡												
_	<u> </u>	Aeroplane pe	formance	calculation se	ection											
(AERODROME	LOCATION INDICATOR)										М	A)				<≡
(DATE/TIME OF	ASSESSMENT (Time of co	ompletion of asse	ssment in	UTC))							М	B)				<u>→</u>
(LOWER RUNW	YAY DESIGNATION NUMBE	ER)									М	C)				→
	DITION CODE (RWYCC) C Condition Assessment Matri										М	D)	1	1		
(PER CENT CO	VERAGE CONTAMINANT	FOR EACH RUN	WAY THIR	RD)							С	E)	1	/		→
(DEPTH (mm) C	F LOOSE CONTAMINANT	FOR EACH RUN	IWAY THI	RD)							С	F)	1	/ -		→
(Observed on each Compact Comp	OW ON TOP OF COMPACT DW ON TOP OF ICE IG WATER DN TOP OF COMPACTED	om threshold havi	ng the low				SHED				M O	G)	1	-		→
WIDTH		Situat	ional awa	reness section												
(REDUCED RU	JNWAY LENGTH, IF LESS										0	l)				→
	OW ON THE RUNWAY)										0	J)				→
(LOOSE SAND	ON THE RUNWAY)										0	K)				→
(CHEMICAL TE	REATMENT ON THE RUNV	VAY)									0	L)				→
	ON THE RUNWAY) ance from runway centre lin	ne (m) followed by	' "L", "R" oi	r "LR" as applica	able)						0	M)		_		→
(SNOWBANKS	ON A TAXIWAY)										0	N)				→
(SNOWBANKS	ADJACENT TO THE RUN	WAY)									0	O)		_		→
(TAXIWAY CO	NDITIONS)										0	P)				→
(APRON CONI	DITIONS)										0	R)				→
(MEASURED F	RICTION COEFFICIENT)										0	S)				→
(PLAIN-LANGU	JAGE REMARKS)										0	T))
Informat Informat Words in	CAO nationality letters as gi ion on other runways, repe- ion in the situational awarer in brackets () not to be trans rs A) to T) refer to the <i>Instru</i>	at from B to H. ness section repe smitted.	ated for ea	ach runway, taxi	way and a	ıpron. F	epeat a	s applic	able wh	enreporte	ed.					

SIGNATURE OF ORIGINATOR (not for transmission)

^{*} The terms SLIPPERY WET and SPECIALLY PREPARED WINTER RUNWAY in item G are used by States that follow EASA Regulations. See details below in note.1 of Section 1, Item D.

SECTION 1: AEROPLANE PERFORMANCE CALCULATION SECTION

Item A — Aerodrome location indicator (four-letter location indicator) of the aerodrome, for which the SNOWTAM is issued. The aerodrome location indicators are listed in the ICAO DOC 7910 (Location Indicators).

Example: **LFPG** = Paris/Charles du Gaulle

Item B — Date and Time of assessment of the runway surface condition (eight-figure date/time group giving time of observation as month, day, hour and minute in UTC)

Example: 12040638

12 = December; $04 = Day 4 (4^{th})$; 0638 (06 hours and 38 minutes)

Item C — Lower runway designator number (nn[L] or nn[C] or nn[R])

Note.1 — Only one runway designator is inserted for each runway and always the lower number.

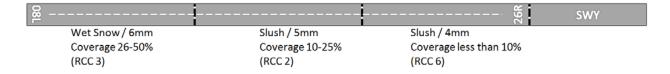
Example: 08L for RWY08L/26R, 08L should be reported (08<26)



Item D — Runway condition code for each runway third. Only one digit (0, 1, 2, 3, 4, 5 or 6) is inserted for each runway third, separated by an oblique stroke (n/n/n). Runway Condition Code is determined during the assessment of the runway surface condition, in accordance with the provisions of the PANS-Aerodrome and the Runway Condition Assessment Matrix (RCAM).

Example: 3/2/6: runway condition code for the first part of runway 08L is 3, for the second part 2 and for the third parts is 6.

Note – Since less than 10% coverage of slush exist on the third part, RWYCC is reported 6 and the condition description will be reported Dry).



	Runway condition assessment matrix (RCAM)						
	Assessment	Downgrade assessment of	criteria				
Runway condition code	Runway surface description	Aeroplane deceleration or directional control observation	Pilot report of runway braking action				
6	•DRY						
5	FROST WET (The runway surface is covered by any visible dampness or water up to and including 3 mm depth) Up to and including 3 mm depth: SLUSH DRY SNOW WET SNOW	Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	GOOD				
4	-15°C and Lower outside air temperature: •COMPACTED SNOW	Braking deceleration OR directional control is between Good and Medium.	GOOD TO MEDIUM				
3	•WET ("slippery wet" runway) •DRY SNOW or WET SNOW (any depth) ON TOP OF COMPACTED SNOW More than 3 mm depth: •DRY SNOW •WET SNOW Higher than -15°C outside air temperature: •COMPACTED SNOW	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	MEDIUM				
2	More than 3 mm depth of water or slush: •STANDING WATER •SLUSH	Braking deceleration OR directional control is between Medium and Poor.	MEDIUM TO POOR				
1	•ICE	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	POOR				
0	WET ICE WATER ON TOP OF COMPACTED SNOW DRY SNOW or WET SNOW ON TOP OF ICE	Braking deceleration is minimal to non- existent for the wheel braking effort applied OR directional control is uncertain.	LESS THAN POOR				

Note.1 — The RCAM is a tool to be used when assessing runway surface conditions. It is not a standalone document and shall be used in compliance with the associated assessment procedures including downgrade and upgrade criteria detailed in ICAO DOC 9881 (PANS-Aerodrome), Part II, Chapter 1.

Note.2 — States that follow EASA Regulations additionally use SPECIALLY PREPARED WINTER RUNWAY for runway condition code 4 and the descriptor WET for runway condition code 3 is replaced by SLIPPERY WET.

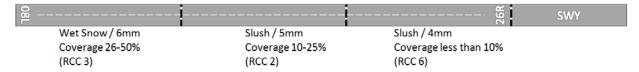
Item E — Per cent coverage is reported as NR (less than 10% or DRY), 25 (10-25 %), 50 (26-50 %), 75 (51-75 %) or 100 (76-100 %) for each runway third, separated by an oblique stroke ([n]nn/[n]nn).

Note 1.— This information is provided only when the runway condition for each runway third (Item D) has been reported as other than 6 and there is a condition description for each runway third (Item G) that has been reported other than DRY.

Note 2.— When the conditions are not reported, this will be signified by the insertion of "NR" for the appropriate runway third(s).

Note 3. — When the runway condition is "DRY" or the coverage is less than 10%, item E shall be reported by inserting "NR".

Example: **50/25/NR**: percentage of coverage at the first runway third of RWY 08L is 50 % (between 26 to 50%), at the second part of the runway is 25 % (between 10 to 25 %) and the coverage is less than 10 % at the third part of the runway.



Item F — Depth of loose contaminant for each runway third. When provided, insert in millimetres for each runway third, separated by an oblique stroke (nn/nn/nn or nnn/nnn/nnn). Depth should be reported in 2 or 3 digits (i.e. 05 for 5mm, 115 for 115mm, etc.) and the units of measurement (mm) is not reported/inserted.

Note 1.— This information is only provided for the following contamination types:

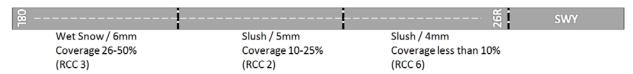
- standing water, values to be reported 04, then assessed value;
- slush, values to be reported 03, then assessed value;
- -wet snow, values to be reported 03, then assessed value; and
- dry snow, values to be reported 03, then assessed value.

Note 2.— When the conditions are not reported, this will be signified by the insertion of "NR" for the appropriate runway third(s).

Note 3.— NR also includes the situations when the depth of the contaminant is less than the minimum values to be reported (as indicated above) or that part of runway is dry, etc.

Note 4. – For contaminants other than STANDING WATER, SLUSH, WET SNOW or DRY SNOW, the depth is not reported. The position of this type of information in the information string is then identified by /NR/.

Example: 06/05/04: depth of the contaminant in the first part of runway is 6mm, in the second part 5mm and in the third part 4mm.



Item G — Condition description for each runway third. Insert any of the following condition descriptions for each runway third, separated by an oblique stroke:

- COMPACTED SNOW
- DRY SNOW
- DRY SNOW ON TOP OF COMPACTED SNOW
- DRY SNOW ON TOP OF ICE
- FROST
- ICE

- SLUSH
- STANDING WATER
- WATER ON TOP OF COMPACTED SNOW
- WET
- WET ICE
- WET SNOW
- WET SNOW ON TOP OF COMPACTED SNOW
- WET SNOW ON TOP OF ICE
- DRY (only reported when there is no contaminant)

Note 1.— When the conditions are not reported, this will be signified by the insertion of "NR" for the appropriate runway third(s).

Note 2.— States that follow EASA Regulations use the additional descriptors SPECIALLY PREPARED WINTER RUNWAY and SLIPPERY WET.

Example: **WET SNOW/SLUSH/DRY**: condition description is "Wet snow" for the first part of runway, "Slush" for the second and "Dry" for the third parts of runway (since the coverage of slush on the third part is less than 10%, it is reported as Dry).



Item H — Width of runway to which the runway condition codes apply. Insert the width in meters (without units of measurement), if it is less than the published runway width.

Example: 35: published width of RWY 08L/26R is 45m and the RCR applies to 35m of it.

SECTION 2: SITUATIONAL AWARENESS SECTION

Note 1.— Elements in the situational awareness section end with a full stop.

Note 2.— Elements in the situational awareness section for which no information exists, or where the conditional circumstances for publication are not fulfilled, are left out completely.

Note 3.— The situational awareness section shall be separated from the aeroplane performance calculation section by an empty line.

Item I — Reduced runway length. Insert the applicable runway designator and available length in meters (example: RWY nn [L] or nn [C] or nn [R] REDUCED TO [n]nnn).

Note 1.— This information is conditional when a NOTAM has been published with a new set of declared distances, i.e. when the runway length is reduced, this item should be included in the SNOWTAM and a NOTAM should also be issued with the new available declared distances (TORA, TODA, ASDA and LDA).

Example: RWY 08L REDUCED TO 2800.

Item J — Drifting snow on the runway. When reported, insert "DRIFTING SNOW".

Example: DRIFTING SNOW.

Note 1.— Drifting snow is an ensemble of snow particles raised by the wind to small heights above the ground (WMO definition).

Note 2. — Drifting snow in the SNOWTAM format refers to the airport (the whole movement area), not a specific runway. However, for large airports with several runways where drifting snow could exist in one or some runways (not all), item J) might be reported with relevant runway designator, e.g. RWY 08 DRIFTING SNOW

Item K — Loose sand on the runway. When reported on the runway, insert the lower runway designator and with a space "LOOSE SAND" (RWY nn or RWY nn[L] or nn[C] or nn[R] LOOSE SAND).

Example: RWY 08L LOOSE SAND.

Item L — Chemical treatment on the runway. When chemical treatment has been reported applied, insert the lower runway designator and with a space "CHEMICALLY TREATED" (RWY nn or RWY nn[L] or nn[C] or nn[R] CHEMICALLY TREATED).

Example: RWY 08L CHEMICALLY TREATED.

Item M — Snow banks on the runway. When snow banks are present on the runway, insert the lower runway designator and with a space "SNOW BANK" and with a space left "L" or right "R or both sides "

LR", followed by the distance in metres from centre line separated by a space FM CL (RWY nn or RWY nn[L] or nn[C] or nn[R] SNOW BANK Lnn or Rnn or LRnn FM CL).

Example: RWY 08L SNOW BANK L12 FM CL.

Item N — Snow banks on a taxiway. When snow banks are present on a taxiway, insert the taxiway designator and with a space "SNOW BANK" (TWY [nn]n SNOW BANK).

Example: TWY B SNOW BANK.

Note 1.— when there are snow banks on every taxiway, "ALL TWYS SNOWBANKS" might be used.

Item O — Snow banks adjacent to the runway. When snow banks are present penetrating the height profile in the aerodrome snow plan, insert the lower runway designator and "ADJ SNOW BANKS" (RWY nn or RWY nn[L] or nn[C] or nn[R] ADJ SNOW BANKS).

Example: RWY 08R ADJ SNOW BANKS.

Item P — Taxiway conditions. When taxiway conditions are reported as poor, insert the taxiway designator followed by a space "POOR" (TWY [n or nn] POOR or ALL TWYS POOR).

Example: TWY C POOR.

Item R — Apron conditions. When apron conditions are reported as poor, insert the apron designator followed by a space "POOR" (APRON [nnnn] POOR or ALL APRONS POOR).

Note 1.— Aprons are named differently in different aerodromes (e.g. Apron 1, Cargo Apron, Apron Main, Apron XXX, Military Ramp, etc.). The Apron designator/name in the SNOWTAM should be the one indicated in the Aerodrome Chart and/or AIP.

Example: APRON 1 POOR.

Item S — Measured friction coefficient. Where reported, insert the measured friction coefficient and friction measuring device.

Note 1.— This item is optional and will only be reported for States that have an established programme of runway friction measurement using a State-approved friction measuring device.

Note 2.— States that follow EASA Regulations do not report measured friction coefficient. 'NR' is inserted for Item S.

Item T — plain language remarks.

5. EXAMPLES OF SNOWTAM

Example 1:

GG EADBZQZX EADNZQZX EADSZQZX
170140 EADDYNYX
SWEA0150 EADD 02170135
(SNOWTAM 0150
EADD
02170055 09L 5/5/4 100/100/100 NR/03/03 WET/WET SNOW/COMPACTED SNOW
02170135 09R 5/2/2 75/50/75 NR/06/06 WET/SLUSH/SLUSH 40)

Example 2:

GG EADBZQZX EADNZQZX EADSZQZX
170229 EADDYNYX
SWEA0151 EADD 02170225
(SNOWTAM 0151
EADD
02170055 09L 5/5/5 100/100/100 NR/NR/03 WET/WET/WET SNOW
02170135 09R 5/2/2 100/50/75 NR/06/06 WET/SLUSH/SLUSH
02170225 09C 2/3/3 75/100/100 06/12/12 SLUSH/WET SNOW/WET SNOW

RWY 09L SNOW BANK R20 FM CL. RWY 09R ADJ SNOW BANKS. TWY B POOR. APRON NORTH POOR.)

Example 3:

GG EADBZQZX EADNZQZX EADSZQZX
170350 EADDYNYX
SWEA0152 EADD 02170345
(SNOWTAM 0152
EADD
02170345 09L 5/5/5 100/100/100 NR/NR/03 WET/WET/SLUSH
02170134 09R 5/2/2 100/50/75 NR/06/06 WET/SLUSH/SLUSH
02170225 09C 2/3/3 75/100/100 06/12/12 SLUSH/WET SNOW/WET SNOW 35

DRIFTING SNOW. RWY 09L LOOSE SAND. RWY 09R CHEMICALLY TREATED. RWY 09C CHEMICALLY TREATED.)

Example 4:

GG EADBZQZX EADNZQZX EADSZQZX
170440 EADDYNYX
SWEA0153 EADD 02170435
(SNOWTAM 0153
EADD
02170435 09L 5/5/5 100/100/100 NR/NR/03 WET/WET/SLUSH
02170415 09R 5/2/2 100/50/75 NR/06/06 WET/SLUSH/SLUSH
02170400 09C 2/2/2 75/75/50 06/12/12 SLUSH/SLUSH/SLUSH 40

DRIFTING SNOW. RWY 09L LOOSE SAND. RWY 09L CHEMICALLY TREATED. RWY 09R CHEMICALLY TREATED. RWY 09C CHEMICALLY TREATED.)

Example 5:

GG EADBZQZX EADNZQZX EADSZQZX

170540 EADDYNYX

SWEA0154 EADD 02170535

(SNOWTAM 0154

EADD

02170535 09L 6/6/6 NR/NR/NR NR/NR/NR DRY/DRY/DRY

02170515 09R 5/2/2 100/50/75 NR/06/06 WET/SLUSH/SLUSH

02170500 09C 2/2/2 75/75/50 06/12/12 SLUSH/SLUSH/SLUSH 40

DRIFTING SNOW. RWY 09R CHEMICALLY TREATED. RWY 09C CHEMICALLY TREATED.)

6. CONCLUSIONS

- 6.1. Appropriate means of communication between the airport authorities/operators (the originators of the runway condition reports through RCR) and the AIS/NOFs (responsible to disseminate information through SNOWTAM according to the information received by RCR) must be ensured.
- 6.2. When RCR is provided by airports to NOF, the NOF should carry out an initial quality check to verify the following:
 - All mandatory information items (items A, B, C, D and G, as appropriate) are provided
 - Items E, F and G are not empty (values to be provided) or the position of this type of information in the information string would be identified by NR
 - The syntax requirement of SNOWTAM in PANS-AIM is strictly adhered
 - Information provided is in accordance with the criteria explained above (in terms of units of measurement, format of data, etc.)
 - Information conforms to other sources (date/time with the Gregorian calendar/UTC; runways, taxiways and aprons designators, width and length as per the published ones in AIP, etc.)
- Note 1. in case NOF needs clarification on the information received through RCR, necessary coordination should be made with the relevant airport authority/operator.
- Note 2. accuracy of RCR data is the responsibility of airport authority, as NOFs are normally unable to verify if the data collected is correct against the actual runway condition.
- Note 3. NOFs should carry out quality checks at different stages, including before issuance of the SNOWTAM to ensure that the SNOWTAM reflects the same information as was originally received from the airport authority through RCR.
- 6.3. NOF/AIS personnel should be sufficiently trained with the new SNOWTAM format.
- 6.4. The software/templates used to issue/receive SNOWTAM (NOTAM/SNOWTAM system) should be updated, as applicable, to enable issuing, receiving, storing and retrieval of SNOWTAM in the new format.
- 6.5. The State's national GRF implementation team (including airport authorities, ATS, CAA, users, AIS/NOF, etc.) should ensure that the required coordination, awareness, training, processes, procedures, etc. are in place.
- 6.6. The national GRF implementation team may elect to publish an Aeronautical Information Circular (AIC) through the Aeronautical Information Services (AIS) to: provide a summary of the implementation process and mechanisms; raise awareness among all stakeholders by providing information about the GRF and the new SNOWTAM format; detail responsibilities of each stakeholders involved (airports, NOF, ATS, users, etc.); explain coordination processes between airports, NOF, ATS, etc.; provide implementation plan/timelines; prepare for tests, if any; and provide any other information that could be useful to facilitate the implementation.
- Note 1. a sample AIC Template is provided at **Attachment B** to this document. However, the content of the AIC depends on the information and the arrangements required in each State.

REFERENCES:

- Procedures for Air Navigation Services (PANS) Aeronautical Information Management (PANS-AIM, Doc 10066)
- Procedures for Air Navigation Services (PANS) Aerodromes (PANS-Aerodromes, Doc 9981)
- Annex 14 to the Convention on International Civil Aviation, Volume 1 Aerodrome Design and Operations
- Assessment, Measurement and Reporting of Runway Surface Conditions (ICAO Circular 355)

Attachment A: Frequently asked questions/issues related to the SNOWTAM format and EAD policy/approach

(Items highlighted in orange are AIS-related issues which need immediate attention)

	Question/Issue	Comment/Initial analysis	Remarks (Impact, if the issue is not resolved)	EAD implementations policy/approach
1	Old SNOWTAM format (availability after 4 NOV 2021) - Will all States issue the SNOWTAM under the new format?	Linked to item 2 below	Possible rejection by regional and national AIS databases and users if some States continue to issue the SNOWTAM in the old format after 4 November 2021	For EAD-migrated clients (B2B and B2C), ONLY the new format will be available. For non- migrated clients (WW SNOWTAM received via AFTN), EAD will also accept the OLD format, which will be automatically converted to the new format in the following way: - SNOWTAM header, including number - Item A) - Aerodrome Location Indicator - Item B) - Date/Time of assessment (without repetition) - Item C) - RWY designation number (without repetition) - Copy of the original SNOWTAM text, from Item B) to Item T) - Plain language remark - No validation Example of old format processing: Original SNOWTAM in OLD Format SWED0012 EDDK 11032330 (SNOWTAM 0012 A) EDDK B) 11032330 C) 14L F) 2/2/2 G) 30/30/40 H) 5/5/5 B) 11032325 C) 14R F) 5/5/5 G) 30/30/40 H) 3/3/3 B) 11032320 C) 07 F) 5/5/5 G) 40/30/30 H) 2/3/2 R) 2 S) 12300800 T) RWY CONTAMINATION 100 PERCENT. SNOW REMOVAL IN PROGRESS) SNOWTAM autostored in EAD SWED0012 EDDK 11040145

	Question/Issue	Comment/Initial analysis	Remarks	EAD implementations policy/approach
			(Impact, if the issue is not resolved)	
				(SNOWTAM 0012 EDDK 11040145 14L THIS SNOWTAM WAS PUBLISHED BY ORIGINATOR IN OLD FORMAT. SNOWTAM STORED IN EAD DATABASE WITHOUT ANY VALIDATION CHECKS. TEXT PROVIDED FOR SAFETY REASON ONLY. QUOTE B) 11032330 C) 14L F) 2/2/2 G) 30/30/40 H) 5/5/5 B) 11032325 C) 14R F) 5/5/5 G) 30/30/40 H) 3/3/3 B) 11032320 C) 07 F) 5/5/5 G) 40/30/30 H) 2/3/2 R) 2 S) 12300800 T) RWY CONTAMINATION 100 PERCENT. SNOW REMOVAL IN PROGRESS) UNQUOTE
2	Worldwide implementation status monitoring and reporting	How will States' plans and eventually their status of implementation be monitored? (linked to item 1 above) It is proposed to establish an online dashboard to monitor States' plans and their implementation status.	This may lead to the circumstances detailed in item 1 above. It may lead to non-harmonised implementation by various States.	
3	Transition concept => At 00.00 UTC, 4 NOV 2021 - What happens to the validity of SNOWTAM messages issued on 4 NOV? - From 4 NOV 2021 – 8H (instead of 24H) - What shall be the Validity for SNOWTAM that are received in the OLD Format after 4th NOV 2021?	From 4 November 2021 at 0000 UTC, all SNOWTAMs will be valid for 8 hours. States should issue an old-format SNOWTAM at the end of 3.11.21 (2359 UTC) to cancel the old-format SNOWTAM and then issue a new SNOWTAM in the new format instead immediately after 0000 UTC This should be clarified by ICAO and be included in guidance material.	If this is not done, there will be both old- and new-format SNOWTAMS on 4 November 2021, which could lead to some of the old SNOWTAMS being missed (because the systems will execute the new rules after 0000 UTC). The issue is addressed in the "Guidance for the issuance of SNOWTAM", para. 3.3 note 2.	After 4 NOV 2021, the validity of SNOWTAM in EAD will be 8H regardless of the format. With that in mind SNOWTAMs will be automatically invalidated (will not appear in the PIB) after 8 hours based on observation time indicated in an Abbreviated Heading EAD Transition concept EAD will start to automatically convert stored valid OLD SNOWTAMs from one day prior to the activation date. The automatic conversion will follow the same process as described under P.1 above. These automatically converted SNOWTAMs will be stored in the database but not used for production (they will not appear on

	Question/Issue	Comment/Initial analysis	Remarks (Impact, if the issue is not resolved)	EAD implementations policy/approach
				the Saved SNOWTAM list nor in the PIB) until the activation of the NEW format. As soon as the NEW format is activated, the system will use the previously auto-converted SNOWTAMs for production use (i.e. they will show in the Saved SNOWTAM list and be used in the PIB). As the CONVERTED SNOWTAMs (like the NEW ones) are valid for 8 hours, OLD SNOWTAMs created more than 8 hours before the activation date (00.00 UTC, 4 NOV 2021) will no longer be valid on the activation date (regardless of their initial 24-hour validity at the time of their creation). SNOWTAMs created after 4 NOV 2021 will automatically replace and invalidate SNOWTAMs existing for the same Aerodrome regardless of the message format: NEW SNOWTAM stored after 4.11.21 will also replace OLD/CONVERTED/NEW-format SNOWTAMs for the same Aerodrome OLD SNOWTAMs processed as CONVERTED after 4.11.21 will also replace OLD/CONVERTED/NEW-format SNOWTAMs for the same Aerodrome.
4	Repeating of the items in the Situational Awareness section (ILimitation of the ICAO specifications) No clear guidance on the repeating of the items in the Situational Awareness section except for this note: NOTES. 1. "Enter ICAO nationality letters as given in ICAO Doc 7910, Part 2 or otherwise applicable aerodrome identifier. Information in the situational awareness section repeated for each rurway, taxway and apron. Repeat as applicable when reported Words in brackets () not to be transmitted. 5. For letters A) to T) refer to the Instructions for the completion of the SNOWTAM Format, paragraph 1, item b). - Room for various interpretations on how to repeat items	Option 1. Repeat whole group of Item I) to Item S) for each runway separately. - Only some of items in the situational awareness section are related to runways, others are not (e.g. Items N, P, R). Option 2. Repeat each item (Item I) for different runways, then next item for different runways, up to item S)). - Items I) to S) occur one after the other (in the given order) but each	If not clarified, there would be different ways of ordering the items in the situational awareness section, which may lead to confusion and difficulty of understanding among users. The issue is addressed in the "Guidance for the issuance of SNOWTAM", para. 3.9.	Incoming SNOWTAMs EAD will accept any order of Items in Situational Awareness Section on receiving SNOWTAMs. Outgoing SNOWTAMs The Situational Awareness Section text will be automatically regenerated with the following structure: 1. Runway groups Runway-related items repeated as a group.
		item can be repeated for different runways. Option 3. Items appear in no		Provided more runways are reported, the output will be sorted by runway designator (ascending number, identical numbers in the order L, C, R)

	Question/Issue	Comment/Initial analysis	Remarks (Impact, if the issue is not resolved)	EAD implementations policy/approach
		particular order (except for Item T, being the last). Option 3 is the most flexible and preferable approach as it would also accept examples from options 1 and 2.		(e.g. items for 09L, 09C, 09R). Note: Item I) (Reduced Runway Length) may also contain the other runway direction (not the lower number). Item I), however, will still be in the same group as the other items related to this runway (even though they are using the lower number). 2. Drifting Snow Note that the DRIFTING SNOW (Item J)) information is provided only once as it is not runway-specific. This, however, depends on the EAD system parameter {SNOWTAM_2020_DRIFTING_PER_RWY}. If the parameter value is changed from the default "N" to "Y", then Item J) is also generated inside each runway group with a similar text structure as the other items: RWY nn [L] or nn [C] or nn [R] DRIFTING SNOW 3. Taxiway groups If items N) and P) are provided for a taxiway, they will be reported in that order. For unrelated N) and P) items, the N) items will be reported first, followed by the P) items. This is also valid for cases where Item P) contains ALL TWYS POOR. The sorting will also follow the taxiway designators, whereas ALL TWYS POOR will be the last item. 4. Aprons groups 5. Item S) 6. Item T)
5	Item J) says to simply insert "DRIFTING SNOW" (when reported) without the RWY designator. Nevertheless Item K) says to insert the lower RWY designator and with a space "LOOSE SAND" (if LOOSE SAND is reported on the RWY). What is the logic behind the two different cases, one with the RWY designator and the other without? Ref.: PANS-AIM 10066, Appendix 4 SNOWTAM Format applicable on 4 November 2021, Instructions for Item J) and Item K)	Is RWY Designator needed for Drifting Snow (as for the loose sand)? (This item has a link with item 6 above.)	Drifting snow is an ensemble of snow particles raised by the wind to small heights above the ground (WMO definition). Drifting snow refers to the airport (whole movement area) not to a specific runway.	EAD will implement the EAD system parameter {SNOWTAM_2020_DRIFTING_PER_RWY}. By default, this parameter will be set to "N". In this case, DRIFTING SNOW (Item J)) information is provided only once as it is not runway-specific. If ICAO decides that the RWY ID must be presented, the EAD parameter will be changed from the default "N" to "Y" and then Item J) will

	Question/Issue	Comment/Initial analysis	Remarks	EAD implementations policy/approach
			(Impact, if the issue is not resolved)	
			The issue is addressed in the "Guidance for the issuance of SNOWTAM", para. 4 section 2 item J.	also be generated inside each runway group with a similar text structure as the other items: RWY nn [L] or nn [C] or nn [R] DRIFTING SNOW
6	The abbreviated heading – geographical designator for States (SW* SERIAL NUMBER) (SW* SERIAL NUMBER) (LOCATION DATE/TIME OF ASSESMENT NODICATOR) (ROCATION DATE/TIME OF ASSESMENT NODICATOR) (SW* SERIAL NUMBER) (SW* SERIAL NUMBER) (LOCATION DATE/TIME OF ASSESMENT NODICATOR) (ROCATION DATE/TIME OF ASSESMENT N	 "X" could be used as a second letter for Canada (CX) and Australia (YX). For the USA -> KX cannot be applied as they use different NOFs for the time being. Clarification needed by ICAO 	Possible rejection of SNOWTAMs The concerned Regions/States to look into this subject (Australia, Canada and United States).	EAD recommends use of "X" as the second letter for Canada (CX) and Australia (YX). However, for the USA -> KX cannot be applied, as they use different NOFs.
7	Apron/TWY designators: - What characters are allowable? i. Alphanumeric characters ii. Symbols (hyphen, underscore, space, etc.) - Is there any length limitation (similar to AIXM)?	Examples from some AIPs: Apron: APRON, APRON 2, APRON II, SAULT COLLEGE APRON, 1, II, IV, APRON II (MNR), CANADIAN WARPLANE HERRITAGE MUSEUM APRON, 51B, DE- ICING, APRON MAINTENANCE_WEST, APRON (POS. 26-28) Taxiway: TWY, TWY A, TWYA, TWY1, TWY 1, A2, A, B-1, WEST, BA, K4 CATIII-RWY, NNORTH, D THR24-RWY14L, B NORTH 10/28, 08/26, W II, TWY C10/STAND102, TWY-1	Possible rejection of SNOWTAMs The issue is addressed in the "Guidance for the issuance of SNOWTAM", para. 4 section 2 item R. Recommendation: these items should be flexible and accept both alphanumeric characters and symbols.	EAD will accept only AIS-compatible characters. This means that Apron/TWY designators will be the same as those stored in the EAD SDO {National AIP}.
8	There seems to be a discrepancy between the 'general descriptions', where the 'CONDITION DESCRIPTION FOR EACH RUNWAY THIRD (Item G)' is mandatory only when RWYCC is 1-5, and the 'field descriptions' where 'CONDITION DESCRIPTION FOR EACH RUNWAY THIRD (Item G)' is always mandatory. The question is when is the 'CONDITION DESCRIPTION FOR EACH RUNWAY THIRD (Item G)' mandatory?	PANS AIM (there is a discrepancy in PANS AIM): - The SNOWTAM form indicates that Item G is mandatory and not conditional. The SNOWTAM form indicates that Item G is mandatory and not conditional.	Confusion for AISs/NOFs Recommendation: Item G is mandatory only when RWYCC is 1 to 5. This is the minimum required by PANS-AIM; however, States/Regions might decide to report item G in all circumstances (RCC 0 to 6).	In EAD, Item G is Mandatory regardless RWYCC values.

	Question/Issue	Comment/Initial analysis	Remarks	EAD implementations policy/approach
			(Impact, if the issue is not	
			resolved)	
		Item G is mandatory and not		
		conditional.		
		Item G — Condition description for each runway third. Insert any of the following con each runway third, separated by an oblique stroke.		
		COMPACTED SNOW DRY SNOW		
		DRY SNOW ON TOP OF COMPACTED SNOW DRY SNOW ON TOP OF ICE		
		FROST ICE SLUSH		
		STANDING WATER WATER ON TOP OF COMPACTED SNOW		
		WET WET ICE		
		WET SNOW WET SNOW ON TOP OF COMPACTED SNOW WET SNOW ON TOP OF ICE		
		DRY (only reported when there is no contaminant)		
		Note.— When the conditions are not reported, this will be signified by the inser- appropriate runway third(s).		
		- The general descriptions says that		
		Item G is mandatory and then		
		includes this condition in a bracket.		
		j) Mendency information in		
		AERODROME LOCATION INDICATOR; DATE AND TIME OF ASSESSMENT;		
		JOWER RUNWAY DESIGNATOR NUMBER:		
		4) RUNWAY CONDITION CODE FOR EACH RUNWAY THIRD: and		
		 CONDITION DESCRIPTION FOR EACH RUNWAY THIRD (when runway cond is reported 1-5) 		
		PANS Aerodrome says that item G is		
		mandatory without any condition.		
		g) Condition description for each runway third: to b 2.9.5 of Annex 14, Volume I. These terms have been		
		and Recommended Practices in Annexes 6, 8, 11 and		
		following condition type descriptions for each runway		
		This information is mandatory.		
		Clarification needed by ICAO		
		(Should it be mandatory – with no		
		condition – everywhere in PANS		
9	Need for an AIC templete (complete for AICD- in and	AIM as well?)	Look of avvarances of stable 13	
9	Need for an AIC template (sample) for AISPs in order to use it for announcement of their plans and details on the	The AIC will be a good tool for States to put their national plan together and	Lack of awareness of stakeholders of the implementation	
	implementation of GRF and the new SNOWTAM format	carry out the necessary coordination	of the implementation	
	mposition of old and money brown frint format	among their national stakeholders. It	Some States already have their own	
		will provide good evidence for ICAO	AICs which could be distributed to	
		to monitor the situation with the	all States.	
		various States. It will also be useful		
		for users.	Sample AIC template is provided as	
		Some States have started developing	appendix B of the "Guidance for	
		an AIC template. It is possible to	the issuance of SNOWTAM".	

	Question/Issue	Comment/Initial analysis	Remarks	EAD implementations policy/approach
			(Impact, if the issue is not resolved)	
		work with those States to make a general template to be used by all States.		
10	Need for guidance material (as part of Doc 8126 or any type of GM) describing the implementation guidelines and explaining the SNOWTAM format and elements in more detail	As a first step (quick action), a brief document could be developed (by a group of volunteers) to include the following: - the missing codes of the SNOWTAM format and the clarifications needed as explained in the items above; - details on each element of the SNOWTAM format; - some implementation guidelines. This document should be published by ICAO as a matter of priority through a mechanism which does not involve a long process (this should be issued as soon as possible but not later than December 2019). The second step would be for ICAO to later include the provisions of this document in the PANS AIM and Doc 8126, as appropriate.	Confusion and lack of sufficient knowledge and information for NOFs may lead to non-implementation or difficulties for AISPs. Development of "Guidance for the issuance of SNOWTAM" would form the basis for future inclusion in DOC 8126	
11	There is a need for training material and a course specifically for AIS staff.	ACI has developed a course for airport operators. IATA is developing course for airline operators. No specific course exists for AIS. A half-day CBT course is proposed for development by ICAO (to be available as soon as possible) (or classroom course – tbd). The volunteer group (mentioned in item 10) could put the training materials together using the current PANS AIM and PANS Aerodrome provisions as well as the guidance material which they develop (referred to in the previous item).	Lack of sufficient knowledge among AIS staff and difficulty with implementation (as raised by many States' AISPs) Development of "Guidance for the issuance of SNOWTAM" would help.	Web-based training prepared by EUROCONTROL concerning general information related to the changes with a new SNOWTAM form might be provided.
12	The Validity of SNOWTAMs after 4 November 2021 is 8 hours and before that it was 24 hours. After the publication of the PANS AIM, the validity of both SNOWTAM formats	This item should be 24 hours. This must be a typographical error.		

	Question/Issue	Comment/Initial analysis	Remarks	EAD implementations policy/approach
			(Impact, if the issue is not resolved)	
	(the one up to 4 NOV and the one after 4 NOV) are both written as 8 hours (probably because of a printing error). Ref.: PANS-AIM Doc 10066, Appendix 4 SNOWTAM Format (applicable until 4 November 2020), page App. 4-2, 1. General-item d)			
13	Conditional Fields, Items E), F): What has to be inserted for the other two thirds if the condition applies only to one third of the RWY (and the other two thirds are dry and clean)? Example: C) Runway 09 D) RWYCC 6/6/5, G) DRY/DRY/STANDING WATER: Question for E) und F): E) ?/?/100, F) ?/?/04 Ref.: PANS-AIM Doc 10066, Appendix 4 SNOWTAM Format applicable on 4 November 2021, Instructions 2. Item E) Note 1 and 2; Item F) Note 1 and 2	According to PANS AD, Item E is not reported for one runway third if it is dry or less than 10% covered. Examples: 25/50/100 NR/50/100 if contaminant coverage is less than 10% in the first third, 25/NR/100 if contaminant coverage is less than 10% in the middle third, 25/50/NR if contaminant coverage is less than 10% in the last third.	The problem has been resolved (closed).	
14	Item F) (Depth of loose contaminant): The field condition is not clear in case of a depth below the minimum values for the contamination of slush, wet snow and dry snow. Which values have to be inserted in those cases in item F) and G). Ref.: PANS-Aerodromes II-I-13 Table II-I-2, Notes 1-3	According to PANS AD, the value could be below the minimum in the case of significant changes. Here are examples from 9981: 04/06/12 [STANDING WATER] 02/04/09 [SLUSH] 02/05/10 [WET SNOW or WET SNOW ON TOP OF] 02/20/100 [DRY SNOW or DRY SNOW ON TOP OF]	The problem has been resolved (closed).	
15	Validity 8 hours: It is not clear whether a series of SNOWTAMs should end with a final SNOWTAM reporting "DRY – RWYCC 6", or if no SNOWTAM is issued after 8 hours, does it mean that there is no longer any contamination. What is the valid status of the contamination if no SNOWTAM is issued after 8 hours? Ref.: PANS-Aerodromes Doc 9981, Part II, Chapter 1 applicable on 4 November 2021, 1.1.3.2	Either the reported runway surface condition ends as a result of the issuing of a SNOWTAM reporting RWYCC 6, or the SNOWTAM expires after 8 hours. If no SNOWTAM is issued after 8 hours, the previous SNOWTAM is considered to have "expired" and it should be understood that there is no longer any contaminant on the runway.	The problem has been resolved (closed).	
16	The new ICAO SNOWTAM FORMAT cannot be used for manual entries in the form (owing to lack of space). How should a manual entry be made in practice, e.g. in field G), or if several entries have to be mad in the Situational Awareness	Airport operators should develop their own form (Runway Condition Report – RCR) to collect runway surface condition data (based on the GRF	This is related to airport operator (not AIS/AIM).	

	Question/Issue	Comment/Initial analysis	Remarks	EAD implementations policy/approach
			(Impact, if the issue is not resolved)	
	Section? Ref.: PANS-AIM Doc 10066, Appendix 4 SNOWTAM Format applicable on 4 November 2021	provisions). When the RCR is filled in, it should be sent to the NOF. The RCR form should be in line with the SNOWTAM format (so as to be easily understandable for NOF personnel and able to be copied into SNOWTAM format by the NOF) On the NOF side, the NOTAM/SNOWTAM system should be updated in line with the new format, in order to accept the new entries. ICAO may provide a sample RCR form for airport operators.		
17	The Acronym "SNOWTAM" is obviously not applicable to those conditions which are related only to water/standing water or loose sand – especially in regions which never have snow and have therefore never issued a SNOWTAM. A new acronym which is better related to RWY conditions should be created.	The new SNOWTAM could also be issued where there is standing water not necessarily associated with snow. However, there is no short plan currently to change the acronym. The IMP (WG-A) is conducting a thorough review of the NOTAM system. WG-A should be informed of this comment.	This is not an immediate problem (but should be considered by the IMP in future NOTAM improvements).	
18	Item F) (Depth of loose contaminant): Significant changes for standing water and slush: What is the reason for the upper limit for the significant change? What action is to be taken if a change of more than the upper limit occurs? Ref.: PANS-Aerodromes II-I-13 Table II-I-2	Clarification needed	This is related to airport operator (not AIS/AIM).	
19	Item G) (Condition Description): It is clear that there could be different conditions on each third of the RWY. It is not clear whether it is possible to insert more than one condition on a single third of the RWY. If this is the case (contrary to our	The dominant contamination or the one which may have the most severe safety consequences should normally be reported.	The problem has been partially resolved.	

	Question/Issue	Comment/Initial analysis	Remarks (Impact, if the issue is not resolved)	EAD implementations policy/approach
	expectations), how must those conditions be inserted? (Syntax!) Ref.: PANS-AIM Doc 10066, Appendix 4 SNOWTAM Format applicable on 4 November 2021, Instructions for Item G)	(Please read ICAO Circular 355, paragraph 4.47, for more details on "Multiple Contaminants".)		
20	Item I) – Reduced runway length: conditional: only when a NOTAM has been published with a new set of declared distances. Does this mean that a NOTAM containing the new RWY length has to be issued in addition to the SNOWTAM if the clearance does not cover the whole length of the RWY, or does it mean that the reduced RWY length has to be inserted if a NOTAM was published concerning the reduced RWY length (of the dry RWY)? Ref.: PANS-AIM Doc 10066, Appendix 4 SNOWTAM Format applicable on 4 November 2021, Instructions for Item I), in particular Note to Item)	It can be understood from the note to Item I) that: when runway length is reduced owing to the closure of part of a runway (as a result of contaminant on the runway which has not been cleared), a SNOWTAM should be issued with the new runway length (Item I) and a NOTAM should also be issued together with the SNOWTAM to indicate the new declared distances. The SNOWTAM is not the consequence of the NOTAM or vice versa. Both should be issued as a consequence of the closure of part of a runway due to a contaminant. The wording of the note may have caused confusion (ICAO to consider).	The problem has been partially resolved.	
21	MEASURED FRICTION COEFFICIENT (Item S) a. In order to be able to recognise Item S and not to confuse it with Item T (text) during SNOWTAM processing/parsing, it is necessary to know the format of Item S. In the current Annex 15, it is a single digit for each third of the runway, separated by an oblique stroke (/): 5/5/5. Will this format remain the same?	Automated systems might need to have a defined format for Item S in order for this item to be recognised and also to allow Item S and the next item (Item T) to be distinguished. Clarification needed by ICAO	Confusion for automated systems to recognize and analyse SNOWTAM messages	

Attachment B: Sample AIC Template



AIC n /2020 1 XXX 20

SUBJECT: IMPLEMENTATION OF THE GLOBAL REPORTING FORMAT (GRF)

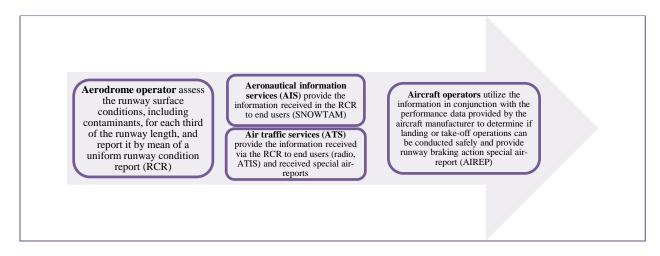
1. INTRODUCTION:

1.1. The new ICAO methodology for assessing and reporting runway surface conditions, commonly known as the Global Reporting Format (GRF), enables the harmonized assessment and reporting of runway surface conditions and a correspondingly improved flight crew assessment of take-off and landing performance.

The GRF, applicable on **4 November 2021**, is described through amendment 13-B to Annex 14 — Aerodromes, Volume I — Aerodrome Design and Operations; Annex 3 — Meteorological Service for International Air Navigation; Annex 6 — Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes and Part II — International General Aviation — Aeroplanes; Annex 8 — Airworthiness of Aircraft; Annex 15 — Aeronautical Information Services and Procedures for Air Navigation Services (PANS) — Aerodromes (PANS-Aerodromes, Doc 9981), Aeronautical Information Management (PANS-AIM, Doc 10066) and Air Traffic Management (PANS-ATM, Doc 4444).

In addition, supporting material is available in Circular 355, Assessment, Measurement and Reporting of Runway Surface Conditions and in the Doc 10064 Aeroplane Performance Manual (in preparation).

2. FLOW OF INFORMATION:



2.1 **Collection of information:** *aerodrome operator* is responsible to assess the condition of the runway for each third of the runway and issue a Runway Condition Report (RCR). This report contains the RWYCC (Runway Condition Code) and information which describes the runway surface condition: type of contamination, depth, coverage for each third of the runway, etc. and other relevant information.

This code is derived from the Runway Condition Assessment Matrix (RCAM) and associated procedures for downgrading and upgrading.

Note – Details of the Global Reporting Format is contained in the Procedures for Air Navigation Services (PANS) — Aerodromes (PANS-Aerodromes, Doc 9981) and ICAO Circular 355 (Assessment, Measurement and Reporting of Runway Surface Conditions).

Runway condition assessment matrix (RCAM)					
	Assessment	Downgrade assessment criteria			
Runway condition code	Runway surface description	Aeroplane deceleration or directional control observation	Pilot report of runway braking action		
6	•DRY				
5	FROST WET (The runway surface is covered by any visible dampness or water up to and including 3 mm depth) Up to and including 3 mm depth: SLUSH DRY SNOW WET SNOW	Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	GOOD		
4	-15°C and Lower outside air temperature: •COMPACTED SNOW	Braking deceleration OR directional control is between Good and Medium.	GOOD TO MEDIUM		
3	•WET ("slippery wet" runway) •DRY SNOW or WET SNOW (any depth) ON TOP OF COMPACTED SNOW More than 3 mm depth: •DRY SNOW •WET SNOW Higher than -15°C outside air temperature: •COMPACTED SNOW	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	MEDIUM		
2	More than 3 mm depth of water or slush: •STANDING WATER •SLUSH	Braking deceleration OR directional control is between Medium and Poor.	MEDIUM TO POOR		
1	•ICE	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	POOR		
0	•WET ICE •WATER ON TOP OF COMPACTED SNOW •DRY SNOW or WET SNOW ON TOP OF ICE	Braking deceleration is minimal to non- existent for the wheel braking effort applied OR directional control is uncertain.	LESS THAN POOR		

2.2 **Dissemination of information:**

• *Aeronautical information services (AIS)* provide the information received in the RCR to end users through SNOWTAM in the new format.

Note – Details of the new SNOWTAM format is contained in the Procedures for Air Navigation Services (PANS) — Aeronautical Information Management (PANS-AIM, Doc 10066). Additional information on the SNOWTAM format could be found in the ICAO EUR/NAT Guidance on the Issuance of SNOWTAM.

• Air traffic services (ATS) provide the information received via the RCR to end users through radio, ATIS, etc. and received special air-reports.

2.3 **Using the information:** *Aircraft operators* utilize the information in conjunction with the performance data provided by the aircraft manufacturer to determine if landing or take-off operations can be conducted safely and provide runway braking action special air-report (AIREP).

3. IMPLEMENTATION PLAN:

Date of implementation

- 3.1. The new ICAO GRF including the new SNOWTAM format will be implemented in [*Name of State*] on 4 November 2021 at 0000 UTC.
- 3.2. The National GRF Implementation Plan of [*Name of State*] is contained at **Attachment** to this AIC.

National GRF implementation Team

3.3. [provide some information about your national GRF implementation team which is in charge of planning and implementation of GRF at the national level]

Stakeholders involved

- 3.4. The following stakeholders in [*Name of State*] are involved in the implementation of the GRF:
 - Aerodromes:
 - [Name of concerned aerodromes]
 - [Name of concerned aerodromes]
 - [Name of concerned aerodromes]
 - Air Traffic Services (ATCOs)
 - Aeronautical Information Services (International NOTAM Office)
 - Airlines (flight operations departments, dispatchers, pilots)
 - Civil Aviation Authority

Coordination between aerodromes, AIS (NOF) and ATS units

3.5. [explain the mechanisms and processes of coordination between aerodromes, ATS and AIS, point of contacts, etc. or refer to the other local procedure that contains this information, if available]

Training and awareness

3.6. [explain the awareness, training and promotion activities on GRF, SNOWTAM and other relevant provisions that are planned for different stakeholders]

Tests and trials

3.7. [insert information about your planned tests and trials, if any]

Other information

3.8. [include any other information that may be useful]

Appendix to AIC Template:

GRF Implementation Plan/Checklist (Sample)

ID	TASK	WHO	WHEN	REMARKS
GRF 1	Establish a GRF implementation team at the State Level	State GRF implementation team - CAA (responsible entity for implementation) - Aerodromes (name of the concerned ADs) - ANSP/ATS (name it) - Airlines (name of airlines concerned) - AIM (NOF)	[<mark>planned date</mark>]	
GRF 2	Educate by reviewing the following documentation: - ICAO Circular 355 - ICAO Annex 14 (Aerodromes) - ICAO Doc 9981 (PANS-AD) - - ICAO Doc 10064 - ICAO Doc 10066 (PANS-AIM) - ICAO GRF Symposium presentations - EUR Guidance on SNOWTAM Educate by attending: - ICAO Regional Workshops Educate by conducting: - State Level Workshops/Seminars	State GRF implementation team - In coordination with national bodies representing airports, ANSPs, Airlines, AIM, etc.	[<mark>planned date</mark>]	
GRF 3	Promote GRF in context of safety by developing: - brochures - website material	State GRF implementation team - distribution should also include GA/BA and Military	[planned date]	
GRF 4	Train relevant stakeholders on GRF (likely computer based training as provided by e.g. ACI) Train relevant groups that interface with customers on GRF so they can brief their customers when on	Relevant stakeholders: - ACI - IATA - IFATCA - IFALPA	[<mark>planned date</mark>]	

ID	TASK	WHO	WHEN	REMARKS
	audit/inspections	State GRF implementation team assures training for: - ADR/ATM - FO inspectors		
GRF 5	Update SNOWTAM Format	State GRF implementation team assures SNOWTAM template is updated by: - AIM	[planned date]	
GRF 6	Train on SNOWTAM Format	State GRF implementation team assures training on SNOWTAM format by: - AIM	[planned date]	
GRF 7	Update AIP	State GRF implementation team assures AIP is updated by: - AIM	[planned date]	
GRF 8	Conduct parallel test of GRF, if applicable Conduct analysis using archives of SNOWTAM & AIREPS (this should also be considered after implementation to identify errors)	State GRF implementation team coordinates parallel test with the necessary stakeholders: - Airport operators - ANSP - CAA - Airlines - AIS	[planned date]	
GRF 9	XXX	-	[planned date]	
GRF 10	XXX	-	[planned date]	



PROPOSAL FOR AMENDMENT OF THE ICAO ASIA AND PACIFIC REGIONS AIR NAVIGATION PLAN, VOLUME II

(Serial No.: APAC-XX XX/XX – ATM)

a) Plan:	Air Navigation Plan (ANP) - Asia and Pacific Regions, Volume II				
b) Proposed amendment:	Volume II, Part VII – TABLE AIM II-1 - RESPONSIBILITY FOR THE PROVISION OF AIS/AIM FACILITIES AND SERVICES IN THE ASIA AND PACIFIC REGIONS Volume II, Part VII – TABLE AIM II-2 - PRODUCTION RESPONSIBILITY FOR SHEETS OF THE WORLD AERONAUTICAL CHART - ICAO 1:1 000 000 OR AERONAUTICAL CHART — ICAO 1: 500 000 Editorial Note: Amendments are arranged to show deleted text using strikeout (text to be deleted), and added text with grey shading (text to be inserted)				
	Amend requirement as f	follows:			
		AIM II-1 - Responsibilitities and Services in the A at A .	•		
	 Amend Table AIM II-2 - Production Responsibility for She the World Aeronautical Chart - ICAO 1:1 000 000 or Aerona Chart — ICAO 1: 500 000. See Attachment B. 				
c) Originated by:	ICAO Secretariat on behalf of APAC Administrations				
d) Originator's reasons for amendment:	[Text] Note: Where the amendment affects adjacent FIRs administered by another State the proposer should provide information on consultation and agreement				
e) Intended date of	As soon as possible foll	owing			
implementation:	[Regional agreement] (Volume II)				
	[Approval by APANPIRG] (Volume III).				
	<u> </u>				
f) Proposal circulated to the following States and International	Afghanistan Australia Bangladesh	Marshall Islands Micronesia (Federated States of)	CANSO IATA IBAC		
Organizations:	Bhutan Mongolia IFALPA Brunei Darussalam Myanmar IFATCA Cambodia Nauru China Nepal				

New Zealand

- Hong Kong, China

	D 11
- Macao, China	Pakistan
Cook Islands	Palau
Democratic People's	Papua New Guinea
Republic of Korea	Philippines
Fiji	Republic of Korea
France	Samoa
- French Polynesia	Singapore
- New Caledonia	Solomon Islands
India	Sri Lanka
Indonesia	Thailand
Japan	Timor-Leste
Kiribati	Tonga
Lao People's	Tuvalu
Democratic	United States of
Republic	America
Malaysia	Vanuatu
Maldives	Viet Nam
* for information	

g) Secretariat Comments:	
	1. [TEXT] 2. [TEXT] 3. [TEXT]

Attachment A

TABLE AIM II-1 - RESPONSIBILITY FOR THE PROVISION OF AIS/AIM FACILITIES AND SERVICES IN THE ASIA AND PACIFIC REGIONS

Note: To be completed

EXPLANATION OF THE TABLE

Column:

- 1. Name of the State or territory
- 2. Designated international NOTAM Office (NOF)
- 3. Designated State for AIP production
- 4. Designated State for aeronautical charts (MAP) production
- 5. Designated State for the provision of the authoritative Integrated Aeronautical Information Database (IAID)
- 6. Designated State for the provision of pre-flight information services
- 7. Remarks additional information, as appropriate.

State	NOF	AIP	MAP	IAID	Pre-flight briefing	Remarks
1	2	3	4	5	6	7
Afghanistan						
Australia	Sydney Melbourne	Australia	Australia	Australia	Australia	
Bangladesh	Dhaka					
Bhutan	Paro					
Brunei Darussalam						
Cambodia	Phnom Penh Siem Reap	Cambodia	Cambodia	Cambodia	Cambodia	
China	Beijing					
Hong Kong, China	Hong Kong	Hong Kong	Hong Kong	Hong Kong	Hong Kong	
Macao, China	Macao	Macao	Macao	Macao	Macao	
Cook Islands						
Democratic People's Rep. of Korea	Pyongyang					
Fiji	Nadi					
French Polynesia	Tahiti					
India	Chennai Delhi Kolkata Mumbai	India	India	India	India	
Indonesia	Jakarta	Indonesia	Indonesia	Indonesia		
<mark>Japan</mark>	Tokyo	Japan	Japan	Japan	Japan	
Kiribati						
Lao Peoples' Democratic Republic	Vientiane					
<u>Malaysia</u>	Kota Kinabalu Kuala Lumpur	Malaysia	Malaysia	Malaysia	Malaysia	
Maldives	Male					
Marshall Islands						
Micronesia (Federated States of)						
Mongolia	Ulaanbaatar	Mongolia	Mongolia	Mongolia	Mongolia	
Myanmar						
Nauru	Nauru					
Nepal	Kathmandu					
New Caledonia						
New Zealand	Apia Christchurch, Rarotonga, Tonga, American Samoa					

Pakistan	Karachi	Pakistan	Pakistan	Pakistan	Pakistan
Palau					
Papua New Guinea	Port Moresby				
Philippines	Manila	Philippines	Philippines	Philippines	Philippines
Republic of Korea	Incheon Daegu	Republic of Korea	Republic of Korea	Republic of Korea	Republic of Korea
Samoa					
Singapore	Singapore	Singapore	Singapore	Singapore	Singapore
Solomon Islands	Honiara				
Sri Lanka	Colombo	Sri Lanka	Sri Lanka	Sri Lanka	Sri Lanka
Thailand	Bangkok	Thailand	Thailand	Thailand	Thailand
Timor-Leste					
Tonga					
United States of America	United States of America	United States of America	United States of America	United States of America	United States of America
Vanuatu	Port Vila				
Viet Nam	Ho Chi Minh Ha Noi	Viet Nam	Viet Nam	Viet Nam	Viet Nam

Attachment B

TABLE AIM II-2 - PRODUCTION RESPONSIBILITY FOR SHEETS OF THE WORLD AERONAUTICAL CHART - ICAO 1:1 000 000 OR AERONAUTICAL CHART — ICAO 1: 500 000

EXPLANATION OF THE TABLE

Column:

- 1. Name of the State accepting production responsibility.
- 2. World Aeronautical Chart ICAO 1:1 000 000/Aeronautical Chart 1: 500 000 sheet number(s) for which production responsibility is accepted.
- 3. Remarks.

Note — In those instances where the production responsibility for certain sheets has been accepted by more than one State, these States by mutual agreement should define limits of responsibility for those sheets. This should be reflected in the Remarks column.

State	Sheet number(s)	Remarks
1	2	3
Afghanistan	2336, 2337, 2430, 2431, 2442	
Australia	3097, 3098, 3099, 3103, 3108, 3109,	
	3110, 3111, 3112, 3164, 3219, 3220,	
	3221, 3222, 3223, 3229, 3230, 3231,	
	3232, 3233, 3234, 3235, 3340, 3341,	
	3342, 3343, 3344, 3345, 3346, 3351,	
	3352, 3353, 3354, 3355, 3356, 3357,	
	3358, 3359, 3456, 3457, 3458, 3459,	
	3461, 3462, 3469, 3470, 3556	
Solomon Islands	2990, 3094	
Bangladesh	2557	
Bhutan		
Brunei Darussalam		
Cambodia	2738, 2739, 2799	
China		
Hong Kong, China	NIL	
Macao, China	NIL	
Cook Islands		
Democratic People's Rep. of Korea		
Fiji		
French Polynesia		
India	2432, 2439, 2440, 2551, 2552, 2553,	With western sheet edge extended to
- India	2554, 2558, 2559, 2560, 2561, 2673,	meridian 71 E
	2674, 2675, 2679, 2681, 2682	meridian / 1 E
	2795	
	2796	With western sheet edge extended to
	2798, 2801	meridian 71E
	2673, 2795, 2796, 2552, 2439, 2681,	Excluding Sri Lanka
	2675, 2558, 2559, 2440, 2801, 2554,	
	2674, 2551, 2553, 2561, 2560, 2679,	
	2682, 2798	
Indonesia	2800, 2862, 2863, 2864, 2920, 2921,	
	2975, 2976, 2977, 2978, 2979, 2980,	
	2981, 2982, 2983, 2984, 2985, 2986,	
	3100, 3101, 3102	
Japan	2281, 2292, 2378, 2379, 2387, 2388,	
1	2389, 2489, 2491, 2500, 2502, 2504	
Kiribati	, , ,	
Lao Peoples' Democratic Republic	2616	Lao PDR to cover its own territory
	2617	Lao PDR to cover its own territory
		and Viet Nam to cover Ho Chi Minh
Malaysia	2858, 2859, 2861	1. WAC 2858 - NORTH NATUNA ISLAND
		2. WAC 2859 - PENANG ISLAND
		3. WAC 2861 - CAPE SIRIK
Maldives		3,112
Marshall Islands	+	

Micronesia (Federated States of)		
Mongolia	2240, 2241, 2201, 2202, 2242, 2286, 2285, 2284, 2331, 2287, 2288	
Myanmar	2555, 2556, 2676	
Nauru		
Nepal	2438	
New Caledonia		
New Zealand	3474, 3553	
Pakistan	2441, 2549, 2550	
Palau		
Papua New Guinea	2972, 2973, 2974, 2987, 2988, 2989, 3095, 3096	
Philippines	2620, 2735, 2741, 2742, 2855, 2856	
Republic of Korea	2380 2379 2387	Republic of Korea to cover Incheon FIR
Samoa		
Singapore	2860	
Sri Lanka	2803	With sheet lines extended to include the whole of Sri Lanka
Thailand	2796	Excluding India
	2677, 2678, 2799	
Timor-Leste		
Tonga Vanuatu		
Viet Nam	2615, 2616, 2617, 2618, 2737, 2738, 2739	Lao PDR to cover its own territory and Viet Nam to cover Ho Chi Minh FIR Each sheet covers only Viet Nam's FIRs.

Note: a scan of the AIM FASID chart follows for checking purposes