



ICAO

International Civil Aviation Organization

**Eleventh Meeting of the Air Traffic Management Sub-Group
(ATM/SG/11) of APANPIRG**

Singapore, 2 – 6 October 2023

Agenda Item 7: AOP, MET, AIM, SAR

AIS – AIM IMPLEMENTATION TASK FORCE OUTCOMES

(Presented by the Secretariat)

SUMMARY

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

1. INTRODUCTION

1.1. The Eighteenth Meeting of the ICAO Aeronautical Information Services (AIS) – Aeronautical Information Management (AIM) Implementation Task Force (AAITF/18) was held from 19 to 23 June 2023 at the ICAO Asia and Pacific Regional Office in Bangkok, Thailand. A total of 88 participants from Australia, Bhutan, 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, CGX Aero (France) and ICAO attended the AAITF/18 meeting.

1.2. 17 Working Papers (WPs), seven Information Papers (IPs) six presentations and six filmsies were presented to AAITF/18.

1.3. AAITF/18 formed five Draft Conclusions and one Draft 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/2023-AAITF18.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/33 were provided for review and update by the meeting.

2.2. There are three AIS/AIM-related deficiencies in the list agreed by APANPIRG/33:

- WGS-84 not implemented (9 States);
- AIP Format (2 States); and

- Quality Management System not implemented (20 States).

2.3. No new deficiencies had been identified since APANPIRG/33, and Bhutan had provided evidence supporting the removal of WGS-84-related deficiency. The meeting was, once again, invited to note the ongoing, deep concern about poor quality management of aeronautical information in the APAC Region, and the apparent lack of organizational priority for this safety-critical obligation of all States that are signatory to the Convention on International Civil Aviation.

2.4. The list of AIS/AIM-related deficiencies as reviewed by AAITF/18 is included in the relevant working paper presented under ATM/SG/11 Agenda Item 4.

Regional Implementation Status of AIM Performance Expectations

2.5. 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.

2.6. The performance expectations were arranged in three phases:

Phase I, expected to be implemented immediately (ATM/SG/6, August 2018);

Phase II, expected to be implemented by 7 November 2019, and

Phase III, expected to be implemented by 27 November 2025.

2.7. States that had never provided information on their implementation status were:

Brunei Darussalam, Marshall Islands, Micronesia and Nauru.

2.8. The 24 Administrations that reported their implementation status in 2023 were:

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

2.9. The latest update of regional implementation status of the AIM performance expectations is provided in **Attachment A**.

2.10. 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.

2.11. **Figures 1 and 2** illustrate overall regional implementation of Phase I and II elements of the Regional Plan for Collaborative AIM; approximately 58% for Phase I and 42% for Phase II (56% and 40% respectively in 2022). Combined progress towards implementation of Phases I and II was 51%, (50% in 2022).

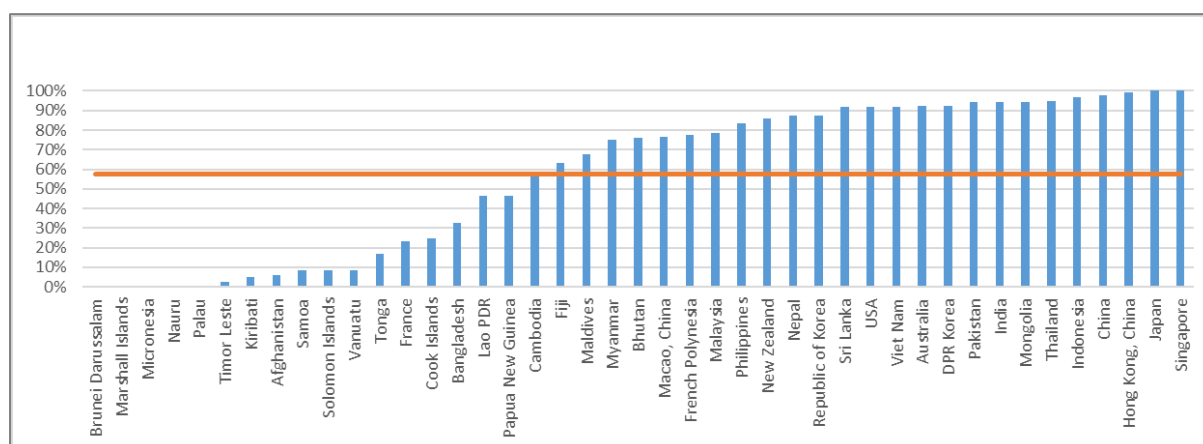


Figure 1: Regional Phase I Implementation Progress (updated 7 June 2023)

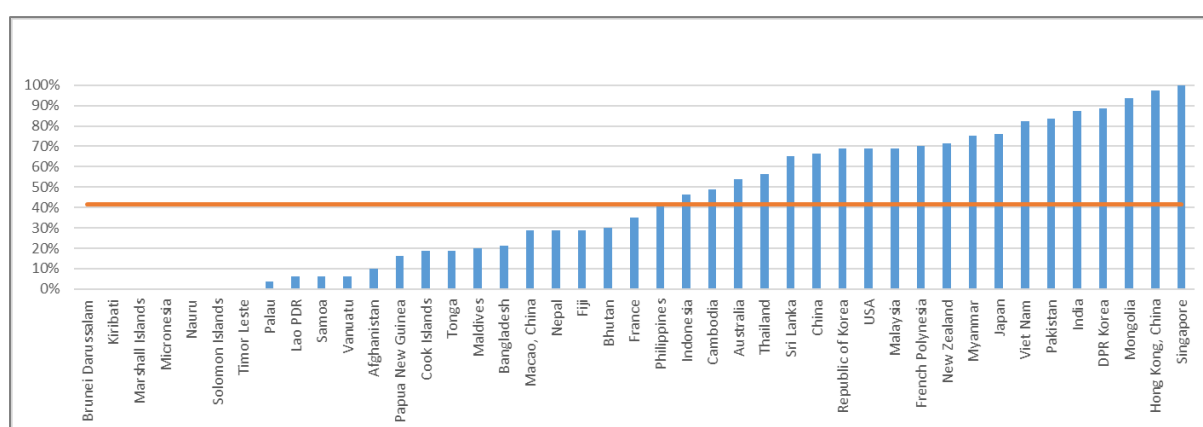


Figure 2: Regional Phase II Implementation Progress (updated 7 June 2023)

2.12. **Regional** implementation of Phase III elements, expected to be implemented by 2025, was approximately 15%, increased from 13% in 2022.

2.13. The meeting is invited to note that these results continue to represent poor regional progress, particularly when recalling that the Phase I performance expectations reflect ICAO Standards and Recommended Practices (SARPS) in Annex 15 *Aeronautical Information Services* that have been applicable in Annex 15 for several decades.

NOTAM Proliferation Analysis

2.14. 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 three-month 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.

2.15. 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**.

2.16. 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.

2.17. **Figures 3 and 4** illustrated APAC NOTAM statistics since June 2020. At 01 May 2023, a total of 6110 NOTAMs were active in the APAC Region. 353 (5.8%) of these were *old* (i.e. more than three months but less than one year), and 620 (10.1%) were *very old* (one year or more).

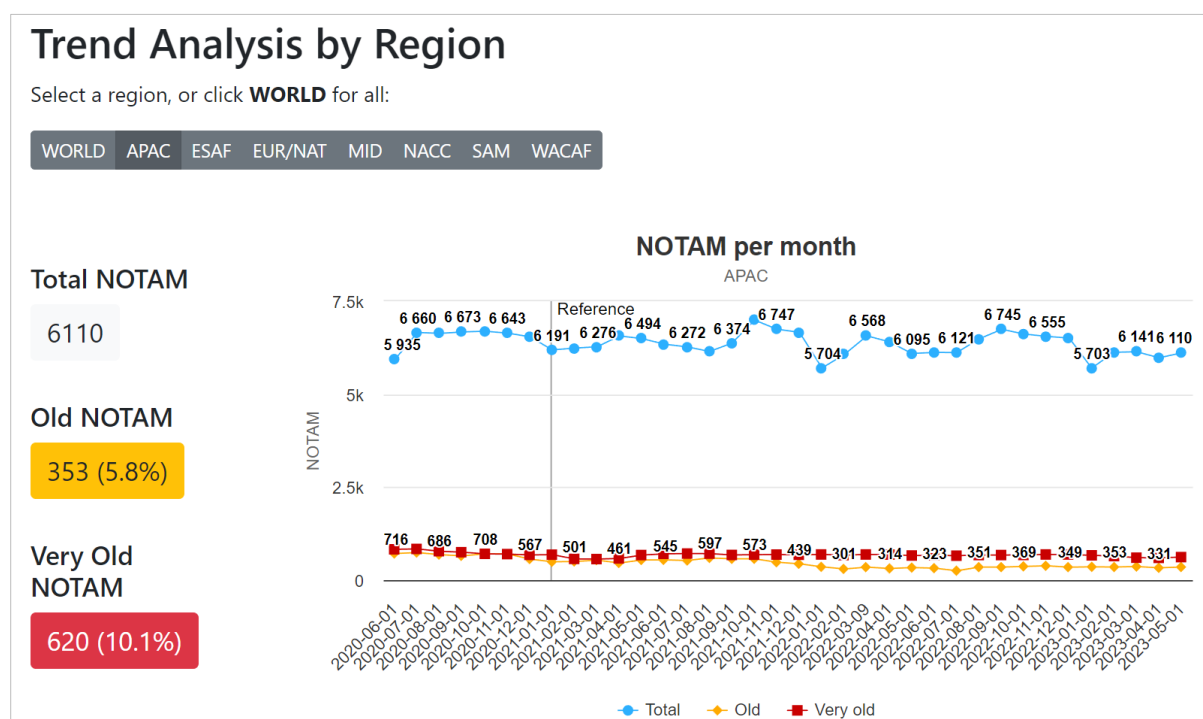


Figure 3 APAC NOTAM Statistics (Total, old and very old)

Trend Analysis by Region

Select a region, or click **WORLD** for all:

WORLD **APAC** ESAF EUR/NAT MID NACC SAM WACAF

Total NOTAM

6110

Old NOTAM

353 (5.8%)

Very Old NOTAM

620 (10.1%)

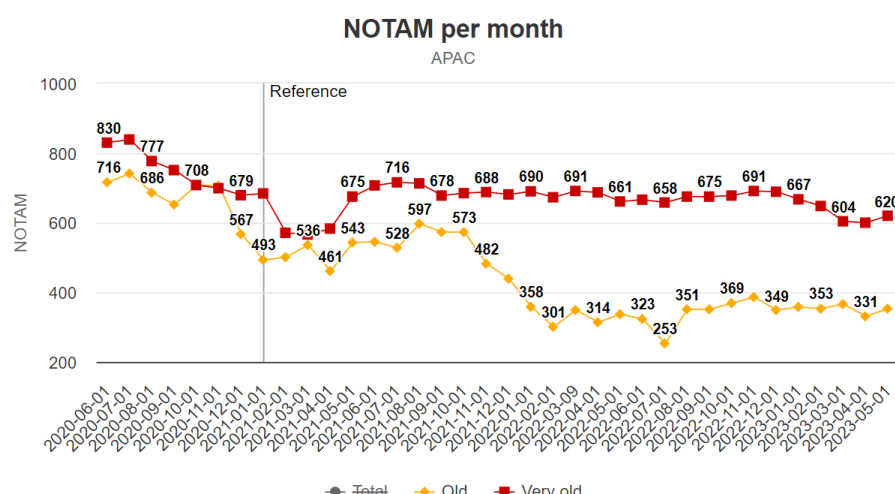


Figure 4: Asia/Pacific NOTAM Statistics (old and very old)

2.18. Compared with June 2022 the number of very old NOTAM had decreased by 46 (9.6%), but the number of old NOTAMs had increased by 30 (9.3%)

2.19. **Table 1** listed the top 10 NOTAM-promulgating APAC Administrations. These Administrations promulgated **89.8%** of all APAC NOTAMs, including **89.1%** of APAC old and very old NOTAM.

No	Administrations	Total NOTAM	Old NOTAM	Very Old NOTAM	Percent of old and very old NOTAM
1	China	1197	135	49	15.4%
2	Japan	1145	1	1	0.2%
3	India	888	78	370	50.5%
4	Australia	621	54	8	10.0%
5	Republic of Korea	588	1	0	0.2%
6	Philippines	443	52	52	23.5%
7	Malaysia	276	19	8	9.8%
8	Thailand	198	2	6	4.0%
9	Singapore	123	0	0	0.0%
10	New Zealand	101	4	0	4.0%
		5580	346	494	15%

Table 1: Top 10 NOTAM-producing Administrations (02 June 2023)

2.20. **Table 2** listed the Top 10 poorest performing Administrations in this regard. These Administrations had **55.5%** of old and very old NOTAM in the APAC Region.

No	Administrations	Total NOTAM	Old NOTAM	Very Old NOTAM	Percent of old and very old NOTAM
1	DPR Korea	10	0	10	100.0%
2	Micronesia	5	3	2	100.0%
3	Kiribati	1	0	1	100.0%
4	Nepal	1	0	1	100.0%
5	Lao PDR	19	0	18	94.7%
6	Timor Leste	15	8	1	60.0%
7	India	888	78	370	50.5%
8	Samoa	5	0	2	40.0%
9	Solomon Islands	21	5	1	28.6%
10	Papua New Guinea	85	13	11	28.2%
		1050	107	417	49.9%

Table 2: Top 10 Poorest Performing Administrations – Old and Very Old NOTAM
(02 June 2023)

2.21. Both the ICAO NOTAMeter and the Regional NOTAM Analysis used the USA’s FAA Defense Internet NOTAM Service (DINS, www.notams.faa.gov) as a primary source of NOTAM information. While DINS is a valuable source of worldwide NOTAMs, occasionally it contains some NOTAMs that are no longer current, due to reasons such as NOTAM Offices not consistently distributing their NOTAMs (NOTAMR, NOTAMC or NOTAM Checklist), connection issues, etc.

2.22. APAC Administrations were invited to take immediate action to ensure full compliance with NOTAM procedures in ICAO Doc 10066 *Procedures for Air Navigation Services – Aeronautical Information Management* (PANS-AIM) and **Conclusion ATM/SG/6-14**, and to ensure the consistent distribution of NOTAMN, NOTAMR, NOTAMC and NOTAM Checklists to international NOTAM Offices and multinational NOTAM processing units.

Airline Feedback on NOTAMs

2.23. IATA presented airline feedback on NOTAM quality, using examples from both the APAC Region and elsewhere, and identified issues needing addressing.

2.24. It was noted that, in spite of the ICAO global campaign on NOTAM proliferation, the practice to repeatedly issue NOTAMR continued globally although this was seen to have improved in the APAC Region.

2.25. Examples were provided of inconsistent NOTAM text and incorrect abbreviations, omission of runway identifiers in runway closure information, inappropriate reference to AIP page numbers instead of instrument flight procedure identifiers, unclear information, references in NOTAM to AIP pages that do not conform with the ICAO-mandated AIP structure and format, publication in NOTAM of major changes to AIP (required to be published in AIP Amendment under the AIRAC process), and the need for use of ICAO designators for aircraft types/models due to the significant variance in in physical dimension within a type range.

2.26. IATA noted that 64% of APAC Administrations were now compliant with the requirement to issue a checklist of NOTAMs, including checklist of AIP SUPs, and encouraged the remaining Administrations to comply with the mandatory procedure¹.

2.27. The Chair informed the meeting that the information provided in this paper provided clear indication of ineffective Quality Management Systems.

2.28. IATA further advised the meeting that the use of the words *trial* or *trial operations* had legal implications for some aircraft operators, which would decline to use a facility or procedure that was under trial. It was acknowledged that trial operations may be used for gathering safety related data prior to full implementation.

Notification for NOTAM Service Disruption

2.29. Japan proposed recommended actions to be taken for service disruption when the International NOTAM Office (NOF) was temporarily unable to distribute aeronautical information, especially NOTAMs, to other NOFs to which NOTAMs were distributed, based on Annex 15 paragraph 2.2.4.

2.30. Noting that the irregular issuance of NOTAMs made monitoring the status of other NOFs' NOTAM distribution difficult, it was important that receiving NOFs and other organizations were aware of any disruption.

2.31. Discussion of Japan's working paper prompted the meeting to hold an ad hoc workshop to develop regional guidance for notification of NOTAM service disruption. The core guidance developed by the workshop was presented in the form of a checklist of considerations for service providers experiencing degraded or failed operation of the NOTAM system, or of any of the supporting infrastructure that supported distribution of NOTAMs.

2.32. Workshop input to the development of the guidance was provided by Australia, Cambodia, China, Hong Kong China, Fiji, India, Japan, Malaysia, Pakistan, Singapore, Viet Nam, IATA and ICAO, supported by detailed discussion in plenary.

2.33. The meeting agreed to the following Draft Conclusion for consideration by ATM/SG/11:

Draft Conclusion ATM/SG/11-x: Asia/Pacific Regional Guidance for Contingency Planning and Response to NOTAM Service Disruption

That, The Asia/Pacific Regional Guidance for Contingency Planning and Response to NOTAM Service Disruption at **Attachment B** be adopted, and uploaded to the ICAO Asia/Pacific Regional Office website.

Asia/Pacific Region ICARD Update

2.34. ICAO provided an update on the use of the ICAO International Codes and Route Designators (ICARD) application in the APAC Region and the resolution status of 5-letter name code (5LNC) duplicates.

2.35. Annex 11 – *Air Traffic Services* defined 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*

¹ ICAO Doc 10066 Procedures for Air Navigation Services – Aeronautical Information Management (PANS-AIM) 5.2.1.4.4 and 5.2.5.3

ATS purposes. Significant points shall be established and identified in accordance with the principles set forth in Annex 11 Appendix 2.

2.36. The ICARD application is the sole repository of 5LNCs ensuring global uniqueness, and was the only means by which the requirements of Annex 11 Appendix 2 paragraph 3.5 may be met.

2.37. 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, must be registered as an ICARD_5LNC_PLANNER to ensure compliance with Annex 11 requirements.

2.38. Several APAC Region Administrations do not have any registered ICARD_5LNC_PLANNER. If these Administrations allocated 5LNC outside the ICARD system, they were not compliant with the requirements of Annex 11.

2.39. ICAO Headquarters had compiled a full global list of duplicated 5LNC in 2018. There were **3,905** duplicated 5LNCs worldwide, of which **2,733** were within the APAC region.

2.40. The Regional Office presented a State 5LNC status report for each AAITF meeting since AAITF/15 in 2020. The status report presented to AAITF/18 is provided in **Attachment C** (as at the annual reporting date of 28 February 2023).

2.41. ATM/SG/10 agreed to **Conclusion ATM/SG/10-10: State Reports of 5LNC Status**, urging States to provide an annual update on the status of duplicated 5LNCs by not later than 28 February each year. In 2023 duplicated 5LNC status updates were provided to the ICAO Regional Office in different formats. A revised, simplified data collection spreadsheet was provided for consideration by the meeting, which agreed to the following Draft Conclusion for ATM/SG consideration:

Draft Conclusion ATM/SG/11-x: Revised 5LNC Data Collection Spreadsheet

That, the revised 5LNC Data Collection Spreadsheet (version 2.0) provided in **Attachment D** be made available on the ICAO Asia/Pacific Regional Office website, to replace the existing.

Preliminary Review of Guidance Manual for AIS in the Asia/Pacific Region

2.42. IFAIMA, in collaboration with the Secretariat, presented a preliminary review of the *Guidance Manual for Aeronautical Information Services in the Asia/Pacific Region*. The Guidance Manual had been developed in 2001 by the AIS Automation Task Force (AATF), and first published in 2002 after incorporation of the *Common Operating Procedures for the Asia/Pacific Automated AIS System*. The Guidance Manual was last updated in 2016.

2.43. Taking into account the availability of new and updated global ICAO guidance documents, the AAITF/18 agreed that the regional Guidance Manual be retired; subject to:

1. The Selection Principles and the Selection Process from Chapter 2 of the regional Guidance Manual be relocated to the Asia/Pacific Regional Plan for Collaborative AIM;
2. The Preface information referring to the stand-alone Operating Procedures for Aeronautical Dynamic Data (OPADD) be relocated to the OPADD, and a brief summary of the history of the Asia/Pacific OPADD and its current status/location be included in the Regional Plan for Collaborative AIM; and

3. Appendix A of the regional Guidance Manual (interim AIM transition guidance) was no longer required.

2.44. A proposed update of the Asia/Pacific Regional Plan for Collaborative AIM included consequential amendments arising from the agreed retirement of the Guidance Manual, updates of a number of superseded items, and editorial amendments. The meeting agreed to the following Draft Conclusions for consideration by ATM/SG/11:

Draft Conclusion ATM/SG/11-X: Consolidation of Regional AIM Guidance Material

That,

1. noting the availability of updated SARPS and PANS in Annex 15 and Doc 10066, and global guidance material in ICAO Docs 8126, 9839 and 9991; and
2. subject to incorporation in the Asia/Pacific Plan for Collaborative Aeronautical Information Management of regional guidance on selection principles and selection processes for AIS personnel extracted from the Guidance Manual for Aeronautical Information Services in the Asia/Pacific Region:

The Guidance Manual for Aeronautical Information Services in the Asia/Pacific Region be withdrawn, and the Asia/Pacific Plan for Collaborative Aeronautical Information Management Version 3.0 at **Attachment E** be uploaded to the Asia/Pacific Regional Office website, to replace the existing.

Draft Conclusion ATM/SG/11-x: Revised APAC OPADD

That, the revised Operating Procedures for AIS Dynamic Data Version 4.1 at **Attachment F** be uploaded to the Asia/Pacific Regional Office website, to replace the existing.

Preliminary Review of APAC ANP Vol II

2.45. A review of the Asia/Pacific Regional Air Navigation Plan (APAC ANP) Vol. II had been conducted by IFAMA, in collaboration with the Secretariat. The meeting was informed of the history and contents of the ANP.

2.46. Part VII of APAC ANP Vol II complements the provisions in ICAO SARPS and PANS related to AIS/AIM and aeronautical charts. It contains dynamic plan elements related to the assignment of responsibilities to States for the provision of AIS/AIM facilities and services within a specified area in accordance with Article 28 of the Convention on International Civil Aviation (Doc 7300), and mandatory requirements related to the AIS/AIM facilities and services to be implemented by States in accordance with regional air navigation agreements.

2.47. APAC ANP VOL II Table AIM II-1 designated:

- International NOFs;
- States for AIP production;
- States for aeronautical chart production,
- States for provision of authoritative Integrated Aeronautical Information Database; and
- States for the provision of pre-flight information services.

2.48. Only Singapore had provided complete information for Table AIM II-1. 14 Administrations had not provided information on their designated NOF. 42 Administrations had not

provided information on the other elements in the table. There were also inconsistencies between the NOF information published in Table AIM II-1, and that published in AIPs.

2.49. Table AIM II-2 contained production responsibility for sheets of the World Aeronautical Charts (WACs). 22 Administrations had not provided information on all relevant sheet numbers for inclusion in the Table.

2.50. Full details of this review were provided to the meeting in a separate presentation (AAITF/18 SP/3).

2.51. The following course of action was agreed by the meeting:

- All Administrations provide the information necessary to fully populate APAC ANP Vol II Part VII Tables AIM II-1 and AIM II-2 to the ICAO Secretariat; and
- A Proposal for Amendment (PfA) to APAC ANP Volume II will be prepared by the Secretariat on behalf of APAC Administrations, for inclusion in Part VII of updated information in the Tables and any necessary editorial amendments.

2.52. Accordingly, the meeting agreed to the following Draft Conclusion:

Draft Conclusion ATM/SG/11-x: Update of APAC ANP Vol II Part VII

That, States are urged to provide all required information for inclusion in APAC ANP Vol II Part VII Tables AIM II-1 and AIM II-2 to the ICAO Asia/Pacific Regional Office by not later than 28 February 2024, for inclusion in a joint PfA to the ANP to be prepared by ICAO.

Dissemination of Aeronautical Information in SWIM Environment

2.53. The meeting was informed of discussions being held in meetings of contributory bodies in the Communications, Navigation and Surveillance (CNS) field regarding bandwidth required to support System-Wide Information Management (SWIM) services on the Common aeronautical Virtual Private Network (CRV), and was asked to share information on plans to disseminate aeronautical information in the SWIM environment.

2.54. A meeting of the SWIM Task Force (SWIM TF) task leads had requested the Secretariat coordinate with AAITF to understand plans to disseminate aeronautical information in the SWIM environment, to assist in assessing bandwidth requirements.

2.55. The AAITF Secretariat informed AAITF/18 that Phase III of the Regional Plan for Collaborative AIM was aligned with the Global Air Navigation Plan targets for exchange of aeronautical information in the SWIM environment. It was further noted that Phase II was fundamentally related to the migration of aeronautical information into digital datasets in preparation for future information exchange in SWIM, and that overall regional implementation was poor. There were few APAC Administrations that had advanced sufficiently in this field to provide useful information on expected bandwidth requirements.

2.56. The meeting was also informed that other areas of information exchange in the ATM field, such as ATC and Air Traffic Flow Management (ATFM) data, would also require significant bandwidth allocation.

Future Direction of AAITF

2.57. A briefing on the history and progress of AAITF was provided to the meeting, together with proposed changes to its operations that were under consideration by the Secretariat. A total of 32 meetings of AAITF and its predecessor groups, the AIS Automation Task Force (AATF) and AIS Implementation Task Force (AITF) had been held since the formation of AATF in 1994.

2.58. Information was provided on progress in areas that could indicate the success or otherwise of AAITF, and regional engagement in its work, for the ten year period 2014 to 2023:

- AIS/AIM implementation status;
- AIS-related APANPIRG ATM and Airspace Safety Deficiencies;
- Internet accessible AIP drawn from digital databases of aeronautical information;
- Working Papers submitted to AAITF meetings; and
- Hosting of AAITF meetings and workshops.

AIS/AIM Implementation Status

2.59. **Tables 3 and 4** summarize reported AIS/AIM implementation status from AAITF/10 (2015) to AAITF/18.

Regional Implementation Status: Phases 1 and 2 of the ICAO Roadmap for Transition from AIS to AIM										
<i>Note 1: The Asia/Pacific Seamless ATM Plan version 1.0 (2013) expected implementation of Phases 1 and 2 of the Roadmap by November 2015.</i>										
<i>Note 2: The Roadmap was superseded (regional use) by the Asia/Pacific Regional Plan for Collaborative AIM in 2019, and is now globally considered to be out-of-date.</i>										
AAITF YEAR	9 2014	10 2015	11 2016	12 2017	13 2018	14 2019	15 2020	16 2021	17 2022	18 2023
%	N/R	37%	41%	44%	49%	51%	-	-	-	-

Table 3: Implementation of Phases 1 and 2 of the ICAO Roadmap for Transition from AIS to AIM

Regional Implementation Status: Phases 1 and 2 of Regional AIM Capability (Asia/Pacific Regional Plan for Collaborative AIM)										
<i>Note 1: Asia/Pacific Regional Plan for Collaborative AIM, first published in 2018, included the expectation of implementation of Phase I of Regional AIM Capability immediately, and Phase II by November 2019.</i>										
AAITF YEAR	9 2014	10 2015	11 2016	12 2017	13 2018	14 2019	15 2020	16 2021	17 2022	18 2023
%	-	-	-	-	-	45%	45%	48%	50%	51%

Table 4: Implementation of Phases 1 and 2 of Regional AIM Capability

2.60. Tables 3 and 4 highlight continuing poor overall regional performance in the implementation of regional performance expectations, including those from Phase 1 of both the Roadmap and Regional AIM Plan, which related mainly to ICAO Standards and Recommended Practices (SARPS) published in Annexes to the Convention for decades.

Electronic AIP Implementation

2.61. Implementation of an *internet-accessible electronic AIP generated from a digital database of aeronautical information*¹, expected to be implemented by November 2019, could be considered to be an indicator of the State progress in transition from AIS to AIM. Only 11 APAC Administrations have reported implementation.

APANPIRG ATM and Airspace Safety Deficiencies

2.62. **Table 5** summarizes AIS-related Deficiencies recorded by APANPIRG from 2014 to 2022, and the proposed deficiencies for 2023.

AIS-related APANPIRG ATM and Airspace Safety Deficiencies (Number of Administrations)										
YEAR	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
WGS/84	17	15	13	12	12	11	10	10	9	9
AIP Format	4	4	4	2	2	2	2	2	2	2
AIS Quality Management	25	25	22	23	23	22	20	20	20	20

Table 5: AIS-related APANPIRG Deficiencies 2014 - 2023

2.63. These deficiencies also related to SARPS that have been in place for decades. While WGS-84 implementation had shown some improvement, it remained less than ideal. The number of Administrations having deficiencies recorded for AIS quality management was deeply concerning. In this regard, it appeared that AAITF activity only had a minor impact.

¹ Asia/Pacific Air Navigation Plan Volume II Part VII Section 3

Working Papers and Information Papers Submitted to AAITF Meetings

2.64. **Table 6** shows the numbers of Working Papers and Information Papers submitted to AAITF meetings from 2014 to 2023.

Working Papers and Information Papers Submitted to AAITF Meetings 2014 - 2023										
AAITF # YEAR	9 2014	10 2015	11 2016	12 2017	13 2018	14 2019	15 2020	16 2021	17 2022	18 2023
State WPs	4	-	3	3	5	7	3	3	3	2
Secretariat WPs	6	7	9	13	11	17	15	13	10	10
State IPs	7	4	3	3	16	12	4	9	7	6
Secretariat IPs	3	2	2	1	1	1	2	3	2	1
IO WP/IP/SP	-	-	-	2	-	2	1	1	2	5
Total Papers	20	13	17	22	33	39	25	29	24	23

Table 6: Working Papers and Information Papers Submitted to AAITF Meetings.

Hosting of AAITF Meetings

2.65. Since the renaming of the group to AAITF (AAITF/4, 2009) five of its 12 face-to-face meetings have been hosted by States, but of those five only one was hosted by a State in the 10 years commencing with AAITF/9 in 2014 (Thailand hosted AAITF/9 at Pattaya, Thailand).

Future Direction of AAITF

2.66. The views of the meeting were sought on a range of considerations for the future direction of AAITF, including the hosting of meetings and workshops by Administrations having advanced AIS/AIM capability or seeking to highlight the importance of AIS within their organization or government, a systematic programme of workshops in collaboration with participant Administrations and industry partners, direct support and assistance activities such as AIM Go-Teams, familiarization visits and training opportunities, and encouraging Administrations active in the IMP/WG-A to keep AAITF informed of developments and coordinate APAC regional input to panel deliberations.

Note: A workshop/seminar had been conducted in conjunction with all meetings of the task force from AAITF/11 (2016) to AAITF/17 (2022). An extensive, five-day workshop on building effective safety oversight of AIS and AIM, conducted primarily by USA, was held at the ICAO Asia/Pacific Regional Office in January 2020.

2.67. Future AAITF meetings would be reduced to three or four days from the current five.

2.68. Noting the very slow progress in AIS/AIM implementation and deficiency resolution, the Secretariat proposed that consideration be given to holding AAITF meetings once per two years.

2.69. In discussion, the meeting considered that there was a need for close coordination with, and participation of AAITF in, the SWIM TF, and for AAITF participants to be active in other ICAO groups.

2.70. Noting the importance of AIS to the safety and regularity of aviation, the meeting did not support a reduced frequency of AAITF meetings. It was further proposed that AAITF may consider developing guidance on practical issues such as how to implement QMS, how to write procedures for AIS operations, and how to assess effective implementation.

Review the AAITF TOR

2.71. The meeting reviewed the AAITF Terms of Reference, noting the outcomes of discussion of the future direction of AAITF. The meeting agreed to the following Draft Decision for consideration by ATM/SG/11:

Draft Decision ATM/SG/11-x: Update AAITF TOR

That, the updated AAITF TOR at **Attachment G** be adopted.

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 poor 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) agree to **Draft Conclusion ATM/SG/11-x: Asia/Pacific Regional Guidance for Contingency Planning and Response to NOTAM Service Disruption**;
- e) note the ongoing need for resolution of duplicated 5-letter name codes, and for ICARD registration of all 5LNCs that are published in AIP;
- f) agree to **Draft Conclusion ATM/SG/11-x: Revised 5LNC Data Collection Spreadsheet**;
- g) agree to **Draft Conclusion ATM/SG/11-x: Consolidation of Regional AIM Guidance Material**
- h) agree to **Draft Conclusion ATM/SG/11-x: Revised APAC OPADD**;
- i) agree to **Draft Conclusion ATM/SG/11-x: Update APAC ANP Vol II Part VII**;
- j) agree to **Draft Decision ATM/SG/11-x: Update AAITF TOR**; and
- k) discuss any relevant matters as appropriate.

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Draft Conclusion ATM/SG/11-X: Revised 5LNC Data Collection Spreadsheet		
What:	That, the revised 5LNC Data Collection Spreadsheet (version 2.0) provided in Attachment C be made available on the ICAO Asia/Pacific Regional Office website, to replace the existing.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why:	To simplify and clarify the information needed to track resolution of 5LNC duplicates in the Asia/Pacific Region	Follow-up: <input checked="" type="checkbox"/> Required from States
When:	6-Oct-23	Status: Draft to be adopted by Subgroup
Who:	<input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: XXXX	

Draft Conclusion ATM/SG/11-X: Asia/Pacific Regional Guidance for Contingency Planning and Response to NOTAM Service Disruption		
What:	That, The Asia/Pacific Regional Guidance for Contingency Planning and Response to NOTAM Service Disruption at Appendix D to the Report be adopted, and uploaded to the ICAO Asia/Pacific Regional Office website	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why:	To provide regional guidance for NOTAM Office actions in the event of degraded operation or failure of NOTAM systems or any other system or infrastructure supporting promulgation and distribution of NOTAMs	Follow-up: <input type="checkbox"/> Required from States
When:	6-Oct-23	Status: Draft to be adopted by Subgroup
Who:	<input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:	

Draft Conclusion ATM/SG/11-X: Consolidation of Regional AIM Guidance Material		
<p>What: That,</p> <p>1. noting the availability of updated SARPS and PANS in Annex 15 and Doc 10066, and global guidance material in ICAO Docs 8126, 9839 and 9991; and</p> <p>2. subject to incorporation in the Asia/Pacific Plan for Collaborative Aeronautical Information Management of regional guidance on selection principles and selection processes for AIS personnel extracted from the Guidance Manual for Aeronautical Information Services in the Asia/Pacific Region: The Guidance Manual for Aeronautical Information Services in the Asia/Pacific Region be withdrawn, and the Asia/Pacific Plan for Collaborative Aeronautical Information Management Version 3.0 at Attachment A be uploaded to the Asia/Pacific Regional Office website to replace the existing.</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>	
<p>Why: To retire redundant regional guidance and consolidate, to the extent practicable, AIM guidance in the Asia/Pacific Regional Plan for Collaborative AIM</p>	<p>Follow-up: <input checked="" type="checkbox"/> Required from States</p>	
<p>When: 6-Oct-23</p>	<p>Status: Draft to be adopted by Subgroup</p>	
<p>Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: XXXX</p>		

Draft Conclusion ATM/SG/11-X: Revised APAC OPADD		
<p>What: That, the revised Operating Procedures for AIS Dynamic Data Version 4.1 at Appendix E to the Report be uploaded to the Asia/Pacific Regional Office website, to replace the existing.</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>	
<p>Why: To incorporate introductory and background information extracted from the now retired Guidance Manual for AIS in the Asia/Pacific Region.</p>	<p>Follow-up: <input type="checkbox"/> Required from States</p>	
<p>When: 6-Oct-23</p>	<p>Status: Draft to be adopted by Subgroup</p>	
<p>Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:</p>		

Draft Conclusion ATM/SG/11-X: Update of APAC ANP Vol II Part VII		
What:	That, States are urged to provide all required information for inclusion in APAC ANP Vol II Part VII Tables AIM II-1 and AIM II-2 to the ICAO Asia/Pacific Regional Office by not later than 28 February 2024, for inclusion in a joint PfA to the ANP to be prepared by ICAO.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why:	To incorporate required regional elements relating to AIS/AIM in the APAC ANP Vol II.	Follow-up: <input checked="" type="checkbox"/> Required from States
When:	6-Oct-23	Status: Draft to be adopted by Subgroup
Who:	<input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: XXXX	

Draft Decision ATM/SG/11-X: Update AAITF Terms of Reference		
What:	That: the updated AAITF Terms of Reference at Appendix F to the Report be adopted	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why:	To Update the TOR to revise references to regional guidance and planning documents, and to strengthen activity in preparation for exchange of aeronautical information in a SWIM environment	Follow-up: <input type="checkbox"/> Required from States
When:	6-Oct-23	Status: Draft to be adopted by Subgroup
Who:	<input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:	

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Regional Implementation Status of AIM Performance Expectations

Date Last Amended: June 7, 2023																							
	Phase 1													Phase 2							Phase 3		
	1				2	3	4	5	6	7	8	9	10	11	12	13	14			15	16	17	18
	1a	1b	1c	1d													14a	14b	14c				
Afghanistan	0%	0%	0%	0%	0%	0%	40%	0%	30%	0%	0%	0%	0%	0%	30%	0%	0%	0%	50%	0%	0%	0%	
Australia	100%	100%	100%	100%	50%	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%	0%	0%	0%	0%	90%	0%	30%	0%	0%	0%
Bhutan	100%	100%	100%	100%	0%	100%	40%	20%	50%	100%	100%	100%	50%	50%	50%	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	50%	100%	50%	70%	10%	90%	50%	30%	50%	50%	50%	100%	50%	50%	30%	80%	50%	50%	10%	70%	10%	30%	50%
China	100%	100%	100%	80%	100%	100%	100%	100%	100%	100%	100%	90%	40%	70%	100%	100%	0%	50%	70%	100%	30%	10%	10%
Hong Kong, China	100%	100%	100%	100%	100%	100%	100%	100%	100%	90%	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%	60%	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	70%	100%	90%	20%	20%	30%
Fiji	100%	100%	30%	0%	30%	100%	10%	100%	100%	30%	100%	60%	100%	50%	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%	0%	100%	0%	0%	0%
Indonesia	100%	100%	100%	100%	80%	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%	50%	100%	100%	100%	70%	0%	50%	100%	100%	70%	70%	70%	90%	0%	0%	50%
Maldives	100%	80%	50%	100%	0%	100%	50%	50%	60%	50%	100%	70%	0%	50%	60%	0%	0%	0%	0%	50%	0%	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%	20%	100%	70%	100%	70%	90%	100%	100%	30%	0%	70%	0%	50%	50%	30%	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%	70%	100%	100%	60%	100%	100%	70%	70%	100%	100%	70%	100%	60%	100%	70%	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%	50%	100%	100%	100%	50%	100%	100%	100%	0%	100%	100%	0%	0%	0%	30%	50%	0%	0%
Republic of Korea	100%	100%	100%	100%	50%	0%	100%	100%	100%	100%	100%	100%	100%	0%	100%	50%	50%	50%	100%	100%	100%	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%	0%	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%	70%	60%	100%	70%	100%	100%	100%	70%	70%	90%	40%	40%	20%	90%	10%	10%	10%
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%	80%	100%	100%	100%	80%	100%	80%	80%	70%	70%	80%	0%	0%	0%
USA	100%	100%	100%	70%	70%	100%	90%	100%	100%	100%	100%	70%	70%	50%	100%	100%	0%	80%	60%	90%	70%	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%
	64%	72%	60%	59%	29%	59%	51%	53%	60%	53%	60%	71%	42%	39%	62%	47%	29%	37%	24%	53%	20%	12%	13%

Phase 1

- Developed policy and enacted primary legislation and supporting regulations for Annex 4 and Annex 15 SARPS, and PANS-AIM Procedures including:
 - establishment of an organizational structure for the safety oversight of aeronautical information service providers;
 - requirements for monitoring of differences from Annex 4 and Annex 15 SARPS;
 - requirements for aeronautical information/data originators;
- Requirement for AIS quality management systems and processes to be established by all entities in the end-to-end AIS data chain.
- 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.
- 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).
- Developed competency requirements for AIS personnel, including English language proficiency requirements, supported by a program of regular performance assessment.
- Established regular programs of engagement with all stakeholders.
- Established quality management processes for aeronautical information under the SARPS in Annex 15.
- 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.
- 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.
- 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

- 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.
- 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.
- Implemented and maintained quality management systems encompassing all functions of an AIS.
- Established and maintained digital databases of aeronautical information (PANS-AIM Appendix 1)
- Managed terrain, obstacle and aerodrome mapping data through the establishment of:
 - a terrain database, from which terrain data sets conforming with Annex 15 Section 5.3.3.3 may be generated;
 - an obstacle database, from which obstacle data sets conforming with Annex 15 Section 5.3.3.4 may be generated; and
 - an aerodrome mapping database, from which aerodrome mapping data sets conforming with Annex 15 Section 5.3.4 may be generated.
- Implemented internet-accessible electronic AIP generated from a digital database of aeronautical information.

Phase 3

- 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.
- Exchanged digital data sets of aeronautical information in a SWIM environment, aligned with ASBU DAIM-BZ/1, provided Aeronautical Information briefing with integrated meteorological information and Electronic aeronautical charts.

Color Code:

Green - Increased implementation

Red - Decreased implementation

Blue - No Change

INTERNATIONAL CIVIL AVIATION ORGANIZATION



DRAFT

ASIA-PACIFIC REGIONAL GUIDANCE

FOR

CONTINGENCY PLANNING AND RESPONSE TO NOTAM SERVICE DISRUPTION

Approved by the
Eleventh Meeting of the Air Traffic Management
Sub-Group of APANPIRG
(ATM/SG/11, October 2023)

APAC Guidance for Contingency Planning and Response
NOTAM Service Disruption

1. INTRODUCTION, SCOPE AND PURPOSE

1.1 The Eighteenth Meeting of the Asia/Pacific Aeronautical Information Systems – Aeronautical Information Management Implementation Task Force (AAITF/18, Bangkok, Thailand, 19 to 23 June 2023) discussed the ICAO standards¹ requiring that a flight not commence unless it had been ascertained by every reasonable means that ground and/or water facilities, airspace, and departure, destination and alternate aerodromes are:

- adequate for the type of operation;
- adequately operated for the purpose; and
- will safely be used for the planned operation.

1.2 *Reasonable means* in the standards are intended to denote the use, at the point of departure or while the aircraft is in flight, of information available to the operator either through official information published by the aeronautical information services or readily available from other sources.

1.3 To provide information meeting this requirement, International NOTAM Offices (NOFs) establish agreements for the exchange of NOTAMs² supporting the pre-flight information service, and to meet the need for in-flight information.

1.4 The NOTAM service provided in accordance with ICAO Standards and Recommended Practices (SARPS) and Procedures is critical to the safety and regularity of flight. System architecture should provide appropriate levels of redundancy including, according to local needs, such considerations as back-up systems (at diverse sites, where possible), frequently or dynamically updated back-up data bases, full safety risk assessment and ongoing safety management of service operations, regular system and procedure testing, and service level agreements specifying reliability, availability and required restoration times. However, experience has shown that NOTAM services may be disrupted by unexpected failure of a wide range of contributing hardware, software and human systems.

1.5 Due to the irregular nature of issuance of NOTAM a NOF may not be aware of disruption to services provided by another NOF with which it exchanges NOTAM. Similarly, airport and airspace users, Air Traffic Services (ATS) units and data originators such as aerodrome operators are also unlikely to be aware of disruptions to NOTAM services. The degree or level of service interruption could range from minor impact to major outage, which may vary the response. Contingency arrangements may therefore consider degraded systems operation or complete system outages, and/or other issues such as facility or staff availability.

1.6 This document, *The Asia/Pacific Guidance for Contingency Planning and Response – NOTAM Service Disruption*, was developed by AAITF/18 with inclusions proposed by Australia, Cambodia, China, Hong Kong China, Fiji, India, Japan, Malaysia, Pakistan, Singapore, Viet Nam, IATA and ICAO. It is intended to provide information and guidance for the contingency planning and response to outages of the NOTAM service in the event that unexpected failure or degradation of any system or process used for the collection of data and/or the, preparation, storage and transmission of NOTAMs results in interruption to the NOTAM service. The document is maintained by ICAO, on behalf of AAITF, as a stand-alone regional guidance document to facilitate its update in response to future developments and lessons learned.

¹ Annex 6 *Operation of Aircraft* Part I paragraphs 4.1.1 and 4.1.2

² Annex 15 *Aeronautical Information Services* paragraph 2.2.4

APAC Guidance for Contingency Planning and Response
NOTAM Service Disruption

1.7 The checklist of considerations in Section 3 of this document assumes complete outage of the NOTAM service. The use or application of the checklist should be varied according to actual circumstances. The checklist is not exhaustive, and may be supplemented by additional considerations, as locally determined.

2. CHECKLIST OF CONSIDERATIONS

Disruption to Your Administration's NOTAM Service	
1.	Contingency Planning/Preparation for Unexpected Failure:
a.	Develop and publish a NOTAM service contingency plan on the AIS website and/or website of the relevant authority/service provider, either as part of the Business Continuity Plan, ATM Contingency Plan, or as a stand-alone contingency plan.
b.	Determine a maximum period of NOTAM service outage after which the contingency plan will be activated.
c.	Include in the NOTAM service contingency plan a process for prioritization of NOTAMs promulgating immediate or near-term safety-related information, and deferment of others, including procedures for notification of data originators and any domestic NOTAM offices.
d.	Make advance formal arrangements with another AIS, NOF or, if available, domestic NOTAM Office, to transmit NOTAMs on behalf of the disrupted NOF, including the AFTN/AMHS and/or email distribution list for all NOTAM series covered by the arrangement and, where practicable, PIB production. <i>Note: formal arrangements may be stand-alone, or included in ATS or similar operational letters of agreement.</i>
e.	Establish and maintain a list of Points of Contact (POCs) for 24/7 contact with all NOFs with which NOTAMs are exchanged. POC details should include AFTN Address, email address, website URL (if any) and telephone numbers.
f.	If possible, include provision for access to NOTAMs on the AIS website.
g.	Publish the URL of the website (if any) to be used for disruption notifications and contingency NOTAM promulgation in AIP GEN 3.1. (GEN 3.1.1)
h.	Prepare address/distribution list (AFTN/AMHS and email) of receiving NOFs, relevant ATS units, and other organizations including airspace users and data originators that have subscribed or registered for notifications.
i.	Establish an automated process or, if not available, manual procedure to publish notifications on the website and immediately distribute notification to receiving NOFs, relevant ATS units, and other organizations including airspace users and data originators that have subscribed or registered for notifications.
j.	Make arrangements/agreements for alternative means of promulgating information during the disruption such as, where available/appropriate: <ul style="list-style-type: none"> • Neighbouring Another AIS; • Email; • Alternative communication systems that may be available such as ATIS/D-ATIS, ACARS, Data Link; • Automated phone messages.

APAC Guidance for Contingency Planning and Response
NOTAM Service Disruption

Disruption to Your Administration's NOTAM Service	
2.	When disruption occurs:
a.	<p>Prepare a disruption notification including:</p> <ul style="list-style-type: none"> • Time the disruption commenced; • Availability of AFTN/AMHS communication; • Availability of NOTAM issuance/distribution; • Availability of NOTAMs on the AIS or other website, if any; • Availability of PIBs; • A schedule of non-urgent NOTAM promulgation, if any (ideally every XX hours), at regular intervals determined by local factors. • Contact information; • Alternative measures to collect NOTAM, if any; • Expected date/time of recovery
b.	<p>If possible, publish NOTAM to notify the service disruption</p> <p><i>Consider item E): NOTAM SVC FM <LOCATION> NOF NAVBL/REDUCED DUE <DISRUPTION CAUSE>. REFER AIP <REFERENCE> (AND <a href="http://WWW.<URL>/AIS">WWW.<URL>/AIS) FOR CONTINGENCY ARRANGEMENTS.</i></p>
c.	Post the disruption notification on the website, if any.
d.	Send the disruption notification to all parties in the address/distribution list.
e.	<p>When If practicable, post a summary of NOTAMS current at the time of the disruption on the website and send the summary to all recipients of the disruption notification.</p> <p>Alternately, disruption notifications could include direction to third-party international NOTAM databases.</p>
f.	Where practicable, limit the number of NOTAMs promulgated during the disruption to the minimum extent possible by applying priority to NOTAMs promulgating immediate or near-term safety-related information, and deferring others.
g.	Commence promulgating information by alternative means, where available/appropriate.
h.	Update the notification as soon as possible when there is any change in the situation, and in any event at regular intervals of, ideally, not less than XX hours determined by local factors.

Disruption of the NOTAM Service of another Administration with which NOTAMs are Exchanged.	
3.	Baseline Assumptions:
a.	All NOTAMS existing at the time the disruption commenced will remain valid;
b.	PERM NOTAMs will remain unchanged unless advised;
c.	NOTAMs with expiry date/time (not EST) will expire at that time unless otherwise advised of renewal, cancellation or amendment.
d.	Updates will be at scheduled times as advised in the disruption notification, except in the case of urgent, safety critical information.

APAC Guidance for Contingency Planning and Response
NOTAM Service Disruption

NOTAM Service Resumption	
4.	When full NOTAM Service Capability is Restored
a.	Notify all recipients of disruption notifications that normal services are restored.
b.	Promulgate a checklist of valid NOTAMs

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5LNC STATUS - AFGHANISTAN

Date: June 2023

ICARD	Total number of 5LNCs	203
	Terminal Airspace (TA)	94
	En-route (ENR)	66
	FIR	17
	Other	9
	No Purpose	17
	No Coordinates	3

Duplicated 5LNCs	Total number of duplicated 5LNCs	12
	Priority allocated to Afghanistan	6
	Priority allocated to other States	2
	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	4

Priority allocated to Afghanistan			
5LNC	States		Priority
BOTAN	2	Afghanistan, Japan	Afghanistan
GOSKI	2	Afghanistan, Japan	Afghanistan
NIPIR	2	Afghanistan, New Zealand	Afghanistan
RAMSO	2	Afghanistan, India	Afghanistan
TAPIS	2	Afghanistan, Malaysia	Afghanistan
KAMAR	2	Afghanistan/Iran (Islamic Republic of) [FIR boundary], Japan	Afghanistan/Iran (Islamic Republic of)

Priority allocated to other States			
5LNC	States		Priority
BENUL	2	Canada, Afghanistan	Canada
MIRAB	2	Saudi Arabia, Afghanistan	Saudi Arabia

5LNC STATUS - AUSTRALIA

Date: June 2023

ICARD	Total number of 5LNCs	3325
	Terminal Airspace (TA)	1390
	En-route (ENR)	1461
	FIR	36
	Other	215
	No Purpose	223
	No Coordinates	24

Duplicated 5LNCs	Total number of duplicated 5LNCs	797
	Priority allocated to Australia	36
	Priority allocated to other States	212
	Priority to be determined	19
	In the process of being resolved	25
	Completely resolved 5LNCs	505

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
BIMOP	2 Australia, India	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
GITOP	2 Australia, Seychelles/India (FIR boundary)	Australia	No
GUKON	2 Australia, New Zealand	Australia	No
IBUSU	2 Australia, India	Australia	No
IDUNA	2 Australia, Singapore	Australia	No
IKODA	2 Australia, Maldives	Australia	No
JACKI	2 United States of America, Australia	Australia	No
LATEP	2 Australia/Mauritius (FIR boundary), India	Australia/Mauritius	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
OKTON	2 Australia, Malaysia	Australia	No
ONAGI	2 Australia, India	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

Priority allocated to other States				
5LNC		States	Priority	Within 1000NM
ALBAK	2	Colombia, Australia	Colombia	No
ALEXI	2	United States of America, Australia	United States of America	No
ALIRA	2	Canada, Australia	Canada	No
ALLOT	2	United States of America, Australia	United States of America	No
AMITY	2	Australia, Japan	Japan	No
ANCOR	2	United States of America, Australia	United States of America	No
ANDYS	2	Australia, United States of America	United States of America	No
ANGAS	2	Brazil, Australia	Brazil	No
APPLE	4	United States of America, United Kingdom, Australia, Japan	United Kingdom	No
ARRAN	2	United States of America, Australia	United States of America	No
ARTHA	2	United Kingdom, Australia	United Kingdom	No
BABEL	3	United States of America, Japan, Australia	United States of America	No
BAKER	4	Hong Kong China, China, Australia, United Kingdom	United Kingdom	Yes
BARFF	2	United States of America, Australia	United States of America	No
BARKA	3	Australia, Algeria, Brazil	Brazil	No
BARTN	3	Australia, United Kingdom, United States of America	United Kingdom	No
BASIL	3	Brazil, Japan, Australia	Brazil	No
BEKKA	2	Japan, Australia	Japan	No
BERNI	2	United States of America, Australia	United States of America	No
BERTI	4	Algeria, Brazil, United States of America, Australia	United States of America	No
BEVLY	2	United States of America, Australia	United States of America	No
BEVSU	2	India, Australia	India	No
BIGAL	2	United States of America, Australia	United States of America	No
BIRDY	3	Japan, Thailand, Australia	Japan	No
BISON	6	China (2), Indonesia, Viet Nam, Australia, United States of America	United States of America	Yes
BITES	2	United States of America, Australia	United States of America	No
BRADD	2	Canada/United States of America (FIR boundary), Australia	Canada/United States of America	No
BRIGG	2	United States of America, Australia	United States of America	No
BROOK	4	Australia, Japan, New Zealand, United States of America	United States of America	No
BULOK	2	Morocco, Australia	Morocco	No
BURPA	2	Colombia, Australia	Colombia	No
CANRI	2	United States of America, Australia	United States of America	No
CANTY	2	United States of America, Australia	United States of America	No
CARBA	2	Costa Rica (COCESNA), Australia	Costa Rica	No
CHEWY	2	United States of America, Australia	United States of America	No
CHOOK	2	United States of America, Australia	United States of America	No
CLARK	4	Australia, New Zealand, United States of America, Brazil	United States of America	No
CONNI	2	United States of America, Australia	United States of America	No
CORAL	8	China, Japan, Australia, Polynesie Française, Brazil, Cuba, Mexico, Honduras (COCESNA)	Brazil	Yes
CORKY	3	Australia, United States of America, Portugal	United States of America	No
CORNE	2	United States of America, Australia	United States of America	No
CORNS	3	Australia, United States of America (2)	United States of America	No
CORSA	2	Mexico, Australia	Mexico. Australia if not used by Mexico.	No
CORSI	2	France/Italy (FIR boundary), Australia	France/Italy	No
COTON	3	Hong Kong China, Australia, United States of America	United States of America	No
CRAIG	2	United States of America, Australia	United States of America	No
CRANE	5	United States of America, Brazil, Republic of Korea, Australia, Japan	United States of America	Yes
CURLY	2	United States of America, Australia	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	No
DEBAY	2	United States of America, Australia	United States of America	No
DELAK	3	Australia, Russian Federation, Chile	Russian Federation	No
DENIS	3	Australia, China, Mali (ASECNA)	Mali (ASECNA)	No
DINGO	3	Japan, Australia, United States of America	United States of America	No
DIPSO	2	United Kingdom, Australia	United Kingdom	No
DONYA	2	Canada/United States of America, Australia	Canada/United States of America	No
DOREN	2	Cyprus/Turkey (FIR boundary), Australia	Cyprus/Turkey	No
DORIS	3	Australia, Japan, United States of America	United States of America	No

DREWS	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
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
FERGI	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
FISHY	2	United States of America, Australia	United States of America	No
FREDY	4	Australia, Japan, Seychelles, Bahamas	Bahamas	No
FULTN	2	United States of America, Australia	United States of America	No
GALLI	2	United States of America, Australia	United States of America	No
GIVEN	2	United States of America, Australia	United States of America	No
GRENE	2	United States of America, Australia	United States of America	No
GULLY	2	United States of America, Australia	United States of America	No
HAKIT	2	United States of America, Australia	United States of America	No
HAMTN	2	United States of America, Australia	United States of America	No
HANKY	5	United States of America, United Kingdom, Republic of Korea, China, Australia	United Kingdom	Yes
HARPO	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
HELNA	2	United States of America, Australia	United States of America	No
HILLS	3	United States of America, Australia, Japan	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
HURTT	2	United States of America, Australia	United States of America	No
INCON	2	United States of America, Australia	United States of America	No
INDEE	2	Bahamas, Australia	Bahamas	No
IRONS	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
KAREN	3	Australia, Paraguay, United States of America	United States of America	No
KARSI	2	Russian Federation, Australia	Russian Federation	No
KEELS	2	United States of America, Australia	United States of America	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
KINGS	3	United States of America, Australia, New Zealand	United States of America	No
KIRAN	2	Jamaica, Australia	Jamaica	No
KONDA	2	Spain, Australia	Spain	No
LAKED	2	Russian Federation, Australia	Russian Federation	No
LAMSI	2	Germany, Australia	Germany	No
LANOL	2	Kazakhstan/Uzbekistan (FIR boundary), Australia	Kazakhstan/Uzbekistan	No
LARDO	3	Pakistan, Australia, Switzerland	Switzerland	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
LEESA	3	Lao People's Democratic Republic, Australia, United States of America	United States of America	No
LILEE	2	Italy, Australia	Italy	No
LIZZI	2	United States of America, Australia	United States of America	No
LUFFY	2	Australia, Japan	Japan	No
LUNAR	3	Italy, Japan, Australia	Italy	No
LUVLY	2	United States of America, Australia	United States of America	No
MAGDA	3	Bolivia, Brazil, Australia	Brazil	Yes
MAIDS	2	United States of America, Australia	United States of America	No
MAJOR	2	United States of America, Australia	United States of America	No
MANDU	3	India, Australia, Brazil	Brazil	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
MECKI	2	Spain, Australia	Spain	No
MEETA	2	United States of America, Australia	United States of America	No
MILLA	2	Australia, New Zealand	United States of America	No
MINIM	2	United States of America, Australia	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
MUMSY	2	United States of America, Australia	United States of America	No
NAVEY	2	United States of America, Australia	United States of America	No
NELLY	2	United States of America, Australia	United States of America	No
NERTI	2	France, Australia	France	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
NOLAN	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
PALGA	2	Singapore, Australia	Singapore	No
PANKI	2	China, Australia	China	No
PARKA	3	Spain, United States of America, Australia	Spain	No
PARKS	2	United States of America, Australia	United States of America	No
PAULA	3	United States of America, Brazil, Australia	United States of America	No
PIKIL	2	Ireland/United Kingdom, Australia	Ireland/United Kingdom	No
POONA	2	Australia, Thailand	Thailand	No
PONYS	2	United States of America, Australia	United States of America	No
PORKY	3	United States of America, Portugal, 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
PRICE	3	United States of America (2), Australia	United States of America	Yes
QUINS	3	Australia, Republic of Korea, United States of America	United States of America	No
RAFFS	2	United States of America, Australia	United States of America	No
RAILS	2	United States of America, Australia	United States of America	No
RAMON	5	Costa Rica (COCESNA), Uruguay, United States of America, Spain, Australia	United States of America	No
RAYMO	2	United States of America, Australia	United States of America	No
RIDGE	4	United States, Australia, New Zealand, Japan	United States of America	No
RILEY	3	United States of America, Australia, New Zealand	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
ROHAN	2	United States of America, Australia	United States of America	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	No
SAILA	3	Japan, Australia, United States of America	United States of America	No
SAILS	3	Japan, Australia, United States of America	United States of America	No
SALIS	2	United States of America, Australia	United States of America	No
SALLY	2	United States of America, Australia	United States of America	No
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
SANDY	6	China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom,	New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand.	Yes
SARAH	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
SCAPA	2	Netherlands (Netherlands Antilles)/United States of America [FIR boundary], Australia	Netherlands Antilles (Netherlands)/United States of America	No
SCOTI	2	United States of America, Australia	United States of America	No
SHEPP	2	United States of America, Australia	United States of America	No
SHOAL	3	Australia, New Zealand, United States of America	United States of America	No
SIRUS	2	Chile, Australia/New Zealand	Chile	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
SOKAL	2	Egypt, Australia	Egypt	No
STANZ	2	United States of America, Australia	United States of America	No
STEEL	3	Australia, Japan, United States of America	United States of America	No
STEVO	2	United States of America, Australia	United States of America	No
SULLY	2	United States of America, Australia	United States of America	No
SUNNY	4	Australia, Japan, Republic of Korea, United States of America	United States of America	Yes
SWANN	2	United States of America, Australia	United States of America	No
SWIFT	2	United States of America, Australia	United States of America	No
TAGOD	2	Slovakia, Australia	Slovakia. Australia if not used by Slovakia.	No
TALAG	2	Honduras (COCESNA), Australia	Belize/Costa Rica/EI 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
TIMMY	2	United States of America, Australia	United States of America	No
TOMAS	6	Australia, New Zealand, Brazil, Venezuela, Costa Rica (COCESNA), Denmark (Greenland)	Denmark (Greenland)	No
TONAR	4	Australia, Japan, Russian Federation, Argentina/Chile (FIR boundary)	Russian Federation	No
TUMAN	2	Canada, Australia	Canada	No
TUMBL	2	United States of America, Australia	United States of America	No
UGENE	2	United States of America, Australia	United States of America	No
VETEL	2	Portugal, Australia	Portugal	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
WAVES	3	Japan, Australia, United States of America	Japan	No
WENDY	4	Japan, Australia, United States of America, Portugal	United States of America	No
WESTY	3	Norway, United States of America, Australia	Norway	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
WINCH	3	United States of America, Australia, New Zealand	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
ZORBA	3	Spain, New Zealand, Australia	Spain	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
COOKY	2	Australia, China	To be determined by the 5LNC Duplicate Resolution Rules	No
DEENA	2	Australia, Israel	To be determined by the 5LNC Duplicate Resolution Rules	No
FALLS	3	Philippines, Australia, New Zealand	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
JABBA	3	Australia, New Zealand, Canada	To be determined by the 5LNC Duplicate Resolution Rules	No
KALAM	3	Australia, India, Indonesia	To be determined by the 5LNC Duplicate Resolution Rules	No
KETCH	2	Australia, China	To be determined by the 5LNC Duplicate Resolution Rules	No
LUNGA	2	Australia, New Zealand	To be determined by the 5LNC Duplicate Resolution Rules	No
MACEL	2	Australia, China	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

MURRY	3	United States of America, Hong Kong China, Australia	To be determined by the 5LNC Duplicate Resolution Rules	No
NORMA	2	Australia, Japan	To be determined by the 5LNC Duplicate Resolution Rules	No
OPTIC	2	Australia, China	To be determined by the 5LNC Duplicate Resolution Rules	No
RUSSO	2	Australia, United States of America	To be determined by the 5LNC Duplicate Resolution Rules	No
SIGUL	2	Australia, Argentina	To be determined by the 5LNC Duplicate Resolution Rules	No
TEENA	2	Australia, New Zealand	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				
5LNC	States		Note	Within 1000NM
ALORA	3	Jamaica, Spain, Australia	Australia replaced with VIRAP, but ICARD deletion request not yet submitted.	No
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 deletion request not yet submitted.	No
BIDAP	2	Australia, Sri Lanka	Sri Lanka is coordinating with ICARD for replacing BIDAP.	No
BOBET	2	India, Australia	Australia replaced with EKUNO, but ICARD deletion request not yet submitted.	No
BORDA	3	Hong Kong China, Australia, United States of America	Australia replaced with MOMGI, but ICARD deletion request not yet submitted.	No
BUNDY	2	Australia, Thailand	Not published in AIP Thailand. Priority given to Australia.	No
COOPS	2	United States of America, Australia	Australia replaced with KARGI, but ICARD deletion request not yet submitted.	No
CRIST	2	United States of America, Australia	Removed from United States of America. Australia replaced with NUBTA, but ICARD deletion request not yet submitted.	No
DOSEL	3	Australia, Germany, United States of America	Removed from United States of America, but ICARD deletion request not yet submitted.	No
EBONY	3	Australia, Indonesia, United States of America	Indonesia replaced EBONY.	No
EMLED	2	Canada, Australia	Canada released. Availability date 30 Oct 2020 to Australia, but ICARD registration request not yet submitted.	No
JORDY	2	United States of America, Australia	Australia replaced with OROLU, but ICARD deletion request not yet submitted.	No
KARRA	2	Australia, Republic of Korea	Not published in AIP Republic of Korea. Priority given to Australia.	No
KITTY	2	Australia, Thailand	Thailand replacing KITTY, Priority given to Australia	No
MARUB	2	Australia, Japan	Japan replacing MARUB. Priority given to Japan.	No
MORGA	2	United States of America, Australia	Australia replaced with LENBA, but ICARD deletion request not yet submitted.	No
NINO	2	Australia, India	Australia replaced with SINMA, but ICARD deletion request not yet submitted. Priority to be given to India.	No
POPET	3	India, Cambodia, Australia	Deleted from Cambodia AIP, but ICARD deletion request not yet submitted.	No
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

TABAL	2	Algeria, Australia	Australia replaced with LENRI, but ICARD deletion request not yet submitted. Priority to be given to Algeria.	No
TARUN	2	Russian Federation, Australia/Indonesia (FIR boundary)	Australia/Indonesia replaced with BOPLO, but ICARD deletion request not yet submitted. Priority to be given to Algeria.	No
VALDA	3	United States of America/Russian Federation (FIR boundary), United States of America	Australia replaced with ATSIN, but ICARD deletion request not yet submitted. Priority to be given to United States of America.	No
WESTI	2	United States of America, Australia	Australia replaced with PIDUT, 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 2023

ICARD	Total number of 5LNCs	82
	Terminal Airspace (TA)	5
	En-route (ENR)	21
	FIR	15
	Other	28
	No Purpose	13
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	7
	Priority allocated to Bangladesh	0
	Priority allocated to other States	1
	Priority to be determined	0
	In the process of being resolved	1
	Completely resolved 5LNCs	5

Priority allocated to Bangladesh			
5LNC	States	Priority	Within 1000NM

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

TAROS	3	Indonesia/Singapore (FIR boundary), India/Bangladesh (FIR boundary), Mexico	Indonesia/Singapore	No
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Priority to be determined			
5LNC	States	Priority	Within 1000NM

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

HORIN	3	Thailand, Bangladesh, Mongolia.	Mongolia replaced HORIN. Thailand de-registered HORIN. Bangladesh to register HORIN.	No
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5LNC STATUS - BHUTAN

Date: June 2023

ICARD	Total number of 5LNCs	13
	Terminal Airspace (TA)	0
	En-route (ENR)	13
	FIR	0
	Other	0
	No Purpose	0
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	7
	Priority allocated to Bhutan	0
	Priority allocated to other States	1
	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	6

Priority allocated to Bhutan			
5LNC	States	Priority	Within 1000NM

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

TAKTI	2	Saudi Arabia, Bhutan	Saudi Arabia	No
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5LNC STATUS - BRUNEI DARUSSALAM

Date: June 2023

ICARD	Total number of 5LNCs	8
	Terminal Airspace (TA)	1
	En-route (ENR)	6
	FIR	0
	Other	1
	No Purpose	0
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	3
	Priority allocated to Brunei Darussalam	1
	Priority allocated to other States	2
	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	0

Priority allocated to Brunei Darussalam			
5LNC	States	Priority	Within 1000NM
SAMET	2 Thailand, Brunei Darussalam	Brunei Darussalam	Yes

Priority allocated to other States			
5LNC	States	Priority	Within 1000NM
OLMIR	2 Spain, Brunei Darussalam	Spain	No
RUSIL	2 New Zealand, Brunei Darussalam	New Zealand	No

5LNC STATUS - CAMBODIA

Date: June 2023

ICARD	Total number of 5LNCs	115
	Terminal Airspace (TA)	57
	En-route (ENR)	30
	FIR	11
	Other	0
	No Purpose	17
	No Coordinates	2

Duplicated 5LNCs	Total number of duplicated 5LNCs	48
	Priority allocated to Cambodia	0
	Priority allocated to other States	22
	Priority to be determined	1
	In the process of being resolved	2
	Completely resolved 5LNCs	23

Priority allocated to Cambodia			
5LNC	States	Priority	Within 1000NM

Priority allocated to other States			
5LNC	States	Priority	Within 1000NM
AKATA	3 Canada, Russian Federation, Cambodia	Russian Federation	No
BANON	2 Russian Federation, Cambodia	Russian Federation	No
BARAY	2 United States of America, Cambodia	United States of America	No
BASAK	2 Russian Federation, Cambodia	Russian Federation	No
BATEE	2 United States of America, Cambodia	United States of America	No
BOSET	2 France (Guadeloupe), Cambodia	France (Guadeloupe)	No
CONDA	2 Viet Nam, Cambodia	Viet Nam	Yes
DAMAT	2 Turkey, Cambodia	Turkey	No
KELN	2 United States of America, Cambodia	United States of America	No
KULEN	2 Croatia, Cambodia	Croatia	No
LALIN	2 Germany, Cambodia	Germany	No
LAVAN	2 United States of America, Cambodia/Lao People's Democratic Republic	United States of America	No
MADAM	2 United States of America, Cambodia	United States of America	No
NORIN	2 Austria/Germany, Cambodia	Austria/Germany	No
OMLET	2 Japan/United States of America (FIR boundary), Cambodia	Japan/United States of America	No
RAMAR	2 Germany, Cambodia	Germany	No
SAMBO	3 Cambodia, Viet Nam, Japan	Viet Nam	Yes
SANDA	4 United States of America, Angola, Japan, Cambodia	United States of America	No
TAMEN	2 Canada, Cambodia	Canada	No
TANAK	2 Russian Federation, Cambodia	Russian Federation	No
VANAK	2 Russian Federation, Cambodia	Russian Federation	No
VESNA	2 Canada, Cambodia	Canada	No

Priority to be determined			
5LNC	States	Priority	Within 1000NM
SAPAL	2 Cambodia, Indonesia	To be determined by the 5LNC Duplicate Resolution Rules	No

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

DORAT	2	Malta, Cambodia	Deleted from Malta. No longer published in 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

Completely resolved 5LNCs			
5LNC	States	Note	Within 1000NM

ALEXV	2	Cambodia, Afghanistan	No longer published in AIP Cambodia.	No
ALVIN	3	Cambodia, United Kingdom, United States of America	No longer published in AIP Cambodia.	No
BANSA	2	Norway, Cambodia/Viet Nam (FIR boundary)	No longer published in AIP Cambodia.	No
KARKA	2	Australia, Cambodia	No longer published in AIP Cambodia.	No
KAKET	2	New Zealand, Thailand/Cambodia (FIR boundary)	No longer published in AIP Cambodia.	No
KORKI	2	Colombia, Cambodia	No longer published in AIP Cambodia.	No
MOSNA	3	Brazil, Colombia, Cambodia	No longer published in AIP Cambodia.	No
NORAK	2	Canada, Cambodia	No longer published in AIP Cambodia.	No
OTRES	2	Austria, Cambodia	No longer published in AIP Cambodia.	No
PASAK	2	Bahrain, Cambodia	No longer published in AIP Cambodia.	No
PISET	3	Cambodia, Mexico, Dominican Republic	No longer published in AIP Cambodia.	No
ROKAS	2	Cambodia, Peru	No longer published in AIP Cambodia.	No
SAMOT	2	Cambodia, Australia/New Zealand	No longer published in AIP Cambodia.	No
SATON	2	Cambodia, Mexico	No longer published in AIP Mexico	No
SANKA	3	Cambodia, United States of America, Brazil	No longer published in AIP Cambodia.	No
SOPAN	2	Denmark (Greenland), Cambodia	No longer published in AIP Cambodia.	No
SOVAN	2	Italy, Cambodia	No longer published in AIP Cambodia.	No
TABEN	2	United Kingdom, Cambodia	No longer published in AIP Cambodia.	No
TASEK	2	Indonesia/Malaysia (FIR boundary), Cambodia	No longer published in AIP Cambodia.	Yes
THARA	3	Nepal, Thailand, Cambodia	No longer published in AIP Cambodia.	Yes
TOTRI	2	United Kingdom, Cambodia/Viet Nam (FIR boundary)	No longer published in AIP Cambodia.	No
VISION	2	Spain, Cambodia	No longer published in AIP Cambodia.	No
VARIN	3	Thailand, Cambodia, United States of America	Removed from United States of America. No longer published in AIP Thailand. Cambodia registered.	Yes

5LNC STATUS - CHINA

Date: June 2023

ICARD	Total number of 5LNCs	1489
	Terminal Airspace (TA)	280
	En-route (ENR)	928
	FIR	17
	Other	6
	No Purpose	258
	No Coordinates	2

Duplicated 5LNCs	Total number of duplicated 5LNCs	228
	Priority allocated to China	31
	Priority allocated to other States	158
	Priority to be determined	27
	In the process of being resolved	7
	Completely resolved 5LNCs	5

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
BIPOP	2	China, Singapore	China	No
BORDO	2	China/Japan FIR boundary, United States of America/Cuba	China/Japan	No
DOREX	2	China, China/Philippines (FIR boundary)	China	No
EKADI	2	China, India	China	No
ESPEG	2	China, Australia	China	No
GOBIN	2	China, Fiji/New Zealand (FIR boundary)	China	No
IGLIT	2	China (2)	China	No
IKARU	2	China, Japan	China	No
KABDO	2	China, Mauritius	China	No
KAGRA	2	China, Japan	China	No
LEDIM	2	China, Solomon Islands	China	No
LEKUB	2	China, Fiji	China	No
LOVTA	2	China, New Zealand	China	No
MADDEM	2	China (2)	China	Yes
MANLI	2	China, Australia	China	No
MAVRA	2	China, Philippines	China	No
MIMAR	2	China, Bangladesh	China	No
NOKAK	2	China, New Zealand	China	No
OBDEG	2	China, New Zealand	China	No
OKATO	2	China, Malaysia/Singapore (FIR boundary)	China	No
PANKI	2	China, Australia	China	No
PONEN	2	China, Spain	China	No
SANKO	2	China, Japan	China	Yes
SAPUT	2	China, Thailand	China	No
TEGAR	2	China, Japan	China	No
TOMUD	2	China, Malaysia	China	Yes
UBLAT	2	China, Indonesia	China	No
UVUNO	2	China, Viet Nam	China	Yes

Priority allocated to other States				
5LNC	States		Priority	Within 1000NM
ABASA	3	China, Philippines, Indonesia	Indonesia	No
ALDEL	2	Australia, China	Australia	No

ALPHA	11	Lao People's Democratic Republic, Vanuatu, China, India, Italy, Russian Federation, Turkey, United Kingdom (2), United Kingdom (Gibraltar), United Kingdom (Falkland Islands)	Lao People's Democratic Republic	Yes
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, Philippines	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
BRAVO	7	China, India, Syrian Arab Republic, United Kingdom, United Kingdom (Falkland Islands), Italy, Brazil	Brazil. To be determined by the 5LNC Duplicate Resolution Rules if not used by Brazil.	Yes
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
CAMRI	3	China (Macao), Viet Nam, United States of America,	United States of America	Yes
CAROL	3	Japan, China, United States	United States of America	No
COMPA	2	United States of America, China	United States of America	No
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
DOCTA	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
DRAKE	5	Chile/Argentina, Costa Rica (COCESNA), United States of America, United Kingdom, China	United Kingdom	No
DUBAG	2	Australia, China	Australia	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
GENIE	2	United States of America, China	United States of America	No
GENUS	3	Brazil, United States of America, China	United States of America	No
GIANT	2	Brazil, China	Brazil	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
GRAIN	2	United States of America, China	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
HANKY	5	United States of America, United Kingdom, Republic of Korea, China, Australia	United Kingdom	Yes
HAPPY	2	Japan, China	Japan	No
HIPPO	3	United States of America, Australia, China	United States of America	No
HOTEL	4	China, Viet Nam, Thailand, Canada	Canada. To be determined by the 5LNC Duplicate Resolution Rules if not used by Canada.	Yes
HYDEE	2	United States of America, China	United States of America	No
IMAGE	2	United States of America, China	United States of America	No
IMPEL	3	United States of America, Brazil, China	United States of America	No
INDIA	4	Indonesia, China, Spain, United States of America	United States of America	No
INDUS	2	Russian Federation, China	Russian Federation	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
KILLY	3	China, Japan, United States of America	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
KUKAN	2	Russian Federation, China	Russian Federation	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
LAVOS	2	Lao People's Democratic Republic/Viet Nam (FIR boundary), China	Lao People's Democratic Republic/Viet Nam	Yes
LEKOS	2	Russian Federation, China	Russian Federation	No
LENTO	3	Japan, China, Thailand	Japan	Yes
LOBAR	5	Chile, Bolivia, Peru, Spain, China	Chile. To be determined by the 5LNC Duplicate Resolution Rules if not used by Chile.	Yes
LOTOS	3	Spain, Saudi Arabia, China	Spain	No
LOTTO	2	United States of America, China	United States of America	No
LUCAS	7	Costa Rica, Venezuela, Mexico, Brazil, Australia, China, Philippines	Venezuela	Yes
MALAY	5	United States of America, Myanmar, China, Viet Nam, Philippines	United States of America	Yes
MALIN	3	United States of America, Thailand, China	United States of America	No
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
MAZDA	3	China, Japan, United States of America	United States of America	Yes
MECCA	2	United States of America, China	United States of America	No
MEDIT	2	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, China	Chile	No
OASIS	2	Mexico, China	Mexico	No
OLIVE	5	China, Japan, Thailand, United States of America (American Samoa), United Kingdom	United Kingdom	Yes
ORION	8	Philippines, China, Japan, Tonga, Italy, United States of America, Peru, Spain	United States of America	Yes

ORTIZ	3	United States of America, Colombia/Venezuela (FIR boundary), China	United States of America	No
OSCAR	3	Spain, United States of America, China	United States of America	No
PANDA	5	United States of America, Brazil, Japan, China, Philippines	United States of America	Yes
PASTA	4	Australia, China, Pakistan, Brazil	Pakistan	No
PEARL	3	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
QUOTA	2	United States of America, China	United States of America	No
RAVIE	2	Venezuela (Bolivarian Republic of), China	Venezuela (Bolivarian Republic of)	No
REGLE	2	United States of America, China	United States of America	No
RODEN	3	China, United States of America, Russian Federation	United States of America	No
SALUN	2	Egypt/Greece (FIR boundary), China	Egypt/Greece	No
SANDY	6	China, Republic of Korea, Phillippines, Australia, New Zealand, United Kingdom,	New Zealand. To be determined by the 5LNC Duplicate Resolution Rules if not used by New Zealand.	Yes
SARGO	4	United States of America, Spain, Argentina/Uruguay (FIR boundary), China	Spain	No
SASHA	2	United States of America, China	United States of America	No
SEDUM	2	Canada, China	Canada	No
SENNA	3	United States of America, Japan, China	United States of America	No
SEPIA	3	China, Japan, Republic of Korea	Japan	Yes
SERVE	4	United States of America, Japan, Australia, China	United States of America	Yes
SPICA	3	China, Japan, Canada	Canada	Yes
SUPER	3	United States of America, Australia, China	United States of America	No
TABOR	3	Venezuela, Chile, China	Venezuela	No
TAZAN	2	United States of America, China	United States of America	No
TENLI	2	Netherlands, China	Netherlands	No
TEPID	2	United States of America, China	United States of America	No
TITUS	2	Greece, China	Greece	No
TODAM	2	Singapore, China	Singapore	No
TOMMY	4	United States of America, Japan, China, Thailand	United States of America	No
TONNY	3	Canada, Japan, China	Canada	No
TOSAS	2	Australia/Papua New Guinea (FIR boundary), China	Australia	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
VIRGO	3	Tonga, Japan, China	Japan	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
ARGOS	2	China, Chile	To be determined by the 5LNC Duplicate Resolution Rules	No
ATOLL	3	Libya, Fiji, China	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

COOKY	2	Australia, China	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
FILET	2	Australia, China	To be determined by the 5LNC Duplicate Resolution Rules	No
JABAR	3	Philippines, Pakistan, 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
KETCH	2	Australia, China	To be determined by the 5LNC Duplicate Resolution Rules	No
KIRIN	3	Thailand, China, Japan	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
OSTIN	2	China, Australia	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
SADAN	2	Indonesia/Philippines (FIR boundary), China	To be determined by the 5LNC Duplicate Resolution Rules	No
TELMA	2	Philippines, Japan/China	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.	No
CAMUS	2	Australia, China	Australia replaced CAMUS. Priority given to China.	No
KANGA	2	Australia, China	Australia replaced CAMUS. Priority given to China.	No
MIDEL	2	Australia, China	Australia replaced CAMUS. Priority given to China.	No
NOMAD	2	Australia, China	Australia replaced NOMAD. Priority given to China	No
OCTAN	2	Australia, China	Australia replaced CAMUS. Priority given to China.	No
POLKA	2	China, Republic of Korea	Not published in AIP Republic of Korea. Priority givent to China.	Yes

5LNC STATUS - COOK ISLANDS

Date: June 2023

ICARD	Total number of 5LNCs	99
	Terminal Airspace (TA)	98
	En-route (ENR)	1
	FIR	0
	Other	0
	No Purpose	1
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	1
	Priority allocated to Cook Islands	0
	Priority allocated to other States	0
	Priority to be determined	0
	In the process of being resolved	1
	Completely resolved 5LNCs	0

Priority allocated to Cook Islands			
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			
5LNC	States	Note	Within 1000NM

MURIA	2	Cook Islands, Indonesia	Indonesia deleted MURIA. Priority given to Cook Islands	No
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5LNC STATUS - DPR KOREA

Date: June 2023

ICARD	Total number of 5LNCs	12
	Terminal Airspace (TA)	1
	En-route (ENR)	0
	FIR	2
	Other	0
	No Purpose	9
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	5
	Priority allocated to DPR Korea	1
	Priority allocated to other States	4
	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			
5LNC	States	Priority	Within 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	United States of America	No
SONDO	2 United Kingdom, Democratic People's Republic of Korea	United Kingdom	No

5LNC STATUS - FIJI

Date: June 2023

ICARD	Total number of 5LNCs	206
	Terminal Airspace (TA)	80
	En-route (ENR)	40
	FIR	12
	Other	1
	No Purpose	73
	No Coordinates	3

Duplicated 5LNCs	Total number of duplicated 5LNCs	39
	Priority allocated to Fiji	4
	Priority allocated to other States	26
	Priority to be determined	4
	In the process of being resolved	2
	Completely resolved 5LNCs	3

Priority allocated to Fiji			
5LNC	States	Priority	Within 1000NM
BAVAP	2 Fiji, India	Fiji	No
DAKAM	2 Fiji/New Zealand, Viet Nam	Fiji/New Zealand	No
EXORA	2 Fiji, Philippines	Fiji	No
SARAT	2 Fiji/Vanuatu, United States of America	Fiji	No

Priority allocated to other States			
5LNC	States	Priority	Within 1000NM
ALANA	2 Fiji, United States of America	United States of America	No
ALENO	2 Fiji, Romania	Romania	No
BATIA	2 Benin, Fiji	Benin	No
DENTO	2 United States of America, Fiji	United States of America	No
DOTOR	2 Mexico, Fiji	Mexico	No
EMURI	2 Saudi Arabia, Fiji	Saudi Arabia	No
GOBIN	2 China, Fiji/New Zealand (FIR boundary)	China	No
HAMAL	2 United States of America (Guam), Fiji	United States of America	No
KETOT	2 Malaysia, Fiji/New Zealand (FIR boundary)	Malaysia	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
LATKA	2 Estonia, Fiji	Estonia	No
LEKUB	2 China, Fiji	China	No
MABEL	2 Spain, Fiji	Spain	No
MALAK	2 Saudi Arabia, Fiji	Saudi Arabia	No
MALEE	2 United States of America, Fiji	United States of America	No
MENTO	3 Costa Rica (COCESNA), Fiji, Republic of Korea	Costa Rica. To be determined by the 5LNC Duplicate Resolution Rules if not used by Costa Rica.	No
MUNDU	2 Saudi Arabia, Fiji	Saudi Arabia	No
NEMAL	3 Austria, Colombia, Fiji	Austria	No
PACKO	2 United States of America, Fiji	United States of America	No
ROTAN	3 United States of America, Indonesia, Fiji	United States of America	No
ROWIN	2 United States of America, Fiji	United States of America	No
RUDAL	3 Indonesia, Fiji, Kazakhstan	Kazakhstan	No
SALUT	2 Polynesie Française, Fiji	Polynesie Française (France)	No
TANKS	2 United States of America, Fiji	United States of America	No
TOMBA	3 Sweeden, Indonesia, Fiji	Sweeden	No

Priority to be determined			
5LNC	States	Priority	Within 1000NM
ATOLL	3 Libya, Fiji, China	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
BLACK	2 Australia, Fiji	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
MUANI	2 Fiji, Republic of Korea	Not published in AIP Republic of Korea. Priority given to Fiji.	No
NABAT	2 Fiji, Indonesia	Indonesia replaced NABAT. Priority given to Fiji.	No

5LNC STATUS - HONG KONG CHINA

Date: June 2023

ICARD	Total number of 5LNCs	123
	Terminal Airspace (TA)	78
	En-route (ENR)	29
	FIR	5
	Other	0
	No Purpose	11
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	80
	Priority allocated to Hong Kong China	9
	Priority allocated to other States	55
	Priority to be determined	2
	In the process of being resolved	3
	Completely resolved 5LNCs	11

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
COLEY	2 Philippines, Hong Kong China	Hong Kong China	No
COMBI	2 Japan, 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
BETTY	3 Japan, Hong Kong China, India	Hong Kong China	Yes
BREAM	3 Libya, Hong Kong China, Australia	Hong Kong China	No

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
ARGON	3 Australia, Hong Kong China,Peru,	Peru	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
CARSO	3 Hong Kong China, India, Canada,	Canada. To be determined by the 5LNC Duplicate Resolution Rules if not used by Canada	No
CEDAR	6 Brazil, United Kingdom, Lebanon, Japan, Australia, Hong Kong China	United Kingdom	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
DEDEE	2 United States of America, Hong Kong China	United States of America	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
LINGI	2	Greece, Hong Kong China	Greece	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
RIVER	4	Thailand, Hong Kong China, Japan, Netherlands	Netherlands	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 China	United States of America. Nepal if not used by the USA.	No
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
LIMES	2 New Zealand, Hong Kong China	To be determined by the 5LNC Duplicate Resolution Rules	No

In the process of being resolved			
5LNC	States	Note	Within 1000N M
OCEAN	2 Republic of Korea, Hong Kong China	Not published in AIP Republic of Korea. Priority given to Hong Kong China.	Yes
PECAN	2 Australia, Hong Kong China	Australia replaced PECAN. Priority given to Hong Kong China.	No
SURFA	2 New Zealand, Hong Kong China	Australia replaced SURFA. Priority given to Hong Kong China.	No

5LNC STATUS - INDIA

Date: June 2022

ICARD	Total number of 5LNCs	1021
	Terminal Airspace (TA)	245
	En-route (ENR)	623
	FIR	57
	Other	78
	No Purpose	18
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	140
	Priority allocated to India	20
	Priority allocated to other States	2
	Priority to be determined	1
	In the process of being resolved	4
	Completely resolved 5LNCs	113

Priority allocated to India			
5LNC	States	Priority	Within 1000NM
ASARI	2 India, Japan	India	No
BEDUX	2 India, Morocco	India	No
BEVSU	2 India, Australia	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
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), Saudi 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
MONPI	2 India, Japan/United States of America (FIR boundary)	To be determined by the 5LNC Duplicate Resolution Rules	No

In the process of being resolved			
5LNC	States	Note	Within 1000NM
BOBET	2 India, Australia	Australia replacing BOBET.	No
KALAM	3 Australia, India, Indonesia	Indonesia replaced KALAM.	No

NINO	2	Australia, India	Australia replacing NINO.	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 2023

ICARD	Total number of 5LNCs	2160
	Terminal Airspace (TA)	1659
	En-route (ENR)	426
	FIR	63
	Other	1
	No Purpose	11
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	316
	Priority allocated to Indonesia	5
	Priority allocated to other States	0
	Priority to be determined	1
	In the process of being resolved	9
	Completely resolved 5LNCs	301

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

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

Priority to be determined			
5LNC	States	Priority	Within 1000NM
SAPAL	2 Cambodia, Indonesia	To be determined by the 5LNC Duplicate Resolution Rules	No

In the process of being resolved			
5LNC	States	Note	Within 1000NM
BORAS	3 Indonesia, Peru, Dominican Republic	Dominican Republic to delete in ICARD.	No
BORME	2 United States of America, Indonesia	To Delete in ICARD	No
LIPOT	2 Indonesia, Philippines	Philippines replacing LIPOT.	No
MATRA	3 Brazil, Israel, Indonesia	To Delete in ICARD	No
MULAN	2 Indonesia, Viet Nam	To Delete in ICARD	No
SADAN	2 Indonesia/Philippines (FIR boundary), China Indonesia/Singapore (FIR boundary), India/Bangladesh (FIR boundary), Mexico	Indonesia/Philippines replacing SADAN.	No
TAROS	3	Indonesia/Singapore	No
TARUN	2 Russian Federation, Australia/Indonesia (FIR boundary)	To Delete in ICARD	No
VERSA	2 Canada, Indonesia	To Delete in ICARD	No

5LNC STATUS - JAPAN

Date: June 2023

ICARD	Total number of 5LNCs	990
	Terminal Airspace (TA)	302
	En-route (ENR)	548
	FIR	17
	Other	5
	No Purpose	118
	No Coordinates	10

Duplicated 5LNCs	Total number of duplicated 5LNCs	696
	Priority allocated to Japan	44
	Priority allocated to other States	580
	Priority to be determined	9
	In the process of being resolved	17
	Completely resolved 5LNCs	46

Priority allocated to Japan			
5LNC	States	Priority	Within 1000NM
ALBAT	3 Philippines, Japan, Mongolia	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
CATCH	3 Japan, Australia, United States of America	Japan	No
CHARA	3 Japan, Brazil, Venezuela	Japan	No
CREEK	2 Japan, New Zealand	Japan	No
HAPPY	2 Japan, China	Japan	No
IKEDA	2 Japan, India	Japan	No
JAKAL	2 Japan, Namibia	Japan	No
JAMES	2 Japan, Philippines	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
OMLET	2 Japan/United States of America (FIR boundary), Cambodia	Japan/United States of America	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
SABAN	3 Indonesia, Japan, Philippines	Japan	No
SABRI	3 Chile, Japan, Saudi Arabia	Japan	No
SAGRA	2 Japan, Philippines	Japan	No
SALVA	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
WAVES	3 Japan, Australia, United States of America	Japan	No

Priority allocated to other States			
5LNC	States	Priority	Within 1000NM
	Suriname, Japan, Italy, Vanuatu, Syrian Arab Republic, Bhutan,		
DELTA	10 Liberia, Lao People's Democratic Republic, India, Sri Lanka	Suriname	Yes
ABBOT	4 Mexico, United Kingdom, Japan, Pakistan	United Kingdom	No
ABIRA	2 Kazakhstan, Japan	Kazakhstan	No
ABUMI	2 Russian Federation, Japan	Russian Federation	No
ACELA	2 United States of America, Japan	United States of America	No
ACORD	2 United States of America, Japan	United States of America	No
ACTOR	2 United States of America, Japan	United States of America	No
ADDUM	2 Japan, United States of America	United States of America	No
AGATA	2 Russian Federation, Japan	Russian Federation	No
AILEY	2 Japan, United States of America	United States of America	No
AKANA	2 Russian Federation, Japan	Russian Federation	No
AKASE	2 Japan, United States of America	United States of America	No
AKASI	2 Russian Federation, Japan	Russian Federation	No
AKESI	2 Russian Federation, Japan	Russian Federation	No
ALCOR	2 Japan, United States of America	United States of America	No
ALDER	3 Japan, United States of America, Chile	United States of America	No
ALICE	3 Japan, Australia, United States of America	United States of America	No
ALISA	2 Russian Federation, Japan	Russian Federation	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
ALLIE	2 United States of America, Japan	United States of America	No
AMAGA	2 Mexico, Japan	Mexico	No
AMAKO	2 Japan, Cyprus	Cyprus	No
AMAMI	2 Netherlands Antilles (Netherlands), Japan	Netherlands Antilles (Netherlands)	No
AMANO	2 Italy, Japan	Italy	No
AMARU	2 Guatemala (COCESNA), Japan	Guatemala	No
AMBER	3 Grenada, Pakistan, Japan	Pakistan	No
AMIDA	2 Japan, Mexico/Belize (COCESNA)	Mexico/Belize	No
ANEMO	2 Japan, United States of America	United States of America	No
ANGEL	5 Thailand, Philippines, Japan, Honduras (COCESNA), Colombia/Ecuador	Colombia/Ecuador	Yes
ANPAL	2 Ecuador/Peru (FIR boundary), Japan	Ecuador/Peru	No
ANPAN	2 Thailand, Japan	Thailand	No
APOLO	3 United States of America, Japan, Republic of Korea	United States of America	No
APPLE	4 United States of America, United Kingdom, Japan, Australia	United Kingdom	No
ARASI	2 Japan, Equatorial Guinea (ASECNA)	Equatorial Guinea	No
ARENA	4 Spain/Morocco (Western Sahara), Brazil, Costa Rica, Japan	Spain/Morocco (Western Sahara)	No
ARIKA	2 New Zealand, Japan	New Zealand	No
ARIMA	2 Malaysia, Japan	Malaysia	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
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	Chile	No
ATENA	2 China (Hong Kong), Japan, NACC (Costa Rica)	Hong Kong (Special Administrative Region of)	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
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), Philippines	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
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, I	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
		India. To be determined by the 5LNC Duplicate Resolution Rules if not used by India.	
BETTY	3 Japan, China (Hong Kong), India Australia, Japan, Lao People's Democratic Republic, United Kingdom	Hong kong	Yes
BILLY	4 Kingdom	United Kingdom	No
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, Venezuela, Burkina Faso/Ghana (FIR boundary), Japan, Australia	United States of America	No
BONGO	5 boundary), Japan, Australia	United States of America	No
BONUS	2 United States of America, Japan	United States of America	No
BORDO	2 China (Taiwan)/Japan (FIR boundary), United States of America/Cu China/Japan	China/Japan	No
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 Kong)	United Kingdom	No
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	2 United States of America, Japan	United States of America	No
CHILY	2 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, France	Brazil	Yes
COSMO	2 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, Australia	United States of America	Yes
CREAM	2 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
DAMBO	3 Japan, Indonesia, New Zealand	New Zealand	No
DANDE	2 United Kingdom (Anguilla)/United States of America, Japan	United Kingdom (Anguilla)/United States of America	No
DANDY	2 United States of America, Japan	United States of America	No
DANGO	2 Mexico, Japan	Mexico	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	2 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
DENNY	2 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
DODGE	2 United States of America, Japan	United States of America	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
ETARI	2 Ireland, Japan	Ireland	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 boundary)	United States of America	No
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
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	2 United States of America, Japan	United States of America	No
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
GUMBO	2 United States of America, Japan/China (Taiwan) [FIR boundary]	United States of America	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	2 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	2 United States of America, Japan	United States of America	No
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
HOLLY	4 Japan, United Kingdom, United States of America, Tonga	United Kingdom	No
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
IKURA	2 Canada, Japan	Canada. Japan if not used by Canada.	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
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	2 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	2 China, Japan	China	No
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
KENNY	3 United States of America, Chile, Japan	United States of America	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, Japan	United States of America	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	3 Japan, Spain, Brazil	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), Japan	United States of America	Yes
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
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
MALKI	2 Thailand, Japan	Thailand	No
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 Koi	United Kingdom	No
MARIA	5 United States of America, Japan, Thailand, Brazil, Argentina/Bolivia	United States of America	Yes
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	2 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
MENOK	3 Indonesia, Japan, Pakistan	Pakistan	No
MERCY	2 United States of America, Japan	United States of America	No
MIKAN	2 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
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	2 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 Duplicate	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 (America)	United Kingdom	Yes
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 Duplicate	No
ORION	8 Philippines, China (Taiwan), Japan, Tonga, Italy, United States of America	United States of America	Yes
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	2 United States of America, Japan	United States of America	No
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, Japan, China (Taiwan), Brazil,	United States of America	No
PANDA	6 Philippines, Indonesia	United States of America	Yes
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 States	United States of America	Yes
ROKGO	2 United States of America, Japan	United States of America	No

ROMAN	4 Thailand, Japan, United States of America, Mexico	United States of America	No
ROSIE	3 Denmark (Greenland), United States of America, Japan	Denmark (Greenland)	No
ROUGE	2 United States of America, Japan	United States of America	No
ROUSY	2 Belgium/France/Luxembourg, Japan	Belgium/France/Luxembourg	No
RUBIS	2 Russian Federation, Japan	Russian Federation	No
SABAE	2 United States of America, Japan	United States of America	No
SABAR	2 United States of America, Japan	United States of America	No
SAILA	3 Japan, Australia, United States of America	United States of America	No
SAILS	3 Japan, Australia, United States of America	United States of America	No
SAKAR	2 Papua New Guinea, Japan	Papua New Guinea	No
SALTY	3 Japan, Australia, United States of America	United States of America	No
SALVO	2 United States of America, Japan	United States of America	No
SAMBA	4 Russian Federation, Japan, Thailand, Indonesia	Russian Federation	No
SAMBO	3 Cambodia, Viet Nam, Japan	Viet Nam	Yes
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 I	United Kingdom/Ireland	No
SANDA	4 United States of America, Angola, Japan, Cambodia	United States of America	No
SANGO	2 United States of America, Japan	United States of America	No
SANJO	3 Japan, Philippines, Thailand	INDIA To be determined by the 5LNC Duplicate	No
SANKO	2 China, Japan	China	Yes
SARUK	2 Saudi Arabia, Japan	Saudi Arabia	No
SASSY	2 United States of America, Japan	United States of America	No
SAVOM	2 Mexico, Japan	Mexico	No
SCOTT	4 Republic of Korea, Japan, Australia, United States of America	Australia	Yes
SENN	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	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, 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	Yes
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
SIJMI	2 United States of America, Japan	United States of America	No
SILVI	2 Canada, Japan	Canada	No
SIMON	4 Brazil, Denmark (Greenland), Australia, Japan	Denmark (Greenland)	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
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/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	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	Russian Federation	Yes
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
SUGAR	3 Japan, United states of America, Norway	Norway	No
SUNNS	2 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	2 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
TAMBA	5 Liberia, Mexico, Japan, Indonesia (2)	Mexico	Yes
TAMER	2 Turkey, Japan	Turkey	No
TAMPO	3 United States of America, Indonesia, Japan	United States of America	No
TANNO	2 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
TEGAR	3 China (mainland), Indonesia, Japan	China	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
Lao People's Democratic Republic, Thailand, Japan, Pakistan/India			
TIGER	6 (FIR boundary), United Kingdom, United States of America	United Kingdom	Yes
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	3 Philippines, Japan, United States of America	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 boundary)	Russian Federation	No
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
Netherlands, United States of America, Japan, China (Taiwan),			
TULIP	5 Indonesia	Netherlands	No
TWINS	2 United States of America, Japan	United States of America	No
UMAKA	2 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua/L	Belize, Costa Rica, El Salvador, Guatemala, I	No
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

VADAR	2 Switzerland, Japan	Switzerland	No
VEGAR	2 United Kingdom, Japan	United Kingdom	No
VELLA	2 United States of America, Japan	United States of America	No
VERDI	2 United States of America, Japan	United States of America	No
VESEL	2 Ukraine, Japan	Ukraine	No
VISTA	2 United States of America, Japan	United States of America	No
WASBI	2 United States of America, Japan	United States of America	No
WATCH	2 United States of America, Japan	United States of America	No
WEBBS	2 United States of America, Japan	United States of America	No
WEBER	3 United States of America, Japan, New Zealand	United States of America	No
WENDY	4 Japan, Australia, United States of America, Portugal	United States of America	No
WHALE	5 Japan, Australia, Tonga, Lybia, Canada/United States of America (F	Canada/United States of America	No
WHITE	3 Canada, United States of America, Japan	United States of America	Yes
WILBA	2 United States of America, Japan	United States of America	No
WIMPY	2 United States of America, Japan	United States of America	No
WOODS	3 Japan, Australia, United States of America	United States of America	No
WOODY	4 Australia, China (mainland), Japan, Belgium/Netherlands (FIR boun	Belgium/Netherlands	Yes
YOHKO	2 United States of America, Japan	United States of America	No
YUCCA	2 United States of America, Japan	United States of America	No
YUTAN	2 United States of America, Japan	United States of America	No
ZEBRA	4 France, Namibia, Japan, Indonesia	France	No
ZELDA	2 United States of America, Japan	United States of America	No

Priority to be determined			
5LNC	States	Priority	Within 1000NM
ASANO	2 Japan, Colombia	To be determined by the 5LNC Duplicate Resolution Rules	No
AVSOX	2 Canada, Japan	To be determined by the 5LNC Duplicate Resolution Rules	No
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
MARIN	3 Brazil, Japan, Indonesia	To be determined by the 5LNC Duplicate Resolution Rules	No
MONTA	3 Japan, China (Hong Kong), Philippines	To be determined by the 5LNC Duplicate Resolution Rules	Yes
NORAN	3 Republic of Korea, Japan, Jamaica	To be determined by the 5LNC Duplicate Resolution Rules	Yes

In the process of being resolved			
5LNC	States	Note	Within 1000NM
AWASI	2 Japan, Indonesia	To register in ICARD	No
DARIO	2 Brazil, Japan	Japan replacing Dario	No
HANKA	2 Japan, Indonesia	To register in ICARD	No
HAYAT	2 Japan, Indonesia	To register in ICARD	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
MARUB	2 Australia, Japan	Japan replacing MARUB	No
MONPI	2 India, Japan/United States of America (FIR boundary)	Japan replacing MONPI	No
NORMA	2 Australia, Japan	Japan replacing NORMA	No
OKURA	2 Japan, New Zealand	Japan replacing OKURA	No
OTAKI	2 Japan, New Zealand	Japan replacing OTAKI	No
PANAP	2 Brazil, Japan	To register in ICARD	No
PONTE	3 Japan, Spain, Brazil	Japan replacing PONTE	No
TALBA	2 Canada, Japan	Japan replacing TALBA	No
TONIK	2 Japan, Thailand	Japan replacing TONIK	No

5LNC STATUS - KIRIBATI

Date: June 2023

ICARD	Total number of 5LNCs	23
	Terminal Airspace (TA)	8
	En-route (ENR)	15
	FIR	0
	Other	0
	No Purpose	0
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	4
	Priority allocated to Kiribati	0
	Priority allocated to other States	4
	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	0

Priority allocated to Kiribati			
5LNC	States	Priority	Within 1000NM

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

DECOR	2	United States of America, Kiribati	United States of America	No
MATER	2	France, Kiribati	France	No
NADAN	2	Saudi Arabia, Kiribati	Saudi Arabia	No
WESLI	2	United States of America, Kiribati	United States of America	No

5LNC STATUS - LAO PDR

Date: June 2023

ICARD	Total number of 5LNCs	91
	Terminal Airspace (TA)	48
	En-route (ENR)	11
	FIR	10
	Other	2
	No Purpose	20
	No Coordinates	9

Duplicated 5LNCs	Total number of duplicated 5LNCs	26
	Priority allocated to Lao PDR	4
	Priority allocated to other States	0
	Priority to be determined	0
	In the process of being resolved	7
	Completely resolved 5LNCs	15

Priority allocated to Lao PDR			
5LNC	States	Priority	Within 1000NM
ALPHA	11 Lao People's Democratic Republic, Vanuatu, China, India, Italy, Russian Federation, Turkey, United Kingdom (2), United Kingdom (Gibraltar), United Kingdom (Falkland Islands)	Lao People's Democratic Republic	Yes
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

In the process of being resolved			
5LNC	States	Note	Within 1000NM
BUTRA	2 Tajikistan/Uzbekistan (FIR boundary), Lao People's Democratic Republic/Thailand (FIR boundary)	Lao PDR replacing BUTRA, Priority given to Tajikistan/Uzbekistan	No
JAMPA	2 United States of America, Lao People's Democratic Republic	Lao PDR replacing JAMPA, Priority given to USA.	No
JAMPI	2 United States of America, Lao People's Democratic Republic	Lao PDR replacing JAMPI, Priority given to USA.	No
LAVAN	2 United States of America, Cambodia/Lao People's Democratic Republic	LAO/Cambodia replacing LAVEN, Priority given to USA.	No
NAMON	3 Denmark, Lao People's Democratic Republic, Republic of Korea	Lao PDR replacing NAMON, Priority given to Denmark	No
NEKON	2 Russian Federation, Lao People's Democratic Republic	Lao PDR replacing NEKON, Priority given to Russia	No
NODIK	2 New Zealand, Lao People's Democratic Republic	Lao PDR replacing NODIK, Priority given to New Zealand.	No

5LNC STATUS - MALAYSIA

Date: June 2023

ICARD	Total number of 5LNCs	966
	Terminal Airspace (TA)	750
	En-route (ENR)	133
	FIR	19
	Other	2
	No Purpose	62
	No Coordinates	2

Duplicated 5LNCs	Total number of duplicated 5LNCs	72
	Priority allocated to Malaysia	30
	Priority allocated to other States	18
	Priority to be determined	3
	In the process of being resolved	2
	Completely resolved 5LNCs	19

Priority allocated to Malaysia			
5LNC	States	Priority	Within 1000NM
ADBAD	2 Malaysia, New Zealand	Malaysia	No
ARIMA	2 Malaysia, Japan	Malaysia	No
BIXOR	2 Malaysia, India	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
GUMIT	2 Malaysia, India	Malaysia	No
IKONO	3 Nigeria, Malaysia, Australia	Malaysia	No
KABTO	2 Malaysia, Japan	Malaysia	No
KADIM	3 Malaysia, India, Viet Nam	Malaysia	No
KETOT	2 Malaysia, Fiji/New Zealand (FIR boundary)	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
NUSTO	2 Malaysia, China (Hong Kong)	Malaysia	No
OKADA	2 Malaysia/Indonesia (FIR boundary), Japan	Malaysia/Indonesia	No
OSRAM	2 Malaysia, India	Malaysia	No
PEGDU	2 Malaysia, China	Malaysia	No
PEGSA	2 Malaysia, New Zealand	Malaysia	No
RUMAL	2 Malaysia, India	Malaysia	No
SABKA	2 Malaysia, India	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
MABAL	2 Sri Lanka, Malaysia/Singapore	Sri Lanka	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
URIGO	2 Norway, Singapore/Malaysia (FIR boundary)	Norway	No
VIDAD	2 Viet Nam, Malaysia	Viet Nam	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 (Taiwan), Pakistan, Malaysia	To be determined by the 5LNC Duplicate Resolution Rules	No
BOGIM	2 Malaysia, Myanmar	To be determined by the 5LNC Duplicate Resolution Rules	No

In the process of being resolved			
5LNC	States	Note	Within 1000NM
LEPNA	2 Malaysia, Singapore	Singapore replacing LEPNA	Yes
NYLON	2 Japan, Malaysia/Singapore	Malaysia Singapore replacing NYLON	No

5LNC STATUS - MALDIVES

Date: June 2023

ICARD	Total number of 5LNCs	139
	Terminal Airspace (TA)	57
	En-route (ENR)	56
	FIR	9
	Other	1
	No Purpose	16
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	12
	Priority allocated to Maldives	0
	Priority allocated to other States	8
	Priority to be determined	1
	In the process of being resolved	1
	Completely resolved 5LNCs	2

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
KUMAD	2 India, Maldives	To be determined by the 5LNC Duplicate Resolution Rules	No

In the process of being resolved			
5LNC	States	Priority	Within 1000NM
ANIVE	2 United States of America, Maldives/Sri Lanka (FIR boundary)	United States of America	No

5LNC STATUS - MARSHALL ISLANDS

Date: June 2023

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

Duplicated 5LNCs	Total number of duplicated 5LNCs	0
	Priority allocated to Marshall Islands	0
	Priority allocated to other States	0
	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	0

5LNC STATUS - MICRONESIA

Date: June 2023

ICARD	Total number of 5LNCs	70
	Terminal Airspace (TA)	0
	En-route (ENR)	0
	FIR	0
	Other	0
	No Purpose	70
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	1
	Priority allocated to Micronesia	0
	Priority allocated to other States	0
	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	1

5LNC STATUS - MONGOLIA

Date: June 2023

ICARD	Total number of 5LNCs	250
	Terminal Airspace (TA)	17
	En-route (ENR)	219
	FIR	14
	Other	0
	No Purpose	0
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	43
	Priority allocated to Mongolia	4
	Priority allocated to other States	2
	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	37

Priority allocated to Mongolia				
5LNC		States	Priority	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

Priority allocated to other States				
5LNC		States	Priority	Within 1000NM
ALDAR	2	Mongolia, Australia	Australia	No
BATUK	2	Turkey, Mongolia	Turkey	No

5LNC STATUS - MYANMAR

Date: June 2023

ICARD	Total number of 5LNCs	174
	Terminal Airspace (TA)	121
	En-route (ENR)	9
	FIR	21
	Other	0
	No Purpose	23
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	12
	Priority allocated to Myanmar	2
	Priority allocated to other States	6
	Priority to be determined	2
	In the process of being resolved	1
	Completely resolved 5LNCs	1

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

Priority to be determined			
5LNC	States	Priority	Within 1000NM
BOGIM	2 Malaysia, Myanmar	To be determined by the 5LNC Duplicate Resolution Rules	No
VEMOS	2 China, Myanmar	To be determined by the 5LNC Duplicate Resolution Rules	No

In the process of being resolved			
5LNC	States	Priority	Within 1000NM
IBONA	2 New Zealand, Myanmar	New Zealand. Deleted Myanmar to register in ICARD	No

5LNC STATUS - NAURU

Date: June 2023

ICARD	Total number of 5LNCs	27
	Terminal Airspace (TA)	6
	En-route (ENR)	0
	FIR	6
	Other	10
	No Purpose	5
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	1
	Priority allocated to Nauru	0
	Priority allocated to other States	1
	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	0

Priority allocated to Nauru			
5LNC	States	Priority	Within 1000NM

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

MARTI	2 Turkey, United States of America/Nauru (FIR boundary)	Turkey	No
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5LNC STATUS - NEPAL

Date: June 2023

ICARD	Total number of 5LNCs	115
	Terminal Airspace (TA)	78
	En-route (ENR)	25
	FIR	9
	Other	0
	No Purpose	3
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	19
	Priority allocated to Nepal	0
	Priority allocated to other States	4
	Priority to be determined	1
	Resolving	1
	Completely resolved 5LNCs	13

Priority allocated to Nepal			
5LNC	States	Priority	Within 1000NM

Priority allocated to other States			
5LNC	States	Priority	Within 1000NM
GAURA	2 Canada, India/Nepal (FIR boundary)	Canada	No
GURAS	2 India, Nepal	India	Yes
PARSI	2 Australia, Nepal	Australia	No
ROMEO	United States of America, Nepal, China (Hong Kong), United Kingdom	United States of America. Nepal if not used b	No

Priority to be determined			
5LNC	States	Priority	Within 1000NM
RATAN	2 Nepal, Nigeria	To be determined by the 5LNC Duplicate Resolution Rules	No

In the process of being resolved			
5LNC	States	Note	Within 1000NM
NARAN	2 Mongolia, Nepal	Mogolia replacing NARAN	No

5LNC STATUS - NEW CALEDONIA

Date: June 2023

ICARD	Total number of 5LNCs	45
	Terminal Airspace (TA)	24
	En-route (ENR)	1
	FIR	0
	Other	1
	No Purpose	19
	No Coordinates	2

Duplicated 5LNCs	Total number of duplicated 5LNCs	6
	Priority allocated to New Caledonia	0
	Priority allocated to other States	4
	Priority to be determined	1
	In the process of being resolved	0
	Completely resolved 5LNCs	1

Priority allocated to New Caledonia			
5LNC	States	Priority	Within 1000NM

Priority allocated to other States			
5LNC	States	Priority	Within 1000NM
BEDON	2 Pakistan, France (New Caledonia)	Pakistan	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 1000NM
BASSA	2 France (New Caledonia), Liberia	To be determined by the 5LNC Duplicate Resolution Rules	No

5LNC STATUS - NEW ZEALAND

Date: June 2023

ICARD	Total number of 5LNCs	1622
	Terminal Airspace (TA)	1143
	En-route (ENR)	362
	FIR	19
	Other	23
	No Purpose	75
	No Coordinates	2

Duplicated 5LNCs	Total number of duplicated 5LNCs	201
	Priority allocated to New Zealand	26
	Priority allocated to other States	128
	Priority to be determined	12
	In the process of being resolved	8
	Completely resolved 5LNCs	27

Priority allocated to New Zealand			
5LNC	States	Priority	Within 1000NM
AKAMO	2 New Zealand, Italy	New Zealand	No
AKELA	2 India, New Zealand	New Zealand	No
ARIKA	2 New Zealand, Japan	New Zealand	No
BUPKA	2 New Zealand (2)	New Zealand	Yes
DAMBO	3 Japan, Indonesia, New Zealand	New Zealand	No
DOSUS	2 New Zealand, Philippines	New Zealand	No
DOXIN	2 New Zealand, India	New Zealand	No
ERVAX	2 New Zealand, India	New Zealand	No
GAKTO	2 New Zealand, Japan	New Zealand	No
GODUM	2 New Zealand, Thailand	New Zealand	No
GUTEL	2 New Zealand, Myanmar	New Zealand	No
IKABA	2 New Zealand, India	New Zealand	No
KABIL	3 Japan, Chile, New Zealand	New Zealand	No
KADET	2 New Zealand, China (Taiwan)	New Zealand	No
KEVEL	2 New Zealand, India	New Zealand	No
	New Zealand/France (Polynesie Française) [FIR boundary],		
KRILL	2 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
ORARA	2 New Zealand, India	New Zealand	No
PABRA	2 New Zealand, Chile	New Zealand	No
RUSIL	2 New Zealand, Brunei Darussalam	New Zealand	No
TARIB	2 New Zealand, Brazil/Colombia (FIR boundary)	New Zealand	No
TARUM	2 New Zealand, India	New Zealand. India if not used by New Zeala	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
AKINA	2 Greece, New Zealand	Greece	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	4 Australia, New Zealand, United States of America, Brazil	United States of America	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	2 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
FALLS	3 Philippines, Australia, New Zealand	rule #3 New Zealand Used in ENR & TER.	No
FERNS	2 United States of America, New Zealand	United States of America	No
GENDA	2 Russian Federation, New Zealand	Russian Federation	No
GIBON	2 United States of America, New Zealand	United States of America	No
GITOR	2 Malaysia, New Zealand	Malaysia	No
GOBIN	2 China, Fiji/New Zealand (FIR boundary)	China	No
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	2 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
HOOKE	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
KETOT	2 Malaysia, Fiji/New Zealand (FIR boundary)	Malaysia	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	Japan/Republic of Korea	No
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 China (Hong Kong), Republic of Korea, United Kingdom, New	Colombia	Yes
MANGO	6 Zealand, Angola, Nicaragua (COCESNA)	United Kingdom	No
MASKU	2 Japan, New Zealand	Japan	No
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
NOKAK	2 China, New Zealand	China	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	2 Malaysia, New Zealand	Malaysia	No
PERAS	2 Russian Federation, New Zealand	Russian Federation	No
PINES	2 United States of America, New Zealand	United States of America	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 China (Hong Kong), China (Taiwan), Japan, New Zealand, United	United States of America	No
ROCKY	6 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
SIRUS	2 Chile, Australia/New Zealand	Chile	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	Australia, Denmark (Greenland), New Zealand, Brazil, Venezuela, 6 Costa Rica (COCESNA)	Denmark (Greenland)	No
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

BIKOT	2 Mongolia, New Zealand	To be determined by the 5LNC Duplicate Resolution Rules	No
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BUDEN	2 Mongolia, New Zealand	To be determined by the 5LNC Duplicate Resolution Rules	No
CONOR	3 Australia, New Zealand, Venezuela	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
JABBA	3 Australia, New Zealand, Canada	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
MARLO	2 New Zealand, United Kingdom	To be determined by the 5LNC Duplicate Resolution Rules	No
NOSAM	New Zealand, Trinidad and Tobago/Dominica [Non-ICAO Member State]	To be determined by the 5LNC Duplicate Resolution Rules	No
OKURA	2 Japan, New Zealand	To be determined by the 5LNC Duplicate Resolution Rules	No
PEPPE	2 Italy, New Zealand	To be determined by the 5LNC Duplicate Resolution Rules	No
REPOL	2 China, New Zealand	To be determined by the 5LNC Duplicate Resolution Rules	No
SURFA	2 New Zealand, China (Hong Kong)	To be determined by the 5LNC Duplicate Resolution Rules	No

In the process of being resolved			
5LNC	States	Note	Within 1000NM
MAKEE	2 Australia, New Zealand	New Zealand to register in ICARD	No
NODIK	2 New Zealand, Lao People's Democratic Republic	Lao PDR replaicng NODIK	No
RUGVI	2 Singapore, New Zealand	New Zealand replaicng RUGVI	No
TAIKI	2 Japan, New Zealand	New Zealand replaicng TAIKI	No
TOONA	2 Australia, New Zealand	New Zealand to register in ICARD	No
WELLS	2 Australia, New Zealand	New Zealand to register in ICARD	No
XMOND	2 Australia, New Zealand	New Zealand to register in ICARD	No
ZOCCA	2 Australia, New Zealand	New Zealand to register in ICARD	No

5LNC STATUS - PAKISTAN

Date: June 2023

ICARD	Total number of 5LNCs	331
	Terminal Airspace (TA)	98
	En-route (ENR)	192
	FIR	30
	Other	2
	No Purpose	9
	No Coordinates	4

Duplicated 5LNCs	Total number of duplicated 5LNCs	43
	Priority allocated to Pakistan	10
	Priority allocated to other States	0
	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	33

Priority allocated to Pakistan			
5LNC	States	Priority	Within 1000NM
BEDON	2 Pakistan, France (New Caledonia)	Pakistan	No
MENOK	3 Indonesia, Japan, Pakistan	Pakistan	No
MUSTA	3 Australia, Pakistan, Uganda	Pakistan	No
PARET	2 Pakistan, Chile	Pakistan	No
PARTY	2 India/Pakistan (FIR boundary), Australia	India/Pakistan	No
PASTA	4 Australia, China (Taiwan), Pakistan, Brazil	Pakistan	No
PONAT	2 Pakistan, Samoa	Pakistan	No
RABAN	3 Republic of Korea, Brazil, India/Pakistan (FIR boundary)	India/Pakistan	No
SABUG	2 Pakistan, Singapore	Pakistan	No
TERIK	2 Pakistan, Australia	Pakistan	No

5LNC STATUS - PALAU

Date: June 2023

ICARD	Total number of 5LNCs	11
	Terminal Airspace (TA)	0
	En-route (ENR)	0
	FIR	0
	Other	0
	No Purpose	11
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	0
	Priority allocated to Palau	0
	Priority allocated to other States	0
	Priority to be determined	0
	Resolving	0
	Completely resolved 5LNCs	0

5LNC STATUS - PAPUA NEW GUINEA

Date: June 2023

ICARD	Total number of 5LNCs	236
	Terminal Airspace (TA)	0
	En-route (ENR)	124
	FIR	11
	Other	74
	No Purpose	27
	No Coordinates	9

Duplicated 5LNCs	Total number of duplicated 5LNCs	16
	Priority allocated to Papua New Guinea	6
	Priority allocated to other States	6
	Priority to be determined	0
	In the process of being resolved	1
	Completely resolved 5LNCs	3

Priority allocated to Papua New Guinea			
5LNC	States	Priority	Within 1000NM
CHAMB	2 Papua New Guinea, United States of America	Papua New Guinea	No
KAIFU	2 Papua New Guinea, Japan	Papua New Guinea	No
LIDIT	2 Australia/Papua New Guinea, Canada	Australia/Papua New Guinea	No
SAKAR	2 Papua New Guinea, Japan	Papua New Guinea	No
SNAPA	3 Papua New Guinea, Australia, New Zealand	Papua New Guinea	No
UPRAP	2 Papua New Guinea, Malaysia	Papua New Guinea	No

Priority allocated to other States			
5LNC	States	Priority	Within 1000NM
BORAM	2 Bolivia, Papua New Guinea	Bolivia (Plurinational State of)	No
GUARI	3 Brazil, Paraguay, Papua New Guinea	Paraguay	No
	United States of America/Papua New Guinea (FIR boundary),		
KALIN	2 Kyrgyzstan	United States of America	No
LUKTI	2 India, Papua New Guinea	India	No
PIKOK	2 Russian Federation, Papua New Guinea/United States of America (Russian Federation	No
TOSAS	2 Australia/Papua New Guinea (FIR boundary), China	Australia	No

Priority to be determined			
5LNC	States	Priority	Within 1000NM

In the process of being resolved			
5LNC	States	Note	Within 1000NM
RIPNA	2 Australia/Solomon Islands, Papua New Guinea	Australia deleting from ICARD	No

5LNC STATUS - PHILIPPINES

Date: June 2023

ICARD	Total number of 5LNCs	161
	Terminal Airspace (TA)	71
	En-route (ENR)	64
	FIR	20
	Other	2
	No Purpose	4
	No Coordinates	1

Duplicated 5LNCs	Total number of duplicated 5LNCs	249
	Priority allocated to Philippines	6
	Priority allocated to other States	195
	Priority to be determined	4
	ResolvingIn the process of being resolved	12
	Completely resolved 5LNCs	32

Priority allocated to Philippines			
5LNC	States	Priority	Within 1000NM
ALDIN	2 Philippines, India	Philippines	No
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
ABASA	3 China (Taiwan), Philippines, Indonesia	Indonesia	No
ABERA	2 Russian Federation, Philippines	Russian Federation	No
ADOLE	2 United States of America, Philippines	United States of America	No
ALBAT	3 Philippines, Japan, Mongolia	Japan	No
ALIZA	2 Philippines, Spain	Spain	No
ALMAR	2 Russian Federation, Philippines	Russian Federation	No
ALPOS	2 United States of America, Philippines	United States of America	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), Colombia/Ecu	Colombia/Ecuador	Yes
ARBOR	3 Philippines, China (Taiwan), United States of America	United States of America	No
ARCHI	2 United States of America, Philippines	United States of America	No
ARITA	3 Honduras (COCESNA), Japan, Philippines	Honduras (COCESNA)	No
ARPAS	2 Argentina, Philippines	Argentina	No
AVILA	4 Spain, Brazil, United States of America, Philippines	Spain	No
BACON	5 Brazil, United States, Japan, China (Taiwan), philippines	United States of America	Yes
BALIN	3 Philippines, United States of America, Nicaragua (COCESNA)	United States of America	No
BANGA	2 Burkina Faso/Niger (FIR boundary), Philippines	Burkina Faso/Niger	No
BANOS	2 Kazakhstan, Philippines	Kazakhstan	No
BARAS	2 Russian Federation, Philippines	Russian Federation	No
BARBA	3 Philippines, Japan, United States of America	United States of America	No
BATAN	3 Honduras (COCESNA), Peru, Philippines	Honduras (COCESNA)	No
BELEN	3 France/Spain (FIR boundary), Costa Rica (COCESNA), Philippines	France/Spain	No
BENTO	4 Philippines, Indonesia, Italy, United States of America	Italy	No
BERON	2 Norway, Philippines	Norway	No
BETEL	2 United States of America, Philippines	United States of America	No
BOYER	2 United States of America, Philippines	United States of America	No

BRANO	2 United States of America, Philippines	United States of America. Philippines if not us	No
BRIEL	2 United States of America, Philippines	United States of America	No
BUTAN	2 Colombia, Philippines	Colombia	No
CABAL	2 Argentina, Philippines	Argentina	No
CADIZ	3 United States of America, Pakistan, Philippines	United States of America	No
CALDO	3 Philippines, Italy/Switzerland, United States of America	Italy/Switzerland	No
CAMBA	3 Bolivia, United States of America, Philippines	United States of America	No
CARAM	2 Brazil, Philippines	Brazil	No
CAREB	2 United States of America, Philippines	United States of America	No
CARLO	5 United States of America, Mexico, Spain, Pakistan, Philippines	United States of America	No
CARMO	2 Brazil, Philippines	Brazil	No
CEDEN	2 United States of America, Philippines	United States of America	No
CHERI	3 Philippines, Republic of Korea, United States of America	United States of America	No
CHRIS	4 United States of America, Liberia, Philippines, Australia	United States of America	No
CLAIR	2 United States of America, Philippines	United States of America	No
COBOL	2 United States of America, Philippines	United States of America	No
CONDE	2 Brazil, Philippines	Brazil	No
CUEVA	2 Mexico, Philippines	Mexico	No
DANIL	3 Philippines, Republic of Korea, United States of America	United States of America	No
DANRI	2 Brazil, Philippines	Brazil	No
DARAG	2 Saudi Arabia, Philippines	Saudi Arabia	No
DAROD	2 Canada, Philippines	Canada	No
DEEPS	2 United States of America, Philippines	United States of America	No
DELOR	2 Nigeria/Cameroon (FIR boundary), Philippines	Nigeria/Cameroon	No
DELRO	2 United States of America, Philippines	United States of America	No
DEMSA	2 Cuba, Philippines	Cuba	No
DIANN	2 United States of America, Philippines	United States of America	No
DIKES	2 United States of America, Philippines	United States of America	No
DIMLO	2 Austria/Hungary/Slovenia (FIR boundary), Philippines	Austria/Hungary/Slovenia	No
DINNO	2 United States of America, Philippines	United States of America	No
DOREX	2 China (mainland), China (Taiwan)/Philippines (FIR boundary)	China	No
DOSUS	2 New Zealand, Philippines	New Zealand	No
EDDIE	2 United States of America, Philippines	United States of America	No
EDWAR	2 United States of America, Philippines	United States of America	No
ELIZA	3 United States of America, Australia, Philippines	United States of America	No
EMERS	2 United States of America, Philippines	United States of America	No
EXORA	2 Fiji, Philippines	Fiji	No
FALLS	3 Philippines, Australia, New Zealand	rule #3 New Zealand Used in ENR & TER.	No
FELIP	3 Venezuela, United States of America, Philippines	United States of America	No
FOLEN	2 United States of America, Philippines	United States of America	No
FRANI	2 United States of America, Philippines	United States of America	No
GABRE	2 United States of America, Philippines	United States of America	No
GAMAN	2 Russian Federation/Ukraine (FIR boundary), Philippines	Russian Federation/Ukraine	No
GARED	2 United States of America, Philippines	United States of America	No
GASSI	3 Philippines, United States of America, Bahrain	United States of America	No
GLARY	2 United States of America, Philippines	United States of America	No
GOLDA	2 United States of America, Philippines	United States of America	No
GOMER	3 Spain, Philippines, United States of America	Spain	No
GONAN	2 United Kingdom/Portugal (FIR boundary), Philippines	United Kingdom/Portugal	No
GONDO	3 Republic of Korea, Philippines, Oman	Oman	No
HAFIZ	3 Canada, Pakistan, Philippines	Canada	No
HANEL	2 United States of America, Philippines	United States of America	No
HARBO	2 United States of America, Philippines	United States of America	No
HYDRA	3 Philippines, Australia, United States of America	United States of America	No
INGRA	2 Bahamas, Philippines	Bahamas	No
IRENE	2 United States of America, Philippines	United States of America	No
JAMES	2 Japan, Philippines	Japan	No
JINET	2 United States of America, Philippines	United States of America	No
JODEM	2 United States of America, Philippines	United States of America	No
JONTU	2 United States of America, Philippines	United States of America	No
JUBAL	2 United States of America, Philippines	United States of America	No
JULUS	2 United States of America, Philippines	United States of America	No
KANON	3 Philippines, Russian Federation, United States of America	Russian Federation	No
KIMPO	2 Guinea/Liberia, Philippines	Liberia	No

KLAIR	2 United States of America, Philippines	United States of America	No
LABON	2 Malawi/Zambia (FIR boundary), Philippines	Malawi/Zambia	No
LATRO	2 Spain, Philippines	Spain	No
LIBON	2 United States of America, Philippines	United States of America	No
LOBOK	2 Panama, Philippines	Panama	No
LOPEZ	3 Costa Rica (COCESNA), United States of America, Philippines	United States of America	No
LORIE	2 United States of America, Philippines	United States of America	No
LUCAN	2 United States of America, Philippines	United States of America	No
LUCAS	7 Costa Rica, Venezuela, Mexico, Brazil, Australia, China (Taiwan), P	Venezuela	Yes
LUCEN	2 United States of America, Philippines	United States of America	No
MADOL	2 United States of America, Philippines	United States of America	No
MAGAR	2 Russian Federation, Philippines	Russian Federation	No
MAGEL	2 Israel, Philippines	Israel	No
MALAY	5 United States of America, Myanmar, China (Taiwan), Viet Nam, phil	United States of America	Yes
MALIB	2 Russian Federation, Philippines	Russian Federation	No
MANGA	4 New Zealand, Philippines, Viet Nam, Colombia	Colombia	Yes
MANOK	2 Greece, Philippines	Greece	No
MARIO	2 Spain, Philippines	Spain	No
MARVI	3 United States of America, Pakistan, Philippines	United States of America	No
MASAW	2 Canada, Philippines	Canada	No
MASUN	2 Germany/Poland/Sweden, Philippines	Germany/Poland/Sweden	No
MAURI	2 Spain/Mauritania (FIR boundary), Philippines	Spain/Mauritania	No
MAVRA	2 China, Philippines	China	No
MECAN	2 United States of America, Philippines	United States of America	No
MERLI	2 United States of America, Philippines	United States of America	No
MINDO	3 United States of America, Ecuador, Philippines	United States of America	No
MINOR	2 Russian Federation, Philippines	Russian Federation	No
MOLOC	2 Netherlands (Netherlands Antilles), Philippines	Netherlands Antilles (Netherlands)	No
MONTE	5 Costa Rica (COCESNA), United States of America, Spain, philippin	United States of America	No
MUNDE	3 United States of America, Philippines, Australia	United States of America	No
NADUM	2 Canada, Philippines	Canada	No
NALIG	2 Romania, Philippines	Romania	No
NANDO	3 Philippines, Spain, Guatemala (COCESNA)	Spain	No
NATIB	2 Russian Federation, Philippines	Russian Federation	No
NELPA	2 Czech Republic, Philippines	Czech Republic	No
NESTY	2 United States of America, Philippines	United States of America	No
NIXON	2 United States of America, Philippines	United States of America	No
OLGAR	2 Portugal, Philippines	Portugal	No
OLIVA	3 United States of America, Philippines, Seychelles	United States of America	No
ORIO	2 United States of America, Philippines	United States of America	No
ORION	8 Philippines, China (Taiwan), Japan, Tonga, Italy, United States of A	United States of America	Yes
ORLIE	2 United States of America, Philippines	United States of America	No
PADRE	3 Philippines, Japan, United States of America	United States of America	No
PALAY	2 United States of America, Philippines	United States of America	No
PALOS	3 United States of America, Spain, Philippines United States of America, Japan, China (Taiwan), Brazil,	United States of America	No
PANDA	6 Philippines, Indonesia	United States of America	Yes
PARAL	5 Saudi Arabia, Mongolia, Guatemala (COCESNA), Chile, Philippines	Saudi Arabia	No
PATTY	4 United States of America (Puerto Rico), Seychelles, India, Philippi	United States of America	No
PETER	4 United States of America, Italy, Philippines, Seychelles	United States of America	No
PIKAN	3 Philippines, Russian Federation/Kazakhstan (FIR boundary), United	Russian Federation/Kazakhstan	No
PINKY	3 United states of America, New Zealand, Philippines	United States of America	No
PONSO	2 Chile, Philippines	Chile	No
PORTA	3 Spain/Portugal (FIR boundary), Australia, Philippines	Spain/Portugal	No
POTON	2 United Kingdom, Philippines	United Kingdom	No
RAMOS	3 Philippines, Brazil, United States of America	United States of America	No
RANAS	2 Iceland, Philippines	Iceland	No
RANGA	3 Philippines, Nepal, France (Polynesie Française)	France (Polynesie Française)	No
REGOR	2 United States of America, Philippines	United States of America	No
RENZO	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
ROLIN	2 Georgia/Turkey (FIR boundary), Philippines	Georgia/Turkey	No
ROSAL	2 Portugal/Spain, Philippines	Portugal/Spain	No

ROWAN	3 Australia, Philippines, United Kingdom	United Kingdom	No
ROXAN	2 Italy, Philippines	Italy	No
SABAN	3 Indonesia, Japan, Philippines	Japan	No
SAGRA	2 Japan, Philippines	Japan	No
SAKAT	2 Russian Federation, Philippines	Russian Federation	No
SALVA	2 Japan, Philippines	Japan	Yes
SANJO	3 Japan, Philippines, Thailand	India	No
SANLY	2 United States of America, Philippines	United States of America	No
SHELA	2 United States of America, Philippines	United States of America	No
SHELY	4 United States, Japan, Philippines, China (Hong Kong)	United States of America	Yes
SIDRO	2 Italy, Philippines	Italy	No
SIKIN	2 Bolivia (Plurinational State of), Philippines	Bolivia (Plurinational State of)	No
SILAG	2 Serbia, Philippines	Serbia and Montenegro	No
SIMAR	2 France, Philippines	France	No
SIMBO	2 United Kingdom (Virgin Islands), Philippines	Virgin Islands (U.K.)	No
SIRMO	2 Norway, Philippines	Norway	No
SKATE	4 China (Hong Kong), Philippines, Libya, United States of America	United States of America	Yes
STRAT	2 United States of America, Philippines	United States of America	No
SUNGA	2 Uruguay, Philippines	Uruguay	No
SURAN	2 Russian Federation, Philippines	Russian Federation	No
SUSIE	2 United States of America, Philippines	United States of America	No
TABBY	2 United States of America, Philippines	United States of America	No
TABUL	2 Canada, Philippines	Canada	No
TAMSI	2 Canada, Philippines	Canada	No
TANSA	3 Egypt/Greece (FIR boundary), Pakistan, Philippines	Egypt/Greece	No
TAREM	2 Democratic Republic of the Congo/Uganda (FIR boundary), Philippines	Democratic Republic of the Congo/Uganda	No
TELMO	2 Sweden, Philippines	Sweden	No
TENIX	2 New Zealand, Philippines	New Zealand	No
TIAGO	3 Philippines, Mexico, Costa Rica (COCESNA)	Mexico	No
TIKAL	3 United States of America (Puerto Rico)/United Kingdom (Anguilla) [f	United States of America/United Kingdom	No
TIMMI	3 United States of America, Australia, Philippines	United States of America	No
TINDO	2 Sweden, Philippines	Sweden	No
TOBAL	2 Cyprus, Philippines	Cyprus	No
TOBBY	3 Philippines, Japan, United States of America	United States of America	No
TONDO	2 Hungary/Serbia and Montenegro (FIR boundary), Philippines	Hungary/Serbia and Montenegro	No
TORNE	2 United States of America, Philippines	United States of America	No
TUBIG	2 Canada, Philippines	Canada	No
VERDE	4 Philippines, United States of America, Spain, Brazil	United States of America	No
VINSO	2 United States of America, Philippines	United States of America	No
YELLOW	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 determined			
5LNC	States	Priority	Within 1000NM

GLENN	3 Philippines, Australia, New Zealand	To be determined by the 5LNC Duplicate Resolution Rules	No
JABAR	3 Philippines, Pakistan, China (Taiwan)	To be determined by the 5LNC Duplicate Resolution Rules	No
PABLO	3 Costa Rica, Philippines, Namibia	To be determined by the 5LNC Duplicate Resolution Rules	No
SANJO	3 Japan, Philippines, Thailand	To be determined by the 5LNC Duplicate Resolution Rules	No

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

ANDAN	3 Venezuela, Philippines, Indonesia	Philippines replacing ANDAN	No
BAYAN	3 Bahrain/Qatar, Mongolia, Philippines	Philippines replacing BAYAN	No
COLEY	2 Philippines, China (Hong Kong)	Philippines replacing COLEY	No
JONAH	2 New Zealand, Philippines	Philippines replacing JONAH	No
KABAN	2 Turkey/Iraq (FIR boundary), Philippines	Philippines replacing KABAN	No
LIPOT	2 Indonesia, Philippines	Philippines replacing LIPOT	No

MINDA	Philippines, Venezuela/Guyana/Trinidad and Tobago (FIR 2 boundary)	Philippines replacing MINDA	No
MOLLY	2 United States of America, Indonesia/Philippines (FIR boundary)	Philippines replacing Molly	No
ROMEX	2 Venezuela (Bolivarian Republic of), Philippines	Philippines replacing ROMEX	No
SABEL	2 Oman/Yemen (FIR boundary), Philippines	Philippines replacing SABEL	No
SADAN	2 Indonesia/Philippines (FIR boundary), China	Philippines replacing SADAN	No
TABLA	2 Venezuela (Bolivarian Republic of), Philippines	Philippines replacing TABLA	No

5LNC STATUS - Polynesie Française

Date: June 2023

ICARD	Total number of 5LNCs	248
	Terminal Airspace (TA)	134
	En-route (ENR)	21
	FIR	9
	Other	41
	No Purpose	43
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	27
	Priority allocated to Polynesie Française	12
	Priority allocated to other States	4
	Priority to be determined	1
	In the process of being resolved	2
	Completely resolved 5LNCs	8

Priority allocated to Polynesie Française				
5LNC	States		Priority	Within 1000NM
BOKAL	2	France (Polynesie Française), Algeria	Polynesie Française (France)	No
CORAL	9	China (Hong Kong), China (Taiwan), Japan, Australia, Brazil, France	Brazil	Yes
IGAMA	2	France (Polynesie Française), India	Polynesie Française (France)	No
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
SALUT	2	France (Polynesie Française), Fiji	Polynesie Française (France)	No
TAVIS	2	France (Polynesie Française), Japan	Polynesie Française (France)	No
TOPOM	2	France (Polynesie Française), Singapore	Polynesie Française (France)	No
UDUMA	2	France (Polynesie Française), New Zealand	Polynesie Française (France)	No

Priority allocated to other States				
5LNC	States		Priority	Within 1000NM
BILAT	3	Polynesie Française (France), China (mainland), India	France	No
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 America	United States of America	No

Priority to be determined				
5LNC	States		Priority	Within 1000NM
TIARE	3	Polynesie Française, France (New Caledonia), Turkey	To be determined by the 5LNC Duplicate Resolution Rules	No

In the process of being resolved				
5LNC	States		Note	Within 1000NM
BAMBI	3	Japan, Australia, Polynesie Française (France)	Allocated to PYF on 28/4/2014.	No
ORARE	2	United States of America, France (Polynesie Française)	French Polynesia replacing with ORARI	No

5LNC STATUS - REPUBLIC OF KOREA

Date: June 2023

ICARD	Total number of 5LNCs	520
	Terminal Airspace (TA)	370
	En-route (ENR)	135
	FIR	6
	Other	0
	No Purpose	9
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	190
	Priority allocated to Republic of Korea	10
	Priority allocated to other States	0
	Priority to be determined	0
	Resolving	1
	Completely resolved 5LNCs	179

Priority allocated to Republic of Korea			
5LNC	States	Priority	Within 1000NM
BASEM	3 Republic of Korea, Syrian Arab Republic, Australia	Republic of Korea	No
BIKSI	2 Republic of Korea, Maldives	Republic of Korea	No
EGOBA	2 Republic of Korea, Malaysia	Republic of Korea	No
GOGET	2 Republic of Korea, China (Taiwan)	Republic of Korea	Yes
GONAX	2 Republic of Korea, New Zealand	Republic of Korea	No
KALMA	3 Republic of Korea, United States of America, Spain	Republic of Korea	No
LANAT	2 Japan/Republic of Korea (FIR boundary), New Zealand/Fiji	Japan/Republic of Korea	No
OROGA	2 Republic of Korea, Myanmar	Republic of Korea	No
SAMUL	2 Republic of Korea, United States of America	Republic of Korea	No
SARAM	2 Republic of Korea, France (New Caledonia)	Republic of Korea	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
BURIM	2 Mongolia, Republic of Korea	Mongolia replacing BURIM	No

5LNC STATUS - SAMOA

Date: June 2023

ICARD	Total number of 5LNCs	9
	Terminal Airspace (TA)	8
	En-route (ENR)	1
	FIR	0
	Other	0
	No Purpose	0
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	9
	Priority allocated to Samoa	3
	Priority allocated to other States	3
	Priority to be determined	0
	In the process of being resolved	1
	Completely resolved 5LNCs	0

Priority allocated to Samoa				
5LNC		States	Priority	Within 1000NM
AROXA	2	Hong Kong China, Samoa	American Samoa (U.S.)	No
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 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		China (Taiwan), Japan, Thailand, United States of America 5 (American Samoa), United Kingdom	Samoa deleting from ICARD	Yes

5LNC STATUS - SINGAPORE

Date: June 2023

ICARD	Total number of 5LNCs	263
	Terminal Airspace (TA)	161
	En-route (ENR)	50
	FIR	31
	Other	0
	No Purpose	21
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	36
	Priority allocated to Singapore	10
	Priority allocated to other States	6
	Priority to be determined	0
	Resolving	3
	Completely resolved	17

Priority allocated to Singapore			
5LNC	States	Priority	Within 1000NM
DONDI	3 India, Singapore, Australia	Singapore	No
DOTAS	2 Singapore, Costa Rica (COCESNA)	Singapore	No
KADAR	2 Indonesia/Singapore (FIR boundary), Japan	Indonesia/Singapore	No
LAPOL	2 Singapore, Chile	Singapore	No
PALGA	2 Singapore, Australia	Singapore	No
PAMSI	2 Singapore, Australia	Singapore	No
RUGVI	2 Singapore, New Zealand	Singapore	No
SUSAR	2 Singapore, Japan	Singapore	No
TAROS	3 Indonesia/Singapore (FIR boundary), India/Bangladesh (FIR bound	Indonesia/Singapore	No
TODAM	2 Singapore, China	Singapore	No

Priority allocated to other States			
5LNC	States	Priority	Within 1000NM
BIPOP	2 China, Singapore	China	No
IDUNA	2 Australia, Singapore	Australia	No
MABAL	2 Sri Lanka, Malaysia/Singapore	Sri Lanka	No
TOKIM	2 Brazil, Singapore	Brazil	No
TOPOM	2 Polynesie Française, Singapore	Polynesie Française (France)	No
URIGO	2 Norway, Singapore/Malaysia (FIR boundary)	Norway	No

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
LEPNA	2 Malaysia, Singapore	Malaysia deleting LEPNA	Yes
NYLON	2 Japan, Malaysia/Singapore	Singapore replacing Nylon, Priority given to Japan	No

5LNC STATUS - SOLOMON ISLANDS

Date: June 2023

ICARD	Total number of 5LNCs	88
	Terminal Airspace (TA)	53
	En-route (ENR)	17
	FIR	12
	Other	1
	No Purpose	5
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	4
	Priority allocated to Solomon Islands	1
	Priority allocated to other States	2
	Priority to be determined	0
	In the process of being resolved	1
	Completely resolved 5LNCs	0

Priority allocated to Solomon Islands			
5LNC	States	Priority	Within 1000NM
DAGDA	2 Solomon Islands, Japan	Solomon Islands	No

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

In the process of being resolved			
5LNC	States	Note	Within 1000NM
RIPNA	2 Australia/Solomon Islands, Papua New Guinea	Australia/Solomon Islands to deleted ICARD	No

5LNC STATUS - SRI LANKA

Date: June 2023

ICARD	Total number of 5LNCs	87
	Terminal Airspace (TA)	30
	En-route (ENR)	30
	FIR	19
	Other	3
	No Purpose	5
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	9
	Priority allocated to Sri Lanka	4
	Priority allocated to other States	2
	Priority to be determined	0
	In the process of being resolved	2
	Completely resolved 5LNCs	1

Priority allocated to Sri Lanka			
5LNC	States	Priority	Within 1000NM
BATIS 3	United States of America, Sri Lanka, Japan	Sri Lanka.	No
DABAP 2	Sri Lanka, New Zealand	Sri Lanka	No
DOGAR 2	Australia/Sri Lanka (FIR boundary), China	Australia/Sri Lanka	No
MABAL 2	Sri Lanka, Malaysia/Singapore	Sri Lanka	No

Priority allocated to other States			
5LNC	States	Priority	Within 1000NM
DELTA 10	Suriname, Italy, Vanuatu, Syrian Arab Republic, Liberia, Bhutan, Japan, Lao People's Democratic Republic, India, Sri Lanka	Suriname	Yes
WINDI 2	United States of America, Sri Lanka	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
ANIVE 2	United States of America, Maldives/Sri Lanka (FIR boundary)	Sri Lanka/Maldives replacing ANIVE, Priority given to USA	No
BIDAP 2	Australia, Sri Lanka	Sri Lanka is replacing BIDAP, Priority given to Australia	No

5LNC STATUS - THAILAND

Date: June 2023

ICARD	Total number of 5LNCs	971
	Terminal Airspace (TA)	537
	En-route (ENR)	221
	FIR	32
	Other	152
	No Purpose	29
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	211
	Priority allocated to Thailand	9
	Priority allocated to other States	165
	Priority to be determined	2
	In the process of being resolved	10
	Completely resolved 5LNCs	25

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
SANOT	3 India, Mongolia, Thailand	Thailand	No
SURIX	2 Thailand, Peru	Thailand	No
TAMOS	2 Malaysia/Thailand (FIR boundary), Spain	Malaysia/Thailand	No

Priority allocated to other States			
5LNC	States	Priority	Within 1000NM
	Thailand, Phillippines, Japan, Honduras (COCESNA),		
ANGEL	5 Colombia/Ecuador (FIR boundary)	Colombia/Ecuador	Yes
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
	Tajikistan/Uzbekistan (FIR boundary), Lao People's Democratic		
BUTRA	2 Republic/Thailand (FIR boundary)	Tajikistan/Uzbekistan	No

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 boundary), Thailand, Japan	United States of America	No
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
GODUM	2 New Zealand, Thailand	New Zealand	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
HOTEL	4 China (Taiwan), Viet Nam, Thailand, Canada	Canada.	Yes
INNDY	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	3 Thailand, Australia, United States of America	United States of America	No
KALIM	2 Argentina, Thailand	Argentina	No
KATIB	2 Sudan, Thailand	Sudan	No
KEETA	2 United States of America, Thailand	United States of America	No
KIMET	2 Kenya, Thailand	Kenya	No
KOKAM	2 Cameroon, Thailand	Cameroon	No
LAMMY	2 United States of America, Thailand	United States of America	No
LAMPA	2 Spain, Thailand	Spain	No
LANNA	2 United States of America, Thailand	United States of America	No
LASON	2 Turkey, Thailand	Turkey	No
LATIN	2 United States of America, Thailand	United States of America	No
LEMON	6 United States of America, Italy, Thailand, China (Hong Kong), Japan, Republic of Korea	United States of America	Yes
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 Kong), Thailand	United Kingdom	No
MAREE	2 United States of America, Thailand	United States of America	No
MARIA	5 United States of America, Japan, Thailand, Brazil, Argentina/Bolivia (FIR boundary)	United States of America	Yes
MARWA	2 Thailand, Bahrain	Bahrain	No
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
		Brazil. To be determined by the 5LNC	
		Duplicate Resolution Rules if not used by	
NITRO	4 Republic of Moldova, Thailand, Japan, Brazil	Brazil.	No
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
		Awaiting confirmation for 5LNC release to	
NOVEM	2 Australia, Thailand	APAC from EUR/NAT	No
	China (Taiwan), Japan, Thailand, United States of America		
OLIVE	5 (American Samoa), United Kingdom	United Kingdom	Yes
		Brazil. To be determined by the 5LNC	
		Duplicate Resolution Rules if not used by	
OPERA	4 Thailand, Japan, Spain, Brazil	Brazil.	No
OSAKI	2 Peru/Ecuador (FIR boundary), Thailand	Peru/Ecuador	No
OSITO	2 Panama, Thailand	Panama	No
PABEK	2 Chile, Thailand	Chile	No
PACER	2 United States of America, Thailand	United States of America	No
PALAT	2 Brazil, Thailand	Brazil	No
PANIN	2 Chile, Thailand	Chile	No
PAPAS	3 Japan, Thailand, Brazil	Japan	No
	India/Mauritius/Seychelles (FIR boundary), Thailand, Sweeden,		
PERRY	4 Trinidad and Tobago	Sweeden	No
	Belize, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica,	Belize, Costa Rica, El Salvador, Guatemala,	
PESTO	2 Nicaragua (COCESNA)/Jamaica, Thailand	Honduras, Nicaragua/Jamaica	No
PIANO	3 Thailand, China (Taiwan), United States of America	United States of America	No
PINTO	4 Spain, United States of America, Thailand, Chile	United States of America	No
PLATU	2 United States of America, Thailand	United States of America	No
PLUTO	4 United States of America, Australia, Thailand, Japan	United States of America	No
POOMA	2 United States of America, Thailand	United States of America	No
PUSIT	2 Philippines, Thailand	Philippines	No
RABEE	2 United States of America, Thailand	United States of America	No
RATLE	2 United States of America, Thailand	United States of America	No
RIVER	4 Thailand, China (Hong Kong), Japan, Netherlands	Netherlands	No
RIZZO	2 United States of America, Thailand	United States of America	No
ROBBY	2 United States of America, Thailand	United States of America	No
ROMAN	4 Thailand, Japan, United States of America, Mexico	United States of America	No
ROMBO	2 Honduras (COCESNA), Thailand	Honduras	No
RONAL	3 Thailand, Spain, Kazakhstan	Spain	No
ROVEN	2 Netherlands, Thailand	Netherlands	No
RUMBA	3 Thailand, United States of America, Brazil	United States of America	No
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
	Thailand, China (Hong Kong), Japan, United Kingdom/Ireland (FIR		
SAMON	4 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	Spain, Syrian Arab Republic, Pakistan, India, Thailand, Lao		
TANON	7 People's Democratic Republic, Viet Nam	Spain	Yes
TAPPA	3 Thailand, Cameroon, Nigeria	Cameroon	Yes
TARAD	2 United States of America, Thailand	United States of America	No
TEMPO	2 Lao People's Democratic Republic, Thailand	Lao People's Democratic Republic	Yes
	2 United States of America, Thailand	United States of America	No
	Lao People's Democratic Republic, Thailand, Japan, Pakistan/India		
TIGER	6 (FIR boundary), United Kingdom, United States of America	United Kingdom	Yes
	United States of America (Puerto Rico)/United Kingdom (Anguilla)		
TIKAL	3 [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

LARGO	3 Cuba, Thailand, China (Taiwan)	To be determined by the 5LNC Duplicate Resolution Rules	No
SANJO	3 Japan, Philippines, Thailand	To be determined by the 5LNC Duplicate Resolution Rules	No

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
KIRIN	3 Thailand, China (Taiwan), Japan	Thailand replacing KIRIN, Priority given to China	Yes
KITTY	2 Australia, Thailand	Thailand replacing KITTY, Priority given to Australia	No
PADAM	2 Brazil, Thailand	Thailand replacing PADAM, Priority given to Brazil	No
ROONY	2 Australia, Thailand	Thailand replacing ROONY, Priority given to Australia	No
SAMET	2 Thailand, Brunei Darussalam	Thailand replacing SAMET, Priority given to Brunei Darussalam	Yes
SAPUT	2 China, Thailand	Thailand replacing SAPUT, Priority given to China	No
SELKA	2 New Zealand, Thailand	Thailand replacing SELKA, Priority given to New Zealand	No
TSTWF	2 Australia, Thailand	Thailand replacing TSTWF, unpronounceable	No
VOBOT	2 Canada, Thailand	Thailand replacing VOBOT, Priority given to Canada	No

5LNC STATUS - TIMOR LESTE

Date: June 2023

ICARD	Total number of 5LNCs	83
	Terminal Airspace (TA)	58
	En-route (ENR)	11
	FIR	11
	Other	1
	No Purpose	2
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	0
	Priority allocated to Timor Leste	0
	Priority allocated to other States	0
	Priority to be determined	0
	Resolving	0
	Completely resolved 5LNCs	0

5LNC STATUS - TONGA

Date: June 2023

ICARD	Total number of 5LNCs	44
	Terminal Airspace (TA)	44
	En-route (ENR)	0
	FIR	0
	Other	0
	No Purpose	0
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	10
	Priority allocated to Tonga	0
	Priority allocated to other States	9
	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 States			
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 1000NM
OTTER	3 Tonga, China, Canada	To be determined by the 5LNC Duplicate Resolution Rules	No

5LNC STATUS - TUVALU

Date: June 2023

ICARD	Total number of 5LNCs	0
	Terminal Airspace (TA)	0
	En-route (ENR)	0
	FIR	0
	Other	0
	No Purpose	0
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	3
	Priority allocated to Tuvalu	0
	Priority allocated to other States	2
	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			
5LNC	States	Priority	Within 1000NM
APATI	2 Ghana, Tuvalu	Ghana	No
BIKEN	2 India, Tuvalu	India	No

Priority to be determined			
5LNC	States	Priority	Within 1000NM

In the process of being resolved			
5LNC	States	Note	Within 1000NM
SEMUT	2 Indonesia, Tuvalu	Unavailable (WACAF)	No

5LNC STATUS - VANUATU

Date: June 2023

ICARD	Total number of 5LNCs	13
	Terminal Airspace (TA)	0
	En-route (ENR)	13
	FIR	0
	Other	0
	No Purpose	0
	No Coordinates	0

Duplicated 5LNCs	Total number of duplicated 5LNCs	3
	Priority allocated to Vanuatu	0
	Priority allocated to other States	3
	Priority to be determined	0
	In the process of being resolved	0
	Completely resolved 5LNCs	0

Priority allocated to Vanuatu			
5LNC	States	Priority	Within 1000NM

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

ALPHA	11	Lao People's Democratic Republic, Vanuatu, China, India, Italy, Russian Federation, Turkey, United Kingdom (2), United Kingdom (Gibraltar), United Kingdom (Falkland Islands)	Lao People's Democratic Republic	Yes
DELTA	10	Suriname, Italy, Vanuatu, Syrian Arab Republic, Liberia, Bhutan, Japan, Lao People's Democratic Republic, India, Sri Lanka	Suriname	Yes
SARAT	2	Fiji/Vanuatu, United States of America	Fiji	No

5LNC STATUS - VIET NAM

Date: June 2023

ICARD	Total number of 5LNCs	364
	Terminal Airspace (TA)	180
	En-route (ENR)	70
	FIR	20
	Other	1
	No Purpose	63
	No Coordinates	7

Duplicated 5LNCs	Total number of duplicated 5LNCs	65
	Priority allocated to Viet Nam	8
	Priority allocated to other States	39
	Priority to be determined	2
	In the process of being resolved	0
	Completely resolved 5LNCs	16

Priority allocated to Viet Nam			
5LNC	States	Priority	Within 1000NM
CONDA	2 Viet Nam, Cambodia	Viet Nam	Yes
DONGI	2 Viet Nam, Brazil	Viet Nam	No
KARAN	3 China (Taiwan), Viet Nam, Indonesia	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
ANTRI	2 Viet Nam, United States of America	United States of America	No
BALOV	2 Norway, Viet Nam	Norway	No
BANCO	2 United States of America, Viet Nam	United States of America	No
BANSU	3 Russian Federation, Japan, Viet Nam	Japan	No
BIBAN	2 Italy/Switzerland (FIR boundary), Viet Nam	Italy/Switzerland	No
	China (Taiwan), China (mainland), Indonesia, Viet Nam, Australia,		
BISON	6 United States of America	United States of America	Yes
BITIS	2 Argentina, Viet Nam	Argentina	No
CAMRI	3 United States of America, China (Macao), Viet Nam	United States of America	Yes
	United States of America, Republic of Korea, China (Hong Kong),		
CANTO	4 Viet Nam	United States of America	No
DAKAM	2 Fiji/New Zealand, Viet Nam	Fiji/New Zealand	No
	United States of America, Lao People's Democratic Republic, Viet		
DONMO	3 Nam	United States of America	Yes
FINAM	2 Spain, Viet Nam	Spain	No
HALAN	2 United States of America, Viet Nam	United States of America	No
HOBIN	2 Republic of Korea, Viet Nam	FAA	No
KADIM	3 Malaysia, India, Viet Nam	Malaysia	No
KANGU	2 Turkey, Viet Nam	Turkey	No
LANVI	2 France, Viet Nam	To be transferred	No
	Lao People's Democratic Republic/Viet Nam (FIR boundary), China		
LAVOS	2 (Taiwan)	Lao People's Democratic Republic/Viet Nam	Yes
MADEN	3 Viet Nam, Panama, United States of America	United States of America	No
	United States of America, Myanmar, China (Taiwan), Viet Nam,		
MALAY	5 Philippines	United States of America	Yes
MANGA	4 New Zealand, Philippines, Viet Nam, Colombia	Colombia	Yes
MAREL	2 Italy, Viet Nam	Italy	No

MISAN	2 Yemen, Viet Nam	Yemen	No
MOLAN	3 Mauritania, Côte d'Ivoire, Viet Nam	Mauritania	Yes
NAMBI	3 Brazil, Saudi Arabia, Viet Nam	Saudi Arabia	No
NITOM	2 Australia, Viet Nam	Australia	No
SOKAN	2 Jordan/Syrian Arab Republic (FIR boundary), Viet Nam	Jordan/Syrian Arab Republic	No
SONTA	2 Spain, Viet Nam	Spain	No
SUDON	2 Russian Federation, Viet Nam	Russian Federation	No
TALAP	2 Russian Federation, Viet Nam	Russian Federation	No
TAMDA	2 Belize (COCESNA), Viet Nam	Belize	No
	Spain, Syrian Arab Republic, Pakistan, India, Thailand, Lao		
TANGO	7 People's Democratic Republic, Viet Nam	Spain	Yes
TANNA	2 United States of America, Viet Nam	United States of America	No
TANOS	2 Liberia/Sierra Leone/Guinea, Viet Nam	Liberia/Sierra Leone/Guinea	No
TINLY	2 United States of America, Viet Nam	United States of America	No
TOTRA	3 New Zealand, Lithuania, Viet Nam	Lithuania	No
VINLO	2 Canada, Viet Nam	Canada	No
VITRA	2 Congo, Viet Nam	Congo	No
ZATON	3 Russian Federation, United States of America, Viet Nam	Russian Federation	No

Priority to be determined			
5LNC	States	Priority	Within 1000NM
		To be determined by the 5LNC Duplicate Resolution Rules	
TONGA	2 Viet Nam, China (Taiwan)		Yes
		To be determined by the 5LNC Duplicate Resolution Rules	
HOTEL	4 China (Taiwan), Viet Nam, Thailand, Canada		Yes

[illegible]

INTERNATIONAL CIVIL AVIATION ORGANIZATION

DRAFT



ASIA/PACIFIC REGIONAL PLAN FOR COLLABORATIVE AERONAUTICAL INFORMATION MANAGEMENT

Version 2.2, June 2023

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

Approved by the ATM Sub-Group of APANPIRG (ATM/SG/11) and published by the ICAO Asia and Pacific Office, Bangkok

CONTENTS

SCOPE OF THE PLAN	1
PLAN OBJECTIVES	6
EXECUTIVE SUMMARY	7
ABBREVIATIONS AND ACRONYMS	9
BACKGROUND INFORMATION	12
Principles	12
Aviation System Block Upgrades (ASBU)	12
Interim AIM Transition Guidance	13
AIM Information Sharing Website.....	13
Quality Management Guidance.....	13
Selection and Training Guidelines for AIS	14
Operating Procedures for AIS Dynamic Data (OPADD).....	15
SNOWTAM Guidance.....	15
Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services.....	16
ICAO Location Indicators.....	16
International Codes and Routes Designators.....	16
Implementation Status Monitoring.....	17
CURRENT SITUATION	19
PERFORMANCE IMPROVEMENT PLAN	22

.....

LIST OF APPENDICES

Appendix A: APAC Regional AIM Principles A-1

Appendix B: Template: Formal Agreements between Data Originators and AIS B-1

Appendix C: ICARD Procedures..... C-1

Appendix D: Implementation Status Reporting FormD-1

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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 ATM ANS Plan*, providing background information, analyses and performance objectives to facilitate seamless ATM ANS operations in the APAC Region; and
- ~~*Guidance Manual for Aeronautical Information Services (AIS) in the Asia/Pacific Region, providing guidance on AIS quality management systems, AIS Training and Competency, guidance for priority AIM transition steps, and the Asia/Pacific Region Operating Procedures for Aeronautical Dynamic Data (OPADD).*~~ This document, the *Asia/Pacific Regional Plan for Collaborative AIM*.

Note: The APAC ANP, Seamless ATM ANS Plan and ~~Guidance Manual for AIS in the Asia/Pacific Region~~ Asia/Pacific Regional Plan for Collaborative AIM are available on the ICAO APAC Regional Office eDocuments web-page 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 1 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.

x.xx *Note: The reference to ANP Vol II Part IV 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 web-page.

Beijing Declaration

[may be considered for revision after the APAC Ministerial Conference in New Delhi in September 2023, which will precede ATM/SG/11 and is expected to produce the *New Delhi Declaration*, updating/superseding the 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 that will become available in documents developed by AIM SG 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, Doc 9750), 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 Basic Air Navigation Plan* and the *Asia/Pacific Seamless ATM 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 ATM 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 ~~AAITF noted the adoption by the Council of ICAO of Amendment 40 to Annex 15—Aeronautical Information Services, the approval of Doc 10066—PANS-AIM and the expected approval of the revised Doc 8126 AIS Manual, all applicable from 08 November 2018, and the work plan of the AIM SG for development and updating of global guidance material. It was determined that in this fluid environment the Plan would require regular updating to keep current with aviation system changes.~~

1.21 Noting that the Asia/Pacific Seamless ANS Plan undergoes its routine review each three years including 2019, and that the Global Air Navigation Plan (GANP), together with its Aviation System Block Upgrades (ASBUs) is also reviewed each three years including 2019, it is therefore intended that AATF conducts a complete review of the Plan in 2020, and thence every three years, in alignment with the update cycle of the Seamless ATM Plan and GANP. 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 x). 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.

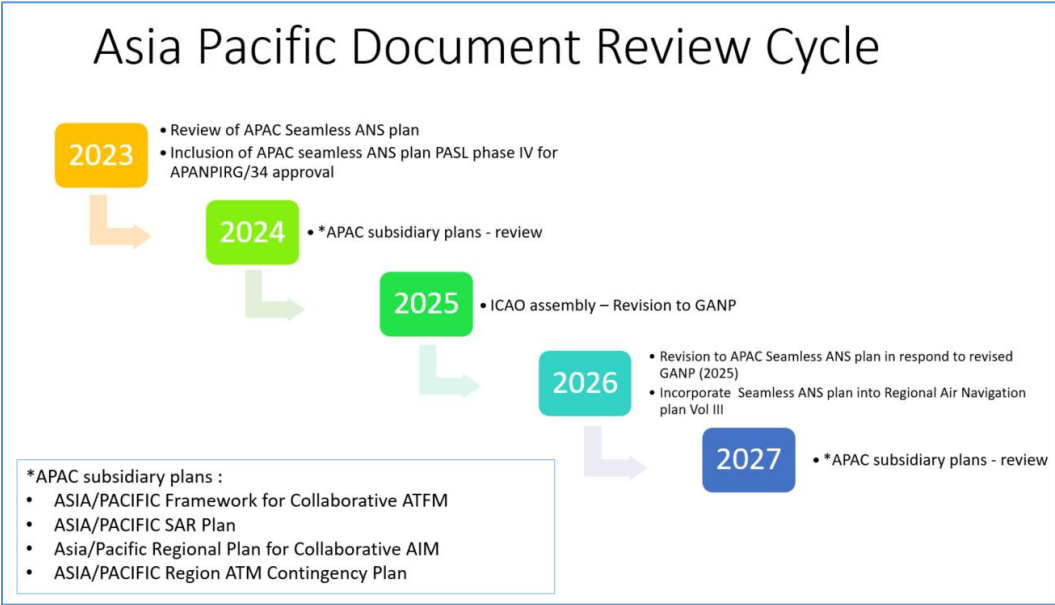


Figure 2: Proposed ATM-Related Document Review Cycle

x.xx 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.

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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 ATM ANS Plan (Version 2.0 3.0, September 2016 2019)
- ~~Guidance Manual for Aeronautical Information Services (AIS) in the Asia/Pacific Region (endorsed by APANPIRG, First Edition 2002)~~

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)

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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) existing~~ Regional AIS guidance manual, this Plan was developed to avoid divergence from, or duplication of, ICAO global guidance material that ~~will~~ ~~was expected~~ be provided in the near to medium term. Such global guidance material ~~is expected to include~~ ~~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 ~~benefit~~ 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 ~~and~~, shared aeronautical information databases, and collaborative efforts in AIM training.

Performance Improvement Plan

3.8 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.

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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 which are relevant for Seamless ~~ATM~~ **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).
- 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.

Interim AIM Transition Guidance

5.6 The Ninth Meeting of the Asia/Pacific Region AIS — AIM Implementation Task Force (AAITF/9, Pattaya, Thailand, 24–27 June 2014), recognized that the lack of AIM transition guidance material was a matter of significant concern to Administrations the Region. There had been delays in the production of global ICAO guidance documents, those of most immediate significance being the updated Doc 8126 AIS Manual, the new Doc 9839 Quality Manual and Doc 9991 AIS Training Manual. AAITF/9 agreed to continue to work on Regional AIM transition guidance material for key AIM transition steps from the ICAO Roadmap for Transition from AIS to AIM.

5.7 AAITF/10 updated the *Guidance Manual for AIS in the Asia/Pacific Region* by adding a new appendix, *Interim AIM Transition Guidance*, which emphasizes four priority steps from AIM transition roadmap, they are:

- P 17 — Quality,
- P 16 — Training,
- P 18 — Agreements with data originators, and
- P 11 — Electronic AIP.

5.8 Interim AIM Transition Guidance is provided in the *Guidance Manual for Aeronautical AIS in the Asia/Pacific Region*.

AIM Information Sharing Website

5.9 The Asia/Pacific AIM Information Sharing Website was established to share information on the current status and challenges being faced by Asia/Pacific Administrations implementing, or planning to implement, AIM. The website is available at <http://aim-tracking.org/>.

Quality Management Guidance

5.10 Global guidance for the quality management of aeronautical information will be is provided in ICAO Doc 9839 *Quality Manual Manual on the Quality Management System for Aeronautical Information Services*, being developed by the AIM-SG and available on the ICAO Secure Portal at <https://portal.icao.int/icao-net/Pages/Documents.aspx>. Interim guidance for quality management may be found in the *Guidance Manual for AIS in the Asia/Pacific Region*.

5.11 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 information or data that is required to be promulgated in AIP, and the quality management processes that shall be applied.

5.12 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.

5.13 A template for the establishment of formal agreements between originators of aeronautical data and the AIS is provided in **Appendix B**. 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, [note: Plan appendices to be renumbered accordingly]

Selection and Training Guidelines for AIS

5.14 Global guidance for AIM training ~~will be~~ is provided in ICAO Doc 9991 *AIS Training Manual* ~~Manual on Aeronautical Information Services Training~~, being developed by the AIM SG also available on the ICAO Secure Portal.

x.xx 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

x.xx 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.

x.xx 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

x.xx 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.

x.xx 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.

x.xx 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

x.xx A Selection Committee will usually be established with a minimum of two people to determine the most suitable applicant.

x.xx 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.

x.xx 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.

x.xx 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.

x.xx 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.

x.xx 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.

x.xx An appropriate delegate will usually formally approve the Selection Committee's recommendation.

x.xx 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)

5.15 ~~The OPADD, based on the EUROCONTROL OPADD and updated periodically by AAITF, provides regional guidance for common procedures for NOTAM. The OPADD for the Asia/Pacific Region May be found in the Guidance Manual for AIS in the Asia/Pacific Region.~~ 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.***

x.xx 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

x.xx 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.

x.xx 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***).

x.xx 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

[Re-number subsequent paragraphs]

5.16 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.

5.17 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.

5.18 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

5.19 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.

5.20 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

5.21 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

5.22 States' requirements for unique five-letter pronounceable name-code designators shall be notified to the Regional Offices of ICAO for coordination.

5.23 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

5.24 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.

5.25 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 C**.

5.26 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

5.27 The Asia/Pacific Regional Plan for Collaborative AIM is one of several important plans that are subsidiary to the Seamless ~~Air Traffic Management (ATM)~~ 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;

~~5.1~~ 5.xx States report implementation of the performance expectations of the Seamless ~~ATM~~ ANS Plan using an online reporting form. Monitoring and reporting schemes for subsidiary plans enhance the current Seamless ~~ATM~~ ANS monitoring and reporting scheme.

~~5.2~~ 5.xx The monitoring and reporting scheme for Regional collaborative AIM implementation

measures State implementation of the performance expectations specified in Section 7 of this document.

~~5.3~~ 5.xx Asia/Pacific Administrations should report their implementation status to the ICAO Asia/Pacific Regional Office at least once annually, by no later than ~~30 April~~ 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 ATM ANS monitoring and reporting scheme.

5.4 5.xx It is expected that the relevant AIM expert/s in each Administration will be responsible for the detailed reporting in the Regional AIM Monitoring and Reporting form, and that these experts will then liaise closely with their Administration's Seamless ATM ANS reporting point of contact to ensure the accuracy of the higher level reporting and consistency between the separate reporting levels.

~~5.5~~ 5.xx The Regional AIM Monitoring and Reporting Form is provided at **Appendix D**, and is available on the ICAO Asia/Pacific Regional Office eDocuments web-page at:

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

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CURRENT SITUATION

Current Status of Transition from AIS to AIM

[To be updated with implementation status data from AAITF/18]

6.1 The performance objectives of the Asia/Pacific Seamless **ATM** **ANS** Plan included the expectation that Phases 1 and 2 of the Roadmap for Transition from AIS – AIM would be completed by November 2015. As on 05 June 2018, regional implementation of Phase 1- Consolidation of the Roadmap is summarized as follows: 18 Administrations (43%) had completed implementation, 20 Administrations ($\approx 48\%$) had partly implemented, 6 Administrations ($\approx 14\%$) had not implemented any Phase 1 step, overall regional implementation of Phase 1 $\approx 72\%$. Regional implementation of Phase 1 and 2 is summarized as follows: 18 Administrations (43%) have completed more than 50%, 16 Administrations ($\approx 38\%$) have implemented less than 50%, 6 Administrations (14%) have not completed any Phase 1 and 2 step.

6.2 **Figure 1** below indicates that many States are lagging in their implementation for transition from AIS to AIM. (Date last amended on 05 June 2018.)

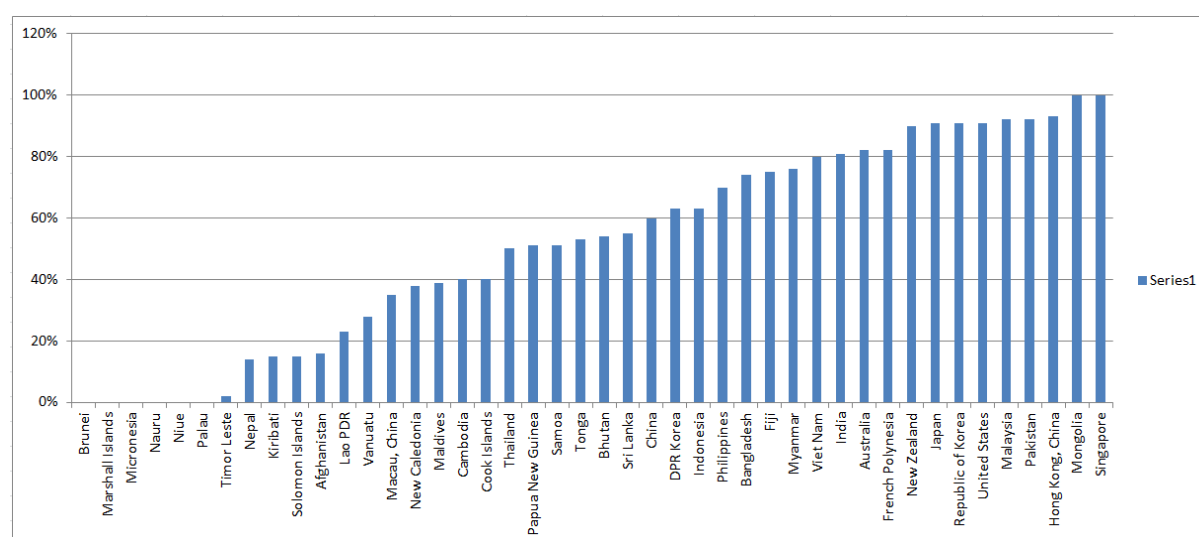


Figure 1: Regional AIM Implementation Status - Phase 1 and 2 Implementation Progress

Asia/Pacific AIM Compliance Analysis – USOAP Audit

6.3 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.

6.4 According to the assessment of Effective Implementation (EI) of AIS-related PQs in May 2018 in APAC Region, an overall EI was **62%**. After analyzing, the EI for 10 AIS-related PQs was **below 50%** (**Figure 2** 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).

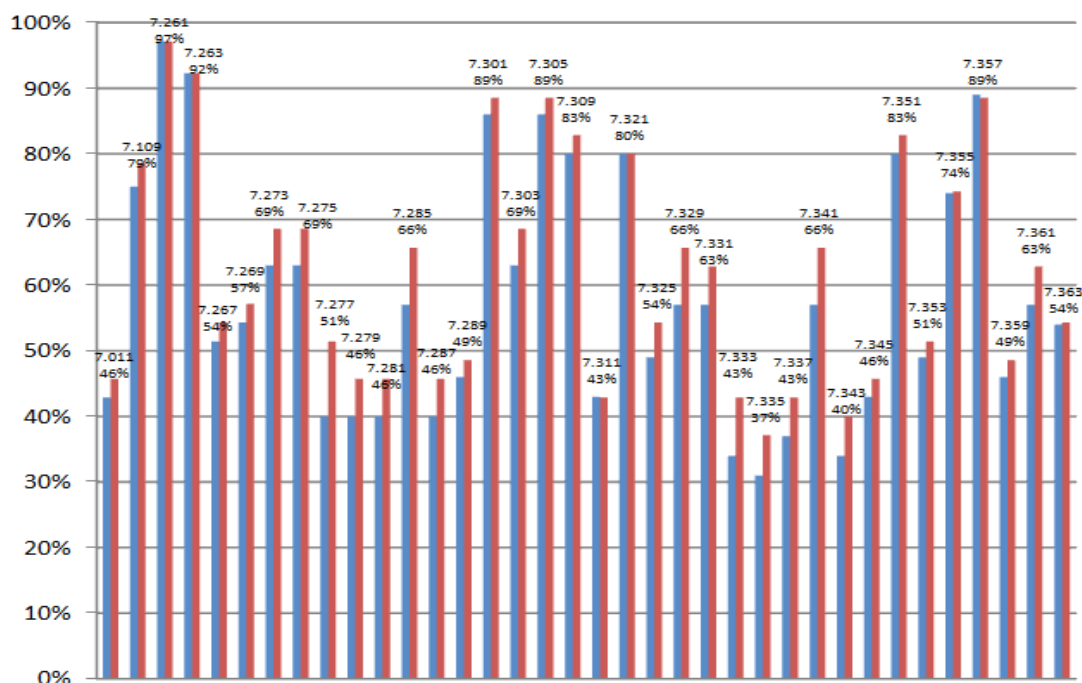


Figure 2: APAC USOAP CMA ANS PQ Compliance (2017 and 2018 Comparison)

6.5 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 in 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%**.

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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 ATM **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 (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 ATM **ANS** Plan – Performance Expectations

7.3 The Seamless ATM **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).*

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 ATM/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, 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

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; and
- iii. provide Electronic aeronautical charts.

*Note 1: The Asia/Pacific Seamless ~~ATM~~ **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.

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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 ATM ANS initiatives, including military cooperation and AIM.

Source: Asia/Pacific Seamless ATM 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 ATM 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

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~~APPENDIX B – TEMPLATE~~
~~SERVICE LEVEL AGREEMENT~~

~~BETWEEN~~

~~{AIS PROVIDER}~~

~~AND~~

~~{DATA ORIGINATOR}~~

~~ON THE SUPPLY OF AERONAUTICAL DATA AND AERONAUTICAL INFORMATION FOR
THE PROVISION OF AERONAUTICAL INFORMATION SERVICES~~

Effective Date : _____ ~~{Date of Inception}~~

Document Management

TABLE OF CONTENTS

No.	Contents	Page
1	General Overview	
1.1	Objectives	3
1.2	Scope	3
1.3	Reference Documents	4
1.4	Validity Period	4
2	Quality Management	
2.1	Overview	5
2.2	Data Quality Attributes	5
2.3	Service Standards of Originator	5
2.4	Service Standards of AIS Provider	7
2.5	Service Level Indicators	8
3	Amendments and Mediation	
3.1	Amendments	9
3.2	Dispute Management	9
3.3	Point of Contact	9
4	Agreement	10
	Annex A – Details of Point of Contact (Effective Date: DD/MM/YYYY)	11

~~1. General Overview~~

~~1.1 Objectives~~

~~1.1.1. This Service Level Agreement (Agreement) between {AIS Providers} and {Data Originator} aims to achieve the following objectives:~~

- ~~i. Strengthen the coordination on the supply, maintenance and publication of aerodrome aeronautical data and aeronautical information pertaining to the facilities, services and navigation aids provided within {Name of State};~~
- ~~ii. Give assurance on the accuracy, integrity, traceability and timeliness of aerodrome aeronautical data and aeronautical information, in accordance to ICAO Annex 4, Annex 14 and Annex 15 requirements, originating from {Data Originator} for publication in the {Name of State} aeronautical publications;~~
- ~~iii. Establish a framework for key operational Service Standards and Performance Measurements to meet user's needs;~~
- ~~iv. Deliver consistent levels of service for the provision of aerodrome aeronautical data and aeronautical information; and~~
- ~~v. Establish clear roles and responsibility of the parties in the provision and dissemination of aerodrome aeronautical data and aeronautical information.~~

~~1.2 Scope~~

~~1.2.1 This Agreement documents the agreed provision of service for the supply of aerodrome aeronautical data and aeronautical information by {Data Originator} (“Originator”) to the {AIS Provider} and the agreed standards to which the said information shall be published by the {AIS Provider}.~~

~~1.2.2 This Agreement shall be in line with the requirements set forth in ICAO Annex 15 paragraph 2.1.5, which states that:~~

~~“Each Contracting State shall ensure that formal arrangements are established between originators of aeronautical data and aeronautical information service in relation to the timely and complete provision of aeronautical data and aeronautical information.”~~

~~1.2.3 This Agreement shall be in line with the requirements set forth in ICAO Annex 14 Volume 1 paragraph 2.13.1, which states that:~~

~~*“To ensure that aeronautical information services units obtain information to enable them to provide up-to-date pre-flight information and to meet the need for in-flight information, arrangements shall be made between aeronautical information services and aerodrome authorities responsible for aerodrome services to report to the responsible aeronautical information services unit, with a minimum of delay”.*~~

~~1.3 Reference Documents~~

~~1.3.1 This Agreement, including the definition of the terms used, is established to fulfil the other relevant requirements in the following ICAO Standards and Recommended Practices (SARPs), manuals and national regulations:~~

- ~~i. ICAO Annex 15 Aeronautical Information Services~~
- ~~ii. ICAO Annex 4 Aeronautical Charts~~
- ~~iii. ICAO Annex 14 Aerodromes~~
- ~~iv. ICAO Doc 8126 Manual on Aeronautical Information Services~~
- ~~v. ICAO Doc 9674 World Geodetic System 1984 (WGS 84) Manual~~

~~{States may include additional reference documents for the purpose of this SLA}~~

~~1.4 Validity Period~~

~~1.4.1 This Agreement shall be effective from {Date} and shall continue to be valid until such time when either party initiates to terminate the Agreement.~~

~~1.4.2 This Agreement shall be reviewed every {Validity Period} years to ensure compliance to ICAO SARPs and international best practices.~~

~~1.4.3 Updates or changes to this Agreement, if required before the periodic review, could be initiated by either party.~~

~~1.4.4 The {Name of the governing, regulatory body or approving authority} shall be the authority to approve updates, changes and review to this Agreement.~~

~~{States to determine the validity period and the governing, regulatory body or approving authority of this SLA}~~

~~2. Quality Management~~

~~2.1 Overview~~

~~2.1.1 Quality management gives the assurance that the aeronautical data and aeronautical information supplied by the Originator provides the confidence that quality requirements will be fulfilled. This includes establishing the data quality attributes and service standards of the parties to this Agreement.~~

~~{States to incorporate any other quality management adherence deemed fit for this SLA}~~

~~2.2 Data Quality Attributes~~

~~2.2.1 The integrity of the aeronautical data shall be maintained throughout the data chain from the Originator to AIS and subsequently to the end users.~~

~~2.2.2 Data integrity classifications used within this Agreement are based on ICAO Annex 15, Appendix 7, Tables A7-1 to A7-5.~~

~~2.2.3 The validation and verification procedures shall be based on the applicable integrity classifications as follows:~~

- ~~i. Routine data: avoid corruption throughout the processing of the data.
The permitted maximum error rate is 1 in 1000, providing an integrity level of 1×10^{-3} (ICAO Doc 9674).~~
- ~~ii. Essential data: assure corruption does not occur at any stage of the entire process and include additional processes as needed to address potential risks in the overall system architecture to further assure data integrity at this level. The permitted maximum error rate is 1 in 100,000, providing an integrity level of 1×10^{-5} (ICAO Doc 9674).~~
- ~~iii. Critical data: assure corruption does not occur at any stage of the entire process and include additional integrity assurance processes to fully mitigate the effects of faults identified by thorough analysis of the overall system architecture as potential data integrity risks. The permitted maximum error rate is 1 in 100,000,000, providing an integrity level of 1×10^{-8} (ICAO Doc 9674).~~

~~{States to incorporate any other data quality attributes deemed necessary for this SLA}~~

~~2.3 Service Standards of Originator~~

~~2.3.1 The established service standards aim to outline the responsibilities of the originator as part of the quality management process of the aeronautical information data chain. {Name of Originator}, as the Originator shall:~~

- i. ~~Supply, maintain and update {AIS Provider} with aerodrome aeronautical data and aeronautical information pertaining to the facilities, services and navigation aids provided within {Name of Aerodromes} for which {Data Originator} is responsible.~~
- ii. ~~Provide {AIS Provider} with a list of aerodrome aeronautical data and aeronautical information originators within {Data Originator} who are authorized to supply, maintain and update the aerodrome aeronautical data and aeronautical information published in the {Name of State} aeronautical publications (that is, NOTAMs, AIP Supplements {AIP SUP}, AIP Amendments {AMDT}, AIP {Name of State} and Aeronautical Information Circulars {AIC}).~~
- iii. ~~Maintain and update the list of subject owners for the aerodrome aeronautical data and aeronautical information to be published and to inform {Name of AIS Provider}, for accountability purpose, whenever there is a change.~~
- iv. ~~Ensure that regular surveys are conducted by qualified and certified surveyors to determine and / or verify the accuracy and integrity of the aerodrome aeronautical and obstacle / terrain data published in AIP {Name of State}. The surveyed aerodrome aeronautical and obstacle / terrain data, including the WGS 84 coordinates, sent to {Name of AIS Provider} shall comply with the aeronautical data publication resolution and integrity classification stipulated in ICAO Annexes 4, 14 and 15.~~
- v. ~~Ensure that accurate, updated and complete aerodrome aeronautical data and aeronautical information is provided to {Name of AIS Provider} in sufficient time which comply with the AIRAC cycle cut off date, where necessary, for timely publication and dissemination to users.~~
- vi. ~~Ensure that all aerodrome aeronautical data and aeronautical information submitted to {Name of AIS Provider} for publication of AMDT, AIP SUP and AIC must include the name{s} of the originator{s} or subject owner{s} who have vetted and verified the submission, and a declaration that the aerodrome aeronautical data and aeronautical information submitted is accurate, updated and complete.~~
- vii. ~~Ensure that the submission of draft NOTAM{s} for promulgation to {Name of AIS Provider} includes the name{s} of person who issues, checks and approves, indicating that the information submitted is vetted and verified, and a declaration that the information submitted is accurate, updated and complete.~~
- viii. ~~Be responsible and accountable for the accuracy and integrity of the aerodrome aeronautical data provided to {Name of AIS Provider}. The aerodrome aeronautical data provided shall be in accordance to the data integrity classification for aeronautical data specified in ICAO Annex 15, Appendix 7, Tables A7-1 to A7-5.~~
- ix. ~~Conduct a yearly review of the AIP {Name of State} sections under their purview and update {Name of AIS Provider} accordingly and to provide a 'Nil' return to {Name of AIS Provider} after each review if no updates were required.~~

- x. ~~Check for permanent information that needs to be incorporated into AIP {Name of State} from the AIP SUP and NOTAMs submitted to {Name of AIS Provider}.~~
- xi. ~~Ensure that personnel performing the role of Data Originator and checker are appropriately trained and equipped with the requisite knowledge, skills and abilities to prepare the draft aeronautical publications and submit NOTAM proposals to {Name of AIS Provider} for promulgation within the context of the established quality management system.~~

~~{States to incorporate any other service standards for the Data Originators deemed necessary for this SLA}~~

2.4 ~~Service Standards of AIS Provider~~

2.4.1 ~~{Name of AIS Provider} is the entity responsible for the provision of aeronautical information services within the {Name of State} Flight Information Region {FIR} and areas where air traffic services are provided. The timely availability of accurate, updated and complete aeronautical data and aeronautical information is necessary to ensure the safety, regularity and efficiency of air navigation. {Name of AIS Provider} shall:~~

- i. ~~Publish updates and changes to aerodrome aeronautical data and aeronautical information through the most appropriate means (that is, AMDT, AIP SUP, AIC or NOTAM) taking into consideration the accuracy and timeliness of aerodrome aeronautical data and aeronautical information submitted by {Data Originator}.~~
- ii. ~~Publish permanent changes to AIP {Name of State} in accordance to the schedule of AMDT publication dates published in AIP {Name of State} and AIC.~~
- iii. ~~Check the submission date of the aerodrome aeronautical data and aeronautical information against the AMDT publication schedule on receipt of the aerodrome aeronautical data and aeronautical information from {Data Originator}. If the aerodrome aeronautical data and aeronautical information is received before the “Latest date for information to reach AIS”, the aerodrome aeronautical data and aeronautical information received will be checked for completeness and compliance with the aerodrome aeronautical data and aeronautical information quality requirements for publication resolution, integrity and data classification stipulated in ICAO Annex 15, Appendix 7, Tables A7-1 to A7-5.~~
- iv. ~~Check the submission date of the aerodrome aeronautical charts against the AMDT publication schedule on receipt of the aerodrome aeronautical charts from {Data Originator}. If the aerodrome aeronautical charts are received before the “Latest date for information to reach AIS”, the charts received will be checked for compliance with the aerodrome aeronautical chart specifications specified in ICAO Annex 4 and the aerodrome aeronautical data quality requirements for chart resolution of geographical coordinates, integrity and data classification stipulated in ICAO Annex 4, Appendix 6, Tables A6-1 to A6-6.~~
- v. ~~Track the aerodrome aeronautical data and aeronautical information submitted by {Data Originator} for errors and non-adherence to the specified timeline. Results of the tracking will be shared through a formal dialogue with {Data Originator} for compliance and to improve subsequent data submissions to {Name of AIS Provider}.~~

- vi. Review, develop and implement work processes which includes ICAO Annex 15 requirements with ~~{Data Originator}~~ on the submissions of aerodrome aeronautical data and aeronautical information for publication.
- vii. Assess the “Requests for NOTAM promulgation” to ensure that they are unambiguous and complete before the NOTAMs are promulgated.

~~{States to include any other services provided or requirements of the AIS Provider}~~

2.5 Service Level Indicators

- 2.5.1 In order to fulfil the requirements for quality management, ~~{Name of AIS Provider}~~ shall be tracking errors detected / observed before and after publication of the aerodrome aeronautical data and aeronautical information provided by ~~{Data Originator}~~. These errors shall be communicated to ~~{Data Originator}~~ for follow up remedial actions.
- 2.5.2 The ~~{Name of the governing, regulatory body or approving authority}~~, as the authority to monitor the effectiveness of coordination between ~~{Data Originator}~~ and ~~{Name of AIS Provider}~~, shall oversee the relevant compliance targets on timeliness and accuracy:

AERONAUTICAL PUBLICATIONS	COMPLIANCE TARGET
NOTAM	
Aeronautical Data and Aeronautical Information from Originator to NOTAM Office	100%
Aeronautical Data and Aeronautical Information from NOTAM Office to End Users	100%
AMDT/ AIP SUP/ AIP / AIC	
Aeronautical Data and Aeronautical Information from Originator to AIS Provider	100%
Aeronautical Data and Aeronautical Information from AIS Provider to End Users	100%

~~{States to indicate any other compliance targets expected by the Data Originators to comply}~~

3. Amendments and Mediation

3.1 Amendments

~~3.1.2~~ Either party can propose amendments and modifications to this Agreement through formal notification to the ~~{Name of the governing, regulatory body or approving authority}~~.

~~3.1.3~~ The ~~{Name of the governing, regulatory body or approving authority}~~, shall be the approving authority of such amendments and modifications to this Agreement.

~~3.2~~ — ~~Dispute Management~~

~~3.2.1~~ Disputes between the parties relating to this Agreement and its interpretation shall be arbitrated by the ~~{Name of the governing, regulatory body or approving authority}~~.

~~3.3~~ — ~~Point Of Contact~~

~~3.3.1~~ ~~{Data Originator}~~ and ~~{Name of AIS Provider}~~ shall each appoint a point of contact to manage issues pertaining to the provisions in this Agreement.

~~3.3.2~~ All communications relating to this Agreement shall be jointly coordinated by the appointed point of contact.

~~3.3.3~~ The details of the appointed point of contact is in ~~Annex A~~ of this Agreement. Both parties agree to ensure that the point of contact details are updated. Amendments to the details of the point of contact do not require the review of the overall Agreement.

~~4.~~ — ~~Agreement~~

~~4.1~~ This Agreement is concluded on ~~{DD MMM of YYYY}~~ by the following signatories:

Name:

Name:

Designation:

Designation:

Organisation:

Organisation:

Date:

Date:

{States and Data Originators to indicate the most appropriate officers to be the signatories of this SLA}

ANNEX A

SERVICE LEVEL AGREEMENT

BETWEEN

~~{STATE AUTHORITY}~~

AND

~~{DATA ORIGINATOR}~~

**~~ON THE SUPPLY OF AERONAUTICAL DATA AND AERONAUTICAL INFORMATION FOR
THE PROVISION OF AERONAUTICAL INFORMATION SERVICES~~**

Effective from ~~{DD MMM of YYYY}~~

Clause 3.2.3. The details of the appointed point of contact are as follows:

Organisation	Primary Contact	Secondary Contact
The AIS provider, {State Authority}	Name: Designation: Email: Tel:	Name: Designation: Email: Tel:
The Originator, {Data Originator}	Name: Designation: Email: Tel:	Name: Designation: Email: Tel:

~~{States may indicate details of the Points of Contact in an Annex to eliminate the need to sign again the Service Level Agreement if there changes to the Point of Contact from both parties to this Agreement.}~~

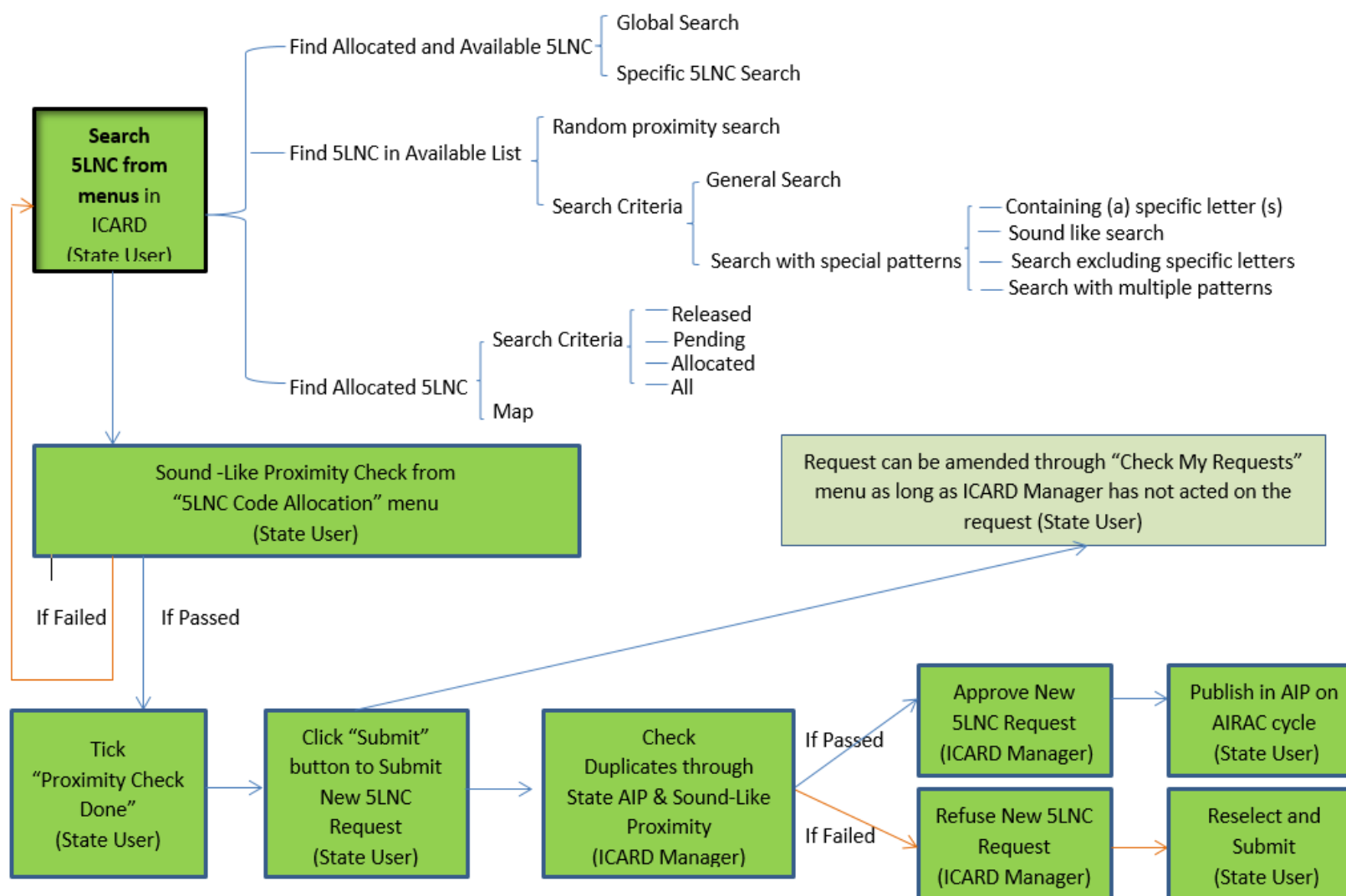
APPENDIX C - ICARD REGISTRATION PROCEDURE – AUTHORIZED USERS
- ICARD PROCESS FLOW CHART

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.

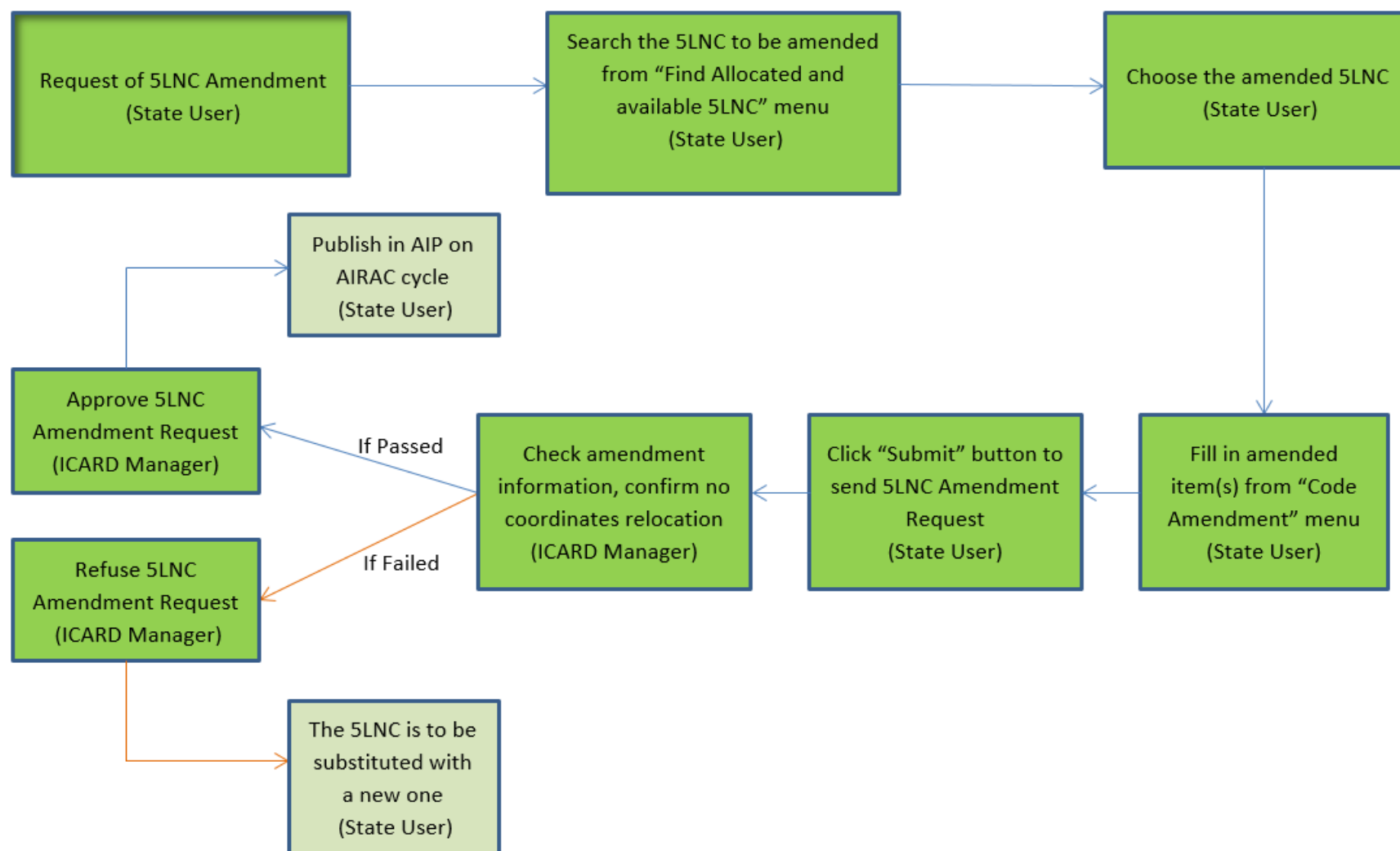
.....



Flow Chart for New 5LNC Request

Notes:

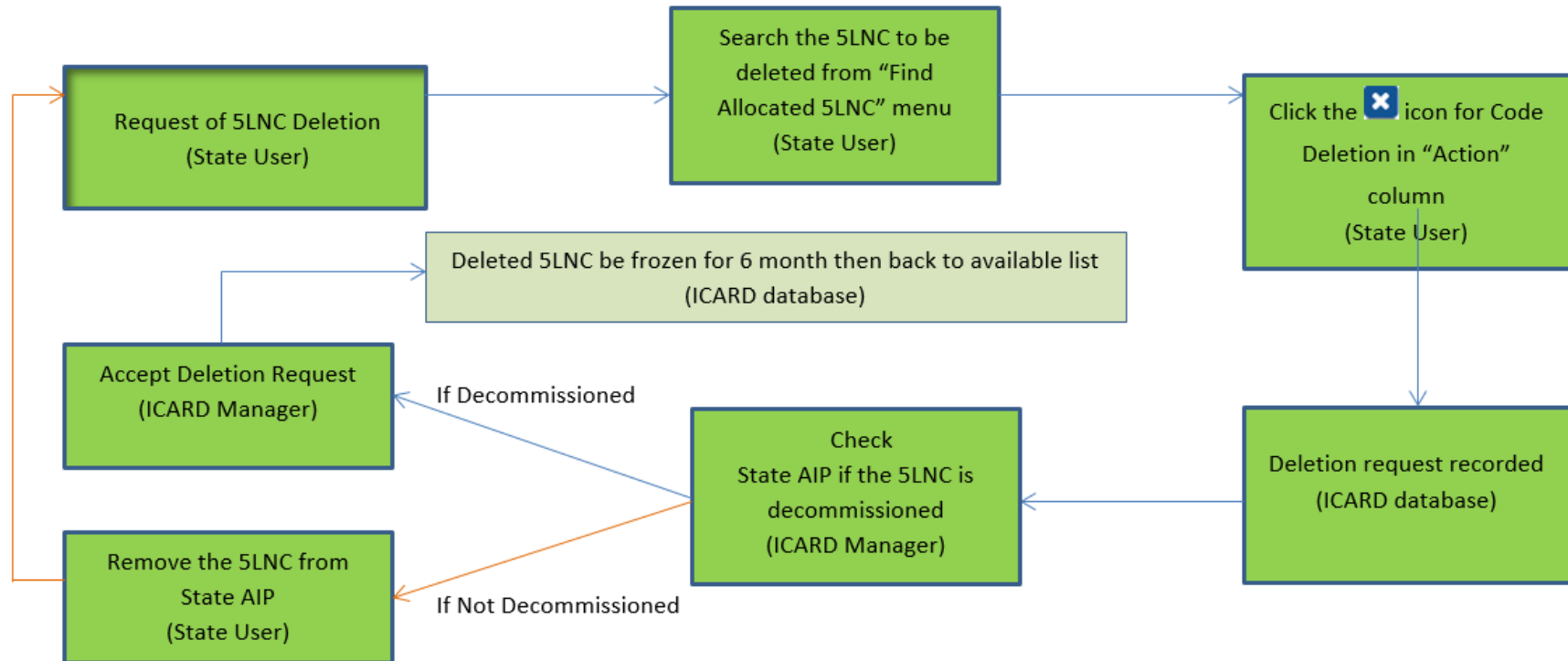
- ❖ In all cases, the coordinates of the requested new 5LNC must be within the territory or any FIR of the requesting State. If this is not the case, the request will be refused.
- ❖ For 5LNCs on FIR boundaries, the requesting State has to coordinate with all State(s) concerned before the new 5LNCs are 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:

- ❖ 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.

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INTERNATIONAL CIVIL AVIATION ORGANIZATION



DRAFT

ASIA-PACIFIC REGION

**OPERATING PROCEDURES FOR AERONAUTICAL INFORMATION SERVICES (AIS)
DYNAMIC DATA**

(OPADD)

Approved by the
Eleventh Meeting of the Air Traffic Management
Sub-Group of APANPIRG
(ATM/SG/11, October 2023)

ASIA/PACIFIC REGION OPERATING PROCEDURES FOR AIS DYNAMIC DATA

1.1 Within the Asia and Pacific Region the AIS-AIM Implementation Task Force (AAITF) monitors, reports on and responds to international developments in the NOTAM domain. AAITF is a contributory body of the Air Traffic Management Sub-Group (ATM/SG) of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG).

1.2 Historically the *Asia/Pacific Operating Procedures for AIS Dynamic Data* (OPADD) were adapted by AAITF from each updated version of the EUROCONTROL OPADD, with updates incorporated in the now retired *Guidance Manual for AIS in the Asia/Pacific Region*, on approval by ATM/SG.

1.3 AAITF/16 (June 2011) was informed of EUROCONTROL OPADD Edition 4.1, published on 07 December 2020 in response to changed ICAO provisions regarding the AIS, especially related to the implementation of the Global Reporting Format (GRF) for runway surface conditions and the associated revision to the SNOWTAM format

1.4 AAITF/16 was also informed that EUROCONTROL no longer offered an editable version of the OPADD, in order to maintain the integrity of the document and the associated intellectual property rights. Consequently, as proposed by AAITF/16, the Ninth Meeting of the ATM Sub-Group of APANPIRG (ATM/SG/9, November 2021) agreed under ***Conclusion ATM/SG/9-5: Update Asia/Pacific OPADD*** that the EUROCONTROL OPADD Edition 4.1 be adopted as the OPADD for the Asia/Pacific Region and uploaded to the Asia/Pacific Regional Office website.

1.5 Accordingly, the OPADD document is maintained as a stand-alone regional guidance document. The APAC OPADD Edition 4.1 is available on the ICAO Asia/Pacific Regional Office eDocuments web page at <https://www.icao.int/APAC/Pages/eDocs.aspx> (ATM Section, AIM Sub-Section).

1.6 AAITF acknowledges, with thanks, the contribution of Japan in adapting previous editions of the EUROCONTROL OPADD for use in the Asia/Pacific Region, and for coordinating the availability of OPADD Edition 4.1.

AAITF Chair

.....

EUROCONTROL Guidelines Operating Procedures AIS Dynamic Data (OPADD)

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Abstract	
<p>This document describes operating procedures for AIS dynamic data. These AIS dynamic data are primarily known as NOTAM, as defined in ICAO Annex 15 and Doc 10066 PANS-AIM.</p> <p>This document details operating procedures for:</p> <ul style="list-style-type: none"> - NOTAM creation in accordance with ICAO Annex 15 and Doc 10066 PANS-AIM; - the processing of incoming NOTAM not compliant with ICAO SARPs; - procedures and messages related to database coherence and completeness; - the handling of ASHTAM and SNOWTAM; - specific European arrangements; - guidelines related to pre-flight information bulletins (PIB). <p>The procedures described herein should allow increased automation. However, they are also applicable in non-automated environment to cover worldwide AIS operational requirements.</p>	
Keywords	
<p>NOTAM SNOWTAM NSC PIB</p> <p>NOTAM Code ASHTAM Trigger NOTAM</p>	
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DOCUMENT APPROVAL

The following table identifies the authority who has approved the present issue of this document.

AUTHORITY	NAME AND SIGNATURE	DATE
Director General	 Eamonn BRENNAN 	7/12/20

DOCUMENT CHANGE RECORD

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

EDITION NUMBER	EDITION DATE	REASON FOR CHANGE	PAGES AFFECTED
1.0	January 2000	Released Issue, incorporation of the Executive Summary, Acknowledgements and Introduction, recording of disagreement, formatting.	All
2.0	September 2005	Major review including AISOPS comments for removing ambiguities, and aligning on new European procedures and ICAO Standards and Recommended Practices.	All
2.1	March 2007	Editorial changes, GNSS examples, Trigger NOTAM Procedure, AIP References, Items F) and G)	All
3.0	April 2009	Released issue. Q-line FL rounding, Trigger NOTAM extended, procedures for (AIRAC) SUP cancellations/changes, NOTAMR/C in the future procedure, publication of bird information, Item E) harmonisation and improvements for better readability of NOTAM, ASHTAM processing, database queries extended, editorial changes, Chapter 3 applicability. New Chapter 7: guidelines on Pre-flight Information Bulletin.	All
4.0	April 2015	Review for aligning with new ICAO SARPs and European procedures, extended guidance on qualifier NOTAM code and issuance of separate /combined NOTAM, insertion of graphics (<i>Note: all graphics are the property of NAV CANADA</i>), removal of redundant/duplicated guidance, adjustment of end-time for Trigger NOTAM, removal of 'AND' and HJ/HN in item D) schedules, provision of geometries and addition of NOTAM examples for text in Item E).	All
4.1	07/12/2020	Incorporation of current ICAO SARPs, GRF (update of SNOWTAM format), NOTAM checklist editorial changes.	All

TABLE OF CONTENTS

DOCUMENT CHARACTERISTICS	2
DOCUMENT APPROVAL.....	3
DOCUMENT CHANGE RECORD.....	4
TABLE OF CONTENTS	5
PREFACE.....	8
ACKNOWLEDGEMENTS.....	9
EXECUTIVE SUMMARY	10
1 INTRODUCTION	11
1.1 Context.....	11
1.2 Purpose	11
1.3 Scope.....	12
1.4 EUROCONTROL Guidelines	12
1.5 Structure of the document.....	13
1.6 Applicability	13
1.7 Conventions.....	14
1.8 Referenced documents	15
1.9 Other publications to consider in NOTAM preparation.....	16
1.10 Digital NOTAM Event Specification and Pre-digital NOTAM Templates	17
1.11 Maintenance of this document	17
2 NOTAM CREATION	18
2.1 Introduction.....	18
2.2 Basic rules for NOTAM Creation	19
2.3 Detailed Procedures	20
2.4 Creation of NOTAMR and NOTAMC	63
2.5 Checklist production	69
2.6 Publication of information by NOTAM, AIP Amendment or AIP Supplement.....	72
2.7 Trigger NOTAM and related procedures	74
2.8 NIL notification	79
3 NOTAM PROCESSING	80
3.1 Introduction.....	80
3.2 Objective	80
This Chapter addresses NOTAM processing principles and procedures which support NOTAM storage.	80

3.3 Applicability	81
3.4 Procedures for the processing of NOTAM.....	81
3.5 General principles	81
3.6 Conversion of original NOTAM.....	82
3.7 Triggering of printed publications.....	83
3.8 Translation of NOTAM.....	83
3.9 Syntax correction	83
3.10 Data correction	84
3.11 Editing	85
3.12 Procedures for dealing with NOTAM Subject to Query.....	85
3.13 Procedures for the creation of NOTAM Series ‘T’	86
3.14 Procedures for correction of NOTAM.....	87
3.15 NOTAM Verification	88
3.16 NOTAM Identification	88
3.17 NOTAM Type	89
3.18 NOTAM Qualification (Item Q).....	89
3.19 NOTAM Items	93
3.20 Procedures related to NOTAM ‘R’ processing.....	97
3.21 Procedures Related to NOTAM ‘C’ processing.....	100
3.22 Checklist Processing	101
3.23 Missing NOTAM	103
3.24 NOTAM Deletion	103
4 DATABASE COMPLETENESS AND COHERENCE MESSAGES.....	104
4.1 General principles	104
4.2 Request for the repetition of NOTAM (RQN).....	105
4.3 Request for the original version of NOTAM (RQO)	106
4.4 Request for the repetition of ASHTAM (RQA).....	107
4.5 Content of the reply messages (RQR).....	109
4.6 Request for a List of valid NOTAM (RQL)	112
4.7 Incorrect requests (RQN, RQO, RQL).....	114
5 PROCEDURES FOR SNOWTAM, ASHTAM AND SPECIAL CONDITIONS.....	116
5.1 Introduction.....	116
5.2 SNOWTAM (“old” format)	116
5.3 SNOWTAM (“new” format).....	119
5.4 ASHTAM	121
5.5 Bird hazards.....	123
6 SPECIFIC EUROPEAN ARRANGEMENTS	124
6.1 Introduction.....	124
6.2 Multi-part NOTAM	124
6.3 Notification of publication of urgent aeronautical information requiring extensive text and/or graphics in contingency/force majeure situations.....	125

7 GUIDELINES FOR THE CREATION AND PROVISION OF PRE-FLIGHT INFORMATION BULLETINS (PIB)	127
7.1 Introduction	127
7.2 Data selection layers	128
7.3 Types of Bulletins - PIB	128
7.4 Types of messages/elements to be included in the PIB	131
7.5 Criteria for PIB customisation – Query Filters	131
7.6 Principle structure of a PIB	134
7.7 PIB - specific presentation considerations	135
7.8 Delivery of PIB	136
7.9 PIB - additional elements to be considered	136
7.10 Update Services	137
7.11 User specific data	138
7.12 Possible evolution of Briefing services	138
APPENDIX A1 – SYSTEM PARAMETERS	142
APPENDIX A2 - GLOSSARY	144
APPENDIX A3 - DOCUMENT UPDATE PROCEDURES	149

PREFACE

The harmonisation of procedures for the creation and processing of standardised aeronautical information is essential for aviation, and this was the reason for drafting Operating Procedures for AIS Dynamic Data (OPADD).

The first edition of the OPADD was published in January 2000 and was widely applied in Europe. The following three editions (released in 2005, 2009 and 2015) responded to the demand for more detailed procedures and guidance, as well as further harmonising the procedures and system output.

The fourth edition of OPADD also started to support the standardisation of digital data exchange, as it contained the concept of structured text in Item E) in the NOTAM, as developed jointly by EUROCONTROL and FAA, laying the foundation for system-to-system interoperability.

The OPADD has become a de facto standard since its first publication, fully compatible with the ICAO SARPs, to which it provides an essential complement. Having been translated into Japanese, Russian and Chinese, and in use by many other States and organisations outside Europe, it has become a very relevant document for AIS stakeholders worldwide.

This new edition – OPADD 4.1 is in response to changed ICAO provisions regarding the Aeronautical Information Service, especially related to the implementation of the Global Reporting Format (GRF) and the consequential changes to the SNOWTAM format. The opportunity of this minor update was also used to rectify some omissions and include editorial improvements.

This edition was again developed through the establishment of a dedicated OPADD Action Group under the supervision of the ECAC States represented in the EUROCONTROL Aeronautical Information Sub-group (AI Operations), and further approved by the AIM Team. The work of the Action Group was driven to enable global applicability. It was therefore a pleasure to welcome external observers to participate in the Action Group, supporting extensive discussions with a global viewpoint.

Users of this document are encouraged to address any comments and suggestions for improvement to EUROCONTROL. The OPADD remains a living document to reflect current and anticipated operating procedures for AIS dynamic data, and suggestions for improvement will therefore be taken into account.

EUROCONTROL acknowledges the extensive contribution and expertise of States and organisations both in Europe and beyond which have contributed to this work.

Dennis HART
Head of the Information and Cyber Unit EUROCONTROL

ACKNOWLEDGEMENTS

The OPADD was first approved for release by the EATMP Aeronautical Information Services Team in September 1999, following the review performed by the AIS Planning and Operations Sub-group. OPADD Ed. 1.0 was developed by the Operating Procedures Task Force (OPTF) composed of: C. Dubois, G. Giorgi, G. Langhammer, I. Litcheva, A. Roche, O. Swinnen, M. Unterreiner, P. Van Ongeval and M-F. Deslandes.

OPADD Ed. 2.0 released in September 2005 included conclusions/recommendations collected by the AIS Operations Subgroup (AISOPS) and by the OPADD Focus Group I. This Focus Group was composed of: C. Dubois, A. Egidi, J-M. Galais, G. Langhammer, H. Pollanen, A. Ohmane, J. Ochoa, P. Van Ongeval, E. Tebbenhoff and J. Webster.

The OPADD Focus Group II addressed outstanding issues and enhancements such as a new chapter on PIB, and was composed of: O. Ayvasolglu, A. Celik, G. Langhammer, J-O. Digernes, C. Dubois, A. Egidi, M. Hietala, P. Kiermeirer, D. Krauss, M. Ljubicic, A. Omahne, J. Simkova, E. Tebbenhoff, D. Turkoglu, H. van der Eem, S. Häberli (Chairperson), J-M. Galais and M. Unterreiner (Secretary). Ed. 3.0 was released in April 2009.

In November 2012, the OPADD Focus Group was again established to assess changes to OPADD based on current ICAO provisions, as well as European activities such as EC Implementing Rule 2010/73 (ADQ) and the Digital NOTAM Event Specification concept, leading to the release of Ed. 4.0. The group consisted of following participants: J-L.Barou, A. Egidi, A. Estrov, V. Karpenko, K. Kovacs, K. Luessow, J. Loose, O. Mauritzen, M. Nedeljkovic, A. Omahne, T Rakulenko, M. Rath, J. Rijmer, L. Stefkova, S. Häberli (Chairperson), A. Standar (Secretary). Participating as Observers: Ms Lynette JAMISON (USA), Ms Diana Young (USA) and Ms Caroline DOUCET (CANADA). A special acknowledgement goes to Ms Caroline Doucet for creating the graphics included in Edition 4.0. All graphics are the property of NAV CANADA.

Early in 2020 OPADD Action Group was established to deal with OPADD 4.1 release. This was aimed at addressing the changes brought by updated ICAO provisions, mainly for the SNOWTAM format. The OPADD Action Group was composed of several members of AI Operations Subgroup: J-O. Digernes, S. Häberli, C. Harben, M. Hennvall, E.C. Gábor, B. Koniuszewski, K. Kovacs, A. Omahne, E. Orban, L. Stefkova, V. Karpenko, A. Wojtowicz.

EXECUTIVE SUMMARY

The EUROCONTROL Guidelines Operating Procedures for AIS Dynamic Data (OPADD) contain ECAC States-approved guidelines for the handling of dynamic data currently known inter alia as Notices to Airmen (NOTAM). These guidelines complement the ICAO Standards and Recommended Practices (SARPs) defined in Annex 15 to the International Convention on Civil Aviation, Procedures for Air Navigation – Aeronautical Information Management (Doc 10066 – PANS-AIM) and in the Aeronautical Information Services Manual (Doc 8126). Application of these procedures by the States enhances the harmonisation of AIS working practices and allows for increased automation, thus supporting operational improvements to the overall ATM system.

1 Introduction

1.1 Context

1.1.1 The document 'EUROCONTROL Guidelines - Operating Procedures for AIS Dynamic Data (OPADD)' was developed for the benefit of the member States of the European Civil Aviation Conference (ECAC).

1.1.2 However, the document has been recognized by the worldwide AIS community as supporting guidance material to everyday NOTAM operations. The Standards and Recommended Practices (SARPs) of Annex 15 to the Chicago Convention on International Civil Aviation and supplementary guidance provided in Procedures for Air Navigation Services - Aeronautical Information Management form the basis on which the Operating Procedures were detailed. The introduction of a new ICAO Global Reporting Format (GRF) - SNOTAM together with a publication of ICAO EUR Doc 041 Guidance on the Issuance of SNOTAM are also identified as important triggers for a review of the Operating Procedures.

1.1.3 OPADD serves as guidance and complements ICAO SARPs and PANS-AIM [Ref 2]. ICAO text is cited when deemed necessary for readability reasons or when not consistently adhered to.

1.2 Purpose

1.2.1 The main purpose of this document is to harmonise AIS Dynamic Data processes such as NOTAM creation and to provide a common understanding of specifications related to NOTAM operations. This approach was deemed a prerequisite in establishing quality assured processes in NOTAM operations and for successful automated processing. ECAC States consider acting in conformity with ICAO Annex 15 and PANS-AIM Aeronautical information products and services provisions. This document is built on and is a complement to ICAO provisions. In addition to the procedures developed in this document, it is required that NOTAM Office specialists are adequately trained, qualified and experienced. With the implementation of the digital NOTAM process, an additional training is required in terms of new role, responsibilities and competencies in digital environment.

1.2.2 OPADD also provides enhanced explanations to better take into account the main deficiencies reported by users on PIB content. Upon NOTAM creation and PIB production, attention should be paid to issues that have an impact on PIB readability and understanding:

- Reduction of irrelevant NOTAM: publishing NOF without allocating proper qualifiers rather taking the default values given without taking into account the actual situation as stated in Item E).
- Lack of graphical presentation: providing a description of active danger or other areas in numerical form (LAT/LONG) makes it difficult for pilots to understand the actual dimensions and location of the areas.
- Lack of integrated aeronautical information briefing facility: no single source (portal) for relevant information e.g. free of charge (or low cost) on-line portal for GA pilots.
- Use of abbreviations in NOTAM.
- NOTAM are difficult to read and to understand: many problems are already dealt with in Chapter 2 of OPADD but those rules are not consistently applied (E.g. text not clear without

reference to the AIP; essential information missing e.g. which specific procedure is affected).

- Users' preference for a simpler NOTAM text in item E) and with a harmonised structure.

1.2.3 The objective of this document is:

- to support AIS personnel with developed procedures for harmonised NOTAM creation process;
- to provide Service Providers with guidance for NOTAM processing, storage and provision.

1.3 Scope

1.3.1 The Operating Procedures for AIS Dynamic Data detail the procedures related to NOTAM in general. Examples of SNOTAM and ASHTAM as well as specific rules or guidance for the harmonisation of these AIS messages are also covered.

1.3.2 The ECAC States agree to follow these procedures for NOTAM creation, as expressed in Chapter 2.

1.3.3 The procedures for NOTAM creation detailed in Chapter 2 will also serve as a benchmark for the processing of incoming international NOTAM, in the sense that where incoming international NOTAM are not prepared in line with these procedures, they may be manually processed in accordance with the principles and procedures laid down in Chapter 3 NOTAM Processing. Chapter 3 is intended to be used as the default for harmonised NOTAM processing by a NOTAM Processing Unit (NPU).

1.3.4 The principles and procedures related to maintaining database completeness and coherence, along with the description of messages associated with this function, are provided in Chapter 4. These messages, such as request and reply messages are required to fulfil the maintenance function. They are based upon the use of AFS, whereas the use of other communication means, using alternative formats, could be envisaged.

1.4 EUROCONTROL Guidelines

EUROCONTROL guidelines, as defined in EUROCONTROL Regulatory and Advisory Framework (ERAF), are advisory materials and contain:

“Any information or provisions for physical characteristic, configuration, material, performance, personnel or procedure, the use of which is recognised as contributing to the establishment and operation of safe and efficient systems and services related to ATM in the EUROCONTROL Member States.”

Therefore, the application of EUROCONTROL guidelines document is not mandatory.

In addition, EUROCONTROL Regulatory and Advisory Framework specifies that:

“EUROCONTROL Guidelines may be used, inter alia, to support implementation and operation of ATM systems and services, and to:

- complement EUROCONTROL Rules and Specifications;
- complement ICAO Recommended Practices and Procedures;

- complement EC legislation;
- indicate harmonisation targets for ATM Procedures;
- encourage the application of best practice;
- provide detailed procedural information.”

1.5 Structure of the document

The document contains seven chapters and three appendices as follows:

Chapter 1- Introduction, presents the deliverable context, purpose and scope. The scope statement clarifies the applicability of the procedures. Chapter 1 contains an outline of the deliverable and a table of referenced documents, as well as other European publications to be considered in NOTAM preparation.

Chapter 2 - NOTAM Creation, describes the procedures related to NOTAM creation in compliance with ICAO SARPs.

Chapter 3 - NOTAM Processing, describes the procedures for the handling of NOTAM, which do not comply with ICAO SARPs. Based on the content of Chapter 2, Chapter 3 is used as the default for harmonised NOTAM processing by any NOTAM Processing Unit (NPU).

Chapter 4 - DATABASE Completeness and Coherence Messages, provides the message formats for maintaining AIS dynamic data.

Chapter 5 - Procedures for SNOWTAM, ASHTAM, describes procedures and gives examples for the handling of these messages.

Chapter 6 - Specific European Arrangements, describes additional creation and processing procedures not explicitly mentioned in ICAO documentation that may be used in Europe.

Chapter 7 - Guidelines for the creation and provision of Pre-flight Information Bulletins (PIB) presents guidelines concerning the provision of briefing primarily in the form of the PIB to elucidate on: bulletin types, understanding of filtering based on NSC and main aspects for PIB layout and structuring.

APPENDIX A1 – SYSTEM PARAMETERS, outlines guidelines for data storage, archiving and actions for EST NOTAM.

APPENDIX A2 - GLOSSARY, presents a list of definitions of terms used in the document.

APPENDIX A3 - DOCUMENT UPDATE PROCEDURES.

1.6 Applicability

1.6.1 Changes to the guidelines address agreed procedural improvements and clarifications. Chapter 7 provides guidance only; however, the outlined propositions should nevertheless be applied whenever possible to ensure the harmonised provision of briefing services.

1.6.2 It is recommended that OPADD Edition 4.1 is implemented by the States' NOFs and relevant Service Providers (e.g. the EAD) as soon as possible, at the same time recognising local implementation dates and possible discrepancies with regard to official SNOWTAM format applicability dates (Chapter 5).

1.6.3 The new OPADD edition 4.1 adopts procedural modifications and the changes deriving from ICAO Annex 15 16th edition, ICAO Doc 10066 PANS-AIM 1st edition, ICAO EUR/NAT Office Guidance on the Issuance of SNOWTAM. The implementation of new ICAO SNOWTAM format has an impact on AIS, Service providers and system developers, requiring an NOF system upgrade. To complement updated guidelines on SNOWTAM creation, training for AIS personnel is required.

1.7 Conventions

The following conventions are used within this document:

- a) “**Shall**” or “**Require**” – indicates a required element that is necessary to meet or satisfy identified objective(s) within the EUROCONTROL Guidelines.
- b) “**Should**” or “**Recommended**” – indicates a recommendation which may or may not be satisfied to meet the identified objective(s).
- c) “**May**” – indicates an optional element.

*These keywords are highlighted in the specification text using **bold** as shown above.*

1.8 Abbreviations

For abbreviations and definitions please see Appendix A2 - GLOSSARY.

1.9 Referenced documents

The following documents were used during the production of this edition:

Nº	Title	Edition	Date
1	ICAO International Standards and Recommended Practices Aeronautical Information Services - Annex 15	16 th , incl. Amdt°39-B and Amdt° 40	July 2018
2	ICAO Procedures for Air Navigation Services,- Aeronautical Information Management - Doc 10066	First	2018
3	ICAO Procedures for Air Navigation Services – Aerodromes – Doc 9981	Second	2016
4	ICAO Aeronautical Information Services Manual – Doc 8126-AN/872	Sixth incl. Amdt N°2	28 Sep 2009
5	ICAO EUR Doc 041 Guidance on the Issuance of SNOWTAM	First	Feb 2020
6	ICAO Abbreviations and Codes – Doc 8400	Ninth, incl. Amdt N° 33	8 Nov 2018
7	ICAO International Standards and Recommended Practices Meteorological Services for International Air Navigation - Annex 3	18th	July 2013
8	ICAO Location Indicators – Doc 7910	175 th	March 2020
9	ICAO Manual on Volcanic Ash, Radioactive Material and Toxic Chemical Clouds, Appendix F - Doc 9691	Third	2015
10	ICAO Handbook on the International Airways Volcano Watch (IAVW), Operational Procedures and Contact List - Doc 9766	Second Amdt	5 November 2007
11	ICAO EUR Doc 019/NAT Doc 006 Volcanic Ash Contingency Plan	First	Dec 2010
12	EUROCONTROL – The European Concept for GNSS NOTAM	V 2.7	29 November 2011

13	Commission Regulation (EU) No 73/2010 on quality of aeronautical data and aeronautical information (ADQ).		26 January 2010
14	Commission Implementing Regulation (EU) No 2017/373 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight.		1 March 2017
15	Commission Implementing Regulation (EU) No 2020/469 amending requirements for air traffic management/air navigation services, design of airspace structures and data quality, runway safety.		14 February 2020
16	Commission Implementing Regulation (EU) No 2020/1177 amending Implementing Regulation (EU) 2020/469 as regards postponing dates of application of certain measures in the context of the COVID-19 pandemic		7 August 2020
17	EUROCONTROL SNOWTAM Harmonisation Guidelines	2.0	14 November 2013

1.10 Other publications to consider in NOTAM preparation

Apart from the documents referred to in 1.9 above, the following documents provide details on general subjects related to AIS provisions:

- EUROCONTROL AIS Data Process (ADP and Static Data Procedures (SDP)) documents provide a set of harmonised guidelines agreed by ECAC States, representing AIS best practices for the receipt, storage and publication of AIS data. EUROCONTROL Aeronautical Data Processes (ADP) is a new document under development addressing changed requirements in the area of aeronautical data provision introduced by ICAO Annex 15, ICAO Doc 10066 PANS-AIM and Commission Implementing Regulation (EU) No. 2017/373. The new ADP will replace the existing ADP/SDP (AIS Data Process/Static Data Procedures) and describe a hierarchy of processes related to digital aeronautical data management. The new ADP will be subject to ECAC State ANSPs approval later in 2020.
- EUROCONTROL specifications for Data Assurance Levels (DAL), Data Quality Requirements (DQR) and Origination of Aeronautical Data Origination (DO) provide means of compliance to Commission Regulation (EU) No 73/2010 on the quality of aeronautical data and aeronautical information (ADQ) [Ref. 13] until Regulation's final applicability date on 27 January 2022, as a result of withdrawal laid down in the Commission Implementing Regulation (EU) 2020/469. Effectively, DQR will be replaced by ICAO/EASA Data Catalogue. DO Volume 1 will also be withdrawn, while DO Volume 2 will remain valid, as it has been referenced through EASA AMC and GM to Part-ATM/ANS.OR — Issue 1, Amendment 2. DAL specification will be retired in January 2022 as well, but the future adoption of the remaining valid provisions in a new form is currently under discussions.
- Note: The OPADD is in general not impacted by EU Regulation No 73/2010, and neither when valid, by EU Regulation No 2020/469. In Commission Implementing Regulation (EU) 2020/469, OPADD is referenced through EASA AMC and GM to Part-AIS — Issue 1, Amendment 1. However, in terms of automation, this edition of OPADD indicates differences from the implementing rules (IR), particularly in Chapter 3, which instructs on manual interventions for cases where this is still required.

- EUROCONTROL Guidelines Supporting the Implementation of Aeronautical Information Requirements – “AIR Guide”, once approved and available by the end of 2020, will provide material to assist ECAC States ANSPs in implementing the necessary changes to comply with the amendments to Commission Implementing Regulation (EU) 2017/373 [Ref. 14] resulting from Commission Implementing Regulation (EU) 2020/469 [Ref. 15].

1.11 Digital NOTAM Event Specification and Pre-digital NOTAM Templates¹

The Digital NOTAM Event Specification contains guidelines for the production and encoding of AIXM 5 for the most common events currently notified by NOTAM. The Digital NOTAM Event Specification also contains a dedicated part for the automatic generation of Item E) of the ICAO NOTAM from the AIXM encoded data, with NOTAM text generation rules described for each scenario.

This part of the Digital NOTAM Event Specification has been further developed into a separate EUROCONTROL guidelines document called ‘EUROCONTROL Guidelines for Pre-digital NOTAM Templates’. The pre-digital NOTAM templates are intended for use by NOTAM officers for familiarisation with standardised NOTAM input forms and in order to achieve harmonisation in Item E) even before digitalisation is fully implemented.

Where OPADD Chapter 2 provides examples for Item E) text included in the Pre-digital NOTAM Templates document, the text is provided in accordance with the templates.

1.12 Maintenance of this document

The Operating Procedures for AIS Dynamic Data (OPADD) have been developed in line with the EUROCONTROL Standards Development Process and are maintained by EUROCONTROL. Aeronautical Information Management Group (AIMG) and its subordinate working arrangements will remain the prime interface for the evolution of this document in accordance with APPENDIX A3 - DOCUMENT UPDATE PROCEDURES.

¹ <http://aixm.aero/page/digital-notam> and <https://www.eurocontrol.int/publication/eurocontrol-guidelines-pre-digital-notam-templates>

2 NOTAM Creation

2.1 Introduction

2.1.1 A NOTAM is issued to notify information of a temporary nature and of short duration, or when operationally significant information is permanently changed, or temporary changes of long duration are made at short notice, except for extensive text and/or graphics.

2.1.2 OPADD Chapter 2 provides extensive rules and best practices for the issuance of such information in terms of completion of the NOTAM format.

2.1.3 To avoid excessive publication of NOTAM, the listed events in ICAO SARPs for which a NOTAM shall be issued must be strictly adhered to. Issuance of unnecessary or irrelevant NOTAM contributes to a greater pressure on the end-user and NOTAM providers during the filtering stage, generating a growing risk of missing vital information that could have a flight safety impact.

2.1.3.1 When information of permanent character or of temporary nature of long duration is required to be published by NOTAM, appropriate procedures **shall** be in place to assure that such information is transferred to AIP, AIP SUP or any other appropriate publication within 3 months as required by Doc 10066 PANS-AIM paragraphs 6.1.4.4/5. This shall be aligned with a relevant NOTAM cancellation in order to avoid overloading PIB with old information.

Note: The negative impact on end-users caused by NOTAM proliferation is not to be solved by including more information in a single NOTAM, but that this fact further increases the difficulty for end-users. More information in one NOTAM makes the message less readable and essential information more difficult to detect.

2.1.4 The ICAO NOTAM format is contained in Appendix 3 of Doc 10066 PANS-AIM [Ref. 2]. This is the reference format for standardizing presentation of information promulgated by NOTAM and forms the baseline on which the OPADD document is developed.

2.1.5 Unless otherwise specifically stated in the text, the procedures described in this Chapter refer to NOTAMN (New NOTAM); most of them also apply to NOTAMR (Replacement NOTAM) and to NOTAMC (Cancellation NOTAM) as provided further in 2.3.3.

2.1.6 However, there are some particularities specific to NOTAMR (Replacement NOTAM) and NOTAMC (Cancellation NOTAM) creation. These are described in this Chapter, under paragraph 2.4.

2.1.7 This Chapter contains the operating procedures to be applied for the creation of NOTAM, and provides:

- Basic rules for NOTAM creation (paragraph 2.2).
- Detailed procedures relative to each NOTAM item (paragraph 2.3).
- Procedures for NOTAMR and NOTAMC creation (paragraph 2.4).
- Procedures for Checklist production (paragraph 2.5).
- Procedures for the publication of permanent information (paragraph 2.6).

- Procedures for Trigger NOTAM creation (paragraph 2.7).
- Procedures for NIL notification (paragraph 2.8).

2.1.8 The procedures relative to the processing of NOTAM are described in Chapter 3.

2.2 Basic rules for NOTAM Creation

2.2.1 The ICAO NOTAM format **shall** be strictly adhered to and the only NOTAM types allowed are NOTAMN, NOTAMR and NOTAMC.

2.2.2 NOTAM intended for international distribution **shall** include English text for those parts expressed in plain language.

2.2.3 A NOTAM **shall** deal only with one subject and one condition of that subject. [Note exceptions in accordance with paragraph 2.3.6 and paragraphs 2.7.2.10 - 2.7.2.14 for Trigger NOTAM.]

2.2.4 Terms such as a planned alternative date or alternative dates **shall not** be used in a NOTAM.

2.2.5 Planned alternative date or alternative dates **shall** be published as any normal date of activity [refer to paragraph 2.4 for NOTAMR].

2.2.6 Erroneous NOTAM **shall** be replaced; or they **may** be cancelled and a new NOTAM issued. No 'correct version' NOTAM **shall** be issued.

2.2.7 Existing NOTAM (containing identical information, but with a new number) **shall not** be renumbered. Renumbering at the beginning of each year is therefore not permitted either.

2.2.8 NOTAM **shall** be qualified according to the NOTAM Selection Criteria (NSC), as published in ICAO Doc 8126.

2.2.9 All published times **shall** be in UTC.

2.2.10 If Item C) contains 'EST', the NOTAM **requires** the later issue of a NOTAMR or NOTAMC.

2.2.11 A NOTAMR **shall** replace only one NOTAM. Both **shall** belong to the same NOTAM series.

2.2.12 A NOTAMC **shall** cancel only one NOTAM. Both **shall** belong to the same NOTAM series.

2.2.13 A NOTAM **shall** be cancelled only by a NOTAMC and never by a Checklist.

2.2.14 For NOTAMR and NOTAMC, the date/time in Item B) **shall** be equal to the actual date/time of creation of that NOTAMR and NOTAMC.

2.2.15 Item C) **shall** contain 'PERM' solely for NOTAM information that will be incorporated in the AIP. These NOTAM **shall** be cancelled according to the rules described in paragraph 2.6.3 when the AIP is updated.

2.2.16 Item E) **should** be composed by the Publishing NOF in such a way that it will serve for direct Pre-flight Information Bulletin entry without requiring additional processing by the receiving unit.

2.2.17 Following data Items **shall** be used for completion the respective NOTAM Type formats and for the Checklist:

	NOTAMN	NOTAMR	NOTAMC	Checklist
Series/Nr/Type	Yes	Yes	Yes	Yes
Ref to Series/Nr	No	Yes	Yes	Yes
FIR	Yes	Yes	Yes	Yes
NOTAM Code	Yes	Yes	Yes	Yes
'Traffic'	Yes	Yes	Yes	Yes
'Purpose'	Yes	Yes	Yes	Yes
'Scope'	Yes	Yes	Yes	Yes
Lower/Upper	Yes	Yes	Yes	Yes
Lat/Long/Radius	Yes	Yes	Yes	Yes
Item A)	Yes	Yes	Yes	Yes
Item B)	Yes	Yes	Yes	Yes
Item C)	Yes	Yes	No	Yes
Item D)	Optional	Optional	No	No
Item E)	Yes	Yes	Yes	Yes
Items F) & G)	Optional	Optional	No	No

Yes = Entry in Item is compulsory.
 No = Entry in Item is not allowed.
 Optional = Entry depending on the NOTAM contents.

2.3 Detailed Procedures

2.3.1 NOTAM Series Allocation

2.3.1.1 The use of a NOTAM Series identifier is always **required**, even for countries publishing only one single NOTAM Series.

2.3.1.2 Letters A to Z (1 character) **shall** be used, except S and T.

2.3.2 NOTAM Number

2.3.2.1 NOTAM number **shall** consists of a combination: NOTAM number/year (4 digits/2 digits). For Multi-part NOTAM refer to the procedures detailed in Chapter 6.

2.3.2.2 Each series **shall** start on January 1st of each year with number 0001.

2.3.2.3 The NOTAM **shall** be issued in ascending and continuous sequence in each and every series.

2.3.3 NOTAM Type

The different types of NOTAM are identified by suffix letters 'N' (New), 'R' (Replacement) and 'C' (Cancellation) and the resulting identifier appears after the reference number as follows:

- NOTAMN (New NOTAM)
- NOTAMR (Replacement NOTAM)
- NOTAMC (Cancellation NOTAM)

Examples: A0123/14 NOTAMN
 A0124/14 NOTAMR A0123/14
 A0125/14 NOTAMC A0124/14

2.3.4 NOTAM Qualification Item Q) – General rules

2.3.4.1 The NOTAM Selection Criteria (NSC) tables form the basis for NOTAM qualification. Guidance for their use is contained in ICAO Doc 8126 [Ref.4] Chapter 6 Appendix B and partially in Doc 10066 Appendix 3 [Ref. 2].

2.3.4.2 NSC is used for the following:

- a) the storage and retrieval of information;
- b) to associate a NOTAM to particular purposes; and
- c) to determine the relevance of a NOTAM for a given context (aerodrome, FIR, area, IFR or VFR flight, ...).

2.3.4.3 Publishing NOF **shall** normally apply the qualifiers associated with the NOTAM Code combinations in accordance with the NSC. Deviation from the corresponding 'Traffic', 'Purpose' and 'Scope' qualifiers is allowed only in exceptional cases, e.g. when required by national regulations or imposed by operational needs (refer to paragraphs 2.3.6.12 - 2.3.6.13, 2.3.7.3, 2.3.9.4 and 2.8.3 for guidance).

2.3.4.4 All fields of Item Q) **shall** be completed for each NOTAM type.

2.3.5 Qualifier 'FIR'

2.3.5.1 This Item **shall** contain the ICAO location indicator of the FIR within which the subject of the information is located geographically.

Example: Q) EDGG/QWELW/....
 A) EDGG

2.3.5.2 If more than one FIR of the same country is concerned, the ICAO nationality letters of that country (e.g. ED) **shall** be followed by 'XX'.

Example: Q) EDXX/QWELW/....
 A) EDGG EDMM EDWW

2.3.5.3 If more than one FIR of different countries are concerned the ICAO nationality letters of the responsible State (e.g. LI) **shall** be followed by 'XX'.

Example: Q) LIXX/QWELW/....
A) LIRR LIBB LATI....

2.3.5.4 A location indicator allocated to an overlying UIR **shall** not be used.

Example: If the information relates to Karlsruhe UAC, the allocated indicator 'EDUU' is not to be used in Item Q):
Q) EDXX/.....
A) EDGG EDMM

2.3.5.5 When a subject aerodrome is situated within the overlying FIR of another State, Item Q) **shall** contain the code for that overlying FIR (paragraph 2.3.14.2 refers).

Example: Q) LMMM/
A) LICD

2.3.5.6 In the absence of a clear and positive alternative, the insertion of location indicators such as LIXX in Item Q) (paragraph 2.3.5.3 refers) **may** be used to enable identification of the Publishing NOF.

2.3.6 Qualifier 'NOTAM CODE'

2.3.6.1 This Item **shall** contain the ICAO Doc 8126 [Ref. 4] rationalised versions of NOTAM Codes published in ICAO Doc 8400 [Ref. 6].

2.3.6.2 The NOTAM Selection Criteria (NSC) set out in ICAO Doc 8126 provide a subject-related association of NOTAM Codes with the qualifiers 'Traffic', 'Purpose' and 'Scope'.

2.3.6.3 If ICAO introduces new NOTAM Code subjects in Doc 8400 [Ref. 6] before amending Doc 8126 [Ref. 4], the allocation of the qualifiers 'Traffic', 'Purpose' and 'Scope' **shall** be based on operational experience and related to similar subjects contained in the existing Doc 8126 NSC.

2.3.6.4 Publishing NOF **shall** ensure that the NOTAM Code selected from the NSC describes the operationally significant information to be promulgated.

Example: If the required text is 'parking area closed due to work in progress'

use QMKLC (parking area closed) instead of QMKHW (parking area work in progress):

Q) EGKA/QMKLC/IV/BO/A/.....

Instead of:

Q) EGKA/~~QMKHW~~/IV/~~M~~/A/.....

Note: by selecting the operationally significant code for the event, the PURPOSE has changed.

2.3.6.5 While selecting the most precise code enables quick information identification, in some cases a more general approach provides the end-user with sufficient relevant information in a single NOTAM with no negative impact on briefing. For example, if a displaced threshold results in a change in declared distances, it may be more appropriate to use the code QMDCH (rather than QMTCM) and include in Item E) the information on the displaced threshold and declared distances.

Note: If a VOR/DME outage affects published instrument procedure(s) (e.g. STAR/SID), issuing this information together as one NOTAM is not the best approach, as different NOTAM codes and qualifiers apply.

2.3.6.6 Multiple NOTAM **should** be published for the navigation aid outage and the affected flight procedures, which allow for tailored briefings of the required information.

2.3.6.7 If the NSC tables do not contain an appropriate 'Subject/Condition' combination for the information to be promulgated, the letters 'XX' **shall** be used. However, every effort shall be made to use 'Subjects' and 'Conditions' listed in the NSC before deciding to use 'XX' as detailed in the following paragraphs.

2.3.6.8 If the Subject is not directly contained in the NSC, an overall term (such as 'FA' or 'AF') or a code, which best fits the situation **shall** be chosen whenever possible instead of 'XX'.

Examples:

- QFALT (AD limited) may be used if handling service is not available.
- QFALT (AD limited) may not be used for fire fighting service. Instead use QFFAU.
- QFAXX may be used if main airport telephone numbers are unserviceable.
- QLAAS (approach light system) may not be used for alignment indicator lights. Instead use QLJAS.
- QLAAS (approach light system) may be used for circling lights (no more precise code available)

2.3.6.9 If a specific Subject code as well as an overall term is available, the specific Subject code **shall** be used.

2.3.6.10 If an available Subject code is not literally the same as the event to be published but coincides well, the coinciding code **shall** be used (if there is no a more suitable code).

However, attention should be paid to the fact that even if the code's *signification* fits well with the event, the code may be very specific and refer to a different aspect than the intended event. In such cases, a different code **should** be chosen.

Examples:

- QFWAS (wind direction indicator U/S) **shall not** be used for anemometer. The general MET code QFM shall be used instead.
- QFTAS (transmissometer U/S) **shall** be used for other RVR measurement devices/instrument RVR.
- QLJAS (runway alignment indicator lights U/S) **shall not** be used for circling lights, use general code QLAAS (approach lighting system U/S) instead.

2.3.6.11 Separate NOTAM are issued for individual elements. General rules, which dictate multiple NOTAM:

- Different NOTAM series.
- Different timeframes (Items B, C and D).
- Different geographical location.
- Different traffic.
- Different scope.
- Different vertical limits.
- Different reserved/restricted areas (incl. P/R/D-areas).

2.3.6.11.1 Exceptions to the list that dictate multiple NOTAM **may** be applied to events which involve different elements (e.g. sub-sectors belonging to the same TMA, activation of reserved/restricted areas with an associated FPL buffer zone, opening/closure of multiple routes), if the same subject/condition and timeframes apply (e.g. same restriction, same activation event). In such cases, a combined NOTAM may be regarded as more appropriate.

In case of the event of non-availabilities of several instrument flight procedures caused by the same event or if the same change applies to all procedures, exceptions from the rule to issue separate NOTAM for each procedure **may** be applied. [Note exceptions also apply to Trigger NOTAM - paragraphs 2.7.2.10 - 2.7.2.14 refer.]

2.3.6.12 More than one occurrence of one subject may exist and can be combined in one NOTAM, if there is a link:

- Several elements of the same TWY.
- Several TWY closures/limitations serving the same RWY.
- TWY closures/limitations caused by the same reason.
- Limitations on the same apron.
- Limitations on the same RWY.

2.3.6.12.1 Facilities consisting of several elements are issued in one NOTAM if all elements are unserviceable, and the general Subject code is used, e.g. 'IC' or 'NM'. For outages of one or more sub-element, separate NOTAM are issued. Subject code is the one of the sub-element, where such a code is available.

Examples:

- VOR/DME is unserviceable: one NOTAM, code QNMAS.

- DME of a VOR/DME is unserviceable: one NOTAM, code QNDAS.
- ILS is unserviceable (all sub-parts): one NOTAM, code QICAS.
- ILS GP is unserviceable, but LOC is operating: one NOTAM, code QIGAS.
- ILS GP and ILS LOC are unserviceable, but ILS DME is operational: one NOTAM, code QICAS.

2.3.6.13 If the Condition is not listed: 'XX' **should** be used as the 4th and 5th letters of the NOTAM code with the exception of Trigger NOTAM where 'TT' is always used (ref. 2.7.2.8).

Association with 'Traffic', 'Purpose' and 'Scope' is fixed by the NOTAM subject 2nd and 3rd letter combination taking into account the requirements mentioned in paragraph 2.3.7.3 and 2.3.9.4.

2.3.6.13.1 In situations where more than one Condition seems appropriate, e.g. 'LT' ('limited') or 'LC' ('closed'): the condition which best qualifies the status of the subject **should** be used:

If the main purpose of a subject is affected, 'LC' (or 'AU' or 'AS') **should** be used rather than 'LT'.

If the subject is limited only for certain types of users, 'LT' **should** be used rather than 'LC' (or 'AU' or 'AS').

For additional usage limitations (apart from those already published in the AIP), condition 'LT' or a specific condition if available **should** be used.

Item E) reads: '<subject> CLSD TO ... (or: not available/unserviceable to)'.

For closures involving a complete replacement of the usage limitations published in the AIP, 'LC' ('AU' or 'AS') **should** be used. Item E) reads: '<subject> CLSD (or: not available/unserviceable)' or '<subject> CLSD (not available/ unserviceable) EXC ...'.

Examples:

- 'TWY A CLSD', use QMXLC.
- 'TWY A CLSD BETWEEN TWY A1 AND TWY A3', use QMXLC.
- 'TWY A CLSD TO ACFT WITH MAX WINGSPAN ABOVE 25M', use QMXLT.
- 'AD CLSD TO VFR FLT', use QFALV.
- 'AD CLSD TO CIVIL ACFT', use QFALT.

Insert 'LC' for closure with exceptions related to special handling by ATS (status such as HUM, STATE). If PPR is the only exception, use 'AP'.

- 'RWY 10/28 CLSD EXC PPR 1HR', use QMRAP..
- 'RWY 10/28 AVBL PPR 1HR FOR CIV ACFT', use QMRAP for an additional PPR requirement for a specific user only.
- 'AD CLSD EXC HOSP AND STATE ACFT', use QFALC.

2.3.6.14 If, exceptionally, the Subject is not listed, 'XX' **should** be used as the 2nd and 3rd letters of the NOTAM Code and 'XX' **should** be also for the Condition. Free association of the qualifiers 'Traffic', 'Purpose' and 'Scope' is possible. The qualifiers shall reflect the content of the NOTAM.

Example 1:

Q) EKDK/QXXXX/IV/M/E/000/999/5533N00940E999
E) ACCORDING TO RESOLUTION 781 UNITED NATIONS HAS DECIDED
TO ESTABLISH A BAN ON MIL FLIGHTS IN

Example 2:

Q) CZXX/QXXXX/IV/NBO/E/000/999/6957N12225W999
A) CZVR CZEG B)1401061304 C)1401162329EST
E) EMERG SECURITY CTL OF AIR TFC (ESCAT) PHASE ONE HAS
BEEN INVOKED BY THE CHIEF OF DEFENSE STAFF. ESCAT PHASE
ONE REQUIRES THAT ALL FLT WITHIN ESCAT ZONE 1, 2A AND 2D
FILE AN IFR OR DEFENCE VFR (DVFR) FLT PLAN. (REF ...)

Example 3:

Q) LFXX/QXXXX/IV/NBO/E/000/999/4504N00053E999
A) LFMM LFRR LFBB LFEE LFFF B)1404100400 C) 1404101800
E) FRENCH CIV AVIATION SERVICES AFFECTED BY STRIKE. SOME
DISTURBANCES MIGHT AFFECT ATS, AIS AND COM SERVICES: 1-
MINIMUM SERVICE WILL BE ENSURED IN ACC AND...

2.3.7 Qualifier 'TRAFFIC'

2.3.7.1 This qualifier relates the NOTAM to a type of traffic and thus allows retrieval according to the user requirements:

I	=	IFR Traffic
V	=	VFR Traffic
IV	=	IFR and VFR Traffic
K	=	NOTAM is a checklist, see paragraph 2.5.

2.3.7.2 The appropriate type of traffic **should** be taken from the NOTAM Selection Criteria (NSC).

2.3.7.3 However, the NSC contains certain subjects (2nd and 3rd letters) where the NOTAM subject/text may demand a different choice of 'Traffic' qualifier (I, V or IV). In these cases, the correct 'Traffic' entry **shall** be determined by the Publishing NOF.

Example:

NOTAM Code for 'VFR REPORTING POINT ID CHANGED' is 'QAPCI'

The given NSC 'Traffic' Qualifier for 'QAPCI' is 'IV'

But as the Reporting Point is for VFR use only;

Entry in Item Q) shall be: 'Q) LFFF/QAPCI/V/BO/E/000/200....'

2.3.8 Qualifier 'PURPOSE'

2.3.8.1 This qualifier relates a NOTAM to certain purposes (intentions) and thus allows retrieval according to the user's requirements.

2.3.8.2 The appropriate 'Purpose' qualifier(s) **should** be taken from the NSC. Consider the impact on the purpose when selecting the NOTAM code. The following entries and combinations are allowed: K, M, B, BO and NBO, where the order in the list reflects the grading in terms of operational significance from the lowest to the highest. Refrain from up- or downgrading the ICAO classification in NOTAM publication.

2.3.8.3 For a NOTAM Checklist, only qualifier K **shall** be used.

2.3.8.4 'PURPOSE' meanings:

N = NOTAM selected for the immediate attention of flight crew members.

Due to their importance, these NOTAM require the immediate attention of flight crew members. Flight crew members may request specific delivery of such NOTAM or their inclusion in specific Pre-flight Information Bulletins.

A specific Pre-flight Information Bulletin contains only NOTAM related to subjects of extreme importance (qualified NBO).

B = NOTAM of operational significance selected for PIB entry.

The NOTAM will appear in a Pre-flight Information Bulletin containing all NOTAM relevant to a general Pre-flight Information Bulletin query. NOTAM qualified B, BO, or NBO will appear in the Pre-flight Information Bulletin.

O = NOTAM concerning flight operations.

The NOTAM will appear in a PIB containing all relevant NOTAM. NOTAM with qualifiers BO or NBO will appear in the PIB.

M = Miscellaneous NOTAM, not the subject of a briefing but available on request.

The NOTAM is for a 'miscellaneous' purpose and will not appear in a Pre-flight Information Bulletin, unless specifically requested.

Note: In Europe, a default briefing is recommended to include NOTAM with purposes B, BO, NBO and M (ref: paragraph 7.5.2.1). K = The NOTAM is a checklist.

2.3.9 Qualifier 'SCOPE'

2.3.9.1 This qualifier relates the NOTAM subject (2nd and 3rd letters) to a specific scope. This qualifier is used to determine under which category a NOTAM is presented in a Pre-flight Information Bulletin, i.e. under 'Aerodrome', 'Enroute' or 'Navigation Warning'.

2.3.9.2 The ICAO NOTAM Selection Criteria provide some guidance for selecting the scope but do not provide guidance if combinations such as 'AE' are intended as either/or, or as both. General rules are provided in OPADD on the application of scopes 'A', 'E' and 'W' in 2.3.9.3 and more details for scopes 'AE' and 'AW' are provided in 2.3.9.5.

2.3.9.3 The following entries are permissible:

A = Aerodrome

Relates the NOTAM to the scope of 'Aerodromes'. Entry of an aerodrome (e.g. EGLL) in Item A) is compulsory.

E = Enroute

Relates the NOTAM to the scope of 'Enroute information'. Entry of one or more FIR in Item A) is compulsory.

W = Warning

Relates the NOTAM to the scope of 'Navigation Warnings' ('Airspace Restrictions' (QR...) and 'Warnings' (QW...)). A Navigation Warning affects airspace and is normally ENR information in AIP. Entry of one or more FIR in Item A) is compulsory.

AE = Aerodrome/Enroute

Relates the NOTAM to both scopes 'A' and 'E'.

Scope 'AE' is used whenever a NOTAM (e.g. certain Navigation Aids, CTR) affects both aerodrome and Enroute operations. For selection of scope, see 2.3.9.6.

Item A) **shall** contain the location indicator of the Aerodrome (e.g. EHAM).

Example:

Q) EHAA/QNMAS/IV/BO/AE/000/999/5216N00442E025
A) EHAM B) 1404170500 C) 1404170700
E) VOR/DME AMS 113.95MHZ/CH96Y U/S

In this example, Item Q) shall contain geographical co-ordinates and a radius centred on the Navigation Aid.

When such a Navigation Aid is serving two or more aerodromes, only one NOTAM **shall** be published with scope 'AE'.

NOTAM for the other aerodromes concerned **shall** be published with scope 'A' only to prevent duplication in the Enroute part of the PIB.

All scope 'A' NOTAM, **shall** contain ARP as the geographical reference.

In the rare event that a Navigation Aid coverage affects more than one FIR, all affected aerodromes are issued with scope 'A' and with ARP as the geographical reference. A separate NOTAM is issued with scope 'E' only, Item A) to contain all affected FIR.

The lower and upper limit **shall** always be provided for the area and service concerned, in accordance with OPADD 2.3.10.2, 2.3.10.3.

AW = Aerodrome/Warning

Relates the NOTAM to both scopes 'A' and 'W'.

Although scope 'AW' is not explicitly listed in the ICAO NSC tables, it **shall** be used whenever a single NOTAM is used for both aerodrome and Enroute traffic affected by a Navigation Warning taking place on or in the near vicinity of an aerodrome.

Item A) **shall** contain the aerodrome location indicator, and Item Q) **shall** contain the geographical co-ordinates of the location where the activity is taking place, followed by the radius.

Example:

Q) LOVV/QWPLW/IV/M/AW/000/160/4720N01113E010
A) LOWI B) 1410201400 C) 1410202200
E) MIL PJE WILL TAKE PLACE WITHIN:
10NM RADIUS CENTRED ON 471940N 0111300E (SEEFELD).
F) GND G) FL160)

Note that co-ordinates for LOWI AD are 471539N 0112040E, but the actual co-ordinates of the site where the activity is taking place are entered in Item Q).

In the rare event that a Navigation Warning affects two or more aerodromes, only one NOTAM **shall** be published with scope 'AW' in order to prevent duplicated information in the Navigation Warnings section of the Enroute part of the PIB.

NOTAM for other aerodromes concerned **shall** be published with scope 'A' only, ARP as the geographical reference and NOTAM Code QFALT (aerodrome limited) and without Item F) and G). If required, the vertical limits are inserted in Item E).

When the area concerned affects one or several AD and more than one FIR, one NOTAM is issued with scope 'W', Item A) to contain all affected FIR. For every affected AD, a separate NOTAM with scope 'A' only is issued in order to provide correct information in all PIB sections for all concerned FIR and AD and to avoid duplications. All scope 'A' NOTAM to contain ARP as the geographical reference and NOTAM Code QFALT (aerodrome limited) without Item F) and G). If required, the vertical limits are inserted in Item E).

K = Checklist

Relates the NOTAM to a checklist, which will not appear in a Pre-flight Information Bulletin. Entry in Item A) of the FIR(s) valid for the Publishing NOF is compulsory (ref paragraph 2.5).

2.3.9.4 The appropriate entries **should** be taken from the NSC.

2.3.9.5 However, the NSC contains certain subjects (2nd and 3rd letters) where the 'Scope' (A, E, W, AE or AW) depends on the NOTAM text. In such cases, the correct 'Scope' entry **shall** be determined by the Publishing NOF according to NOTAM text.

Examples: 'QOB . .' = Obstacle = 'AE' in NSC but could also be 'A' or 'E' only.

'QWA . .' = Air Display = 'W' in NSC but could also be 'AW'.

'QNV . .' = VOR = 'AE' in NSC but could also be 'E'.

'QOA . .' = AIS = 'A' in NSC but could also be 'AE' (e.g. if AIS is also responsible for other aerodromes in the FIR) or 'E' if the NOTAM refers to national NOF or information provision.

'QST . .' = TWR = 'A' in NSC but could also be 'AE' (e.g. if TWR also serves Enroute traffic).

2.3.9.6 Scope entries **shall** always be considered in relation to the subject, and therefore the use of 'A' or 'E' instead of 'AE' (which may be a default scope given in the NSC) is allowed.

Below are examples of Q-codes which have a default scope 'AE'; however if the subject is clearly only related to departing and/or arriving traffic, the selected scope shall be 'A' (aerodrome); if the subject relates only to overflying traffic, the selected scope shall be 'E':

QAT..(TMA), QAC.. (CTR), QCA.. (A/G FAC), QCC.. (computer-pilot data link communication), QSP.. (APP), QOB.. (OBST), QOL..(OBST Lights).

For selecting the Scope for the subjects *obstacle* and/or *obstacle lights*, Item E) can provide indications if the events are only aerodrome related, e.g. through the geographical location or reference to OCA penetrations or similar.

2.3.9.7 If the letters 'XX' are used as 2nd and 3rd letters of the NOTAM Code, the appropriate Scope **shall** be derived from the text of the NOTAM. If the letters 'XX' are inserted as 4th and 5th letters of the NOTAM Code, the appropriate 'Scope' must be derived from the NOTAM-subject (2nd and 3rd letters of the NOTAM Code) according to the NSC.

2.3.9.8 Recapitulation of 'Scope' qualification possibilities and respective Item A) contents:

Qualifier 'SCOPE'	Item A) contents
A	Aerodrome
AE	Aerodrome
E	FIR(s)
W	FIR(s)
AW	Aerodrome
K	FIR(s)

2.3.10 Qualifiers 'LOWER/UPPER'

2.3.10.1 These qualifiers relate a NOTAM to a vertical section of airspace by reference to specific lower/upper limits. This allows lower/upper limits to be specified in requests for pre-flight information and, by doing so, any NOTAM not relating to all or part of the requested vertical section may be excluded from the retrieved Pre-flight Information Bulletin obtained.

2.3.10.2 Lower and Upper limits are linked to the Scope. Whenever the scope classifies a NOTAM as airspace information (Enroute or Warning) or a combination of aerodrome and airspace information (Enroute or Warning), Lower and Upper limits **shall** be designated by the corresponding vertical values of the defined airspace.

2.3.10.3 Whenever the scope classifies a NOTAM as aerodrome information only, the default values 000/999 **shall** be inserted.

2.3.10.4 The limits specified in these qualifiers are given as 'flight levels' only.

Example: 'Q) .../090/330/...' = from 'Lower' FL090 up to 'Upper' FL330

2.3.10.5 The 'Lower' limit **shall** be inferior or equal to the 'Upper' limit.

2.3.10.6 Whenever the NOTAM information refers to an airspace, Lower and Upper limits **shall** be designated by the corresponding vertical values of the defined airspace.

2.3.10.7 Whenever NOTAM information refers to obstacles, Lower and Upper limits **shall** be designated by the corresponding vertical values of the obstacle unless the obstacle is classified as aerodrome information only.

2.3.10.8 In the case of Navigation Warnings (NOTAM Codes 'QW' and 'QR'), the values specified in 'Lower' and 'Upper' **shall** correspond to the values specified in Items F) and G) (paragraph 2.3.23 refers).

2.3.10.9 The values entered in the qualifier 'Lower' **shall** be rounded down to the nearest 100ft increment and the values entered in the qualifier 'Upper' **shall** be rounded up to the nearest 100ft increment.

Examples:

Lower/Upper 1400ft/1900ft	1400/1900	= 014/019
Lower/Upper 1350ft/2000ft	1300/2000	= 013/020
Lower/Upper 1850ft/2020ft	1800/2100	= 018/021

2.3.10.10 The addition of 'buffers' to these qualifiers, either manually or within system software, which increases the airspace to be considered for PIB purposes, **shall** be avoided.

2.3.10.11 When the values in F) and G) are expressed as ‘flight levels’ (FL), then the same FL values **shall** be entered respectively as the ‘Lower/Upper’ values in Item Q).

2.3.10.12 When the values in F) and G) are expressed as an ‘altitude’ (AMSL), then the corresponding FL values (based on the standard atmosphere) **shall** be entered as the ‘Lower/Upper’ values in Item Q).

Example: F) 2000FT AMSL G) 7500FT AMSL

=> ‘Lower/Upper’ = ‘020/075’

2.3.10.13 When the values in F) and G) are expressed as a ‘height’ (AGL), and when the corresponding altitude can be calculated based on the terrain elevation of the affected area, then the corresponding FL values (based on the standard atmosphere and AMSL values) **shall** be entered as the ‘Lower/Upper’ values in Item Q).

Example: F) 2000FT AGL G) 7500FT AGL

Lowest terrain elevation = 500FT AMSL

Upper terrain elevation = 1000FT AMSL

=> ‘Lower/Upper’ = ‘025/085’.

2.3.10.14 When the values in F) and G) are expressed as a ‘height’ (AGL), and no corresponding flight levels can be defined (i.e. the terrain elevation of the affected area is unknown to the Publishing NOF despite all possible attempts to obtain the data), the highest terrain elevation of the State, or the FIR, or the region concerned **shall** be added to the value in Item G) for calculating the qualifier ‘Upper’ in Item Q) and the default value ‘000’ **shall** be entered in the qualifier ‘Lower’ in Item Q).

Example: F) 2000FT AGL G) 7500FT AGL

Highest terrain elevation = 9000FT

=> ‘Lower/Upper’: 000/165.

2.3.10.15 In the case of Airspace Organisation (NOTAM related to structure of ATS Routes, TMA, CTR, ATZ etc.), the specified ‘Lower/Upper’ values **shall** correspond to the vertical limits of the affected airspace concerned. This also includes information about ATS units (e.g. APP) providing a service and their systems (e.g. TAR), provided there is an impact. For ATS units and their systems, the corresponding limits of the referring airspace are inserted.

2.3.10.16 The use of default values 000/999 **shall** be avoided whenever possible except where NOTAM information is published for an aerodrome only (paragraph 2.3.9.2 refers).

Example:

Q) LFFF/QACCA/IV/NBO/AE/000/055/4929N00212E027

A) LFOB B) 1402010630 C) 1403262130

E) CTR BEAUVAIS ACTIVATED .

If the vertical limits of an Airspace organisation are only partly affected, lower and upper limits **shall** be limited to the affected part only.

Example:

Q) LFFF/QATCA/IV/NBO/AE/015/035/4929N00212E027

A) LFOB B) 1402010630 C) 1403262130

E) TMA 1, TMA 2 AND TMA 3 BEAUVAIS:

SPEED LIMITATIONS OF 150KT IN FORCE FOR ALL FLIGHTS BELOW
3500FT AMSL.

2.3.10.17 In the case of changes to vertical limits, lower and upper limits **shall** cover the extended or not affected part.

Example:

Q) LFFF/QATCH/IV/NBO/AE/**025**/070/4935N00219E015
A) LFOB B) 1405100400 C) PERM
E) TMA 3.2 BEAUVAIS VERTICAL LIMITS CHANGED: LOWER LIMIT
RAISED TO 3000FT AMSL, UPPER LIMIT RAISED TO FL070.

Note: published lower/upper limit in AIP for TMA 3.2 is 2500FT AMSL/FL065.

2.3.10.18 In the case of Enroute obstacles (e.g. TV masts) no Items F) and G) are included, but appropriate values **shall** be used in Item Q), based on local elevation. Use of default value '000/999' shall be avoided.

If several (grouped) obstacles (in close proximity) are published with one NOTAM, the upper limit **shall** reflect the highest obstacle.

Example:

B0120/14 NOTAMN
Q) LSAS/QOBCE/V/M/AE/000/**030**/4631N00839E001
A) LSPM B) 1402250557 C) 1406300000EST
E) OBSTACLES ERECTED 2.5KM 280DEG GEO ARP AMBRI-PIOTTA:
463103N0083927E ELEVATION 880M / 2914FT AMSL (54.0M /
177.2FT AGL) .

2.3.10.19 Most aerodrome-related information, 'Scope' 'A', refers to ground installations for which the insertion of an Upper Limit is not relevant. Therefore, if specific height indications are not required, these NOTAM **shall** include the default values '000/999'.

2.3.10.20 Whenever the aerodrome-related information also affects the overlying or surrounding airspace, the Lower/Upper Limits need to be specified; and the 'Scope' qualifier shall read 'AE' or 'AW'.

2.3.11 Qualifier 'GEOGRAPHICAL REFERENCE' – General rules

2.3.11.1 This qualifier allows the geographical association of a NOTAM to a facility, service or area that corresponds to the aerodrome or FIR(s) given in Item A), and is composed of two elements.

2.3.11.2 The first element contains one set of coordinates comprising 11 characters rounded up or down to the nearest minute; i.e. Latitude (N/S) in 5 characters; Longitude (E/W) in 6 characters.

2.3.11.3 The second element contains a radius of influence comprising three figures rounded up to the next higher whole Nautical Mile encompassing the total area of influence measured from the rounded coordinate: e.g. 10.2NM shall be indicated as 011.

Example: Q) EDWW/QWELW/IV/BO/W/000/310/**5410N00845E011**.

2.3.12 Qualifier 'GEOGRAPHICAL REFERENCE' – Co-ordinates

2.3.12.1 For NOTAM with 'Scope' 'A' the Aerodrome Reference Point (ARP) coordinates **shall** be inserted.

2.3.12.2 For NOTAM with 'Scope' 'AE' or 'AW' the appropriate co-ordinates **shall** be inserted. These coordinates may be different from the ARP.

E.g. a VOR situated at an aerodrome will not necessarily have the same coordinates as the ARP. The same applies for a Navigation Warning that affects the aerodrome traffic, at or in the close vicinity of an aerodrome, and whose coordinates may also be different from the ARP.

2.3.12.3 For NOTAM with 'Scope' 'E' or 'W' referring to a given/known point (Navigation Aid, Reporting point, City, etc.) these co-ordinates **shall** be inserted.

2.3.12.4 If a NOTAM with 'Scope' 'E' or 'W' refers to an area (FIR, Country, Danger Area etc.), the coordinates represent the approximate centre of a circle whose radius encompasses the whole area of influence.

2.3.12.5 For NOTAM with 'Scope' 'E' or 'W' containing information that cannot be allocated a specific geographical position, the coordinates represent the approximate centre of a circle whose radius encompasses the whole area of influence (this may be the centre of an FIR or multiple FIR, e.g. for an entire State).

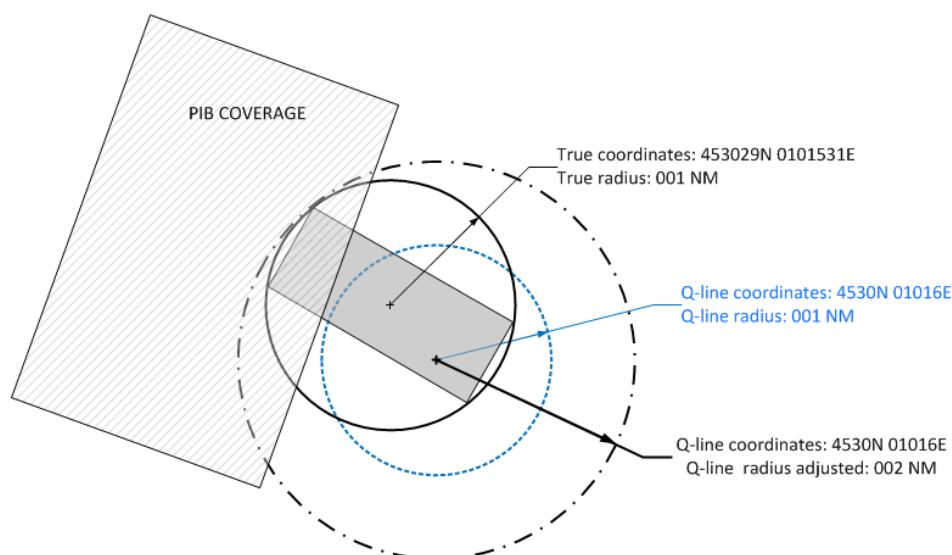
2.3.13 Qualifier 'GEOGRAPHICAL REFERENCE' – Radius

2.3.13.1 For NOTAM with 'Scope' 'A', the default value 005 **shall** be inserted.

2.3.13.2 For NOTAM with 'Scope' 'E', 'W', 'AE', 'AW', the radius **shall** be used in such a way that it encompasses the total area of influence of the NOTAM. The radius entered shall be as precise as possible. Use of an excessive radius indication (e.g. by entering the default '999') causes unnecessary PIB coverage and shall be avoided.

2.3.13.3 When rounding up or down coordinates for inclusion in appropriate format in the Q-line, the centre of the radius is moved, which may cause the PIB not to cover the complete area of influence of the NOTAM. In this case, the Q-line radius **shall** be increased.

In the example below, the NOTAM area is represented by the smaller and darker rectangle. The true coordinates are rounded to fit the Q-line format, whereas the centre point of the radius has shifted (smaller dotted circle). If the radius of the Q-line remained 1NM, the PIB would not contain the NOTAM. Therefore, the radius is adjusted to 2NM.



Note: In the case of an adjusted radius in the qualifier to allow inclusion of the NOTAM in the PIB, the radius provided as information in Item E) may differ slightly.

2.3.13.4 For simplification in system calculations of an adjusted radius, it is recommended to add 0.71NM to the calculated radius (0.71NM being the maximum possible displacement vector (the Equator). A more precise algorithm/method may also be applied provided it ensures that the whole area of influence is completely covered.

2.3.13.5 Whenever a NOTAM concerns an entire FIR or several FIR, then '999' **shall** only be entered as the radius, if no central geographical coordinates incl. radius are known.

Example:

Q) EDXX/QXXXX/IV/BO/E/000/999/5120N01030E**999**
 A) EDWW EDGG EDMM B) 1401010000 C) PERM
 E) FLIGHTS TO/FROM THE CONTRACTING STATES OF THE SCHENGEN
 REGIME MAY BE CONDUCTED TO/FROM ANY AERODROME WITHIN THE
 FEDERAL REPUBLIC OF GERMANY. THE OBLIGATION TO USE A
 DESIGNATED CUSTOMS AERODROME IS WITHDRAWN.

2.3.13.6 For certain specific NOTAM subjects, the radius **should** be standardised for the sake of uniformity and simplicity. A list of default radius per NOTAM Code is provided in the following table.

Table of default radius indicators for NOTAM Creation

NOTAM Code	Plain language	Radius (NM)
Q - - - -	All Aerodrome-related NOTAM with 'Scope A' only. <u>Note:</u> this default value also applies for the following specific subjects listed in the table, when issued as Aerodrome-related with 'Scope A' only. The default value shall also be used for 'Scope' 'AE'/'AW', but only if a precise value cannot be defined.	005 005 if no precise value can be found
QN - - -	All Enroute Navigation Aids (VOR/DME, NDB ...)	025
QOB - -	OBST for a single structure, chimney, mast, etc. OBST for multiple structures, e.g. windmill parks, line of obstacles (cables) the actual radius of the whole structure shall be used.	001 001-025
QOL - -	OBST LIGHT for a single structure, chimney, mast, etc. For multiple structures, e.g. windmill parks, the actual radius of the whole structure shall be used.	001 001-025
QPH - -	Holding Procedure	025
QPX - -	Minimum Holding Altitude	025
QAP - -	Reporting Point	001
QAX - -	Significant Point	001
QWC - -	Captive Balloon	001

Note: Due to the dense network of ground-based navigation aids in Europe, these default values should be used by the publishing NOF in order not to overload Pre-flight Information Bulletins with superfluous information.

Note: Full coverage of Navigation Aids might be inserted instead of 025, in the event of low density of Navigation Aids coverage.

2.3.14 Item A) – Single Location (FIR or AD)

2.3.14.1 In the case of a single FIR, the Item A) entry **shall** be identical to the 'FIR' qualifier entered in Item Q).

2.3.14.2 When an aerodrome indicator is given in Item A), it **shall** be an aerodrome/heliport situated in the FIR entered in Item Q). This shall apply even when the aerodrome/heliport is situated within an overlying FIR of another State, e.g. NOTAM for EGJJ shall have LFRR in Item Q).

2.3.14.3 If no 4-letter ICAO location indicator for an aerodrome/heliport exists, Item A) **shall** contain either the two ICAO nationality letters + XX (EDXX) or the single ICAO nationality letter + XXX (KXXX); with the full name of the aerodrome/heliport as the first element in Item E).

2.3.14.4 States **shall** take steps to ensure that:

- All aerodromes, which may be the subject of NOTAM, have an ICAO location indicator.
- The same location indicator is not used for an aerodrome and an FIR.
- All NOTAM published with XX in Item A) shall be cancelled (NOTAMC) and published as NOTAMN as soon as possible after the new location indicator has been published and has reached its effective date.

Examples: A) EBBU (ICAO location indicator for a single FIR)

A) LFPO (ICAO location indicator for an Aerodrome)

A) EDXX

E) SACHSENRING-HOHENSTEIN-ERNSTTAL
<text to be continued in new line>

2.3.15 Item A) – Multi-Location (FIR or AD)

2.3.15.1 If more than one AD is affected, separate NOTAM **shall** be issued.

2.3.15.2 If more than one FIR is concerned:

(a) All FIR location indicators affected by the information **shall** be entered in Item A), each separated by a space.

(b) The number of FIR in Item A) is restricted to 7 by the current ICAO NOTAM format.

(c) In the case of multiple FIR in Item A), the FIR qualifier of the Item Q) contains the ICAO nationality letter(s) + XX (or XXX). In the event of more than one FIR belonging to several countries, the ICAO nationality letter of the Publishing NOF (followed by XX or XXX) **shall** be entered as the 'FIR' qualifier in Item Q). In both cases, Item A) contains all FIR.

The first FIR in item A) **shall** always be a FIR of the publishing State.

Example 1: Multiple FIRs in one country:

Item Q) LFXX

Item A) LFFF LFBB LFRR

Example 2: Multiple FIRs in different countries:

Item Q) EDXX (*if the NOTAM is originated by the German NOF*)

Item A) EDGG EBBU LFFF

2.3.15.3 If referring to a navigation aid serving more than one AD or to a navigation warning affecting several AD, separate NOTAM **shall** be issued for each AD.

2.3.16 Item B) – Start of Activity

2.3.16.1 A ten-digit date-time group giving the year, month, day, hour and minutes at which the NOTAM comes into force.

Example: B) 1407011200 (1 July 2014, 12:00 UTC)

2.3.16.2 Insertion of 'WIE' or 'WEF' is not permitted.

2.3.16.3 The start of a UTC day **shall** be indicated by '0000' (i.e. do not use '0001').

2.3.16.4 A NOTAM is 'valid' from the moment it is published, whereas it only comes 'into force' at the date-time group specified in Item B).

2.3.16.5 The Item B) date-time group **shall** be equal to or later than the actual date/time of creation of the NOTAM.

2.3.16.6 However, for NOTAMR and NOTAMC, the Item B) time **shall** correspond to the actual date-time of creation of that NOTAMR or NOTAMC. No future coming into force is permitted (paragraph 2.4.1.5 refers).

Note: The date-time of creation may precede the date-time of transmission by a few minutes, due to the time required for the full completion and review of the NOTAM data.

2.3.16.7 Refer to paragraph 2.3.18.20 for NOTAM advising changes to previously published operating or activity hours.

2.3.17 Item C) – End of Validity

2.3.17.1 For NOTAM of a known duration of validity, a ten-digit date-time group giving the year, month, day, hour and minute at which the NOTAM ceases to be in force and becomes invalid. This date and time **shall** be later than that given in Item B).

Example: C) 1407022030

2.3.17.2 The end of a UTC day **shall** be indicated by '2359' (i.e. do not use '2400').

2.3.17.3 For NOTAM of uncertain duration of validity, the date-time group **shall** be followed by 'EST' (estimate). There shall be no space between the ten digits and 'EST'.

Example: C) 1407031230EST

If dates are used in Item D), 'EST' in Item C) shall not be used.

2.3.17.4 Insertions of 'UFN' or 'APRX DUR' are not permitted.

2.3.17.5 For NOTAM containing information of permanent validity that will be incorporated in the AIP, the abbreviation 'PERM' **shall** be used instead of a date-time group.

Example: C) PERM

2.3.17.6 Item C) **shall** not be included in a NOTAMC.

2.3.17.7 Refer to paragraph 2.3.18.20 for NOTAM advising changes to previously published operating or activity hours.

2.3.18 Item D) – Day/Time Schedule – General rules

2.3.18.1 This Item needs to be inserted only when the information contained in a NOTAM is relevant for users only at certain periods within the overall 'in force' period, i.e. between the dates and times given in Items B) and C). In these cases, Item D) will detail the actual periods of activation with the exception referred to in paragraph 2.3.18.20.

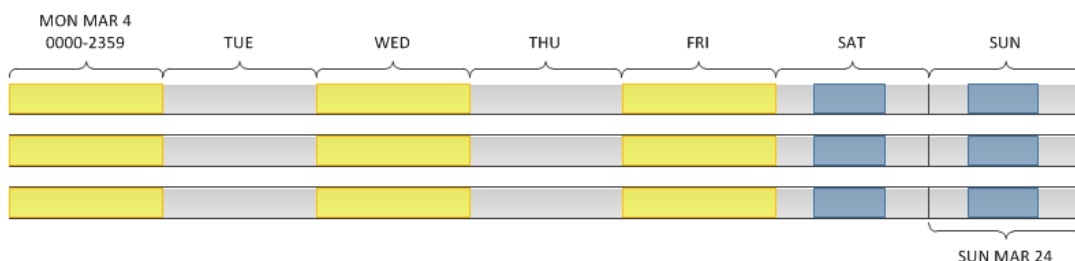
2.3.18.2 The start of the first activity in Item D) **shall** always correspond to the Item B) date and time. This period shall always appear as the first entry in Item D) – see paragraph 2.3.21 examples.

2.3.18.3 If the NOTAM is issued during an activity period that is defined by days of the week and that will be repeated, then the first day given in Item D) **may** not equate literally to the date in Item B).

In the illustration below, Item D) is the same, but Item B) and C) differ:

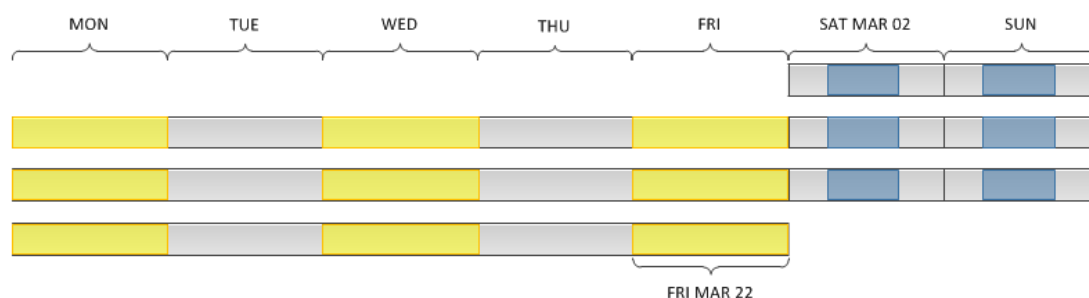
B) 1303040000 C) 1303241700

D) MON WED FRI H24, SAT SUN 0600-1700



B) 1303020600 C) 1303222359

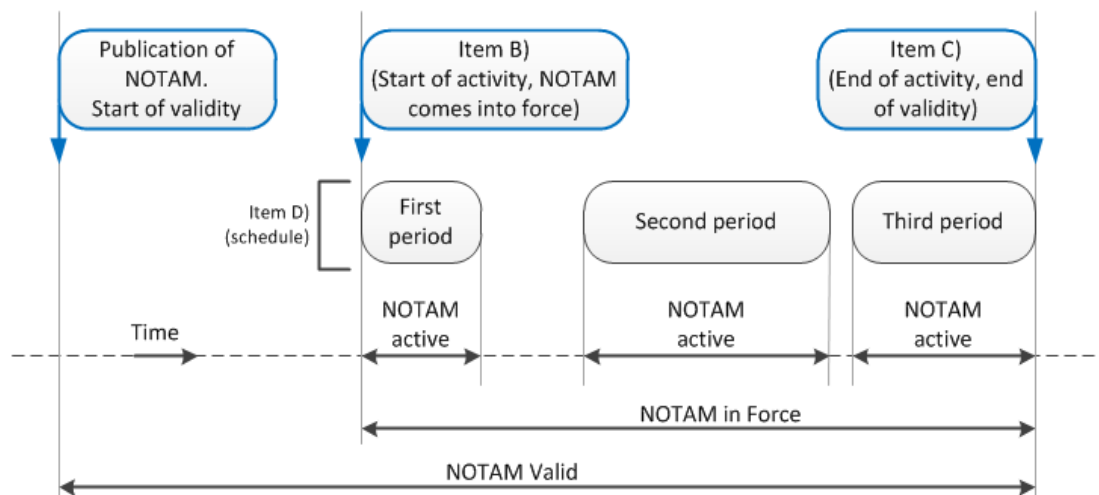
D) MON WED FRI H24, SAT SUN 0600-1700



2.3.18.4 The end of the latest activity period notified in Item D) **shall** always correspond to the end of the validity of the NOTAM given in Item C). Note that this period may not always be listed as the final entry in Item D) – see paragraph 2.3.21 Examples.

2.3.18.5 Syntaxes or rules referring to a date also apply to days of the week.

2.3.18.6 The following diagram illustrates the relationship between the time-related expressions used in the OPADD:



2.3.18.7 Automated processing (and to a certain extent manual processing) thus allows exclusion of a NOTAM from PIB whenever it is inactive between the dates and times given in Items B) and C).

2.3.18.8 Item D) **shall** be structured according to the following rules. These provide clear and unambiguous standard expressions allowing automated processing for Pre-flight Information Bulletin production, while maintaining a good and clear readability in manual environments.

2.3.18.9 A time indication **shall** be inserted for each period of activity. When the activity covers a full day, H24 shall be inserted after the date(s).

2.3.18.10 A date **shall** appear only once (refer to paragraph 2.3.21.1 Example 14).

2.3.18.11 When the activity covers more than 24 hours, the following syntax is **recommended**: (start date) (start time)-(end date) (end time)

2.3.18.12 When the activity covers less than 24 hours on particular days, the following syntax is recommended: (date) (start time)-(end time)

2.3.18.13 When the activity is a succession of identical periods of less than 24 hours on consecutive days, the following syntax is recommended: (start date)-(end date) (start time)-(end time)

2.3.18.14 When entering a succession of activities that span midnight UTC, the following syntaxes are recommended:

a) (start date) (start time)-2359 (end date) 0000-(end time)

b) (start date) (start time)-(end time)

Note that the end date in b) above is omitted from Item D) but that it will appear in Item C). Dates are always in relation to the starting times of the period(s).

2.3.18.15 When the activity spans midnight UTC on successive days, the following syntaxes are recommended:

a) (start date first period) (start time)-2359, (start date next period(s))-(end date next period(s)) 0000-(end time) (start time)-2359, (start date last period) 0000-(end time)

b) (start date)-(start date of last period) (start time)-(end time)

Note that the period end dates in b) above are omitted from Item D) but that the last one will appear in Item C).

2.3.18.16 Item D) **shall** contain either days of the week (MON, TUE,...) or dates (01 02 03...). When days are used, dates may follow the expression 'EXC'.

Example: D) MON-FRI 0600-1700 EXC DEC 05

2.3.18.17 If all periods of activity start in the same month, it is not necessary to include the name of the month in Item D).

2.3.18.18 Item D) **shall** not exceed 200 characters. If it exceeds 200 characters, additional NOTAM shall be issued.

2.3.18.19 The maximum time period between two consecutive activity periods **shall** not exceed 7 days. If the time gap between consecutive activity periods is 8 days or more, additional NOTAM shall be issued.

2.3.18.20 When a NOTAM is issued to notify a change to previously published operating or activity hours, the time range indicated by Items B) and C) **shall**, if necessary, combine the new and previous periods to encompass the widest time period. The new schedule **shall** be presented in Item E) and not in Item D).

Example 1: Operating hours of ATC are changed from **1000-2000** to 1200-1900:
B) YYMMDD**1000**
C) YYMMDD**2000**
E) OPERATION HOURS OF ATC CHANGED TO 1200-1900

Example 2: Operating hours of ATC are changed from **1000-1800** to 1200-**1900**:
B) YYMMDD**1000**
C) YYMMDD**1900**
E) OPERATION HOURS OF ATC CHANGED TO 1200-1900

Example 3: Operating hours of ATC are changed from 1000-1800 to **0800-1900**:
B) YYMMDD**0800**
C) YYMMDD**1900**
E) OPERATION HOURS OF ATC CHANGED TO 0800-1900

2.3.19 Item D) – Day/Time Schedule – Abbreviations and symbols used

2.3.19.1 Abbreviations and punctuation when used in Item D) **shall** be applied as described in the following paragraphs.

2.3.19.2 Abbreviations for Dates and Times:

Year: The year shall not be inserted in Item D), as it is stated in Items B) and C).

When the planned time schedule goes from one year into another, the displayed data shall remain in chronological order; i.e. December of this year shall precede January of next year.

Months: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Dates: 01 02 03 29 30 31
Days: MON TUE WED THU FRI SAT SUN
Times: Written as 4 digits (e.g.: 1030)

2.3.19.3 Abbreviations for Time Periods and associated text:

‘EXC’ for designating a full day or a series of full days when the NOTAM is NOT active.

Note: Full day exceptions are not allowed for timeframes spanning midnight. Using ‘recurrent’ exceptions such as ‘except every Monday’ or ‘except Saturdays and Sundays’ shall be avoided.

‘DAILY’ is optional, but recommended for activities applied every day from Item B) to Item C) inclusive. The expression ‘nightly’ shall not be used.

‘EVERY’ for a schedule on fixed days.

‘H24’ for the period 0000-2359 on the day/dates concerned. Not to be used as a single entry.

‘SR’ and/or ‘SS’ if appropriate to indicate Sunrise or Sunset.

2.3.19.4 Punctuation:

‘ , ’ (comma) for separation of the schedule elements:
- groups of dates or days to which the same time periods apply.
- groups of time periods that all apply to the preceding and qualifying dates or days.
(refer to paragraph 2.3.19.5 for the recommended syntax and paragraph 2.3.21.1 for clarification).
The use of the comma for enumeration is not allowed.

‘ - ’ (hyphen) means ‘TO’ or ‘FROM-TO’

Note: ‘ / ’ (oblique) shall not be used in Item D).

2.3.19.5 The use of the commas in Item D) is recommended as it helps both human and system readability. If used, a comma shall be placed, always and only, after a time schedule and only if the latter is immediately followed by a date.

The following syntaxes are recommended. They are followed by examples (where dates could be presented as days of the week, two examples are given):

a) Separation of groups of dates to which the same time periods apply:

(start date) (start time)-(end date) (end time), (start date) (start time)-(end date) (end time)

Example: D) 04 1000-06 1200, 08 1200-10 0700

(date) (date) (date) (start time)-(end time), (date) (date) (date) (start time)-(end time)

Example: D) 12 14 15 0900-1300, 17 18 21 0800-2000

Example: D) MON WED THU 0900-1300, TUE FRI SAT 0900-2000

(start date)-(end date) (start time)-(end time), (start date)-(end date) (start time)-(end time)

Example: D) 13-18 0700-1000, 21-28 0800-1000

b) Separation of groups of time periods that all apply to the preceding and qualifying dates:

(date) (start time)-(end time) (start time)-(end time), (date) (start time)-(end time) (start time)-(end time)

Example: D) 11 1000-1130 1230-1800, 14 0700-0800 1030-1145

Example: D) MON 0900-1300 1400-1430, TUE 0900-1000 1245-1400

(start date)-(end date) (start time)-(end time) (start time)-(end time), (date) (start time)-(end time) (start time)-(end time)

Example: D) 23-26 1000-1130 1230-1800, 27 0730-0800 1200-1300

Example: D) MON-FRI 0800-1100 1230-1300, SAT 1000-1100 1230-1300

(date) (date) (date) (start time)-(end time) (start time)-(end time), (date) (date) (date) (date) (start time)-(end time) (start time)-(end time)

Example: D) 04 09 13 0900-1300 1400-1430, 07 10 14 16 0700-0800 1030-1145

Example: D) MON TUE FRI 0900-1300 1400-1430, WED THU SAT SUN 1000-1100 1230-1300

c) Combinations regarding separation of several different time frames within different time periods:

(start date) (start time)-(end date) (end time), (date) (date) (start time)-(end time) (start time)-(end time), (start date)-(end date) (start time)-(end time)

Example: D) 06 0500-09 2000, 11 14 0930-1100 1600-2300, 21-25 0300-0430

Example: D) MON 0800-WED 1100, THU FRI 1000-1130 1230-1800, SAT-SUN 1000-1100

2.3.20 Item D) – Day/Time Schedule – Special cases

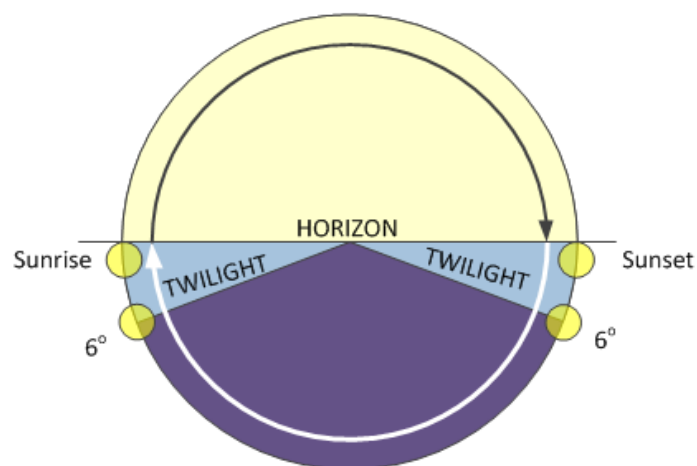
2.3.20.1 Sunrise (SR) and Sunset (SS): If the active time of a NOTAM corresponds to sunrise or sunset, the actual times of sunrise on the first day of validity and of sunset on the last day of validity **should** be inserted in Items B) and C) respectively.

Example: B) 1405151920 C) 1405200437 D) SS-SR

2.3.20.2 Twilight Periods: The keywords for expressing the beginning and end of twilight periods, are 'SR MINUS**mm' and 'SS PLUS**mm' (** mm= number of minutes up to a maximum of 99). There **shall** be a blank space after 'SR' and 'SS' and the number of minutes **shall** be inserted immediately after 'MINUS' or 'PLUS'.

Example:

B) 1405110413 C) 1405211701 D) SR MINUS30-SS PLUS30



2.3.20.3 Processing of SR and SS formats: Due to the daily variation of SR and SS times, it may not be possible to automatically interpret the special formats as actual times for PIB output. If this is the case, the NOTAM will be displayed in the PIB for the whole day concerned.

2.3.20.4 Legal or public holidays: The dates **shall** be stated explicitly due to differences existing between States.

2.3.20.5 Long or complicated schedules: These **should** not be given in a structured Item D). Such schedules should be 'split' and separate NOTAM should be issued.

2.3.21 Item D) – Day/Time Schedule – Examples

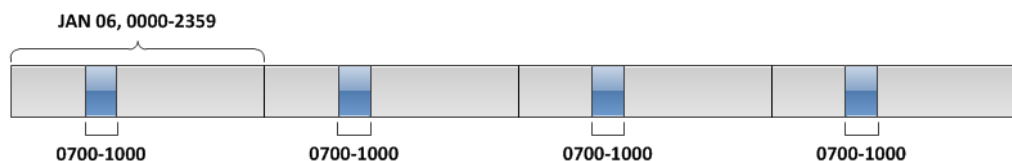
2.3.21.1 The following examples pre-suppose a correct calendar and the application of the rule that the start of the first activity in Item D) coincides with the Item B) date and time, and the end of the last activity with that in Item C). Therefore, Items B) and C) (i.e. the defined time periods) are not shown in the examples unless required for clarification.

Example 1: Repetitive event active every day:

D) 0700-1000

or

D) DAILY 0700-1000



Example 2: Repetitive event active on a certain weekday:

B) 1401060000 C) 1401272359

D) EVERY MON H24

MON JAN 06 0000-2359		TUE	WED	THU	FRI	SAT	SUN
06	07	08	09	10	11	12	
13	14	15	16	17	18	19	
20	21	22	23	24	25	26	
27	28	29	30	31			

Example 3: Activity only on specific days within the period:

B) 1401070000 C) 1401152359
D) 07 10 13 15 H24

MON JAN 06 0000-2359		TUE	WED	THU	FRI	SAT	SUN
06	07	08	09	10	11	12	
13	14	15	16	17	18	19	

Example 4: Various day-periods explained by FROM-TO:

D) 16-20 25-28 H24

MON JAN 13 0000-2359		TUE	WED	THU	FRI	SAT	SUN
13	14	15	16	17	18	19	
20	21	22	23	24	25	26	
27	28	29	30	31			

Example 5: Combination of day-periods and time-periods:

D) FEB 17-28 2000-2200, MAR 01-05 1800-2200

MON FEB 17 0000-2359		TUE	WED	THU	FRI	SAT	SUN
17	18	19	20	21	22	23	
24	25	26	27	28	01	02	
03	04	05					

D) WED SAT 0900-1400, SUN-TUE 1500-2200

MON		TUE		WED		THU		FRI		SAT FEB 01 0000-2359		SUN	
										01		02	
03		04		05		06		07		08		09	
10		11		12		13		14		15		16	
17		18		19		20		21		22		23	

D) FEB 04 06 08 1000-1600 1800-2000, 09-28 1200-1900, MAR 01-05 1000-1300 1500-1700

MON FEB 03 0000-2359		TUE		WED		THU		FRI		SAT		SUN	
03		04		05		06		07		08		09	
10		11		12		13		14		15		16	
17		18		19		20		21		22		23	
24		25		26		27		28		01		02	
03		04		05									

Example 6: Combination of whole day-periods (H24) with part day-periods:

Activity H24 on WED and FRI, and from 0600 to 1700 on SUN:

B) 1405040600 C) 1405232359

D) SUN 0600-1700, WED FRI H24

or

D) 04 11 18 0600-1700, 07 09 14 16 21 23 H24

MON		TUE		WED		THU MAY 01 0000-2359		FRI		SAT		SUN	
						01		02		03		04	
05		06		07		08		09		10		11	
12		13		14		15		16		17		18	
19		20		21		22		23		24		25	

Example 7: Day-period and time-period with specific exceptions:

B) 1409060700 C) 1410261800

D) SAT-SUN 0700-1800 EXC SEP 20 OCT 05

September 14							October 14						
Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su
1	2	3	4	5	6	7			1	2	3	4	5
8	9	10	11	12	13	14	6	7	8	9	10	11	12
15	16	17	18	19	20	21	13	14	15	16	17	18	19
22	23	24	25	26	27	28	20	21	22	23	24	25	26
29	30						27	28	29	30	31		

Day period and time-period with specific exception when alternative times apply on the exception date:

NOTAM 1:

- B) 1409010300 C) 1409261200
D) MON-FRI 0300-1200 EXC 11

September 14						
Mo	Tu	We	Th	Fr	Sa	Su
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

NOTAM 2:

- B) 1409111400 C) 1409111600

September 14						
Mo	Tu	We	Th	Fr	Sa	Su
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Avoid using “recurrent” exceptions such as “except every Monday” or “except Saturdays and Sundays”

- B) 1409020600 C) 1409301600
D) TUE-SUN 0600-1600

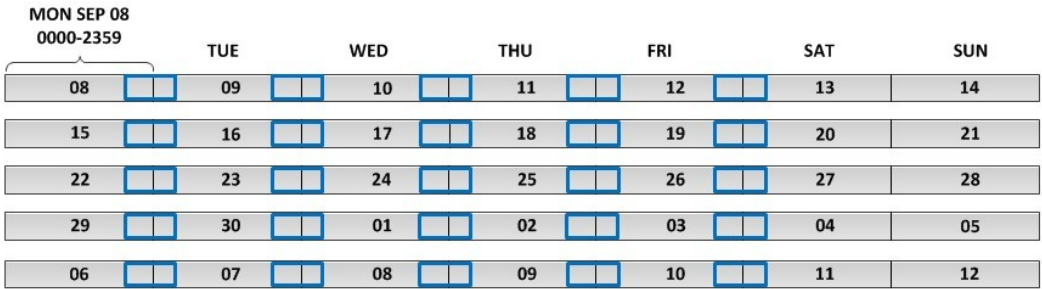
Instead of:

- D) 0600-1600 EXC EVERY MON*

September 14						
Mo	Tu	We	Th	Fr	Sa	Su
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Exceptions with periods spanning midnight:

- B) 1409081800 C) 1410110700
D) MON 1800-2359, TUE-FRI 0000-0700 1800-2359, SAT 0000-0700
or
B) 1409081800 C) 1410110700
D) MON-FRI 1800-0700



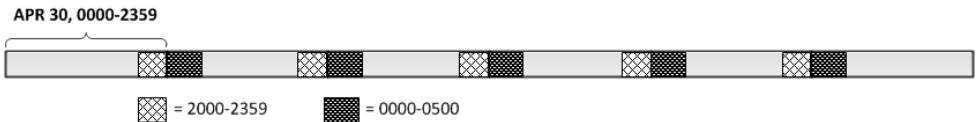
Example 8: Activity from WED 1900 to FRI 0600, during two consecutive weeks.

- B) 1406041900 C) 1406130600
D) WED 1900-FRI 0600
or
D) 04 1900-06 0600, 11 1900-13 0600



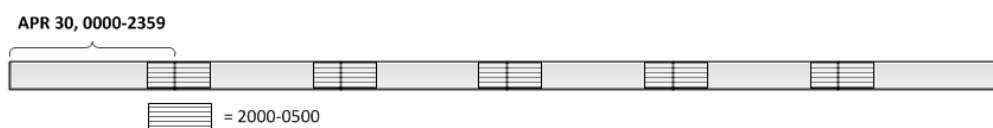
Example 9: The activity takes place every day between 2000 and 0500. The periods start on April 30 at 2000 and ends on May 05 at 0500:

- B) 1404302000 C) 1405050500
D) APR 30 2000-2359, MAY 01-04 0000-0500 2000-2359, 05 0000-0500



or

D) DAILY 2000-0500



Instead of:

D) APR 30-MAY 04 2000-0500

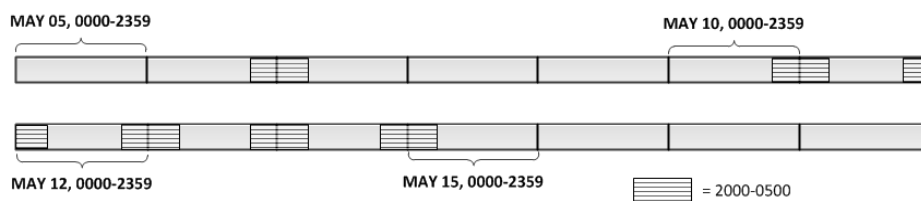
Example 10:

a) First period of activity starts on May 06 at 2000 and ends on May 07 at 0500 and a series of subsequent 2000-0500 periods start on May 10 at 2000 and ends on May 15 at 0500:

B) 1405062000 C) 1405150500
D) 06 2000-2359, 07 0000-0500, 10 2000-2359,
11-14 0000-0500 2000-2359, 15 0000-0500

or

B) 1405062000 C) 1405150500
D) 06 10-14 2000-0500



b) A series of 2300-0500 periods' starts on May 06 at 2300 and ends on May 10 at 0500 and the final period starts on May 10 at 2200 and ends on May 11 at 0600:

B) 1405062300 C) 1405110600
D) 06 2300-2359, 07-09 0000-0500 2300-2359,
10 0000-0500 2200-2359, 11 0000-0600

or

B) 1405062300 C) 1405110600
D) 06-09 2300-0500, 10 2200-0600

Example 11: If the more descriptive schedule is used, the periods of activity may have to be split into several NOTAM:

B) 1405062300 C) 1405101300
D) 06-09 2300-1300

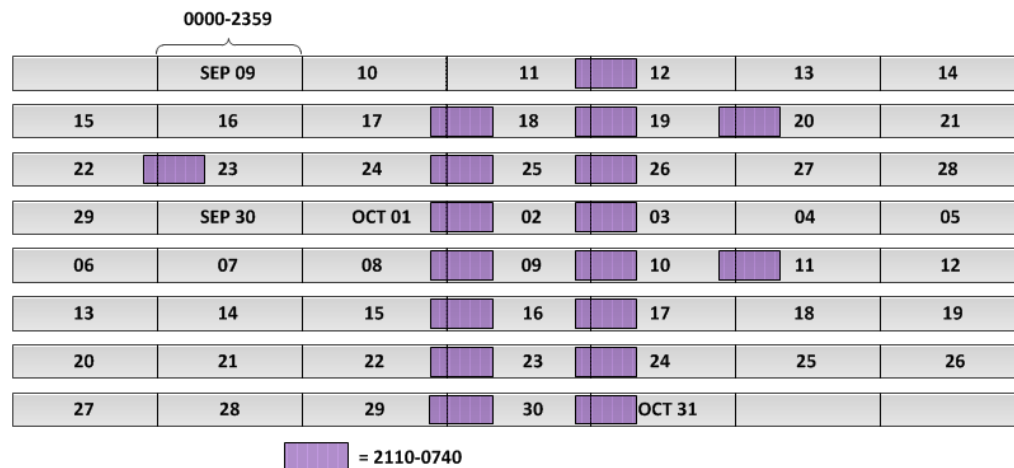
or

B) 1405062300 C) 1405101300
D) 06 2300-2359, 07-09 0000-1300 2300-2359 10 0000-1300



and

B) 1409112110 C) 1410310740
D) SEP 11 17-19 22 24 25 OCT 01 02 08-10 15 16 22 23 29 30
2110-0740



or

NOTAM 1:

B) 1409112110 C) 1409242359
D) 11 2110-2359, 12 0000-0740, 17 2110-2359, 18-19 0000-0740
2110-2359, 20 0000-0740, 22 2110-2359, 23 0000-0740, 24 2110-
2359

NOTAM 2:

B) 1409250000 C) 1410110740
D) SEP 25 0000-0740 2110-2359, 26 0000-0740, OCT 01 2110-2359,
02 0000-0740 2110-2359, 03 0000-0740, 08 2110-2359, 09-10 0000-
0740 2110-2359, 11 0000-0740

NOTAM 3:

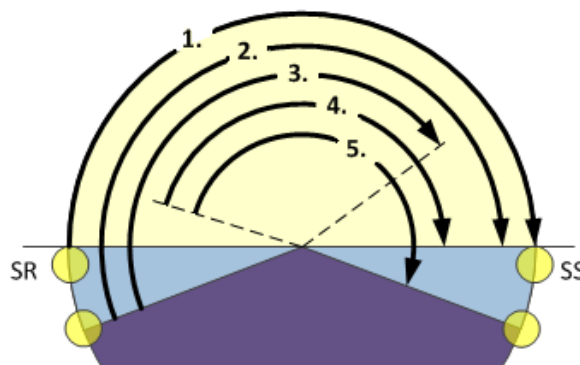
B) 1410152110 C) 1410310740
D) 15 2110-2359, 16 0000-0740 2110-2359, 17 0000-0740, 22 2110-
2359, 23 0000-0740 2110-2359, 24 0000-0740, 29 2110-2359, 30
0000-0740 2110-2359, 31 0000-0740

Instead of:

D) SEP 11 17-19 22 24 25 OCT 01 02 08-10 15 16 22 23 29 30
2110-2359, SEP 12 18-20 23 25 26 OCT 02 03 09-11 16 17 23 24 30
31 0000-0740

Example 12: Activity relative to Sunrise and/or Sunset:

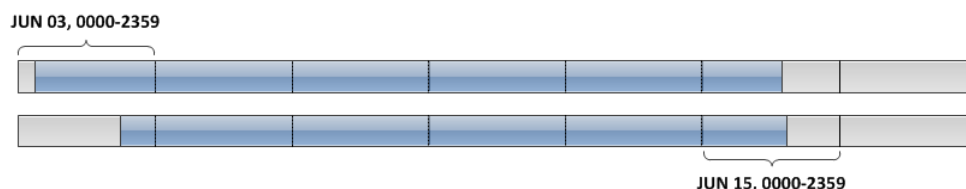
- 1: D) SR-SS
- 2: D) SR MINUS30-SS
- 3: D) SR MINUS30-1500
- 4: D) 0800-SS
- 5: D) 0800-SS PLUS30



Example 13: Periods of activity longer than 24 hours:

- B) 1406030300 C) 1406151450
- D) 03 0300-08 1400, 10 1800-15 1450

This Item D) indicates two periods of continuous activity: the first starting on the 3rd at 0300 and ending on the 8th at 1400; the second from the 10th at 1800 to the 15th at 1450.



Example 14 Repetitions of a date are not allowed to avoid that any activities following later for the same date are overlooked:

- B) 1405050800 C) 1405231500
- D) 05-08 0800-1100, 09 10 0800-1100 1300 1500, 11-20
1330-1500, 21-23 0800-1100 1330-1500

Instead of:

D) 05-10 0800-1100, 11-20 1330-1500, 21-23 0800-1100
1330-1500, 09 10 1300-1500

2.3.22 Item E) – NOTAM Text

2.3.22.1 Item E) is free text in plain language and shall not contain NOTAM Code.

2.3.22.2 In NOTAM intended for international distribution the plain language text **shall** be in English. For the creation of the plain language text, the decoded standard expressions contained in the NOTAM Selection Criteria **should** be used.

Examples:

E) ILS RWY 14 U/S.
E) ILS RWY 14, DME PART U/S.
E) DVOR/DME ZUE 112.650MHZ/CH75X U/S.
E) NDB MUR 310.5KHZ FREQ CHANGED TO 312KHZ.
E) RWY 10/28 CLSD.
E) RWY 07L/25R CLSD.
E) TWY A, B AND T CLSD.
E) ALS RWY 10 U/S.
E) EDGE LGT RWY 10/28 U/S.
E) CL LGT TWY A U/S.
E) DME CVA CH57Y U/S.

When one part of a collocated Navigation Aid is unserviceable, use the following:

E) DVOR/DME ZUE 112.650MHZ/CH75X, DME PART U/S.
E) TACAN BNK CH47X U/S.

2.3.22.3 Item E) text **should** be kept as short and concise as possible and compiled in such a way that its meaning is clear without the need to refer to another document.

Example 1:

.... C) PERM
E) MILAN LINATE CTR. SPECIAL VFR HEL OPS MET MINIMA
REQUIREMENTS CHANGED: SPECIAL VFR HEL OPS ACCEPTED IF GND
VIS IS NOT LESS THAN 3KM. REF AIP ENR 2.1.2.23-2 ITEM
7.3.

Note: Reference to AIP as NOTAM is of permanent character.

Instead of:
E) REF AIP ENR 1-1-4.3 ITEM 6.3. MILAN CTR. CANCEL THE
REMARK.

Example 2:

.... C) PERM
E) CARRIAGE OF 8.33 CHANNEL SPACING RDO EQPT MANDATORY
FOR ACFT OPR ABV FL195. REF AIP GEN 1.5-1 ITEM 3.

Instead of:
E) PLEASE MAKE HAND AMENDMENT IN AIP ON PAGE GEN 1.5-1
ITEM 3. RADIO EQUIPMENT REQUIREMENTS. DELETE: 'AND
FURTHER TO THE EUROCONTROL DELAY DECISION AGREED ON 23
JUL 98' AND AMEND TO READ: 'CHAPTER 4.0 ON AIR-GROUND
COMMUNICATIONS AND IN-FLIGHT REPORTING' DELETE: 'AS OF 7
OCT 99 FOR AIRCRAFT OPERATING ABOVE FL245' AND AMEND TO
READ: 'AS OF 15 MAR 07 FOR AIRCRAFT OPERATING ABOVE
FL195' LAST PARAGRAPH CHANGE, DELETE: 'FL245' AND AMEND
TO READ: 'FL195'.

Example 3:

.... C) PERM
E) MISSED APCH **PROC** FOR **RWY 34 LOCALIZER** AND **ILS** APCH
CHANGED AS FOLLOWS: CLIMB STRAIGHT AHEAD. INITIAL CLIMB TO
5000FT AMSL. AT DME 5.5 IZS PAST THE STATION TURN LEFT.

CONTINUE CLIMB TO 7000FT AMSL. INTERCEPT RDL 261 FROM ZUE.
PROCEED TO GIPOL. REF AIP AD LSZH 2.24.10.9-1 AND 2.24.10-1.

Instead of:

.... C) PERM

E) REF AIP PAGE LSZH AD 2-24.10.9-1 AND 2-24.10.10-1.
MISSED APPROACH TO READ AS FOLLOWS: CLIMB STRAIGHT AHEAD.
INITIAL CLIMB TO 5000FT. AT D5.5 IZS PAST THE STATION
TURN LEFT. CONTINUE CLIMB TO 7000FT. INTERCEPT R261 FROM
ZUE. PROCEED TO GIPOL

2.3.22.4 Publishing NOF **should** endeavour not to exceed 300 characters; whilst ensuring that all essential information needed for the safe conduct of flight is included.

2.3.22.5 Consider avoiding unnecessary information such as rationale, background information and other text additions with no direct impact on aircraft operations or not containing any flight restrictions or other clear limitation.

Example:

E) ACFT STANDS 25 TO 30 AND 37 TO 40 CLSD. *Instead of:*
E) USE CAUTION WHEN TAXIING DUE TO WIP BEHIND ACFT STANDS
37 AND 40 AND FM 30M EAST OF TWY E TO STAND 20. WIP ALSO
BTN ACFT STANDS 25 AND EAST OF STAND 27 ON APRON 1. APRON
2 NOT AFFECTED. ACFT STANDS 25 TO 30 AND 37 TO 40 CLSD AS
CONSEQUENCE

2.3.22.6 The essentials of the information (i.e. translated and amplified NOTAM code Subject and Condition) **shall** be given in the beginning of the Item E).

Example:

E) ACFT STANDS 25 TO 30 AND 37 TO 40 CLSD DUE TO WIP ON
APRON 1.

Instead of:

E) DUE TO WIP ON APRON 1, ACFT STANDS 25 TO 30 AND 37 TO
40 CLSD.

2.3.22.7 The type of equipment **should** be inserted instead of the name of the equipment or manufacturer.

Example:

E) ANEMOMETER U/S.

Instead of:

E) VAISALA U/S.

2.3.22.8 Item E) text **shall** be related to one NOTAM subject only. (Except in case of a Trigger NOTAM, ref paragraph 2.7.2.10 - 2.7.2.12).

Example 1:

NOTAM 1: E) PJE WILL TAKE PLACE

NOTAM 2: E) AWY G5 MINIMUM USABLE FL RAISED TO FL070.

Instead of:

E) PJE WILL TAKE PLACE WITHIN RADIUS 5KM CENTRED AT 4608N 00751E (HUTTWIL). AWY G5 MINIMUM USABLE FL RAISED TO FL070.

Example 2:

NOTAM 1:

.... C) PERM

E) MINIMUM SECTOR ALTITUDE SW SECTOR RAISED TO 1700FT AMSL.
REF AIP AD 2-9.

NOTAM 2:

.... C) PERM

E) DECLARED DIST RWY 09 CHANGED:

TORA 2450M

TODA 2450M

ASDA 2450M

TKOF FROM INTERSECTION WITH TWY C.

REF AIP AD 2-13.

Note: Reference to AIP as the NOTAM is of permanent character.

Instead of:

.... C) PERM

E) MINIMUM SECTOR ALTITUDE SW SECTOR RAISED TO 1700FT
AMSL

PLS ADD IN AIP XXXXXXXX, ON PAGE ZZZZ AD 2-9,
ITEM ZZZZ AD 2.13 (TABLE FOR DECLARED DISTANCES)
A NEW ROW WITH FLW DATA:

COLUMN 1- RWY 09

COLUMN 2- TORA (M) 2450

COLUMN 3- TODA (M) 2450

COLUMN 4- ASDA (M) 2450

REMARKS: TAKE-OFF FROM INTERSECTION WITH TWY C

2.3.22.9 Item E) **may** contain ICAO abbreviations [Doc 8400, Ref. 6].

2.3.22.10 For abbreviations used for directions and units of measurements (e.g. N, SE, FT, GND, AMSL, NM, DEG etc.), there **shall** be no blank between the value and the unit of measurement (e.g. 3000FT).

2.3.22.11 A reference datum **shall** be separated from the unit of measurement by a blank (e.g. 3000FT AMSL). No other character (e.g. '/', '-...') **shall** be used.

2.3.22.12 Non-common abbreviations and those abbreviations listed at GEN 2.2 in AIP but marked as 'not included in Doc 8400' **shall** not be used in item E).

The NOTAM users' understanding of the text in Item E) shall always be considered, by which inclusion of rarely used abbreviations **shall** be avoided or the use of abbreviation that is likely to result in confusion/queries, e.g. 'CW' and 'CCW' for 'clockwise' and 'counter-clockwise'. In these cases, spelled out text in Item E) is preferred.

Examples:

E) ILS RWY 25R U/S.

E) CRANE PSN 500545.12N 0141556.19E ERECTED 190M S OF RWY 13/31 AXIS, 1300M BEHIND THR RWY 31, MAX ELEV 390.3M, MAX HGT 20.7M AGL.

2.3.22.13 The cardinal points and their combinations **shall** not be abbreviated when there is an imminent risk of misunderstanding, e.g. in connection with TWY using letters as designators.

Example:

E) TWY A **EAST** OF RWY 10/28 CLSD.

Instead of:

E) TWY A E OF RWY 10/28 CLSD.

2.3.22.14 The coordinates of known subjects **shall** not be provided.

2.3.22.15 In the case of relocations, realignments and new installations the location is usually provided by coordinates. For these cases the coordinates **shall** be indicated in degrees, minutes and, if required, seconds.

Degrees **shall** always be indicated by 2 digits for N/S and 3 digits **shall** be used for W/E. Minutes and seconds are displayed in 2 digits. If more precision is required, the seconds are followed by a dot and tenth of seconds.

The resolution **shall** be in accordance with the minimum requirements in ICAO Doc 10066 PANS-AIM Appendix 1 Aeronautical Data Catalogue [Ref. 2]

Examples :

P-area outside CTA (resolution 1 min): 4635N 00825E

ARP position (resolution 1 sec): 463542N 0082537E

En-route VOR (resolution 1 sec): 463542N 0082537E

Localizer position (resolution 1/10 sec): 463542.3N 0082537.8E

Note: Assure that North/South and East/West coordinate-pair is not separated by the automatic carriage return .

2.3.22.16 Coordinates **shall** be converted to degrees, minutes and seconds for the publication in order to prevent misunderstanding.

Example :

4635**42**N

Instead of: 4635.7N

2.3.22.17 Areas **shall** be described by coordinates.

2.3.22.18 Coordinates **shall** be separated by hyphens and **may** be accompanied by location indicators, navigation aids and geographical indications. Geographical indications may be indicated only as displayed on aeronautical chart.

2.3.22.19 Geographical coordinates for the lateral limits of an area are expressed in accordance with ICAO Doc 10066 minimum requirements for aeronautical data:

– if inside CTA/CTR, with resolution of 1 second; e.g. 445600N 0200941E

– if outside CTA/CTR, with resolution of 1 minute; e.g. 4456N 02010E

2.3.22.20 If coordinates of an area are published in AIP or AIP SUP, the lateral limits **shall** not be repeated in Item E), the name of this area should be referred to, instead.

Example:

E) DANGER AREA LYD12 ACT.

Instead of:

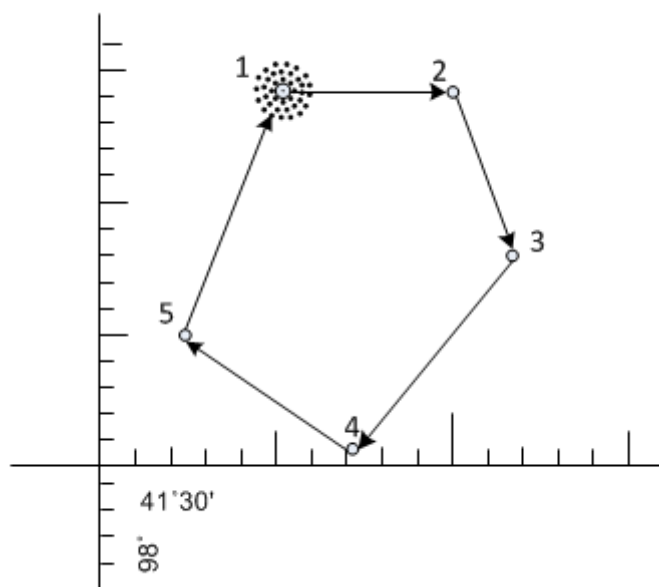
E) DANGER AREA LYD12 PLACED WITHIN LATERAL LIMITS:

*451700N 0201141E – 451600N 0201641E – 451300N 0201941E –
451400N 0201241E – 451700N 0201141E ACTIVE.*

2.3.22.21 If coordinates of an area are not published in AIP or AIP SUP, the lateral limits **should** be expressed in accordance with the following:

a) Polygon

Points defining lateral limits of an area shall be enumerated in clockwise order, each point separated by a hyphen. The last and the first points of the list shall be the same. Coordinates may be followed, when available, by geographical indications between brackets (see paragraph 2.3.22.9).



Example:

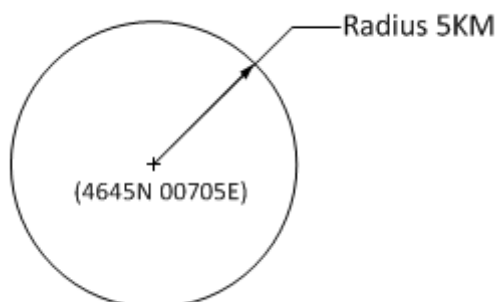
E) AIR DISPLAY WILL TAKE PLACE WITHIN:

414407N 0975500W (NDB JUH) – 414407N 0975000W – 413800N
0974815W (MOUNT HABBS) – 413042N 0975251W – 413458N
0975740W – 414407N 0975500W (NDB JUH).

b) Circular shape

A circular shape is defined by the value of the radius and its abbreviated unit of measurement, followed by the word 'RADIUS', followed by the words 'CENTRED ON', followed by coordinates of the centre of the circle.

The point defining the centre of the circle may be complemented (in brackets) by geographical indications (see paragraph 2.3.22.12).



Example:

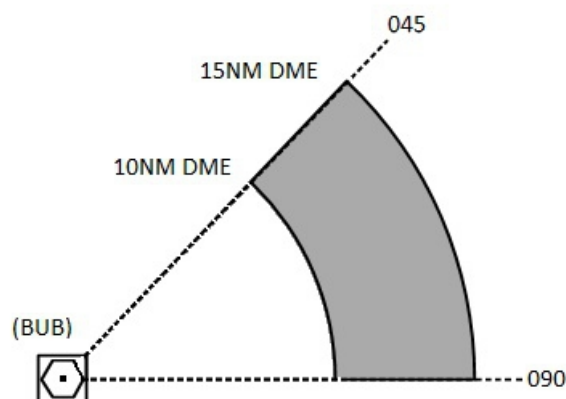
E) AIR DISPLAY WILL TAKE PLACE WITHIN: 5KM
RADIUS CENTRED ON 4645N 00705E (ECUVILLENS AD) .

The lateral limits of the affected area can also be defined by the appropriate radial and distance from a navigation aid.

c) Circle Sector

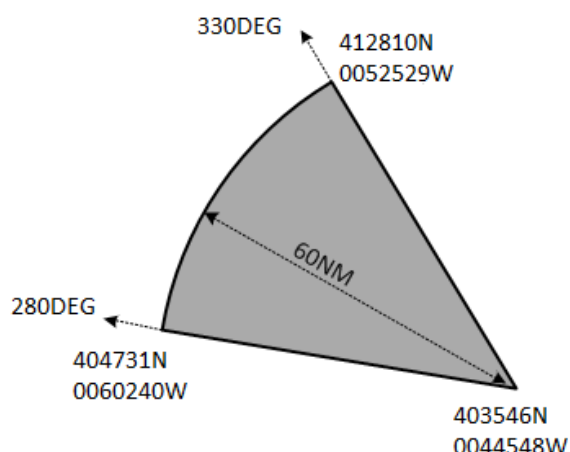
A circle sector is a part of a disc between two specified angular values and between an inner and outer arc of a circle.

Example 1:



E) EXERCISE X WILL TAKE PLACE WITHIN A SECTOR DEFINED BY:
505407N 004321E (BUB VOR/DME) BETWEEN BUB RDL 045 BUB AND
RDL 090, INNER ARC 10NM RADIUS OUTER ARC 15NM RADIUS
CLOCKWISE.

Example 2:

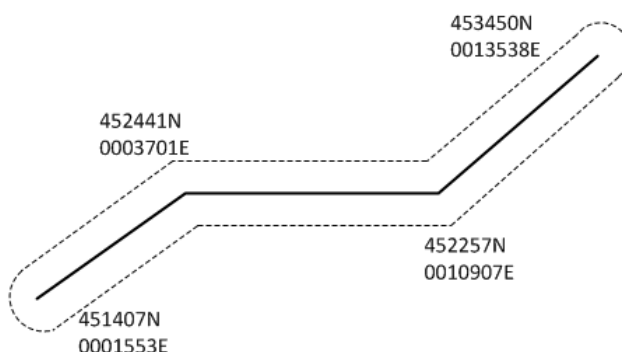


E) EXERCISE X WILL TAKE PLACE WITHIN A SECTOR CENTRED ON 403546N 0044548W BTN BRG 280 AND 330DEG AND ARC 60NM RADIUS CLOCKWISE.

d) Corridor

A corridor is a type of polygon defined by a line between points and a lateral distance on either side of the line. The lateral limits are at the end points connected by arcs of circle.

Example:



E) SAR EXERCISE WILL TAKE PLACE WITHIN AREA 5NM EITHER SIDE OF A LINE: 451407N 0001553E – 452441N 0003701E – 452257N 0010907E – 453450N 0013538E.

2.3.22.22 Description of an area by the use of geographical or administrative features, such as State borders, rivers, sea shores etc. is not recommended. If operationally necessary, this can be defined by describing a simplified larger area, and exclude the excessive airspace.

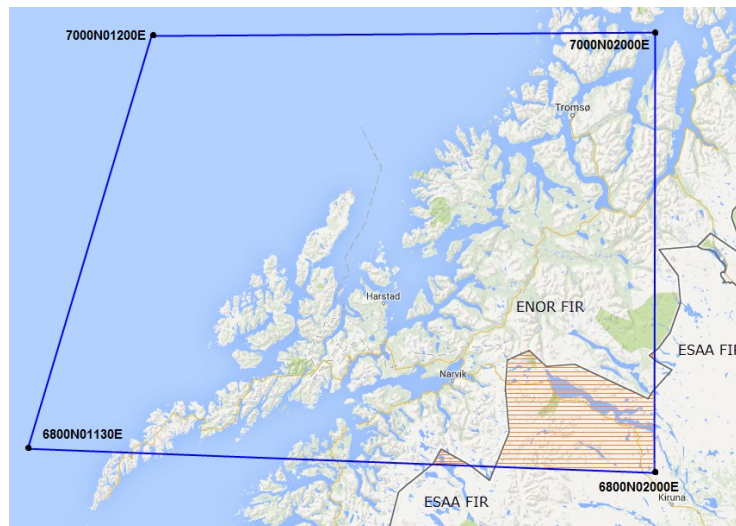
Example 1:

E) PJE WILL TAKE PLACE WITHIN:
20KM RADIUS CENTRED ON 460939N 0085243E (LOCARNO)
EXCLUDING CTR LSZL AND CTR LSZA AND FIR LIMM.

Example 2:

E) TEMPORARY DANGER AREA ESTABLISHED WITHIN:
7000N 01200E – 7000N 02000E – 6800N 02000E – 6800N
01130E – 7000N 01200E EXCLUDING FIR ESAA.

*Instead of: TEMPORARY DANGER AREA ESTABLISHED WITHIN: 7000N
01200E – 7000N 02000E – 6820N 02000E ALONG NORWEGIAN/ SWEDISH
BORDER TO 6800N 1700E – 6800N 01130E – 7000N 01200E.*



2.3.22.23 The position of an obstacle or a group of obstacles is indicated by means of a single coordinate, a set of coordinates forming a polygon or line or by a circle radius.

Examples:

E) CRANE (CONSTRUCTION) :
492623N 0073604E ELEVATION 858FT AMSL (HEIGHT 85FT
AGL) . LIGHTED.

E) CRANE LOCATED AT 3.2KM 236DEG GEO ARP LS GP: 462324.1N
0061324.1E ELEVATION 497.6M/1632.5FT AMSL, (HEIGHT
77.0M/252.7FT AGL) . LIGHTED AND MARKED.

E) WIND FARM (72 TURBINES UNDER CONSTRUCTION) WITHIN
AREA:
513922N 0025425E – 513733N 0025756E –
513534N 0025244E – 513922N 0025425E. ELEVATION 1000FT
AMSL. LIGHTED RED OBST LGT.

E) MOBILE CRANE WITHIN SAFETY ZONE OF AD KLAGENFURT NE
OF THR RWY 01L: 463853N
0141949E – 463853N 0141948E – 463852N 0141951E
– 463853N 0141919E. ELEVATION 1614FT AMSL (HEIGHT 492M
AGL) . MARKED.

E) CABLEWAY GROEBMING ALONG A LINE:
472642N 0135121E ELEVATION 975M/3198FT AMSL (HEIGHT

102M/335FT AGL) - 472645N 0135037E ELEVATION
1244M/4081FT AMSL (HEIGHT 102M/335FT AGL) - 472714N
0134943E ELEVATION 1551M/5090FT AMSL. OBST DAY MARKED.

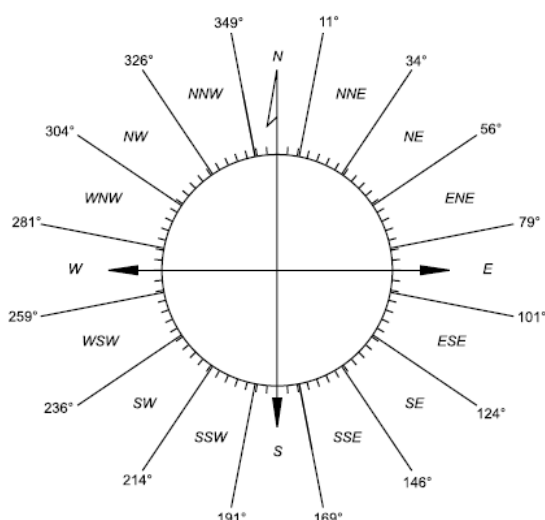
2.3.22.24 In addition to obstacle coordinates (e.g. for visualisation), a descriptive relative location **may** be inserted, as directional and distance information from a known reference point:

Examples:

-500FT SOUTH OF TWR.
-250M 023DEG FM ARP.
-3.5KM NE OF ARP LSPV.

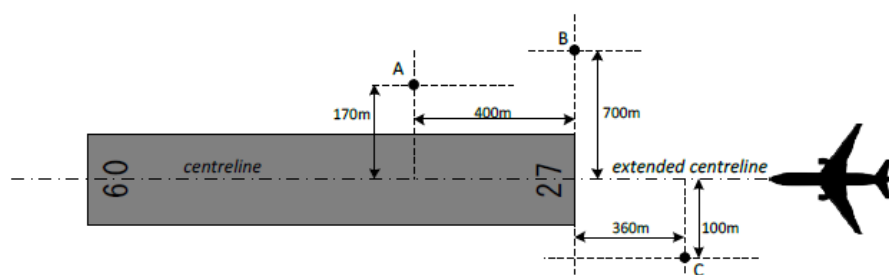
Guidance for direction information:

- a) indicating the exact number of degrees for direction
- b) using terms in accordance with the compass rose, e.g. NORTH-NORTH-EAST (or NNE), used between 11 and 34 degrees.



- c) only if the viewing direction is clear for the user, can the terms 'BEYOND', 'BEFORE', 'ABEAM' runway threshold be used. Otherwise indication by compass rose or by degrees should be used.

The graphic below illustrates how to use the terms beyond, before and abeam threshold, when describing the relative location of an obstacle. The location is described in relation to the closest threshold seen from an aircraft on final approach.



Obstacle A: '400M BEYOND THR 27, 170M NORTH OF CENTERLINE.'

Obstacle B: 'ABEAM THR 27, 700M NORTH OF CENTERLINE.'

Obstacle C '360M BEFORE THR 27, 100M SOUTH OF EXTENDED CENTERLINE.'

2.3.22.25 Whenever an airspace is affected (relevant scopes AE, E, AW and W), the location reference (e.g. aerodrome, identification, area) **shall** be mentioned in Item E.

2.3.22.26 For airspace organisation subjects, the name of airspace organisation **shall** be present whenever it is intended also as En-route NOTAM (scope E and AE).

Examples:

E) TMA 14 ZURICH DEACTIVATED.

E) CTR 12 ZURICH ACTIVATED.

E) APP GENEVA 131.325MHZ HOURS OF SERVICE ARE NOW...

E) AWY G5 CLOSED BTN WIL AND FRI.

E) RNAV RTE N850 CLOSED BTN GERSA AND ODINA.

2.3.22.27 GPS RAIM and EGNOS NOTAM and procedures based on GNSS.

Examples for events of GPS and EGNOS signal non-availability predictions:

Q) LSAS/**QGAAU**/I/NBO/A/000/999/4729N00933E005

A) LSZR B) 1401071300 C) 1401071458

E) EGNOS IS NOT AVAILABLE FOR LPV.

Q) LSAS/**QGAAU**/I/NBO/A/000/999/4711N00725E005

A) LSZG B) 1312032116 C) 1312050333

D) 03 2116-2122, 04 0329-0338 2112-2118, 05 0325-0333

E) GPS RAIM IS NOT AVAILABLE FOR LNAV

Example of (GNSS) instrument procedures change:

Q) LFMM/**QPIAU**/I/NBO/A/000/999/4345N00425E005

A) LFTW B) 1401010000 C) 1406302359

E) IAP RNAV (GNSS) RWY 36 NOT AVAILABLE WHEN CTA RHONE 3 AND 3.1 ACT.

2.3.22.28 GNSS Radio Frequency Interference (RFI) events notified by NOTAM

Example:

Q) EGGX/**QGWAU**/IV/NBO/E /000/400/5800N01413W186

A) EGGX B) 1411181100 C) 1411181500

E) GPS UNRELIABLE AND MAY BE UNAVAILABLE WITHIN: ...

The location (area, position) of the event shall be described in accordance with the relevant paragraphs in 2.3.22.

If information is provided on clear situations of interference, insert 'GPS NOT AVAILABLE' in Item E) and Q-code QGWAU.

2.3.22.29 Frequencies and channels for navigation aids in Item E) **shall** display the number of characters as published in States AIP and shall follow ICAO provisions.

Examples:

VHF: 121.025MHZ (Berne TWR), 124.675MHZ (Goteborg CTL)
UHF: 336.400MHZ (Laage TWR)
HF: 5598KHZ, 13306KHZ (Gander RDO)
EMERG: 121.500MHZ (VHF), 243.000MHZ and 406MHZ (UHF)
Channels: 38X, 103Y

2.3.22.30 As entries in Items F) and G) are required only for Navigation Warnings – (NOTAM Codes 'QW' and 'QR') and the 'Lower/Upper' indication in Item Q) is usually not visible in a PIB, inclusion of applicable vertical limits in Item E) **shall** be considered whenever appropriate, e.g. for changes to the Airspace Organisation (QA subjects).

2.3.22.31 When an e-mail address is included in the Item E) text, the @ symbol **shall** be represented by the string '(AT)'.

2.3.22.32 Item E) should be composed by the Publishing NOF in such a way that it will serve as a direct Pre-flight Information Bulletin entry without requiring additional processing by the receiving Unit.

2.3.22.33 Unclear and/or incomplete NOTAM text **shall** be avoided.

Example:

... C) PERM
E) ULTRALIGHT AREA SAN TEADORA 5048N 09339E COMPLETELY
WITHDRAWN. REF AIP ENR 5.5.3.

Instead of:

.... C) PERM
E) WARNING WITHDRAWN REF AIP ENR 4-2-7.3 PARA 6.5.

2.3.22.34 AIP references, in NOTAM other than PERM, **should** be avoided (paragraph 2.3.22.4 above also refers to this).

Example:

E) TACAN ALA CH88X U/S.

Instead:

E) TACAN ALA CH88X U/S. REF AIP ENR 4-1.

However, when required, AIP references **shall** include AIP section/sub-section/paragraph numbers and not the page number(s) alone.

2.3.22.35 Dates in Item E) **shall** be presented in day-month-year sequence DD MMM YYYY (e.g. for Trigger NOTAM)) as follows:

DD – to designate a day in a month, two digits shall always be used.

MMM – to designate the month with three-letter abbreviation from ICAO Doc 8400: JAN, FEB ... NOV, DEC.

YYYY – to designate the year with four digits: 2013, 2014, 2015 etc.

Example:

E) TRIGGER NOTAM – AIRAC AIP SUP 2/14 WEF
06 MAR 2014 UNTIL 03 APR 2014: ANNEX LY TO ROUTE
 AVAILABILITY DOCUMENT.

2.3.22.36 Schedule inside Item E) **shall** be presented in accordance with Item D) rules.

Example:

E) ATC OPERATING HOURS CHANGED AS FOLLOWS: 01 03 05 1000-
 1600 02 04 06-31 0800-2200.

2.3.23 Items F) and G) – Lower and Upper limit

2.3.23.1 Lower and Upper limits **shall** be inserted in Items F) and G) only for Navigation Warnings (NOTAM Codes 'QW' and 'QR').

2.3.23.2 If entries are required (ref 2.3.23.1), then both Items F) and G) **shall** always be included.

2.3.23.3 Items F) and G) **shall** contain an altitude (Above Mean Sea Level – AMSL) or a height (Above Ground or Sea or Surface Level – AGL) expressed in metres or feet, or a Flight Level (always expressed in 3 digits). In addition, SFC and GND **shall** be used in Item F) to designate surface and ground respectively, UNL shall be used in Item G) to designate unlimited.

2.3.23.4 Reference datum (AGL or SFC or AMSL) and units of measurement (FT or M) **shall** be clearly indicated.

2.3.23.5 Only a single entry is permitted in each Item, i.e. G) 10000FT (3048M) AGL **shall** not be used.

2.3.23.6 There **shall** be no blank between the value and the unit of measurement (e.g. 3000FT). But a reference datum **shall** be separated from the unit of measurement by a blank (e.g. 3000FT AMSL).

2.3.23.7 Abbreviations FT or M **shall** be divided from AGL or AMSL by a blank character. No other character (e.g. '/', '-...') shall be used. The correct annotation is '3000FT AMSL' (i.e. '3000FT/AMSL' shall not be used).

2.3.23.8 Acceptable entries and formats are therefore as follows:

Item F):	Item G):
SFC	UNL
GND	
XXXXXXFT AGL	XXXXXXFT AGL
XXXXXXFT AMSL	XXXXXXFT AMSL
XXXXXXM AGL	XXXXXXM AGL
XXXXXXM AMSL	XXXXXXM AMSL
FLXXX (see 2.3.23.9)	FLXXX (see 2.3.23.9)

2.3.23.9 The Item Q) default FL values 000 and 999 shall not be used in Items F) and G). The abbreviations GND or SFC **shall** be used in Item F) and UNL in Item G) instead.

2.3.23.10 The values in the qualifiers 'Lower' and 'Upper' of Item Q) **shall** correspond to the flight levels or altitudes specified in Items F) and G). If Items F) and/or G) are expressed as a height, the values specified in the 'Lower' or 'Upper' qualifiers in Item Q) shall indicate the equivalent FL and may therefore require calculation. For detailed conversion procedures see paragraph 2.3.10.

2.3.23.11 Where an event is notified in a form such as 'ACTIVITY UP TO FL040, AFTER ATC APPROVAL UP TO FL080', the higher value (FL80) **shall** be used in Item G) and the 'Upper' qualifier in Item Q) shall read '080'.

2.3.23.12 Similarly, where the lower limit of activity is variable, the lowest limit **shall** be used in Items Q) and F).

2.4 Creation of NOTAMR and NOTAMC

2.4.1 General procedures related to NOTAMR and NOTAMC creation

2.4.1.1 NOTAMR and NOTAMC are issued in the same series as the NOTAM to be replaced or cancelled.

2.4.1.2 NOTAMR and NOTAMC respectively replace and cancel only one NOTAMN or NOTAMR.

Example 1: A0124/14 NOTAMR A0106/14

Example 2: A0234/14 NOTAMC A4567/13

2.4.1.3 NOTAMR and NOTAMC deal with precisely the same subject as the NOTAM to be replaced or cancelled. Therefore, the 2nd and 3rd letters of the NOTAM Code in Item Q) **shall** be the same as those in the NOTAM to be replaced or cancelled.

2.4.1.4 NOTAMR and NOTAMC have the same Item A) contents as the NOTAM to be replaced or cancelled.

2.4.1.5 The date-time group in Item B) of a NOTAMR or NOTAMC **shall** be the actual date and time that this NOTAMR or NOTAMC is created.

i.e. NOTAMR and NOTAMC shall take effect immediately and no future start of coming into force is permitted. The replaced or cancelled NOTAM cease to be valid from the very moment their replacing NOTAMR or NOTAMC are issued. This is done to assure the correct processing in all systems regardless of their design.

2.4.1.6 One of the following procedures **shall** be applied instead of issuing a NOTAMR or NOTAMC with Item B) in the future.

2.4.1.7 If the condition described in a NOTAM to be replaced is to remain valid for a period before being changed, then a NOTAMR shall be issued for the period up to the intended date and time of the change provided the NOTAM to be replaced is in force at the time of replacement. This NOTAMR shall immediately replace the existing NOTAM and shall notify the same conditions but with a changed Item C). A NOTAMN detailing the intended change in condition shall then be issued with a future date and time in Item B).

Example:

```
261637 LIIAYNYX
(B1826/14 NOTAMN
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1401150500 C) 1403311100EST
E) THR RWY 14 DISPLACED 300M. DECLARED DIST CHANGED: .....)
```

On MAR 01 it is known that DTHR will be 200M only from MAR 07 until about APR 15. NOTAM are issued as follows:

```
011035 LIIAYNYX
(B1893/14 NOTAMR B1826/14
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1403011035 C) 1403062359
E) THR RWY 14 DISPLACED 300M. DECLARED DIST CHANGED: .....)
```

```
011035 LIIAYNYX
(B1894/14NOTAMN
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1403070000 C) 1404152359EST
E) THR RWY 14 DISPLACED 200M. DECLARED DIST CHANGED: .....)
```

If the NOTAM to be replaced is not in force at the time of replacement, 2.4.1.9 applies.

2.4.1.8 If the condition described in a NOTAM to be cancelled is to remain valid for a period before Item C) is reached, then a NOTAMR **shall** be issued with the new end time in Item C).

Example:

```
261637 LIIAYNYX
(B1826/14 NOTAMN
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1401150500 C) 1403311100EST
E) THR RWY 14 DISPLACED 300M. DECLARED DIST CHANGED: .....)
```

On MAR 01 it is known that the RWY will be back to normal from MAR 07. NOTAM is issued as follows:

011035 LIIAYNYX
(B1893/14NOTAMR B1826/14
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1403011035 C) 1403062359
E) THR RWY 14 DISPLACED 300M. DECLARED DIST CHANGED:)

2.4.1.9 If the condition described in a NOTAM to be replaced is a postponement, a correction of Item B), an interruption or a temporary suspension (taking place immediately) of the present situation, then a NOTAMC **shall** be issued to immediately cancel the NOTAM. This **shall** be followed by a NOTAMN dealing with the new situation and a new Item B).

Example:

(W0280/14 NOTAMN
Q) HECC/QRDCA/IV/BO/W/000/040/3024N03141E003
A) HECC B) 1406111300 C) 1406201500
D) 11-13 1300-1800, 15-20 0800-1500
E) DANGER AREA HED9 ACT.
F) GND G) FL040

On JUN 13 at noon D-Area is deactivated immediately and will be active again on Jun 15.
NOTAM are issued as follows:

131213 HECAYNYX
(W0285/14 NOTAMC W0280/14
Q) HECC/QRDXX/IV/BO/W/000/040/3024N03141E003
A) HECC B) 1406131213
E) DANGER AREA HED9 DEACTIVATED.

121214 HECAYNYX
(W0286/14 NOTAMN
Q) HECC/QRDCA/IV/BO/W/000/040/3024N03141E003
A) HECC B) 1406150800 C) 1406181600
D) 15-18 0800-1600
E) DANGER AREA HED9 ACT.
F) GND G) FL040

2.4.1.10 If the condition described in a NOTAM to be replaced is a temporary suspension or change of the present situation for a certain period in the future, then a NOTAMR **shall** be issued to immediately replace the NOTAM. This **shall** be followed by a NOTAMN dealing with the temporary change. NOTAMR to specify the dates/times of activation for the periods the situation is as in the replaced NOTAM and NOTAMN to cover dates/times dealing with the different situation. No NOTAMN is issued for a temporary 'back to normal' situation.

Example for a temporary suspension taking place in the future:

261637 LIIAYNYX
(B1826/14 NOTAMN
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1401150500 C) 1403311100EST
E) THR RWY 14 DISPLACED 300M. DECLARED DIST CHANGED:)

On FEB 27 it is known that the RWY will be made available for normal operations for the next weekend (MAR 01+02):

Option 1 (Item D) including dates after the suspension):

271035 LIIAYNYX
(B1893/14 NOTAMR B1826/14
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1402271035 C) 1403312359
D) FEB 27 1035-2359, FEB 28 MAR 03-31 0000-2359
E) THR RWY 14 DISPLACED 300M. DECLARED DIST CHANGED:)

Option 2 (Separate NOTAM for dates after the suspension):

271035 LIIAYNYX
(B1893/14 NOTAMR B1826/14
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 142271035 C) 1402282359
E) THR RWY 14 DISPLACED 300M. DECLARED DIST CHANGED:)

271036 LIIAYNYX
(B1894/14 NOTAMN
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1403030000 C) 1403312359EST
E) THR RWY 14 DISPLACED 300M. DECLARED DIST CHANGED:)

For Option 2, the second NOTAM should also be issued as soon as possible but may also be done after FEB 27 (latest before Item B).

Depending on how well the situation is known, NOTAMR may deal only with the situation until the change occurs, followed by two NOTAMN; one to cover the period for the changed situation and one for the period afterwards.

Example for a temporary change taking place in the future:

261637 LIIAYNYX
(B1826/14 NOTAMN
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1401150500 C) 1403311100EST
E) THR RWY 14 DISPLACED 300M. DECLARED DIST CHANGED:)

On FEB27 it is known that the DTHR will be reduced to 150 M for the next weekend (MAR 01+02):

Option 1:
271035 LIIAYNYX
(B1893/14 NOTAMR B1826/14
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1402271035 C) 1403312359
D) FEB 27 1035-2359, FEB 28 MAR 03-31 0000-2359
E) THR RWY 14 DISPLACED 300M. DECLARED DIST CHANGED:)

271035 LIIAYNYX
(B1894/14 NOTAMN
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1403010000 C) 1403022359
E) THR RWY 14 DISPLACED 150M. DECLARED DIST CHANGED:)

Option 2:
271035 LIIAYNYX
(B1893/14 NOTAMR B1826/14
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1402271035 C) 1402282359
E) THR RWY 14 DISPLACED 300M. DECLARED DIST CHANGED:)

271035 LIIAYNYX
(B1894/14 NOTAMN
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1403010000 C) 1403022359
E) THR RWY 14 DISPLACED 150M. DECLARED DIST CHANGED:)

271035 LIIAYNYX
(B1895/14 NOTAMN
Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
A) LIPO B) 1403030000 C) 1403312359EST
E) THR RWY 14 DISPLACED 300M. DECLARED DIST CHANGED:)

2.4.1.11 Any NOTAM, which includes an 'EST', **shall** be replaced by NOTAMR or cancelled by NOTAMC before the 'estimated' end date specified in Item C).

2.4.1.12 Refer also to the procedures for handling 'Multipart' NOTAM in Chapter 6.

2.4.2 Specific procedures related to NOTAMR Creation

2.4.2.1 NOTAMR are Replacement NOTAM.

2.4.2.2 NOTAM which are to become invalid before their given End of Validity, or did not have a defined End of Validity (i.e. have 'EST' or 'PERM' in Item C) **may** be replaced, provided they are 'in force' at the time of replacement.

2.4.3 Specific procedures related to NOTAMC Creation

2.4.3.1 NOTAMC are Cancellation NOTAM.

2.4.3.2 NOTAM which are to become invalid before their given End of Validity, or did not have a defined End of Validity (i.e. have 'EST' or 'PERM' in Item C) **may** be cancelled at any time.

2.4.3.3 NOTAMC **shall** be published whenever NOTAM are incorporated in an AIP AMDT (see Chapter 2.6.3).

2.4.3.4 NOTAMC Qualifier 'NOTAM Code' **shall** be as follows:

Subject: 2nd and 3rd letters shall be identical to the original NOTAM (ref paragraph 2.4.1.3).

Condition:permitted 4th and 5th letters are as follows:

Q - - AK	=	RESUMED NORMAL OPS
Q - - AL	=	OPERATIVE (or RE-OPERATIVE) SUBJECT PREVIOUS PUBLISHED LIMITATIONS /CONDITION
Q - - AO	=	OPERATIONAL
Q - - CC	=	COMPLETED
Q - - CN	=	CANCELLED
Q - - HV	=	WORK COMPLETED
Q - - XX	=	OTHER (Plain Language – ref paragraph 2.4.3.8)

2.4.3.5 The code Q - - AO is intended for NOTAMC and **shall** be used only to inform that the equipment or service is 'now operational', compared to the previous notified status (e.g. 'unserviceable', 'not available') which the NOTAMC is cancelling. The code is not intended to be used to notify about a new equipment or service in a NOTAM. For this purpose code Q - - CS *Installed* **shall** be used.

2.4.3.6 The code Q - - CN **shall** be used when cancelling a planned event published by NOTAM, such as navigation warning, planned exercises or work. The code Q - - CN is not intended to be used as a general code for all NOTAMC. To cancel NOTAM events such as closed RWY the use of Q - - AK or Q - - AL is preferred.

2.4.3.7 The code Q - - HV ('work completed') shall be used when cancelling the condition Q - -HW ('work in progress').

2.4.3.8 NOTAMC Qualifiers 'Traffic', 'Purpose', 'Scope', 'Lower/Upper' and 'Coordinates/Radius' **shall** be identical to the cancelled NOTAM. Maintaining the original qualifiers allows additional use of NOTAMC for the preparation of 'Updates' to Pre-flight Information Bulletins.

2.4.3.9 NOTAMC **shall** not contain Items C), D), F) and G).

2.4.3.10 For all NOTAMC, the text of the decoded NOTAM Code **shall** be inserted in Item E) together with details of the NOTAM subject.

Example: NOTAM Code = QNVAK

Item E) = VOR DKB RESUMED NORMAL OPS.

2.4.3.11 In order to facilitate work in manual environments, NOTAMC, which are to be followed immediately by a NOTAMN (instead of a NOTAMR), **shall** contain XX as the 4th and 5th letters of the NOTAM Code and, at the end of the text in Item E), the remark: 'NEW NOTAM TO FOLLOW'.

Example: NOTAM Code = QMRXX

Item E) = RWY 07L/25R NEW NOTAM TO FOLLOW.

Cancellation of NOTAM solely on the basis of a Checklist is not allowed.

2.4.3.12 Once the immediate cancellation has been effected, the cancelling NOTAMC ceases to be valid.

2.5 Checklist production

2.5.1 Checklists – General

2.5.1.1 Checklists are issued as a NOTAM in the series that they refer to.

2.5.1.2 A separate Checklist **shall** be issued for each NOTAM Series.

2.5.1.3 The first Checklist in a new NOTAM series **shall** be issued as a NOTAMN.

2.5.1.4 Subsequent Checklists **shall** be issued as NOTAMR, replacing the previous Checklist with immediate effect. Consequently, Item B) is the issuing time of the Checklist and supersedes the previous one immediately.

2.5.1.5 Item A) **shall** contain the FIR, or a list of all FIR, or the location indicator covered by the Checklist. The third and fourth letters 'XX' shall not be used.

2.5.1.6 Item C) **shall** contain the estimated (EST) end of validity, normally not more than one month after the Checklist is issued.

2.5.1.7 Checklists **shall** contain the numbers of the NOTAM incorporated in a normal AIP AMDT or AIP SUP until the time that these NOTAM are specifically cancelled by the publication of a NOTAMC.

2.5.2 Checklist qualification – Item Q)

2.5.2.1 Qualifier 'FIR' **shall** be either:

- the FIR indicator, or
- the country nationality letters followed by 'XX' (or "XXX") if there is more than one FIR concerned, or
- the country nationality letters of the Publishing NOF followed by 'XX' if publishing for FIR in different countries.

2.5.2.2 Qualifier 'NOTAM Code' **shall** be the special dedicated code 'QKKKK'.

2.5.2.3 Qualifiers 'Traffic', 'Purpose' and 'Scope' **shall** be given the artificial value 'K'.

2.5.2.4 Qualifiers 'Lower'/'Upper' **shall** be the default values '000/999'.

2.5.2.5 Qualifier 'Geographical Reference' **shall** always contain the geographical co-ordinates of the centre of the FIR(s) listed in Item A), followed by the default radius '999'.

Example: Q) LIXX/QKKKK/K/K/K/000/999/4323N01205E999

2.5.2.6 Qualifiers 'QKKKK' (NOTAM Code) and 'K' ('Traffic', 'Purpose', 'Scope') are used to allow selective retrieval of the Checklist. This also prevents the Checklist from appearing in a Pre-flight Information Bulletin.

2.5.3 Checklist format – Item E)

2.5.3.1 Item E) **shall** be divided into three sections.

2.5.3.2 First section, identified by the keyword 'CHECKLIST'

- a) This contains the list of the valid NOTAM numbers, which have been promulgated in the same series as the Checklist, in a specific format. Note that the list shall not contain the number of the replaced NOTAM checklist nor its own NOTAM checklist number.
- b) The text in Item E) shall start with the word 'CHECKLIST'.
- c) The numbering of NOTAM is grouped by year (indicated by 4 digits) using the word 'YEAR' plus the '=' sign, followed by the year of publication without blanks (e.g. YEAR=1999).
- d) Each NOTAM number (always 4 digits) is separated by a blank with no other punctuation mark.
- e) Each indicator of a different year shall start on a new line.
- f) If no NOTAM number is valid, insert current year and 'NIL' (e.g. YEAR=2014 NIL)

2.5.3.3 Second section, identified by the keywords 'LATEST PUBLICATIONS'

- a) This contains the list of the latest publications issued, in a format suitable for manual processing.
- b) Additional possibilities to differentiate between IFR or VFR publications (volumes) can be stated, if so required:

Note: Whenever the numbering of AIP AMDT takes place on a yearly basis, a reference to the year of publication will be added to the number.

- c) If no AIRAC AIP Amendment will be published at the established interval or publication date, a NIL notification is included in the NOTAM checklist. For more details, refer to paragraph 2.8.

2.5.3.4 The third section provides information on valid publications

- a) This contains the list of valid AIP Supplements and AIC.
- b) If no AIP Supplement or no AIC is valid, insert 'NIL' instead of a valid document number.

Note: Structure of a third section is not a conformed one, however it is proposed to include expressions referring to the validity e.g. "LIST OF VALID PUBLICATIONS", "VALID AIP SUPPLEMENTS", "VALID AIC".

2.5.3.5 In accordance with ICAO Doc 10066 PANS-AIM [Ref. 2] paragraph 5.2.5.3.3, the checklist **should** also include the latest data sets. As this requirement requires additional clarification, this part may be omitted for the time being. It may be considered instead to provide information where more information on published data sets can be found.

2.5.3.6 Examples of a complete checklistExample 1 (without NIL notification):

```
(A0355/20 NOTAMR A0262/20
Q) LSAS/QKKKK/K/K/K/000/999/4645N00808E999
A) LSAS B) 2006010611 C) 2007012359 EST
E) CHECKLIST
YEAR=2019 0565 0694 0723 0724 0725
YEAR=2020 0049 0051 0173 0189 0216 0219 0220 0222 0248
0264 0274
```

0275 0276 0285 0294 0295 0296 0297 0298 0299 0300 0301
0302 0303
0307 0309 0314 0315 0316 0317 0318 0327 0334 0339 0347
0349 0351
0354

LATEST PUBLICATIONS

AIRAC AIP AMDT 05/20 EFFECTIVE 18 JUN 2020
AIRAC AIP SUP 02/20 EFFECTIVE 21 MAY 2020
AIP AMDT 06/20
VFR MANUAL AMDT 06/20
AIP SUP 03/19
VFR MANUAL SUP 02/20
AIC A 04/20

LIST OF VALID PUBLICATIONS

AIP SUPPLEMENTS

AIRAC SUP 02/20
AIP SUP 07/14 07/18 09/18
VFR MANUAL SUP 05/16 03/18 05/18 02/19 04/19 05/19
01/20 02/20

AIC SERIES A

02/17 08/17 02/19 03/19 05/19 01/20 02/20)

Example 2 (with NIL notification):

(A0541/20 NOTAMR A0361/20
Q) EVRR/QKKKK/K/K/K/000/999/5619N02322E999
A) EVRR B) 2005010620 C) 2006010620EST
E) CHECKLIST
YEAR=2020 0194 0257 0291 0297 0388 0389 0397 0406 0407
0409 0410 0411
0416 0418 0419 0424 0426 0427 0464 0465 0469 0494 0495
0496
0519 0520 0529 0530 0531 0532 0533 0534 0535 0537 0538
0539
0540

LATEST PUBLICATIONS

AIP AIRAC AMDT IFR 003/2020 EFFECTIVE DATE 21 MAY 20
AIP AIRAC SUP IFR 010/2015 EFFECTIVE DATE 10 DEC 15
AIP SUP IFR 004/2020
AIC IFR A004/2020
AIRAC EFFECTIVE DATE 18 JUN 2020 – NIL

AIC CHECKLIST

AIP IFR
A007/2015 A008/2016 A003/2019 A005/2019 A006/2019
A007/2019
A001/2020 A002/2020 A003/2020 A004/2020

SUP CHECKLIST

AIP IFR
004/2020

2.5.4 Checklist errors

2.5.4.1 When the publication of the Checklist contains an error, the following procedures **shall** apply.

2.5.4.2 Whenever a valid NOTAM number is omitted from the Checklist:

- a) if the omitted NOTAM is in force, a NOTAMR **shall** be issued replacing the omitted NOTAM with the new number;
- b) if the omitted NOTAM is not yet in force, a NOTAMC and NOTAMN **shall** be issued.

This procedure will allow consistency of the data in the database of all recipients, whatever the method of processing of Checklists.

2.5.4.3 Whenever an invalid NOTAM number is erroneously inserted in the Checklist, a revised Checklist (NOTAMR replacing the erroneous Checklist) **shall** be published without the invalid NOTAM number (no correct version).

2.6 Publication of information by NOTAM, AIP Amendment or AIP Supplement

2.6.1 Permanent information **shall** not be distributed by means of a NOTAM only. This information **shall** be incorporated in an AIP Amendment.

2.6.2 Publication of permanent information by NOTAM

2.6.2.1 When the urgency of publication of an Amendment to the AIP is such that the 'normal' AIRAC or Non-AIRAC Amendment publication is considered to be unsuitable, the responsible NOF issues a NOTAM 'PERM' according to the following rules.

2.6.2.2 Item Q) **shall** be completed according to the NOTAM Selection Criteria.

2.6.2.3 Item B) of the NOTAM **shall** contain the effective date of the change.

2.6.2.4 Item C) of the NOTAM **shall** contain the term 'PERM' to indicate that the change itself is of a permanent nature. Note that Item C) shall never include the expected publication date or the effective date of the Amendment.

2.6.2.5 Item E) **shall** contain the operational changes as for normal NOTAM. Special care shall be taken to assure that the phrasing is clear without AIP consultation. For the benefit of users specifically interested in NOTAM that will later be transferred to the AIP, a reference to the AIP is added at the end of Item E).

AIP references **shall** include AIP section/sub-section/paragraph numbers, not the page number(s) alone.

For examples refer to paragraphs 2.3.22.3, 2.3.22.8 example 2, 2.3.22.27 and 2.3.22.28.

2.6.2.6 In cases where a NOTAM is issued to correct a mistake in an AIP AMDT, Item E) **shall** provide a reminder of the operational content of the AMDT and not only of the mistake.

Example text shall read correctly:

E) RWY 08/26 EXTENSION, AIRAC AIP AMDT 10/08 PART AD: EGNX 2-12 RWY 08 READ 1850M INSTEAD OF 1805M.

Instead of:

'E) AIRAC AIP AMDT 10/08 PART AD: EGNX 1-12 RWY 08 READ 1850M INSTEAD OF 1805M'

This allows users to be aware of the subject when reading the PIB and to refer to the AIP AMDT content only if necessary.

2.6.2.7 In cases where a NOTAM is issued to correct a mistake in an AIP AMDT:

- Item B) contains current date and time if the AMDT is already in force.
- In case of a correction to an AMDT not in force yet, Item B) is the effective date of the AMDT.
- Item C) shall be PERM.

2.6.3 Incorporation of NOTAM information in AIP Amendment

2.6.3.1 Permanent information **shall** be incorporated in the AIP within 3 months after NOTAM publication. As re-issuing of NOTAM with the same contents is not permitted, the interim use of an AIP SUP should be considered. (ICAO Doc 8126 [Ref. 4] refers).

2.6.3.2 When permanent (PERM) information has been published in a NOTAM, the NOTAM will require cancellation after an appropriate AIP Amendment has been issued to formally amend the AIP (ref paragraph 2.4.3.3).

In this case, the NOF **shall** issue a NOTAMC, which cancels the NOTAM 'PERM', 15 days after the effective date of the AIP Amendment that contains the 'PERM' information.

Note 1: 'Effective date' in this instance can be equal to an AIP Amendment publication date. This broadens the Annex 15 use of this expression, which relates currently to AIRAC AIP Amendments only.

Note 2: It is assumed that the AIP Amendments will be available at all receiving units by the time the NOTAMC is sent.

2.6.3.3 The NOTAMC **shall** contain in Item E) a reference to the AIP Amendment that incorporates the originally published NOTAM.

Example:

'INFORMATION INCORPORATED IN AIP AMDT 4/08 WEF 14 APR 2014.'

2.6.3.4 The numbers of the NOTAM incorporated in the AIP Amendment **shall** be published on the cover page of the AIP Amendment.

2.6.3.5 The date on which NOTAMC will be issued to cancel NOTAM incorporated in the AIP Amendment **shall** be published on the cover page of the AIP Amendment.

Example: *'NOTAM incorporated to this AMDT will be cancelled by NOTAMC on the 29 APR 2014.'*

2.6.4 Incorporation of NOTAM information in AIP Supplement

2.6.4.1 Publication of an AIP Supplement to replace and/or modify information in an existing NOTAM may occur at any time. A Trigger NOTAMN **shall** be published to refer to this AIP Supplement (ref paragraph 2.7.4).

2.6.4.2 The previously published NOTAM containing the affected information **shall** be cancelled by a NOTAMC.

2.7 Trigger NOTAM and related procedures

2.7.1 Trigger NOTAM – Definition

2.7.1.1 NOTAM used to announce the existence and subject contents of AIRAC AIP Amendments or AIP Supplements of operational significance are referred to as 'Trigger NOTAM'.

2.7.1.2 The text of Trigger NOTAM is included in Pre-flight Information Bulletins (PIB) to ensure that pilots and operators are advised or reminded that permanent changes of operational significance take effect from the given date or that details of temporary changes of operational significance are to be found in an AIP Supplement.

2.7.2 Trigger NOTAM – General rules

2.7.2.1 AIRAC AIP Amendments and AIRAC AIP Supplements **shall** always be triggered by a NOTAM. Note that information concerning any circumstances listed in Annex 15 [Ref. 1], Chapter 6, paragraph 6.2 shall be disseminated under the regulated 'AIRAC' system, either as an AIRAC AIP Amendment or as an AIRAC AIP Supplement.

2.7.2.2 The text in Item E) **should** not exceed 300 characters and must always start with the words 'TRIGGER NOTAM' (followed only in the case of an AIP Amendment by the abbreviation PERM), the reference number of the published AIP Amendment or AIP Supplement concerned, the effective date and a brief description of its contents. Effective time will be omitted in Item E) unless it differs from the default AIRAC effective time of 0000 UTC.

2.7.2.3 Trigger NOTAM must come into force on the effective date and time of the Amendment or Supplement they refer to. The Trigger NOTAM **shall** be issued as soon as possible, preferably at the publication date of the AIRAC AIP Amendment or the AIP Supplement.

2.7.2.4 Trigger NOTAM **shall** remain in force for 14 days.

Example:

B) 1402060000 (AIRAC effective date and time)

C) 1402192359 (AIRAC effective date and time + 14 days)

If the effective time of the Trigger NOTAM is defined to the beginning of the day (first minute of the day=0000), use 2359 as end-time to correspond to the end-time rule for a 24 hour period.

If the effective time of the Trigger NOTAM is not at the beginning of the day, the end-time shall equal the start time.

Example:

B) 1403061000 C) 1403201000

2.7.2.5 Trigger NOTAM **shall** be issued in the appropriate NOTAM series, according to the information to be promulgated.

2.7.2.6 Trigger NOTAM **shall** follow the normal NOTAM procedures (but see following paragraphs for exceptions).

2.7.2.7 The NOTAM Code 2nd and 3rd letters (= 'Subject') **shall** be selected from the NSC and shall never be 'XX'. If no suitable 2nd and 3rd letter combination exists then use 'FA' for Aerodrome or 'AF' for FIR.

2.7.2.8 The NOTAM Code for a Trigger NOTAM **shall** always contain 'TT' as 4th and 5th letters (= 'Condition'). This exclusive 'TT' 'Condition' indicator shall be used with all subjects of the NOTAM Codes, even if not explicitly listed in the NSC tables.

2.7.2.9 The exclusive 'TT' 'Condition' indicator can be used to retrieve specific Trigger NOTAM from any Publishing NOF, and can additionally be used for the inclusion (or non-inclusion) of Trigger NOTAM in PIB, at a specific time before their effective date.

2.7.2.10 In the case of Amendments or Supplements containing information dealing with different subjects and/or locations, a single Trigger NOTAM dealing with multiple subjects and/or locations **may** be issued [Note exception to Basic Rule – ref. paragraph 2.2.3].

2.7.2.11 For FIR, Publishing NOF may group all the information that relates to one or several FIR, regardless of the subject, in order to reduce the amount of NOTAM to be published [Note exception to Basic Rule – ref. paragraph 2.2.3].

Example:

Q) LEXX/QAETT/IV/BO/E/065/660/4229N00152E999
 A) LECB LECM B) 1402060000 C) 1402192359
 E) TRIGGER NOTAM – PERM AIRAC AIP AMDT 2/14 WEF 06 FEB 2014. CHANGES TO AIRSPACE CLASSIFICATION AND UPPER LIMIT OF CONTROLLED AIRSPACE.

2.7.2.12 For Aerodromes, a separate Trigger NOTAM **shall** be issued for each aerodrome. Different subjects relating to the same aerodrome, may nevertheless be grouped in the same NOTAM [Note exception to Basic Rule – ref. paragraph 2.2.3].

Example:

Q) EFIN/QPATT/I/BO/A/000/999/6031N02216E005
 A) EFTU B) 1402060000 C) 1402192359
 E) TRIGGER NOTAM – PERM AIRAC AIP AMDT 2/14 WEF 06 FEB 2014. CHANGES TO STAR AND TO WGS 84 COORDINATES.

2.7.2.13 In the case of Amendments or Supplements containing information about a new location indicator or a changed one, the related Trigger NOTAM **shall** be issued as FIR information: Scope E, Item A) location indicator of the FIR affected and Item E) information about the new or changed location indicator. Other information related to this aerodrome and subject to trigger procedures is published in accordance with paragraph 2.7.2.12, Item A) to contain the new location indicator.

2.7.2.14 In the cases described in paragraphs 2.7.2.10-2.7.2.12, the NOTAM qualifiers 'Traffic', 'Purpose' and 'Scope' **shall** be filled in according to the subject of highest operational importance.

When grouping different subjects it may happen that the subject of highest operational importance does not cover qualifiers 'Traffic' and 'Scope' for all the subjects. For example, the Q-lines for two AD subjects (ILS, VFR APCH PROC) read as follows: .../QICTT/I/BO/A/... and .../QPKTT/V/BO/A.... Whichever is taken as highest, both traffic types (I and V) concerned are never covered. In this special case a deviation from NSC is permitted to guarantee the necessary bulletin entries.

Example: In the following case, the 'Traffic' qualifier 'IV' is a combination to cover both subjects (QICTT and QPKTT):

Q) EFIN/QICTT/**IV**/BO/A/000/999/6240N02937E005
 A) EFJO B) 1402060000 C) 1402192359
 E) TRIGGER NOTAM – PERM AIRAC AIP AMDT 2/14 WEF 06 FEB 2014. INTRODUCTION OF ILS RWY 28 AND REVISED VFR APCH PROC.

2.7.3 Trigger NOTAM relative to AIRAC AIP AMDT

2.7.3.1 AIRAC Amendments represent permanent changes to the AIP on a predefined date.

2.7.3.2 Effective Date: AIRAC AIP Amendments become effective on the AIRAC cycle date. Item B) **shall** always contain the AIRAC effective date and time.

Example:

Q) LOVV/QARTT/I/BO/E/245/999/4720N01330E999
 A) LOVV B) 1408210000 C) 1409032359
 E) TRIGGER NOTAM – PERM AIRAC AIP AMDT 6/14 WEF 21 AUG 2014. IMPLEMENTATION OF NEW ATS ROUTE UA15.

Note that the term 'PERM' is inserted in Item E) to stress that Item C) contains an artificial end-date and that the information is of a permanent nature.

2.7.4 Trigger NOTAM relative to AIP SUP (AIRAC and Non-AIRAC)

2.7.4.1 Whilst current ICAO SARPs do not specify a requirement for Non-AIRAC AIP Supplements to be triggered, Publishing NOF **shall** trigger all Operationally Significant AIP SUP to ensure that all relevant elements of the integrated aeronautical information package are available for inclusion in PIB.

2.7.4.2 Effective date: AIP Supplements become effective at the date and time stated in the Supplement. Information to be published under the AIRAC system does not always start on an AIRAC cycle date (e.g. major works, large air exercises, etc. ...). Consequently, both the AIP Supplement and the Item B) of the Trigger NOTAM **shall** contain the effective date and time of the start of the information.

2.7.4.3 Triggering of AIRAC information in Non-AIRAC Supplements: Due to time constraints, AIP Supplements are sometimes published to promulgate information that should have been published as an AIRAC AIP Supplement. In such exceptional cases, the operational nature of the information **shall** prevail and a Trigger NOTAM **shall** be issued for this Non-AIRAC AIP Supplement. The 'Subject' and 'Condition' shall relate the information to at least the 'Purpose' 'BO', according to the NOTAM Selection Criteria.

2.7.4.4 Period of validity: The general rule as stated in paragraph 2.7.2.4 shall apply. However, if the information has a duration that is shorter than 14 days, Item C) **shall** reflect the date and time when the information published in the AIP Supplement will expire. If the information has a duration that is longer than 14 days, the period for which the SUP is in force shall be indicated in Item E).

Example 1:

Q) EFIN/QRDTT/IV/BO/W/000/040/6637N02825E016
A) EFIN B) 1402062200 C) 1402111200
E) TRIGGER NOTAM – AIP SUP 68/14 WEF 06 FEB 2014.
TEMPO DANGER AREA EFD148 SALLA ACT.
F) SFC G) 4000FT AMSL

Example 2:

Q) EFIN/QRDTT/IV/BO/W/000/040/6637N02825E016
A) EFIN B) 1401172200 C) 1401312200
E) TRIGGER NOTAM – AIP SUP 68/14 WEF 17 JAN 2014 TIL 20 FEB 2014. TEMPO DANGER AREA EFD148 SALLA ACT.
F) SFC G) 4000FT AMSL

2.7.4.5 Supplements requiring activation: Some (AIRAC) SUP require activation by NOTAM, such as: description of major works at aerodromes, establishment of large-scale military exercise areas or other related (AIRAC) SUP covering work progress or modifications.

These SUP usually cover long periods and are published with remarks such as: 'detailed dates and times of activation will be published by NOTAM', 'individual phases will be activated by NOTAM', 'operational limitations will be published by NOTAM'.

Such (AIRAC) SUP are triggered according to procedures for Trigger NOTAM.

If required, one or more additional activation NOTAM are issued according to NOTAM procedures for the periods the restrictions apply.

2.7.5 Notification of changes to AIP SUP

2.7.5.1 Changes: Any change to an AIP Supplement and its associated Trigger NOTAM, **shall** be published by the Publishing NOF in such a way that the information itself is always clear and without any ambiguities.

Normally, changes to an AIP Supplement (such as corrections) are announced by replacing the AIP Supplement in due time by another Supplement. The procedure described in paragraph 2.7.5.3 **shall** be applied to announce the cancellation of the replaced SUP. The new SUP will be triggered according to the normal procedure.

The same procedure applies to Supplements of 'unknown' or 'estimated' duration or in the case of notifications of a postponed end date/time.

If time constraints do not allow a replacement by another SUP, the change is published by NOTAM. Refer to 2.7.5.2 for details.

2.7.5.2 Notification of changes by NOTAM: Changes at short notice as well as temporary suspensions of a SUP are published by NOTAM. The Q-line is completed according to normal NOTAM rules. Item B) is the effective date of the Supplement or current date/time, Item C) the published end of validity of the SUP. If the change is only of a temporary nature, Item C) is limited to the validity of the change. Apart from the change, Item E) contains a reference to the Supplement.

Example:

```
(A0115/14 NOTAMN
Q) ESAA/QMDCH/IV/BO/A/000/999/5739N01217E005
A) ESGG B) 1404120637 C) 1405112359
E) RWY 03/21 TORA 2800M. REF AIRAC AIP SUP 14/14.
```

Long-term changes issued by NOTAM **shall** be replaced by a SUP in due time.

2.7.5.3 Notification of an earlier end date or time: exceptionally, the original end date specified in the AIP SUP **may** be changed to an earlier date by NOTAM. If such earlier cancellations are known well in advance they are treated as changes to a SUP and the rules of paragraph 2.7.5.1 apply.

The cancellation of a SUP at short notice is always published by NOTAMN (ref 2.7.5.3.1). If necessary, in addition to the NOTAMN the associated Trigger NOTAM has to be cancelled or replaced (ref 2.7.5.3.2) and the validity of any other existing NOTAM referring to the SUP must be verified (ref 2.7.5.3.3).

2.7.5.3.1 A NOTAMN **shall** be issued according to NOTAM procedures to announce the cancellation of a SUP at short notice.

Item B) is the new expiring date/time of the SUP.

Item C) is the original end of validity of the SUP or the next AIP SUP checklist or NOTAM checklist or AIP GEN 0.3 if it serves as a checklist of SUP, whichever is the most suitable means.

Example:

```
NOTAMN 151830 EUECYIYN
A0127/14 NOTAMN
Q) ESAA/QFALT/IV/BO/A/000/999/5739N01217E005
A) ESGG B) 1404230000 C) 1405112359
E) REF AIRAC AIP SUP 14/14 WORKS COMPLETED. RESTRICTIONS
ON THE USE OF AERODROME NO LONGER IN FORCE.
```

Note that Item E) shall always contain text clearly indicating that the planned end date has been brought forward.

Note that if the AIP SUP was not originally triggered, a NOTAMN may also be issued exceptionally to announce the cancellation in accordance with the above validity and Item E) procedures.

Note the use of Condition 'LT' (instead of 'TT') in the NOTAMN to indicate more precisely the nature of the information.

2.7.5.3.2 If the Trigger NOTAM is still valid at the time the information about the early cancellation is received, the Trigger NOTAM is cancelled or replaced, depending on the new expiry date/time. The Trigger NOTAM is not affected by the cancellation of the SUP if the new expiry date is later than Item C) of the Trigger NOTAM.

Example:

```
Original Trigger:
A0034/14 NOTAMN
Q) ESAA/QFATT/IV/BO/A/000/999/5739N01217E005
A) ESGG B) 1404100600 C) 1404240600
```

E) TRIGGER NOTAM – AIRAC AIP SUP 14/14 WEF 10 APR 2014
TIL 11 MAY 2014. USE OF AERODROME RESTRICTED DUE TO MAJOR
CONSTRUCTION WORKS.

New end of SUP: after 24 April 2014: Trigger not affected.
New end of SUP: before 24 April 2014: Trigger replaced or cancelled

Example: Notification about early cancellation received 15 APR 2014,
SUP cancelled as of 22 APR 2014 2359.

Replacement:
(APR 2014)
151828 EUECYIYN
A0126/14 NOTAMR A0034/14
Q) ESAA/QFATT/IV/BO/A/000/999/5739N01217E005
A) ESGG B) 1404151828 C) 1404222359
E) TRIGGER NOTAM – AIRAC AIP SUP 14/14 WEF 10 APR 2014.
USE OF AERODROME RESTRICTED DUE TO MAJOR CONSTRUCTION
WORKS. AIP SUP VALID TIL 22 APR 2014.

2.7.5.3.3 If the SUP is subject to a valid activation NOTAM or any other NOTAM referring to it (e.g. temporary suspensions, changes published by NOTAM), the validity of these NOTAM have to be verified. If necessary, these NOTAM are cancelled or replaced depending on the new expiry date and time. If an activation NOTAM or any other NOTAM referring to the SUP is not yet in force at the time the earlier end is known, the activation NOTAM is cancelled and a new one is published reflecting the new date/time.

Example:

151830 EUECYIYN
(A0128/14 NOTAMR A0115/14
Q) ESAA/QMDCH/IV/BO/A/000/999/5739N01217E005
A) ESGG B) 1404151830 C) 1404222359
E) RWY 03/21 TORA 2800M. REF AIRAC AIP SUP 14/14.

2.8 NIL notification

2.8.1 A NIL notification to announce that an AIP Amendment will not be published at the established interval or publication date, **shall** be distributed by NOTAM checklist (ICAO Doc 10066 PANS-AIM Chapter 6, Item 6.1.2.2 [Ref. 2]). The distribution of a NIL notification **shall** be done at least 28 days in advance of the AIRAC date concerned (compliant with ICAO Annex 15 paragraph 6.2.4 – [Ref 1]).

2.8.2 This NIL notification **shall** be included in the NOTAM checklist with the following guidance:

- publish at least 28 days before the AIRAC effective date; and
- clearly identify in the text which AIRAC effective dates are affected by the NIL notification

An example of a NOTAM checklist announcing a NIL notification is provided in paragraph 2.5.3.6

2.8.3 Additional means to notify that no AIP Amendment will be published **may** be considered e.g. website.

3 NOTAM Processing

3.1 Introduction

3.1.1 The current standard NOTAM format was introduced in ICAO Annex 15, 8th Edition promulgated on 14 November 1991, with the majority of the content being transferred to ICAO Doc 10066 PANS-AIM on 08 November 2018. All NOTAM **should** be produced in this format, following the procedures on NOTAM creation explained in Chapter 2 of this document.

3.1.2 Some States are not adhering completely to the Aeronautical Information Product and do not publish Trigger NOTAM for operationally significant publications.

3.1.3 Other States publish those NOTAM selected for international distribution in an official ICAO language other than English. In order to make this information available to the NOTAM Processing Unit (NPU) Clients in accordance with Annex 15 [Ref. 1] paragraph 1.3.1 and ICAO Doc 10066 [Ref. 2] paragraph 5.2.5.1.3, a translation into English is **required**.

3.1.4 Conclusively, there are differences in the interpretation of ICAO Standards and Recommended Practices and guidelines causing inconsistent, inaccurate or even false PIB output.

3.1.5 As a result, differences and discrepancies exist internationally in published NOTAM. NOTAM have to pass through a series of phases where their conformity to the ICAO format is analysed and their contents are assessed prior to their storage in automated NOTAM processing systems. The purpose of this Chapter is to define and describe the principles and detailed procedures applied throughout these different phases.

3.2 Objective

3.2.1 The goal of NOTAM processing is to process all received NOTAM in accordance with the procedures laid down in Chapter 2 of these guidelines on NOTAM creation, to allow their storage in automated pre-flight information systems in order to provide correct and harmonised PIB output for the benefit of the end user.

3.2.2 Processed NOTAM **shall** be distributed or made available as soon as possible after receipt of the original NOTAM by the NOTAM Processing Unit.

3.2.3 NOTAM processing **should** result in a standardised level of service, regardless of which Unit was responsible for the processing.

3.2.4 In order to ensure the quality of the NOTAM and the consistency of the database, quality review procedures **shall** be agreed between Client NOF and NOTAM Processing Unit.

3.2.5 It is essential that NOTAM Processing Units ensure that their Clients are made fully aware of the NOTAM processing procedures being applied.

3.2.6 This Chapter addresses NOTAM processing principles and procedures, which support NOTAM storage.

3.3 Applicability

3.3.1 Chapter 3 links the NOTAM publication with the retrieval of NOTAM (Chapter 7 PIB). The processing of incoming NOTAM therefore constitutes an essential part in order to achieve correct and harmonised PIB. Chapter 3 provides guidelines for the processing of NOTAM deviating from ICAO or OPADD standards as outlined in Chapter 2 (NOTAM creation).

3.3.2 However, non-adherences vary a lot and not every specific case can be covered. Incoming messages **shall** modified whenever they cannot be processed or when they would otherwise have a negative impact on the production of the Pre-flight Information Bulletin.

3.4 Procedures for the processing of NOTAM

3.4.1 The procedures described in this Chapter refer to NOTAMN (New NOTAM). Most of them apply also to NOTAMR and NOTAMC.

3.4.2 Specific procedures relative to NOTAMR (Replacement NOTAM) and NOTAMC (Cancellation NOTAM) and the particulars of their processing are described in this Chapter after the NOTAMN procedures.

3.5 General principles

3.5.1 Whilst it is expected that most Clients will work with the processed version of the NOTAM, the NOTAM Processing Unit shall be able to make the original version available in accordance with the requirements of its Clients.

3.5.2 The NOTAM Processing Unit **shall** keep track of any message (free text or 'correct version' NOTAM), which is related to the original NOTAM.

3.5.3 NOTAM processing functions are as follows:

Conversion into the standard format.

Triggering of information of operational significance.

Translation into English.

Syntax correction of obvious detected mistakes in syntax.

Data correction of detected mistakes in data.

Editing text in order to clarify it.

3.5.4 A NOTAM Processing Unit **shall** perform all of the above listed functions.

3.5.5 The following table shows the applicable processing functions to be performed on the respective NOTAM data and Items (Note that the matrix is not applicable to Triggering):

NOTAM Items	Conversion	Translation	Syntax Correction	Data Correction	Editing
Series/Nr/Type	No	No	Yes	Yes	No

NOTAM Items	Conversion	Translation	Syntax Correction	Data Correction	Editing
Ref Series/Nr	No	No	Yes	Yes	No
FIR	Yes	No	Yes	Yes	No
NOTAM Code	Yes	No	Yes	Yes	No
Traffic	Yes	No	Yes	Yes	No
Purpose	Yes	No	Yes	Yes	No
Scope	Yes	No	Yes	Yes	No
Lower/Upper	Yes	No	Yes	Yes	No
Lat/Long	Yes	No	Yes	Yes	No
Radius	Yes	No	Yes	Yes	No
Item A)	No	No	Yes	Yes	No
Item B)	No	No	Yes	Yes	No
Item C)	No	No	Yes	Yes*	No
Item D)	No	Yes**	Yes	Yes	No
Item E)	Yes	Yes	Yes	Yes	Yes
Items F) & G)	No	No	Yes	Yes	No

Yes = Processing function to be performed, if necessary

No = Processing function not applicable

* = exc. EST/PERM

** = Only if names of weekdays, months etc., are not used in English language

3.6 Conversion of original NOTAM

3.6.1 On reception of NOTAM from countries that do not adhere to the NOTAM format, the NOTAM Processing Unit **shall** convert these into the correct ICAO Doc 10066 PANS-AIM [Ref. 2] NOTAM format before storing and making them available.

3.6.2 In converted NOTAM, each Item of the original NOTAM **shall** be transposed into the appropriate standard NOTAM Item, and those not present (e.g. Item Q) **shall** be added.

3.6.3 Converted NOTAM **shall** be qualified according to the NOTAM Selection Criteria published in ICAO Doc 8126 [Ref. 4]. For this purpose, the NOTAM Code **shall** be identified from Item E).

3.6.3.1 If the NOTAM Code is present in Item E), it **shall** be moved into the Item Q) for further qualification, and decoded in Item E) according to the text provided in the NOTAM Selection Criteria.

3.6.3.2 If no NOTAM Code is contained in Item E), the subject and condition **shall** be derived from the NOTAM contents.

Example 1: Incoming original NOTAM

A1324/14 NOTAMN
 A) KJFK
 B) 1407231000
 C) 1407231700
 E) QMRLC 13L/31R CLSD)

Corrected NOTAM

(A1324/14NOTAMN
Q) KZNY/QMRLC/IV/NBO/A /000/999/4038N07347W005
A) KJFK B) 1407231000 C) 1407231700
E) RWY 13L/31R CLSD)

Example 2: Incoming original NOTAM

231639 KDZZNAXX
(A1326/14 NOTAMC A1324/14
A) KJFK)

Corrected NOTAM

A1326/14 NOTAMC A1324/14
Q) KZNY/QMRXX/IV/NBO/A /000/999/4038N07347W005
A) KJFK B) 1407231639
E) REF RWY 13L/31R
NOTAM CANCELLED)

3.7 Triggering of printed publications

3.7.1 Triggering - the issuing of a Trigger NOTAM in Series 'T', by the NOTAM Processing Unit, relative to AIRAC AIP Amendments and operationally significant AIP Supplements for which no Trigger NOTAM has been issued by the Publishing NOF.

3.7.2 The NOTAM Processing Unit cannot use any of the Publishing NOF's NOTAM series because the NOTAM numbering consistency would not be preserved. Therefore, the Series 'T' is allocated and reserved for this type of Trigger NOTAM.

3.7.3 A Trigger NOTAM in Series 'T' **shall** be created on the initiative of the NOTAM Processing Unit whenever an AIRAC AIP Amendment or AIP Supplement containing operationally significant information is received for which it is established that no associated Trigger NOTAM is normally issued by the responsible NOF (paragraph 2.7 refers).

3.7.4 Refer to paragraph 3.13.2 for details of the procedures to be applied.

3.8 Translation of NOTAM

3.8.1 Translation - A NOTAM originated in French or Spanish, **shall** be translated to English.

3.8.2 Translation **shall** be carried out in the same spirit as the translation of a technical document. The objective is to provide a text in the English language, which corresponds as closely as possible to the original.

3.9 Syntax correction

3.9.1 Syntax correction - changing the published format structure of the NOTAM where these are obviously wrong.

This may be carried out automatically by a system or manually by an operator.

3.9.2 Correction of syntax **shall** be based on the format described in ICAO Doc 10066 PANS-
AIM [Ref. 2] and in Chapter 2 of these guidelines.

Example 1: Incoming original (incorrect) NOTAM

A00123/14 NOTAMR A00122/14
Q) EDGG/QMRLC/IV/NBO/A/000/999/4841N00913E005
EDDS **A)** 1401121000 C) 1401131800
E) RWY 17/35 CLSD

Corrected NOTAM

A0123/14 NOTAMR A0122/14
Q) EDGG/QMRLC/IV/NBO/A/000/999/4841N00913E005
A) EDDS **B)** 1401121000 C) 1401131800
E) RWY 17/35 CLSD

Example 2: Incoming original (incorrect) NOTAM

A0101/14 NOTAMR A0100/14
Q) OJAC/QXXXX/IV/M/E/000/999/3116N03706E999
A) OJAC B) 1401010001 C) 1401310001EST
E) **THE FOLLOWING NOTAM ARE STILL IN FORCE:**
2012 :- 0020.
2013 :- 0023.
2014 :- 0052 0066 0067 0068 0069 0070
LAST AIP AMDT :- 32/14.

Corrected NOTAM

A0101/14 NOTAMR A0100/14Q)
OJAC/QKKKK/K/K/K/000/999/3116N03706E999
A) OJAC B) 1401010001 C) 1401310001EST
E) **CHECKLIST**
YEAR=2012 0020
YEAR=2013 0023
YEAR=2014 0052 0066 0067 0068 0069 0070
LATEST PUBLICATIONS
AIP AMDT 32/14

3.10 Data correction

3.10.1 Data correction - changing data elements where these are obviously wrong.

This may be carried out automatically by a system or manually by an operator (and does not include correction by the Publishing NOF).

3.10.2 Correction of data **shall** be carried out only when the error is such that there can be no possible ambiguity. Where appropriate, corrections **shall** be made using validated static data. Where there is ambiguity or any doubt whatsoever the Publishing NOF **shall** be consulted and the paragraph 3.12 procedures for 'NOTAM Subject to Query' **shall** be applied.

Example: Incoming original NOTAM

A0100/14 NOTAMN
Q) EDGG/QMRXX/I/BO/A/000/999/4841N00913E999
A) **RDDS** B) 1401011000 C) 1401011800
E) RWY **007** AVAILABLE FOR LANDINGS ONLY

Corrected NOTAM

A0100/14 NOTAMN
Q) EDGG/~~QMRLT~~/IV/NBO/A/000/999/4841N00913E005
A) ~~EDDS~~ B) 1401011000 C) 1401011800
E) RWY 07 AVAILABLE FOR LANDINGS ONLY

3.11 Editing

3.11.1 Editing - changing the Item E) wording and/or layout to make it clearer or to more explicitly express ideas that are implicit in that text.

E.g. correcting spelling or abbreviation errors and editing layout or changing line length in order to make it more readable.

3.11.2 Editing **may** be carried out in order to clarify text, or to draw specific attention to important elements, which are implied by the original text but not stated explicitly. Under no circumstances **shall** editing change the sense of the original NOTAM.

Example: Incoming original NOTAM (Item E) only)

E) MIL PJE WILL TAK PLAC AT BLOHFELD 471940N
0111300E RDS 10NM. INF ABOUT THE DROPI-
NG ZONE MAY
BE OBTAI-
NED BY LOWI TWR 120.100MHZ OR BY WIEN
INFORMATION ON 124.400MHZ.

Corrected NOTAM (Item E only)

E) MIL PJE WILL TAKE PLACE AT BLOHFELD 471940N 0111300E
RADIUS 10NM. INFORMATION ABOUT THE DROPPING ZONE MAY BE
OBTAINED BY LOWI TWR 120.100MHZ OR BY WIEN INFORMATION ON
124.400MHZ.

Note: The line lengths in this example (maximum number of characters per line) do not reflect real NOTAM processing because of the format used to present the example; nevertheless, the erroneous carriage returns/line feeds in the example of the incoming NOTAM are made intentionally to show editing needs.

3.11.3 When the sense of the original NOTAM is not clear, the paragraph 3.12 procedures for 'NOTAM Subject to Query' **shall** be applied. For examples of unclear NOTAM refer to 2.3.22.27.

3.12 Procedures for dealing with NOTAM Subject to Query

3.12.1 If a received NOTAM contains ambiguities that cannot be clarified by the NOTAM Processing Unit, a query **shall** be addressed to the Publishing NOF. However, such NOTAM shall be stored and made available as 'NOTAM Subject to Query' by the NOTAM Processing Unit.

3.12.2 The NOTAM Processing Unit **shall** add the reason for the query after the statement 'NOTAM Subject to Query' in Item E). In this case the original Item E) **should** not be altered until a clarification on the intended content and meaning has been reached with the Publishing NOF.

3.12.3 If the Publishing NOF follows ICAO procedures the corrected version will consist of a NOTAMR (if the queried NOTAM is already in force) or a NOTAMC followed by a NOTAMN (if the queried NOTAM is not in force). In either case the new NOTAM **shall** be processed normally by the NOTAM Processing Unit.

3.12.4 If the reply is in the form of a 'Correct Version' NOTAM retaining the Series and Number of the queried NOTAM, the NOTAM Processing Unit **shall** store it, overwriting the original NOTAM and make it available as an ordinary NOTAM. The words 'Correct Version' shall be removed.

3.12.5 If the reply is in the form of a free text message, the NOTAM Processing Unit **shall** edit the last processed version of the queried NOTAM in accordance with the information provided, and the statement 'NOTAM Subject to Query' **shall** be removed.

3.13 Procedures for the creation of NOTAM Series 'T'

3.13.1 General procedures

3.13.1.1 NOTAM Series 'T' **shall** be created by the NOTAM Processing Unit in accordance with OPADD rules.

3.13.1.2 The NOTAM Processing Unit is responsible for the follow-up of the NOTAM Series 'T' that it issues, and, if appropriate, **may** replace it with a NOTAMR and shall in due course cancel it with a NOTAMC unless the information time expires beforehand.

3.13.1.3 The NOTAM Processing Unit **shall** make NOTAM Series 'T' available to their Clients only.

3.13.1.4 No monthly checklist of Series 'T' NOTAM is issued by the NOTAM Processing Unit. Automatically produced 'ad hoc' Checklists, **shall** be made available upon request at any time.

3.13.1.5 In addition to normal NOTAM creation rules (Chapter 2 refers), the basic procedures listed in the following paragraphs 3.13.2 and 3.13.3 **shall** be observed.

3.13.2 Trigger NOTAM in Series 'T'

3.13.2.1 Trigger NOTAM in Series 'T' are created by the NOTAM Processing Unit to trigger specific printed AIS publications, for which no Trigger NOTAM is normally issued by the Publishing NOF.

3.13.2.2 The State to which the Trigger NOTAM Series 'T' relates **shall** be identified by the FIR in Item Q) and by the content of Item A).

3.13.2.3 Item B) of a Trigger NOTAM in Series 'T' for AIRAC AIP Amendments **should** contain the effective date of the Amendment. If the information is received after the effective date of the Amendment, the date in Item B) **shall** be the issue date of the Trigger NOTAM. Item C) of a Trigger NOTAM in Series 'T' for AIRAC AIP Amendments and AIP Supplements shall contain the effective date +14 days. However, if the information has a duration that is shorter than 14 days, Item C) **shall** reflect the date and time when the published information will expire.

3.13.2.4 The Item Q) NOTAM Code **shall** be compiled in accordance with the guidance at paragraphs 2.7.2.7 and 2.7.2.8. The Qualifiers **shall** then be chosen according to the prevailing association.

3.13.3 NOTAM in Series ‘T’

3.13.3.1 NOTAM in Series ‘T’ are created by the NOTAM Processing Unit to deal with exceptional formatting errors, if the format of a received NOTAM does not allow standard processing.

3.13.3.2 The original Publishing NOF **shall** be identified by the FIR in Item Q) and by the content of Item A).

3.13.3.3 A reference to the original NOTAM **shall** be included at the end of Item E).

3.13.3.4 A NOTAM series ‘T’ **shall** be system linked to the original NOTAM to keep track of the source and to assure its replacement or cancellation.

3.13.3.5 If multiple aerodrome location indicators are listed in Item A), the original NOTAM **shall** be processed keeping only the first AD. In addition, NOTAM Series ‘T’ **shall** be created for the remaining aerodromes with data identical to the original NOTAM.

3.13.3.6 If combinations of Aerodrome and FIR are listed in Item A), the original NOTAM **shall** be processed, according to the relevance of the NOTAM subject. In addition, NOTAM Series ‘T’ **shall** be created for the other entries, e.g. original NOTAM shall be processed with the FIR(s) in Item A), and, if relevant, Series ‘T’ NOTAM shall be created for each.

3.13.3.7 When a NOTAM Series ‘T’ is published by a NOTAM Processing Unit, the related Publishing NOF **shall** be informed that such a NOTAM has been created and why.

3.14 Procedures for correction of NOTAM

3.14.1 If an error is detected by the NOTAM Processing Unit, appropriate action **shall** be taken to correct the received NOTAM and a query **shall** additionally be sent to the Publishing NOF.

3.14.2 If the NOTAM Processing Unit detects re-occurring errors, it **shall** inform the Publishing NOF, indicating the correct procedure.

3.14.3 If a NOTAM Processing Unit is alerted that an error has occurred in a NOTAM that it has processed, the NOTAM Processing Unit **shall** determine the origin of the error, and:

- if the error was made by the NOTAM Processing Unit: correct and re-send the NOTAM; or
- if the error was already contained in the original NOTAM: proceed with a request to the Publishing NOF (paragraph 3.12 rules for ‘NOTAM Subject to Query’ shall be applied).

3.14.4 All NPU Clients **shall** be aware that only the last version received from the NOTAM Processing Unit is the valid version.

3.15 NOTAM Verification

3.15.1 In addition to the rules described in Chapter 2, the following general verification **shall** be performed by the NOTAM Processing Unit:

- a) Check if the NOTAM has already been received and differentiate between a 'Dupe' and a 'Correct Version' NOTAM.
- b) Check if there is a logical sequence in the origin time of the AFS messages whenever an 'identical' NOTAM is received.
- c) NOTAM Series/Number/Year/Sub-number, relative to the Publishing NOF, are valid and in logic ascending sequence. If not, an appropriate request for the missing NOTAM is sent by the NOTAM Processing Unit to the Publishing NOF (see Chapter 4).
- d) NOTAM number referred to in a NOTAMR or NOTAMC is a valid NOTAM from the same Publishing NOF.

3.16 NOTAM Identification

3.16.1 For storage in automated systems, the NOTAM identification consists of establishing the relation between the NOTAM series, number and the 'Numbering Reference' it refers to, which is the Publishing NOF.

Establishing correct relations and storage allows a unique identification of a NOTAM and easy tracking of missing numbers.

3.16.2 Publishing NOF identification

3.16.2.1 The identification of the Publishing NOF is not straightforwardly contained in the NOTAM format but is usually identified by the Publishing NOF's AFS message origin (a 4-letter location indicator).

3.16.2.2 Whenever third parties are transmitting or making available a NOTAM via AFS on behalf of the Publishing NOF, that station enters its own AFS address into the message origin line according to ICAO Annex 10 SARPs. As a consequence, the information about the 'Numbering reference' is not present in the origin. For such NOTAM, the information about the 'Numbering reference' **shall** be deduced from the FIR Qualifier in the Q) line and Item A) of the NOTAM instead. Additionally, the NOTAM number sequence and/or NOTAM series in use by a Publishing NOF may provide further help when allocating the NOTAM to the Publishing NOF.

Similar identification and allocation procedures may have to be applied for NOTAM issued by a publishing NOF without a designated 4-letter location indicator or for States also using origins other than that of the Publishing NOF.

3.16.3 NOTAM Series allocation

3.16.3.1 The NOTAM Processing Unit retains the Series and NOTAM number of the original NOTAM when making it available.

3.16.3.2 If the NOTAM Series letter has been omitted, the NOTAM Processing Unit **shall** try to derive it from the NOTAM sequence number and include this series.

3.16.4 NOTAM Number

3.16.4.1 If a NOTAM is received that is out of numerical sequence, a query for the missing NOTAM number(s) **shall** be initiated, according to Chapter 4 procedures (Database Completeness and Coherence Messages).

3.16.4.2 If the NOTAM number consists of less than 4 digits, the NOTAM Processing Unit **shall** add the leading zeros. If the 'Year' indicator is missing, it **shall** also be added.

3.16.4.3 If a NOTAM with the same number is received twice but with different contents, paragraph 3.12 rules for 'NOTAM Subject to Query' **shall** be applied.

3.16.5 NOTAM Multi-part indicator

3.16.5.1 If a Multi-part NOTAM is received without the format specified in paragraph 6.2.2, it **shall** be converted into this format by the NOTAM Processing Unit.

3.17 NOTAM Type

3.17.1 If the Publishing NOF did not include the NOTAM type in the original NOTAM, the NOTAM Processing Unit **shall** insert the appropriate NOTAM type letter.

3.17.2 If the Publishing NOF originally allocated the wrong type, the NOTAM Processing Unit **shall** insert the appropriate type.

3.17.3 In both cases, the Publishing NOF **shall** be informed about the change.

3.18 NOTAM Qualification (Item Q)

3.18.1 General rule

3.18.1.1 If Item Q) is missing, it **shall** be inserted by the NOTAM Processing Unit.

3.18.1.2 If Item Q) is obviously wrong, it **shall** be corrected by the NOTAM Processing Unit in accordance with the following paragraphs (3.18.2 to 3.18.8).

3.18.2 Qualifier 'FIR'

3.18.2.1 Item Q) may contain location indicators that indicate applicability to more than one FIR. The ICAO location indicators of all FIR concerned **shall** appear in Item A).

3.18.2.2 The NOTAM Processing Unit **shall** check that this field correctly applies to the location indicator(s) of the FIR(s) entered in Item A). If not, the correct location indicator **shall** be inserted.

3.18.2.3 Fictitious airspaces UUUU, ZBBB, KFDC, KICZ and KNMH are used by the originating NOF to cover/ imply the whole country.

3.18.3 Qualifier 'NOTAM CODE'

3.18.3.1 The NOTAM Selection Criteria are the basis for NOTAM Code allocation and qualification as described in paragraph 2.3.6.

3.18.3.2 If the NOTAM Code is not entered in Item Q), the NOTAM Processing Unit **shall** include the NOTAM Code, corresponding to the Item E) content, together with the appropriate Qualifiers.

3.18.3.3 If the NOTAM Code does not correspond to the text of Item E), and the text of Item E) is clear and unambiguous, the Code **shall** be brought into line with the text, provided that this does not imply a downgrading of the 'Purpose' Qualifier.

Example: Incoming original NOTAM

Q) EDXX/**QAFXX/I/B/W**/000/120/5023N01021E030
A) EDGG EDMM B) 1403011000 C) 1404011800
E) ATS ROUTE XYZ11 CLSD BETWEEN XXX and YYY BETWEEN GND
AND FL120

Corrected NOTAM

Q) EDXX/**QARLC/IV/NBO/E**/000/120/5023N01021E030
A) EDGG EDMM B) 1403011000 C) 1404011800
E) ATS ROUTE XYZ11 CLSD BETWEEN XXX and YYY BETWEEN GND
AND FL120

3.18.3.4 Overwriting of the original Qualifiers ('Traffic', 'Purpose' and 'Scope') (in accordance with paragraphs 3.18.4 to 3.18.6) **should** be avoided, unless to correct obvious mistakes.

3.18.3.5 If the original NOTAM has been coded 'QXXXX' and a more appropriate NOTAM Code exists, the NOTAM Processing Unit **shall** replace the Code and its associated Qualifiers (subject to the limitations specified in paragraphs 3.18.4 to 3.18.8).

3.18.3.6 The NOTAM Processing Unit **may** also use 'QXXXX' to upgrade 'Scope' and 'Purpose' Qualifiers or for NOTAM where 'AG', 'CO' or 'RC' have been used as 2nd and 3rd letters

3.18.3.7 For NOTAM received with a NOTAM Code that is not contained in the NSC, the NOTAM Processing Unit **shall** allocate a Code in accordance with the subject and the condition of that subject specified in the Item E) text (refer to paragraph 2.3.6 for further guidance).

3.18.3.8 If a Trigger NOTAM is received without the 4th and 5th letter 'Condition' indicator 'TT', the NOTAM Processing Unit **shall** replace it with 'TT'. Similarly, if the 2nd and 3rd letter 'Subject' indicator is received as 'XX', the NOTAM Processing Unit **shall** change it in accordance with paragraph 2.7.2.7 (Note also the guidance at paragraphs 2.7.2.8 and 2.7.2.14).

Example: Incoming original NOTAM

Q) EDMM/**QXXTT**/I/BO/E/000/240/4841N00913E250
A) EDMM B) 1402200100 C) 1403050100
E) TRIGGER NOTAM – PERM AIRAC AMDT 02/14 WEF 20 FEB
2014: NEW ATS ROUTE XYZ123 ESTABLISHED.

Corrected NOTAM

Q) EDMM/**QARTT**/I/BO/E/000/240/4841N00913E250
A) EDMM B) 1402200100 C) 1403050100

E) TRIGGER NOTAM – PERM AIRAC AMDT 02/14 WEF 20 FEB
2014: NEW ATS ROUTE XYZ123 ESTABLISHED.

3.18.4 Qualifier ‘TRAFFIC’

3.18.4.1 If the ‘Traffic’ Qualifier is missing, it **shall** be filled in according to the NOTAM Selection Criteria, or, if not specified therein, according to the NOTAM contents.

3.18.4.2 If the ‘Traffic’ Qualifier is not according to the NOTAM Selection Criteria, the NOTAM Processing Unit **may** adapt it to the NSC, taking into account the entry in Item E) and guidance at paragraphs 2.3.7.3 and 2.7.2.14.

3.18.5 Qualifier ‘PURPOSE’

3.18.5.1 If the ‘Purpose’ Qualifier is missing, it **shall** be filled in according to the NOTAM Selection Criteria, or, if not specified therein, according to the NOTAM contents.

3.18.5.2 The ‘Purpose’ Qualifier of a NOTAM **shall** not be modified by a NOTAM Processing Unit, unless it implies an upgrading. For example, Purpose ‘M’ may be changed to ‘B’, ‘BO’, or ‘NBO’; Purpose ‘B’ may be changed to ‘BO’, or ‘NBO’ and Purpose ‘BO’ may be changed to ‘NBO’.

3.18.6 Qualifier ‘SCOPE’

3.18.6.1 If the ‘Scope’ Qualifier is missing or is not filled in according to the NOTAM Selection Criteria, it **shall** be filled in according to the NOTAM contents, following the procedures described in paragraph 2.3.9.

3.18.7 Qualifiers ‘LOWER/UPPER’

3.18.7.1 The logical order of the vertical limits indicated in Qualifiers ‘Lower’ and ‘Upper’ **shall** be verified and corrected; these should also correspond to the values specified in Items F) and G) for Navigation Warnings and Airspace Restrictions.

Example: If ‘F) GND’ and ‘G) 7500FT AMSL’, then ‘Q) for Lower/Upper = ‘000/075’

3.18.7.2 If vertical limits have been entered in Items F) and G) and:

- the limits in Item Q) extend beyond those given in Items F) and G), they **shall** be left unchanged unless the 000/999 default has been used;
- the limits in Item Q) do not equate but lie between the limits given in Items F) and G), they **shall** be modified to correspond to Items F) and G);
- if the limits in Item Q) are 000/999, they **shall** be modified to correspond to Items F) and G) if the actual limits stated there are in FL or in FT or M AMSL (i.e. not for those stated in FT or M AGL – see below);
- if the limits in Items F) and G) are given as FT or M AGL (or FT or M SFC), Item Q) **shall** be left unchanged unless the LOWER/UPPER limits are obviously wrong or are missing. If the LOWER/UPPER values are obviously wrong or missing, the lower value **shall** be Item F), rounded down to the nearest FL. The upper value **shall** be the sum of Item G) and the highest terrain elevation of the State (or the FIR, or the region concerned), rounded up to the nearest FL.

Example: Incoming original NOTAM from Kuwait, which has 922FT as its highest terrain elevation:

A0264/14 NOTAMN
Q) OKAC/QRACA/IV/NBO/W/000/200/2925N04708E006
A) OKAC B) 1403011000 C) 1404011800
E) AREA XYZ11 ACTIVATED.
F) 5500FT G) 8000FT AGL

Corrected NOTAM:

A0264/14 NOTAMN
Q) OKAC/QRACA/IV/NBO/W/**055/090**/2925N04708E006
A) OKAC B) 1403011000 C) 1404011800
E) AREA XYZ11 ACTIVATED
F) 5500FT **AMSL** G) 8000FT AGL

3.18.7.3 If vertical limits also appear in Item E), these **shall** be consolidated with Items Q), F) and G).

Example: Incoming original NOTAM:

A0564/14 NOTAMN
Q) EDXX/QARLC/IV/NBO/E/000/**999**/5023N01021E030
A) EDGG EDMM B) 1403011000 C) 1404011800
E) ATS ROUTE XYZ11 CLSD BETWEEN XXX and YYY BETWEEN **FL055**
AND **FL120**

Corrected NOTAM

A0564/14 NOTAMN
Q) EDXX/QARLC/IV/NBO/E/**055/120**/5023N01021E030
A) EDGG EDMM B) 1403011000 C) 1404011800
E) ATS ROUTE XYZ11 CLSD BETWEEN XXX and YYY BETWEEN FL055
AND FL120

3.18.8 Qualifier ‘GEOGRAPHICAL REFERENCE’

3.18.8.1 The Geographical Reference **shall** be present in each NOTAM made available by a NOTAM Processing Unit. If this value is not contained in a received NOTAM, the NOTAM Processing Unit has to add it, following the procedures described in paragraph 2.3.11 (General Rules), 2.3.12 (Co-ordinates) and 2.3.13 (Radius).

3.18.8.2 If coordinates and radius are given, the NOTAM Processing Unit **shall** change the entry only if it contains an obvious error and the area covered by the given values is greater or less than necessary (e.g. when the whole FIR default 999 is used for a small danger area located within it or when an insufficient radius is used for a Navigation Aid coverage).

3.18.8.3 If a NOTAM is received without geographical reference, and no positional information appears in Item E), the entry in Item A) **should** permit the coordinates to be derived from the Unit’s available static data.

3.18.8.4 If a NOTAM is received without a radius, it **shall** be derived from the Static Database whenever possible. If the radius cannot be derived, the NOTAM Processing Unit **shall** include a default radius, as specified in the table at paragraph 2.3.13.6 for Europe and dense areas or ‘999’ for other areas.

3.18.8.5 If Item E) contains a reference to a published area or facility or the definition of a temporary area or facility, this **shall** be used to correct or determine an appropriate entry in Item Q).

3.19 NOTAM Items

3.19.1 Item A) – Location ‘FIR/AD’ – General

3.19.1.1 The given aerodrome or FIR(s) **shall** be valid for the country and for the Publishing NOF. If not, paragraph 3.12 ‘*Procedures for dealing with NOTAM Subject to Query*’ shall be applied.

3.19.1.2 If the location indicator is not filled or contains a typing error, the NOTAM Processing Unit **shall** try to deduce it from Item Q) and from Item E) content. Paragraph 3.12 ‘*Procedures for dealing with NOTAM Subject to Query*’ shall be applied.

3.19.1.3 If the location indicator is unknown to the NOTAM Processing Unit (i.e. the aerodrome location indicator is not listed in ICAO Doc 7910 [Ref. 8] or the national AIP, SUP or NOTAM), the NOTAM Processing Unit **shall** replace the location indicator by the nationality indicator followed by ‘XX’ or ‘XXX’ (e.g. EDXX or CXXX). Paragraph 3.12 ‘*Procedures for dealing with NOTAM Subject to Query*’ **shall** be applied, mentioning ‘ICAO LOCATION INDICATOR UNKNOWN’.

3.19.1.4 If a new location indicator or a change of a location indicator is announced by a NOTAM, the Processing Unit **shall** proceed as follows:

1. Store NOTAM with scope E to assure that users are informed about the change. Item A) to contain the location indicator of the FIR and Item E information about the new or changed location indicator as well as other information from NOTAM. Additionally, insert an instruction in Item E to retrieve NOTAM by selecting the new and old location indicator until all valid NOTAM have been replaced or cancelled by the Publishing NOF.
2. Add the new or changed location indicator to the database.
3. Delete old location indicator from database as soon as there are no more valid NOTAM for this Item A and delete retrieval instruction from the NOTAM announcing the change of location indicator.

3.19.1.5 If the Publishing NOF has no discrete FIR (e.g. Swaziland FD, Lesotho FX, Macau VM), Item Q) **shall** contain the appropriate overlying FIR Indicator. If an aerodrome is used in Item A) and the NOTAM subject/contents is Enroute or Navigation warnings, the NOTAM Processing Unit **shall** also change Item Q) ‘Scope’ to read ‘AE’ or ‘AW’.

3.19.1.6 If a CTA or TMA indicator is used as pseudo FIR in Item A), the NOTAM Processing Unit **shall** replace it with an indicator that reflects the Item E) text (for example by using the main aerodrome within a TMA or the area affected).

Example: Incoming original NOTAM:

```
A7333/14 NOTAMN
Q) RJDG/QRACH/IV/NBO/EW/220/230/
A) RJTD B) 1412272315 C) 1412280515
E) TOKYO FIR MULTIPLE U.S.MIL ACT WILL BE CONDUCTED WI
TOKYO FIR AS FLW, BOUNDED BY THE POINTS
3201N 12633E - 3230N 12650E - 3230N 12712E -
```

3025N 12752E - 3015N 12708E - 3201N 12633E. ATC WILL NOT
CLEAR NON-PARTICIPATING IFR FLT THRU THIS AREA.
F) FL220 G) FL230)

Corrected NOTAM

A7333/14NOTAMN
Q) RJTG/QRACH/IV/NBO/**W**/220/230/3533N15022E999
A) **RJTG** B) 1412272315 C) 1412280515
E) TOKYO FIR MULTIPLE U.S.MIL ACT WILL BE CONDUCTED WI
TOKYO FIR AS FLW, BOUNDED BY THE POINTS
3201N 12633E - 3230N 12650E - 3230N 12712E -
3025N 12752E - 3015N 12708E - 3201N 12633E. ATC WILL NOT
CLEAR NON-PARTICIPATING IFR FLT THRU THIS AREA.
F) FL220 G) FL230

3.19.1.7 If a NOTAM is received with 'Scope' 'A' and an FIR in Item A), and if Item E) confirms the NOTAM applicability to an FIR, the NPU **shall** modify the 'Scope' to 'W' or 'E', whichever is more appropriate. If the NSC do not provide for 'Scope' 'W' or 'E' to be applied, the 2nd and 3rd letters shall be modified to read 'XX'. However, if Item E) indicates applicability to an Aerodrome, changes to Item A) and to Item Q) ('Scope' 'AE' or 'AW') might be necessary.

3.19.1.8 If a NOTAM is received with 'Scope' 'E' or 'W' and an aerodrome in Item A), and if Item E) confirms the NOTAM applicability to an aerodrome, the NPU **shall** modify the 'Scope' to 'AW' or 'AE', whichever is more appropriate. However, if Item E) indicates applicability to an FIR, a change to Item A) might be necessary.

Example: Incoming original NOTAM:

A2222/14 NOTAMN
Q) MUFH/QRACA/IV/BO/**W**/000/180/1918N10013W025
A) **MUHA** B) 1401211500 C) 1401312359
D) DAILY 1500-2359
E) AIRSPACE RESERVATION BTN UNG AND UCA, ACTIVITY COORD
WITH TWR MUHA.
F) GND G) 18000FT AMSL

Corrected NOTAM

A2222/14 NOTAMN
Q) MUFH/QRACA/IV/BO/**AW**/000/180/1918N10013W025
A) **MUHA** B) 1401211500 C) 1401312359
D) DAILY 1500-2359
E) AIRSPACE RESERVATION BTN UNG AND UCA, ACTIVITY COORD
WITH TWR MUHA.
F) GND G) 18000FT AMSL

3.19.2 Item A) – Location 'FIR/AD' – Single-location NOTAM - shall always be the ICAO location indicator of one aerodrome or FIR.

3.19.2.1 In the case of one FIR, the entry **shall** be identical to the Qualifier 'FIR' in Item Q). If not, this entry **shall** be corrected by the NOTAM Processing Unit.

3.19.2.2 If an aerodrome indicator is given, it **shall** be an aerodrome situated in the FIR inserted in Item Q). If not, the FIR in Item Q) **shall** be changed according to the static database.

3.19.2.3 For aerodromes without an ICAO location indicator, Item A) **shall** contain the nationality indicator followed by 'XX' or 'XXX' (e.g. EDXX or CXXX), with the full name of the aerodrome as the first element in Item E).

3.19.2.4 If Item A) of a received NOTAM contains the full name of an aerodrome, the NOTAM Processing Unit **shall** replace it by a 4-letter code consisting of the nationality indicator followed by 'XX' or 'XXX' (e.g. LFXX or CXXX), and shall enter the full name in Item E).

Examples:

- A) EBBU (ICAO location indicator for a single FIR)
- A) LFPO (ICAO location indicator for an aerodrome)
- A) FBXX (no location indicator published by Botswana)

In the latter example, Item E) shall contain the full name of the aerodrome as its first element, e.g.:

E) BOTTLEPAN

3.19.3 Item A) – Location 'FIR/AD' – Multi-location NOTAM

3.19.3.1 If multiple aerodromes are inserted in Item A), the NOTAM Processing Unit **shall** retain only the first indicated aerodrome. For the remaining aerodromes, one or more NOTAM Series 'T' shall be issued with identical data as in the original NOTAM until all original indicated aerodromes are covered.

3.19.3.2 Such NOTAM Series 'T' **shall** follow the rules described in paragraph 3.13.

3.19.3.3 In cases where a NOTAM contains information covering several FIR belonging to more than one country, the Qualifier 'FIR' in Item Q) **shall** contain the Publishing NOF's nationality Code followed by 'XX' or 'XXX' (e.g. EDXX or CXXX). If this procedure is not applied by the Publishing NOF, the NOTAM Processing Unit shall correct the Item Q).

3.19.4 Item B) – Start of activity - shall be a 10 figure date-time group, giving the year, month, day, hour and minutes at which the NOTAM comes into force (paragraph 2.3.16 refers).

3.19.4.1 If 'WIE' (With Immediate Effect) appears in Item B), the NOTAM Processing Unit **shall** replace it with a 10 figure date/time group corresponding to the time of origin of the original NOTAM.

3.19.4.2 If Item B) contains 'SR' or 'SS' and the NOTAM Processing Unit can calculate an actual time, it **shall** replace the letters with that time. If, however, the actual time cannot be calculated, the NOTAM Processing Unit shall insert '0000' and add or complete an Item D) with the given 'SR' or 'SS'.

3.19.5 Item C) – End of validity shall be a 10 figure date time group, giving the year, month, day, hour and minutes at which the NOTAM ceases to be in force and becomes invalid (ref paragraph 2.3.17).

3.19.5.1 If 'UFN' (Until Further Notice) appears in Item C), the NOTAM Processing Unit **shall** process the NOTAM with an Item C) changed to an 'EST' time of 48 hours added to the DTG indicated in Item B).

3.19.5.2 If 'APRX DURATION' appears in Item C), the NOTAM Processing Unit **shall** change it into a Date/Time Group of 10 figures, corresponding to the approximate duration given, followed by 'EST'.

3.19.5.3 If the end of the day is expressed as '2400', the NOTAM Processing Unit **shall** change it to read '2359'

3.19.5.4 If Item C) contains 'SR' or 'SS' and the NOTAM Processing Unit can calculate an actual time, it **shall** replace the letters with that time. If, however, the actual time cannot be calculated, the NOTAM Processing Unit shall insert '2359' and add or complete an Item D) with the given 'SR' or 'SS'.

3.19.5.5 NOTAM containing 'EST' or an approximate duration **should**, at the end of the estimated validity, be replaced by NOTAMR or cancelled by NOTAMC. If the Publishing NOF does not react at the end of the estimated validity, the NOTAM Processing Unit **shall** request action from all the Publishing NOF concerned at least once a month.

3.19.6 Item D) – Day/Time schedule

3.19.6.1 If the Item D) of the original NOTAM is not structured according to the procedures as detailed in paragraph 2.3.18 till 2.3.21, and if no ambiguity about the originator's intention is present (for example Item E) may contain clear specification), it **shall** be edited by the NOTAM Processing Unit in accordance with these specifications.

3.19.6.2 If PIB service is provided based on active NOTAM, it is **recommended** to assure that Item D) does not contain operating hours or other dates/times where the NOTAM would appear at date/times for which there is no restriction.

3.19.6.3 Item D) **shall** not exceed 200 characters. If it does, then the Item D) time schedule shall be removed and inserted at the end of Item E). This procedure will, however, exclude automatic retrieval into Pre-flight Information Bulletins on the specified days and times.

3.19.7 Item E) – NOTAM text

3.19.7.1 The NOTAM Processing Unit **shall** check the correspondence between the Item E) text and the NOTAM Code.

3.19.7.2 If a NOTAM is received in a non-standard format, the NOTAM Processing Unit **shall** identify the subject and select the relevant NOTAM Code. If Item E) contains more than one subject, the subject of highest operational importance, based on the appropriate 'Purpose' Qualifier, shall be inserted in Item Q).

3.19.7.3 If the NOTAM Code is already present in Item E) of the original NOTAM, it **shall** be moved to Item Q) and decoded in Item E); using the text provided in the NOTAM Selection Criteria.

3.19.7.4 If the text in Item E) contains clear restrictions or limitations for an aerodrome or FIR not covered by Item A), the NOTAM Processing Unit **shall** add the missing FIR in Item A) and/or **shall** issue one or more NOTAM Series 'T' with identical data as in the original NOTAM until all originally indicated aerodromes and/or FIR are covered and with reference to the original NOTAM. Refer also to paragraph 3.13 for the creation of NOTAM Series 'T'.

3.19.7.5 All navigational data, navigation aids, frequencies, location indicators, heights and any logical combinations **shall** be verified.

3.19.7.6 If the text in the Item E) is ambiguous, the NOTAM Processing Unit **shall** make the original NOTAM available with the text 'NOTAM Subject to Query' added to the beginning of Item E) according to the procedures described in paragraph 3.12.

3.19.8 Items F) and G) – Lower and Upper limit

3.19.8.1 If Item F) and G) appear in the NOTAM, refer to guidance at paragraph 2.3.23.

3.19.8.2 NOTAM Processing Unit **shall** make sure that Lower and Upper limits in Items F) and G) are inserted for Navigation Warnings (NOTAM Codes 'QW...' or 'QR...'). If these Items are missing, the NOTAM Processing Unit **shall** add them after verification of the data in Item E), or in the Item Q) 'Lower/Upper' Qualifiers, or in the Static Database, and/or after consultation with the Publishing NOF. Use of the paragraph 3.12 'NOTAM Subject to Query' procedure may be required.

3.19.8.3 If NOTAM other than Navigation Warnings (NOTAM Codes 'QW...' or 'QR...'). are received with Items F) and G), the vertical limits **shall** be transferred to Item E) using the keywords 'FROM' and 'TO' followed by the appropriate values (e.g. 'FROM 1000FT AMSL TO FL100').

3.19.8.4 If the values specified in Items F) and G) do not cover the limits mentioned in Item E), the NOTAM Processing Unit **shall**:

- change the values in Item F) or in Item G) to correspond to the lowest (Item F) or the highest (Item G) value mentioned in Item E); and
- use 'NOTAM Subject to Query' procedure in paragraph 3.12 and contact the Publishing NOF to clarify the content of the NOTAM.

3.19.8.5 The values specified in Items F) and G) **shall** not be changed, whenever the limits in Item F) or G) are respectively lower or higher than the limits specified in Item E).

3.19.8.6 If no Item F) (Lower limit) has been specified in a NOTAM that contains an Item G), but from Items Q) or E) it is obvious that the Lower limit is sea or ground, then the term 'SFC' (surface) **shall** be inserted in Item F). 'SFC', will be used instead of 'GND' because precise topographic information concerning the area of influence of the NOTAM may not be available.

3.19.8.7 If 'AGL' or 'AMSL' is omitted and the datum cannot be determined, the NOTAM Processing Unit **shall** add 'AMSL' to the lower limit and 'AGL' to the upper limit.

3.20 Procedures related to NOTAM 'R' processing

3.20.1 NOTAMR are issued in the same series as the NOTAMN or NOTAMR referred to. If this is not the case, the NOTAM Processing Unit **shall** verify whether the Items of the 'to be replaced' NOTAM correspond to the NOTAMR. If the Items correspond, the NPU **shall** make the NOTAM available as a NOTAMN and **shall** delete the 'to be replaced' NOTAM. The paragraph 3.12 procedure for 'NOTAM Subject to Query' **shall** be applied.

3.20.2 NOTAMR **should** replace only one NOTAMN or NOTAMR. If more than one NOTAM are replaced by one NOTAMR, the NOTAM Processing Unit **shall** change the NOTAMR to replace only the first one in the list and shall delete all the others. If it is identified that this is a recurring error, the Publishing NOF **shall** be requested to adhere to the published ICAO provisions (ICAO Doc 10066 [Ref. 2] paragraph 5.2.5.1.8-9 and Doc 8126, [Ref. 4] Chapter 6 refer).

3.20.3 NOTAMR **should** relate to the same subject (2nd and 3rd letters of the NOTAM Code) as the NOTAMN or NOTAMR referred to. If this is not the case, the NOTAM Processing Unit **shall** compare the two NOTAM subjects, and make the potential necessary changes, when these are obvious from the message contents.

3.20.4 NOTAMR **shall** have the same Item A) content as the NOTAMN or NOTAMR referred to. If this is not the case, the NOTAM Processing Unit **shall** compare the Item A) of both NOTAM with the data in Item E) and make any necessary changes. If Item A) of the NOTAMR **should** be changed to the same value as the NOTAM it replaces, the change will be done in the processed NOTAMR. If, however, Item A) of the NOTAMR cannot be changed (e.g. if the activity has moved to a separate FIR), this NOTAMR **shall** be processed as a NOTAMN and the 'to be replaced' NOTAM shall be deleted. If Item Q) 'Scope' contains 'A', the paragraph 3.12 procedure for 'NOTAM Subject to Query' shall be applied.

3.20.5 According to paragraph 2.4.1.5, Item B) of a NOTAMR is equal to the date/time the NOTAMR is created. The NOTAM replaced by a NOTAMR ceases to exist the moment its replacing NOTAM is received.

Although ICAO does not allow for the creation of NOTAMR coming into force at a future date, some States may continue to use this practice. There is no clear guidance on the handling of the NOTAM being replaced. If a NOTAMR with an Item B) in the future is received, automated processing of the NOTAM **shall** be discontinued for further analysis to ensure correct database storage. Ensure the intent of the issuing State is understood prior to processing the NOTAM.

3.20.5.1 In a first step, NOTAM Items B), through G) (as applicable) of the newly received NOTAMR **shall** be compared with the NOTAM being replaced to analyse the intention of the originator with respect to the validity of the replaced NOTAM. Possible scenarios:

a) Case 1:

The replaced NOTAM ceases to exist at the very moment the NOTAMR is created. The replaced NOTAM does not appear in a PIB or checklist anymore.

This case usually applies when Item B) of the replaced NOTAM and Item B) of the NOTAMR are identical or if no other changes can be identified apart from the changes in Item B) (and D). The NOTAM can be considered as referring to a situation where the activity is suspended.

b) Case 2:

The replaced NOTAM remains valid until item B of the NOTAMR is reached. In PIB, the replaced NOTAM will appear until item B of the replacing NOTAM is reached. Item C) of the replaced NOTAM shows the new end date/time. Both NOTAM appear in a checklist created before Item B) of the NOTAMR.

Example:

```
012056 OSDIYNYX
(A0111/14 NOTAMN
Q) OSTT/QXXXX/IV/M/E/000/999/.....
A) OSTT B) 1411010001 C) 1403312359EST
E) WINTER LOCAL TIME UTC PLUS 2HR WILL BE USED.)
```

```
NOTAM created 29 MAR 2014:
290908 OSDIYNYX
(A0038/14 NOTAMR A0111/14
```

Q) OSTT/QXXXX/IV/M/E/000/999/.....
 A) OSTT B) 1404032200 C) 1410312100EST
 E) SUMMER LOCAL TIME UTC PLUS 3HR WILL BE USED.)

In this specific example case 1 can be excluded as the content of the NOTAM describes a phenomena that is globally known, the NOTAMR can be considered as referring to a situation where the condition in the replaced NOTAM remains valid for a certain period before being replaced by a new situation and that the new situation ends earlier or later than originally planned. Case 2 has to apply or no time is applicable between MAR 29 0908 and APR 03 2200 or the time published in AIP which is not likely to be the case.

Note: for the example provided, this means that as soon as A0038/14 is stored in the database, Item C) of A0111/13 is replaced by Item B) of the NOTAMR and shows the new expiry date C) 1404032200.

c) Case 3:

The situation is unclear. The operator is unable to identify if the NOTAM being replaced is superseded immediately or if both NOTAM remain valid until Item B) of the NOTAMR is reached and the originator's system design is unknown.

Example:

NOTAM created 26 DEC 2012:

261637 LIIAYNYX
 (B3326/12 NOTAMN
 Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
 A) LIPO B)1301150500 C) 1303311100EST
 E) THR RWY 14 DISPLACED 300M. DECLARED DIST CHANGED:
)

NOTAM created 01 MAR 2013:

011035 LIIAYNYX
 (B1893/13 NOTAMR B3326/12
 Q) LIMM/QMDCH/IV/NBO/A/000/999/4525N01019E005
 A) LIPO B)1303070000 C) 1304101800
 E) THR RWY 14 DISPLACED 200M. DECLARED DIST CHANGED:
)

Note: The situation could refer to a situation where the condition in the replaced NOTAM remains valid for a certain period before being replaced by a new situation and that the new situation ends later than originally planned or it could refer to a situation where the planned works are suspended (or Item B) was incorrect) and restart from a later date with changed limitations (or 300 M was a typing error).

3.20.5.2 In a second step, appropriate action is taken by the operator to assure correct storage. Different procedures apply for cases 1 and 2. No specific further procedures are provided for these cases as all actions depend on what the system is designed to do without operator intervention and on the extent of manual intervention a system allows. Any operator action should be traceable.

For case 3, the 'NOTAM Subject to Query' procedure shall be applied to clarify the situation. Depending on the analysis, clarification must be reached with the originating NOF whether the NOTAMR was intended to be a continuation of the NOTAM to be replaced, a suspension, an error, a completely different time schedule etc.

3.20.6 In case a NOTAMR is received that replaces only an individual part of a Multi-part NOTAM, the NOTAM Processing Unit **shall** amend the original Multi-part NOTAM and make all parts of it available to its Client as NOTAMR. If ambiguity is detected the paragraph 3.12 procedure for 'NOTAM Subject to Query' shall be applied.

3.20.7 In case of a NOTAMR replacing an AIP Supplement, the NOTAM Processing Unit **shall** change the original NOTAMR into a NOTAMN; and, if appropriate, issue a NOTAMC in Series 'T' to cancel any previously issued Trigger NOTAM in Series 'T'.

3.21 Procedures Related to NOTAM 'C' processing

3.21.1 NOTAMC are issued in the same series as the NOTAMN or NOTAMR referred to. If this is not the case, the NOTAM Processing Unit **shall** verify whether the Items of the 'to be cancelled' NOTAM correspond to the NOTAMC. If the Items correspond, the NPU **shall** make the NOTAM available as a NOTAMN and shall delete the 'to be cancelled' NOTAM.

3.21.2 NOTAMC **should** cancel only one NOTAMN or NOTAMR. If more than one NOTAM are cancelled by one NOTAMC, the NOTAM Processing Unit **shall** change the NOTAMC to cancel only the first one in the list and **shall** delete all the others.

3.21.3 NOTAMC **should** come into force at the time they are issued, and immediately cancel the NOTAMN or NOTAMR referred to.

3.21.4 According to paragraph 2.4.1.5, Item B) of a NOTAMC is equal to the date/time the NOTAMC is created. The NOTAM replaced by a NOTAMC ceases to exist the moment its cancelling NOTAM is received.

3.21.4.1 Contrary to NOTAMR with an Item B) in the future, a NOTAMC with Item B) in the future is always a change to Item C) of the cancelled NOTAM and may be a prolongation or a shortening. Item B) of the NOTAMC is equal to or later than Item B) of the cancelled NOTAM.

Similar procedures as for case 2 for NOTAMR with Item B) in the future can be applied (the cancelled NOTAM remains valid until Item B) of the NOTAMC is reached).

However, 'NOTAM Subject to Query' procedure shall be applied to obtain confirmation from the Publishing NOF and to exclude that item B) of the NOTAMC had been a typing error.

3.21.4.2 If Item B) of the NOTAMC is later than the date/time of reception but earlier than Item B) of the cancelled NOTAM, procedures in force for case 1 have to be applied and the cancelled NOTAM is cancelled with immediate effect. The NOTAMC was obviously issued in error or should have been a NOTAMR instead. 'NOTAM Subject to Query' procedure applies to clarify the status of the cancelled NOTAM with the Publishing NOF.

If clarification results in a reply that the NOTAMC should have been a NOTAMR instead, a NOTAM series 'T' has to be issued if the publishing NOF does not correct the erroneous NOTAMC by publishing a NOTAMN. The same applies if a 'correct version' is published instead of NOTAMN. The series 'T' NOTAM contains all data from the erroneously cancelled NOTAM, Item B) the date and times from the NOTAMC.

3.21.5 For all NOTAMC, the text of the decoded NOTAM Code **shall** be inserted in Item E) together with details of the NOTAM subject. If no text is inserted by the Publishing NOF, the NOTAM Processing Unit **shall** insert a reference to the cancelled NOTAM subject followed, in a new line, by the text 'NOTAM CANCELLED'.

3.21.6 If a NOTAMC contains an Item A) but does not contain Items Q), B) or E), the NOTAM Processing Unit **shall** fill in the missing compulsory Items.

- Item Q) NOTAM Code 2nd and 3rd letters shall be derived from the NOTAM to be cancelled.
- Item Q) NOTAM Code 4th and 5th letters shall be 'XX' (unless an Item E) text had been provided to confirm use of 'AK', 'AL', 'AO', 'CC', 'CN' or 'HV'.).
- Item Q) other Qualifiers shall be identical to those in the cancelled NOTAM (ref. paragraph 2.4.3.8).
- Item B) shall be the date and time of filing the NOTAMC.
- Item E) shall contain a reference to the cancelled NOTAM subject followed, in a new line, by the text 'NOTAM CANCELLED'.

Example: Incoming original NOTAM

231639 KDZZNAXX
A1326/14 NOTAMC A1324/14
A) KJFK

Corrected NOTAM

A1326/14 NOTAMC A1324/14
Q) KZNY/QMRXX/IV/NBO/A/000/999/4038N07347W005
A) KJFK B) 1407**231639**
E) RWY 13L/31R
NOTAM CANCELLED

3.21.7 If a NOTAMC cancels an AIP Supplement, the NOTAM Processing Unit **shall**:

- Change the original NOTAMC into a NOTAMN.
- Insert an Item C) according to paragraph 2.7.5.3.1
- Issue a NOTAMR or a NOTAMC in Series 'T' in accordance with the rules described in paragraph 2.7.5 to cancel previously issued Trigger NOTAM in Series 'T', if any.

3.22 Checklist Processing

3.22.1 General principles

3.22.1.1 A received Checklist **shall** be processed and made available to all Clients by the NOTAM Processing Unit. Checklists may also be received as NOTAMN and/or without an 'EST' indication in Item C) (ref paragraph 2.5.1.6 and 3.22.2.9).

3.22.1.2 Checklists **shall** be edited and corrected according to 2.5.

3.22.1.3 In the event of any ambiguities, e.g.:

- a valid NOTAM is not included in the Checklist; or
- a NOTAM included in the Checklist is not in the database, etc.

The NOTAM Processing Unit **shall** request clarification from the Publishing NOF and analyse the differences (paragraph 3.12 procedures for 'NOTAM Subject to Query' refers).

Procedures described in paragraph 3.23 and 3.24 are applied in order to resolve the ambiguities.

3.22.2 Checklist received as a NOTAM

3.22.2.1 If a Checklist is received as a NOTAM, but it is not in the agreed NOTAM Checklist format (paragraph 2.5 refers), the NOTAM Processing Unit **shall** convert it as described hereafter:

3.22.2.2 The NOTAM Series, Number and Type **shall** be retained.

3.22.2.3 Item Q) 'FIR' Qualifier **shall** be:

- the FIR of the Publishing NOF, if responsible for only one FIR; or
- the 2-letter country indicator of the Publishing NOF followed by 'XX', if the Publishing NOF is responsible for multiple FIR (in the same or in different countries).

3.22.2.4 The NOTAM Code **shall** always be 'QKKKK'.

3.22.2.5 Item Q) 'Traffic', 'Purpose' and 'Scope' Qualifiers **shall** be given the artificial value 'K', even if another Qualifier was included by the Publishing NOF.

3.22.2.6 Item Q) 'Lower/Upper' Qualifiers **shall** be the default values '000/999'.

3.22.2.7 Item Q) geographical reference and radius Qualifiers are required and, if missing, they **shall** be entered by the NOTAM Processing Unit.

3.22.2.8 Item A) **should** contain the list of all valid FIR for the Publishing NOF and, if any are missing, they **shall** be added by the NOTAM Processing Unit.

However, for States with a NOF but no own FIR (e.g. Swaziland, Lesotho, Macao), the location indicator of the main aerodrome will be entered in Item A). Otherwise the Checklist cannot be associated with the Publishing NOF (e.g. Lesotho would have a Series A Checklist with Q-FIR + Item A) FAJS which is the same as for South African A Series).

3.22.2.9 Item C) **should** indicate the estimated time of validity, usually exactly one month after the date and time of the publication of the current Checklist, followed by 'EST'. Whenever another date/time group is entered by the Publishing NOF, the NOTAM Processing Unit shall not change it.

3.22.3 Checklist not received as a NOTAM

3.22.3.1 If a NOTAM Checklist is not received as a NOTAM (i.e. when no NOTAM number has been allocated to the Checklist), the NOTAM Processing Unit **shall** create a series T NOTAM applying the regulations in 3.22.2.

3.23 Missing NOTAM

3.23.1 If NOTAM are missing, the NOTAM Processing Unit **shall** request them from the Publishing NOF using a Request message. Chapter 4 details the procedure but the syntax requirements of the Publishing NOF **shall** be observed.

3.23.2 Time parameters for initiating the first request message and successive repetitions of the message **shall** be defined by the NOTAM Processing Unit and may vary depending on the Publishing NOF.

3.24 NOTAM Deletion

3.24.1 The processing of NOTAM not adhering to the ICAO Standard may force a NOTAM Processing Unit to delete NOTAM by means other than a NOTAMR or a NOTAMC if:

- a) The NOTAM is cancelled by a printed publication (AIP AMDT, AIP SUP, etc.).
- b) The NOTAM is cancelled by a checklist.
- c) The NOTAM is cancelled by an AFS free text message from the Publishing NOF.
- d) The NOTAM is cancelled or replaced by a NOTAMC or a NOTAMR with more than one NOTAM to be cancelled or replaced.
- e) The NOTAM is deleted because an updated/corrected version of the NOTAM is to follow.

3.24.2 NPU Clients **shall** receive notification of deletion of a NOTAM (see chapter 6 for notification mechanism).

4 DATABASE Completeness and Coherence Messages

4.1 General principles

4.1.1 The maintenance of dynamic data is essential for the efficient operation of data users such as: a NOTAM Processing Unit, a Publishing NOF, for an aeronautical database administrator and Briefing Office (the aerodrome AIS unit) providing pre-flight bulletin. The application of 'query messages' is required to ensure the NOTAM database completeness and coherence. Query messages based upon the use of AFS (but not restricted to AFS) are described in this Chapter. They were developed so as to permit automatic and manual processing of queries.

4.1.2 The basic requirements for messages destined for the maintenance of the dynamic data are:

- Request for one or more NOTAM.
- Request for the original version of a NOTAM.
- Request for an intermediate Checklist of valid NOTAM.

4.1.3 In order to facilitate automatic processing, the requests and the replies to the requests are identified by means of 3-letter identifiers.

Request for NOTAM:	'RQN'
Request for 'original version' NOTAM:	'RQO'
Request for ASHTAM:	'RQA'
Request for an intermediate Checklist:	'RQL'
Reply to these requests:	'RQR'

4.1.4 For the avoidance of network overload, the number of requested NOTAM in a single request message **shall** be limited in 'RQN' or in 'RQO'. It is recommended that the maximum is set to 100.

4.1.5 Request **shall** include the 4-letter indicator of the Publishing NOF or any other location indicator to which the numbering of the required NOTAM refers (e.g. an automated system with another AFS address than the Publishing NOF location indicator).

4.1.6 A reply message **shall** contain only one NOTAM (or several messages in the case of a multi-part NOTAM), or a status text regarding the requested NOTAM, normally followed by the requested NOTAM.

4.1.7 A request **shall** refer to only one Publishing NOF.

4.1.8 If a request contains a syntax error, the recipient of the request **should** inform the originator (manually or automatically) that an error has been detected in the request message.

4.2 Request for the repetition of NOTAM (RQN)

4.2.1 Codes and symbols used

4.2.1.1 Note that no brackets **shall** be used when transmitting a 'Request NOTAM' message. The following codes and symbols are used in requests for repetition:

'RQN'	the designator for 'Request NOTAM'.
'LFFA'	the 4-letter indicator of the Publishing NOF or other location indicator to which the numbering of the NOTAM refers.
'A0123/00'	the NOTAM Series Identifier and NOTAM Number.
' - '	(hyphen) is used to indicate 'TO' or 'FROM-TO'.
' '	(blank) is interpreted as 'AND'.
'RQR'	the designator for the reply.

4.2.2 Examples of the request for NOTAM

4.2.2.1 Request for a single NOTAM

Example 1: French NOF requests from Italian NOF the Italian NOTAM A0123/14.

```
Request:  ZCZC ...
          GG LIIAYNYX
          160830 LFFAYNYX
          RQN LIIA A0123/14

Reply:    ZCZC ...
          GG LFFAYNYX
          160835 LIIAYNYX
          RQR LIIA A0123/14
          (A0123/14 NOTAMN
          Q) .../.... /.... etc.)
```

Example 2: French NOF requests from German NOF the Polish NOTAM A1253/14.

```
Request:  ZCZC ...
          GG EDDZYNXX
          160900 LFFAYNYX
          RQN EPWW A1253/14

Reply:    ZCZC ...
          GG LFFAYNYX
          160905 EDDZYNXX
          RQR EPWW A1253/14
          (A1253/14 NOTAMN
          Q) .../.... /.... etc.)
```

4.2.2.2 Request of several NOTAM with continuous numbering

Example 3: French NOF requests from German NOF the Cypriot NOTAM between A0199/14 and A0210/14.

Request: ZCZC ...
GG EDDZYNXX
281030 LFFAYNXX
RQN LCNC A0199/14-A0210/14

Reply: ZCZC ...
GG LFFAYNXX
281035 EDDZYNXX
RQR LCNC A0199/14
(A0199/14 NOTAMN
Q) .../..../. etc.)

Note: The full Reply consists of 12 messages containing one NOTAM each.

4.2.2.3 Request for several NOTAM with discontinuous numbering

Example 4: French NOF requests from German NOF the Russian Federation NOTAM A0400/14, A0410/14 and NOTAM between A0420/14 and A0425/14.

Request: ZCZC ...
GG EDDZYNXX
281530 LFFAYNXX
RQN UUUU A0400/14 A0410/14 A0420/14-
A0425/14

Reply: ZCZC ...
GG LFFAYNXX
281540 EDDZYNXX
RQR UUUU A0400/14
(A0400/14 NOTAMN
Q) .../..../. etc.)

Note: The full Reply consists of 8 messages containing one NOTAM each.

4.3 Request for the original version of NOTAM (RQO)

4.3.1 General specification

4.3.1.1 A NOTAM Processing Unit will normally transmit only the processed version of NOTAM to its clients. Whenever a NPU client needs the original version of a NOTAM, it can be obtained by sending a 'Request for Original NOTAM' message (RQO) to the NOTAM Processing Unit.

4.3.1.2 RQO is to be used only in data exchange between the NPU Client and NOTAM Processing Unit.

4.3.1.3 A reply message **shall** contain the 'status line': 'ORIGINAL NOTAM', followed by a single NOTAM.

4.3.1.4 The reply message of an original NOTAM **shall** always include the original origin line (DTG + Publishing NOF address).

4.3.2 Codes and symbols used

4.3.2.1 The following codes and symbols are used in requests for the original version:

'RQO'	the designator for 'Request Original NOTAM'.
'LFFA'	the 4-letter indicator of the Publishing NOF or other location indicator to which the numbering of the NOTAM refers.
'A0123/14'	NOTAM Series Identifier and NOTAM Number.
' - '	(hyphen) is used to indicate 'TO' or 'FROM-TO'.
' '	(blank) is interpreted as 'AND'.
'RQR'	the designator for the reply.

4.3.3 Example of the request for original NOTAM

Example 5: Czech Republic NOF requests from EAD the Original NOTAM KJFK A0553/14.

Request:	ZCZC ... GG EUECYRYX 160900 LKPRYNYX RQO KJFK A0553/14
Reply:	ZCZC ... GG LKPRYNYX 160910 EUECYIYN RQR KJFK A0553/14 ORIGINAL NOTAM 052255 KDZZNAXX (A0553/14 NOTAMN A) KJFK B) WIE C) UFN E) ...etc.

4.4 Request for the repetition of ASHTAM (RQA)

4.4.1 Codes and symbols used

4.4.1.1 Note that no brackets will be used when transmitting a 'Request ASHTAM' message. The following codes and symbols are used in requests for repetition:

'RQA'	the designator for 'Request ASHTAM'.
'SAEF'	the 4-letter indicator of the FIR to which the numbering of the ASHTAM refers.
'0134'	ASHTAM Number.
' - '	(hyphen) is used to indicate 'TO' or 'FROM-TO'.
' '	(blank) is interpreted as 'AND'.
'RQR'	the designator for the reply.

4.4.1.2 RQA followed by the 4-letter indicator of an FIR will result in the repetition of all valid ASHTAM for the FIR requested.

4.4.1.3 RQA followed by the 4-letter indicator of an FIR and ASHTAM number will result in the repetition of the requested ASHTAM only.

4.4.2 Examples of the request for ASHTAM

4.4.2.1 Request of all valid ASHTAM for an FIR

Example 6: French NOF requests from Italian NOF all valid ASHTAM for SAVF.

```
Request:  ZCZC ...
          GG LIIAYNYX
          161600 LFFAYNYX
          RQA SAEF

Reply:    ZCZC ...
          GG LFFAYNYX
          161601 LIIAYNYX
          RQR SAEF
          VASA0123 SAEF 14161515
          ASHTAM 0123
          A) ... etc.

          ZCZC ...
          GG LFFAYNYX
          160835 LIIAYNYX
          RQR SAEF
          VASA0121 SAEF 14152225
          ASHTAM 0121
          A) ... etc.
```

Example 7: French NOF requests from Italian NOF all valid ASHTAM for WAAF.

```
Request:  ZCZC ...
          GG LIIAYNYX
          161600 LFFAYNYX
          RQA WAAF

or ..... /
Reply:    ZCZC ...
          GG LFFAYNYX
          161601 LIIAYNYX
          RQR WAAF
          NO VALID ASHTAM IN DATABASE
```

4.4.2.2 Request for a single ASHTAM

Example 8: French NOF requests from Italian NOF the SAEF ASHTAM 0123.

```
Request:  ZCZC ...
          GG LIIAYNYX
          161600 LFFAYNYX
          RQA SAEF 0123
```

Reply: ZCZC ...
GG LFFAYNYX
161601 LIIAYNYX
RQR SAVF 0123
VASA0123 SAEF 14161515
ASHTAM 0123
A) ... etc.

4.5 Content of the reply messages (RQR)

4.5.1 General specification

4.5.1.1 A Reply message to RQN and RQO contains only one NOTAM (or one part of a Multi-part NOTAM).

4.5.1.2 A single 'RQN' or 'RQO' request for multiple NOTAM **shall** result in multiple reply messages unless the requested NOTAM are not available for a reply (exception paragraph 4.5.1.7 refers).

4.5.1.3 In reply to a RQN, if the queried NOTAM has been processed by the NPU, the reply message **shall** contain the location indicator of the NPU as the originator instead of the code of the Publishing NOF.

4.5.1.4 In reply to a RQO, the status line with the status expression 'ORIGINAL NOTAM' **shall** precede the original NOTAM. No additional information about the current status/validity of this NOTAM shall be provided.

4.5.1.5 If the queried NOTAM is no longer valid or not available, this status will be communicated through the reply as follows:

a) if the NOTAM is no longer valid, a 'status line' will precede the transmission of the requested NOTAM.

b) if the NOTAM is not available, only a relevant 'status line' will be transmitted. Only one 'status line' shall be included in the reply and it shall contain only one status expression.

4.5.1.6 In order to limit the number of RQR messages in reply to a RQN for more than one NOTAM and when these NOTAM are not available in the NPU's database, the RQR **shall** contain all NOTAM numbers concerned by the same reply: 'NOTAM REQUESTED' or 'NOTAM NO LONGER IN DATABASE' or 'NOTAM NOT ISSUED'. For example, instead of 99 RQR messages with 'NOTAM NOT ISSUED', only one RQR shall be sent.

4.5.1.7 The database **should** allow repetition of no longer valid NOTAM for a period of 3 months.

4.5.1.8 NOTAM Processing Unit **shall** provide their NPU Clients with a list of the available NOTAM series for each Publishing NOF. This list shall contain the 4-letter indicators that uniquely identify the Publishing NOF or any other location indicator to which the numbering of the NOTAM in the series refers.

4.5.2 Standard expressions in reply messages

4.5.2.1 The following mandatory statements **shall** be mentioned in the reply when appropriate:

'NOTAM EXPIRED'	Item C) time was reached.
'NOTAM REQUESTED'	The NOTAM Processing Unit has requested the requested NOTAM but not yet received it.
'NOTAM CANCELLED BY A1324/14'	The NOTAM was cancelled by a NOTAMC.
'NOTAM DELETED'	The NOTAM was deleted by the NOTAM Processing Unit. Reasons for deletion might be for example that the NOTAM was omitted from the Checklist, deleted by printed publication, or other information was received from Publishing NOF.
'NOTAM NO LONGER IN DATABASE'	The NOTAM has either expired, been replaced, cancelled or deleted more than 3 months ago.
'NOTAM NOT ISSUED'	The Publishing NOF has not issued the requested NOTAM.
'NOTAM REPLACED BY C3042/14'	The NOTAM was replaced by a NOTAMR.
'ORIGINAL NOTAM'	Original version of the NOTAM.
'NO VALID NOTAM IN DATABASE'	For reply on a RQL if no valid NOTAM is available.
'NO VALID ASHTAM IN DATABASE'	For reply on a RQA if no valid ASHTAM is available.

4.5.3 Examples for status of NOTAM

Example 9: The requested Egyptian NOTAM A0400/14 has expired.

Reply: ZCZC ...
 GG LFFAYNYX
 281600 LIIAYNYX
 RQR HECA A0400/14
 NOTAM EXPIRED
 (A0400/14 NOTAMN
 Q) .../.../.... etc.)

Example 10: The requested Senegal NOTAM A0213/14 was not received by the NOTAM Processing Unit.

Reply:

If a gap in the NOTAM numbers is detected:

ZCZC ...
GG EDDZYNXX
091430 LFFAYNXX
RQR GOOO A0213/14
NOTAM REQUESTED

or if the NOTAM number is greater than the last one received:

ZCZC ...
GG EDDZYNXX
091430 LFFAYNXX
RQR GOOO A0213/14
NOTAM NOT ISSUED

or if the NOTAM was cancelled, replaced or deleted:

ZCZC ...
GG EDDZYNXX
091430 LFFAYNXX
RQR GOOO A0213/14
NOTAM CANCELLED BY A0222/14
or ... NOTAM REPLACED BY A0233/14
or ... NOTAM DELETED

Example 11: The requested Tahiti NOTAM A0021/14 was cancelled.

Reply:

ZCZC ...
GG LIIAYNXX
301235 LFFAYNXX
RQR NTAA A0021/14
NOTAM CANCELLED BY A0023/14
(A0021/14 NOTAMR A0017/14
Q) .../.../.../ etc.

Example 12: The requested Cuban NOTAM A1577/08 was not issued.

Reply:

ZCZC ...
GG EDDZYNXX
110925 LEANYNXX
RQR MUHA A1577/14
NOTAM NOT ISSUED

Example 13: The requested Korean NOTAM A0449/14 was replaced.

Reply:

ZCZC ...
GG LFFAYNXX
282055 LIIAYNXX
RQR RKRR A0449/14
NOTAM REPLACED BY A0452/14
(A0449/14 NOTAMN
Q)/.../.../ etc.)

The importance of transmitting the requested NOTAM is emphasised, even when it has already been cancelled, replaced or deleted. Otherwise, there might be inconsistencies in the database, as NOTAM could not then be removed, (NOTAM A0017/14 in Example 8).

In the exceptional case that a cancelled, replaced or deleted NOTAM was not received, the RQR shall contain the status line only.

Example 14: The requested (RQO) United States NOTAM A0092/14 is an original NOTAM.

Reply: ZCZC ...
GG LIIAYNYX
031755 EDDZYNYX
RQR KJFK A0092/14
ORIGINAL NOTAM
010025 KDZZNAXX
(A0092/14 NOTAMN
A) KJFK B) ...C) ... etc.)

4.6 Request for a List of valid NOTAM (RQL)

4.6.1 General specification

4.6.1.1 The 'List of valid NOTAM' is a free text message. Contrary to the regular checklist, this intermediate checklist is not a NOTAM itself, as it does not receive a number in the series to which it refers.

4.6.1.2 Note that the last regular checklist is a valid NOTAM and therefore, its number shall appear in the RQL.

4.6.1.3 Multiple series of the same Publishing NOF **may** be requested in one message.

4.6.1.4 A reply message **shall** contain the checklist of only one NOTAM Series.

4.6.1.5 A request for multiple NOTAM series **shall** result in multiple reply messages each containing one series checklist.

4.6.1.6 The reply message is identified by the unique 4-letter indicator and the NOTAM series identifier. The 'List of valid NOTAM' according to the NOTAM Processing Unit database content is provided in a way similar to the structure of Item E of a regular NOTAM checklist, without the latest publication part.

4.6.1.7 Whenever the regularly published NOTAM checklist is requested, the Client **should** use the RQN procedure, clearly indicating both NOTAM series and number.

4.6.2 Codes and symbols used

4.6.2.1 The following codes and symbols are used in requests for a list of valid NOTAM:

'RQL'	the designator for 'request list'.
'LFFA'	the 4-letter indicator of the Publishing NOF or other location indicator to which the numbering of the NOTAM refers to.
'A'	the NOTAM Series Identifier.

‘ ‘ (blank) is interpreted as ‘AND’.
‘RQR’ the designator for the reply.

4.6.3 Examples of the request for a list of valid NOTAM

4.6.3.1 Request of a single NOTAM Series

Example 15: French NOF requests from Italian NOF the list of valid Cypriot NOTAM in series Alpha:

Request: ZCZC ...
GG LIIAYNYX
281040 LFFAYNYX
RQL LCNC A

Reply: ZCZC ...
GG LFFAYNYX
281055 LIIAYNYX
RQR LCNC A
YEAR=2013 0322 0452
YEAR=2014 0001 0006 0010 0015 0016
0021 0035 0039

or /
Reply: ZCZC ...
GG LFFAYNYX
281055 LIIAYNYX
RQR LCNC A
NO VALID NOTAM IN DATABASE

Example 16: French NOF requests from Italian NOF the list of valid Guyana NOTAM in series Alpha, but last Checklist A0011/14 is the only valid NOTAM.

Request: ZCZC ...
GG LIIAYNYX
281040 LFFAYNYX
RQL SYCJ A

Reply: ZCZC ...
GG LFFAYNYX
281055 LIIAYNYX
RQR SYCJ A
YEAR=2014 0011

4.6.3.2 Request for multiple NOTAM Series

Example 17: Italian NOF requests from German NOF the list of valid NOTAM from the United Kingdom in series Bravo and Golf:

Request:	ZCZC ... GG EDDZYNXX 310840 LIIAYNXX RQL EGGN B G
Reply:	ZCZC ... GG LIIAYNXX 310850 EDDZYNXX RQR EGGN B YEAR=2013 1678 1789 YEAR=2014 0012 0022 0056 0057 0058 0123 0124 0125

The full reply consists of two messages containing one NOTAM Series in each.

4.7 Incorrect requests (RQN, RQO, RQL)

4.7.1 General specification

4.7.1.1 If a RQN, RQO, RQA or RQL message has been received that does not adhere to the published syntax format or content, the recipient of the request will send a reply message informing the originator about the error.

4.7.2 Standard expressions

4.7.2.1 For a request received with an incorrect format

INCORRECT REQ MSG FORMAT PLEASE CORRECT
AND RPT. FOR DETAILS SEE
[HTTP://WWW.EUROCONTROL.INT/PUBLICATIONS
OPADD-OPERATING-PROCEDURES-AIS-DYNAMIC-
DATA](http://www.eurocontrol.int/publications/opadd-operating-procedures-ais-dynamic-data)

The recipient of the request has detected an error in the format of the RQ message.

4.7.2.2 For a request received referring to an unknown or incorrect NOF designator or series

REQUESTED NOF OR SERIES NOT MANAGED

The recipient of the request has received a request for a NOF or series which is not contained in the database

4.7.2.3 or a request exceeding the maximum number allowed for a single request

YOUR REQ MSG EXCEEDS MAX NR OF 100

Number of requested NOTAM limit is exceeding.

4.7.2.4 Examples:

Example 18:

Request: ZCZC ...
GG LEANYNYX
151030 EDDZYNXX
RQN LEMD LEBL

Reply: ZCZC ...
GG EDDZYNXX
151035 LEANYNYX
RQR
RQN LEMD LEBL
INCORRECT REQ MSG FORMAT PLEASE CORRECT
AND RPT. FOR DETAILS SEE
[HTTP://WWW.EUROCONTROL.INT/PUBLICATIONS
OPADD-OPERATING-PROCEDURES-AIS-DYNAMIC-
DATA](http://www.eurocontrol.int/publications/opadd-operating-procedures-ais-dynamic-data)

Example 19:

Request: ZCZC ...
GG EBBRYNYN
151030 LOWWYNXX
RQN EBBR A0523/14-A0626/14

Reply: ZCZC ...
GG LOWWYNXX
151035 EBBRYNYN
RQR
RQN EBBR A0523/14-A0626/14
YOUR REQ MSG EXCEEDS MAX NR OF 100 NOTAM

Example 20:

Request: ZCZC ...
GG EBBRYNYN
151030 LOWWYNXX
RQN EBBA A0523/14-A0626/14

Reply: ZCZC ...
GG LOWWYNXX
151035 EBBRYNYN
RQR
RQN EBBA A0523/14-A0626/14
REQUESTED NOF OR SERIES NOT MANAGED

5 Procedures for SNOWTAM, ASHTAM and Special conditions

5.1 Introduction

5.1.1 Two types of operationally relevant messages are described in the ICAO documentation and distributed via the AFS. As these messages are operationally relevant, their processing is required to enable database storage and consequently further retrieval for their incorporation in PIB. The concerned messages are:

- SNOWTAM and
- ASHTAM

5.1.2 SNOWTAM and ASHTAM are expected to be received in their defined format. Therefore, it is anticipated that they **shall** neither be edited nor corrected nor summarised. However, some formatting (line return, additional or removal, etc.) **may** be required. If a received message is detected as obviously incorrect (e.g. garbled), a query **shall** be addressed to the originator for clarification. This processing can be done by individual or centralised units.

5.1.3 Hazardous winter conditions, bird hazards or changes in volcanic activity (if operationally significant) can also be published by means of NOTAM.

Note: Application dates of both formats should be verified against the latest, local implementation provisions eg. ICAO State Letter 20-73 or respective European Commission Implementing regulation [Ref. 16] as discrepancy in applicability schedule may occur.

5.2 SNOWTAM (“old” format)

5.2.1 Definition

5.2.1.1 ‘A special series NOTAM notifying the presence or removal of hazardous conditions due to snow, ice, slush or standing water associated with snow, slush and ice on the movement area by means of a specific format.’

5.2.1.2 During periods when deposits of snow, ice, slush or water associated with these conditions remain on the aerodrome pavements, information on such conditions should be disseminated to all to whom the information is of direct operational significance.

For details of SNOWTAM Items, refer to ICAO Doc 10066 PANS-AIM Appendix 4 [Ref. 2] and Doc 8126 [Ref. 4] and EUROCONTROL SNOWTAM Harmonisation Guidelines. [Ref. 17].

Note: For details on clearing requirements, refer to ICAO Doc 9981 PANS Aerodromes [Ref. 3].

5.2.2 Procedures for SNOWTAM creation

5.2.2.1 SNOWTAM identification **shall** appear in the first line of the AFS message text (Abbreviated heading) and shall start with the SNOWTAM indicator 'SW' followed by the designator for the State, e.g. 'EF', and a serial number in a four-digit group, followed by a space and followed by the four-letter location indicator to which the SNOWTAM refers. An eight-digit date-time group follows, based on Item B) (if only one runway is listed) or the latest observation in Item B) (when multiple Item B) are listed).

Example: SWEF0001 EFTP 11250800

Note: Contrary to NOTAM, the serial number refers to the aerodrome.

5.2.2.2 The maximum validity of an SNOWTAM is 24 hours.

5.2.2.3 It is **recommended** to adopt a numbering sequence starting at the beginning of the year.

5.2.2.4 Examples

Example 1:

```
SWEF0587 EFTP 11291215
(SNOWTAM 0587
A) EFTP
B) 11291215 C) 06 E) 30 F) 47/47/47 G) 3/3/3 H) 4/5/4 N) 7
R) 47
T) RWY CONTAMINATION 100 PERCENT. SURFACE FRICTION:
   ON TWY MEDIUM TO GOOD, ON APRON MEDIUM TO POOR)
```

Where the Abbreviated heading is composed of:

SWEF0587	= SW is the data designator for SNOWTAM; EF are the nationality letters for the State; =0587 is a four-digit serial number.
EFTP	= Four-letter location indicator of the aerodrome to which the SNOWTAM refers.
11291215	= date-time of the latest observation as month, day, hour and minute in UTC, all by two digits (in this case 29 November, 1215 UTC).
(COR)	= optional group in case there is a need to correct a SNOWTAM previously sent with the same serial number

If there is reporting on two or more runways, the observation time in the Abbreviated heading shall be the latest Item B) time.

Where the message is composed of:

SNOWTAM	= designator for the SNOWTAM.
0587	= the SNOWTAM number (the same four-digit serial number as in the abbreviated heading).
A) EFTP	= Item A) aerodrome location indicator (the same as in the abbreviated heading).
B) 11291215	= Item B) date-time of observation of each runway listed in Item C).

- C) 06 = Item C) lower runway designator number (for RWY 06/24 the lower runway designator number is 06).
- E) 40 = Item E) cleared runway width in metres, if less than published width (in this case, the published width is 45 metres and cleared width is 40 metres only).
- F) 47/47/47 = Item F) deposits over the total runway length, observed on each third part of the runway starting from the threshold with lower runway designator number (in this case a combination of dry snow (4) over ice (7) on each third).
- If more than one deposit is present on the same portion of the runway, they should be reported in sequence from the top (closest to the sky) to the bottom (closest to the runway).
- G) 3/3/3 = Item G) depth of the deposit(s) in millimetres for each third of the total runway length (in this case the mean depth of the deposits is 3 millimetres on each third).
- H) 4/5/4 = Item H) estimated friction on each third of the runway (in this case the estimated values are respectively 4, 5 and 4 starting from the threshold with lower runway designator).
- N) 7 = Item N) taxiway conditions (in this case ice – deposit code for ice (7) as described in Item F) of the SNOWTAM format).
- R) 47 = Item R) apron conditions (in this case a combination of dry snow over ice – deposit codes for dry snow (4) and ice (7) as described in Item F) of the SNOWTAM format)
- T) RWY CONTAMINATION 100 PERCENT. SURFACE FRICTION: ON TWY MEDIUM TO GOOD, ON APRON MEDIUM TO POOR
= Item T) plain language field for any additional information (in this case the percentage of the runway contamination (Item F above) is between 51 and 100 %. The estimated surface friction for taxiways and apron are also given).

Example 2:

‘When reporting on two runways or more, repeat Items B) to P) inclusive’:

```
SWED0012 EDDK 12300630
(SNOWTAM 0012
A) EDDK
B) 12300630 C) 14L F) 2/2/2 G) 30/30/40 H) 5/5/5
B) 12300625 C) 14R F) 5/5/5 G) 30/30/40 H) 3/3/3
B) 12300620 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)
```

Example 3:

```
GG EKZZ....
130429 ESSAYNYX
SWES0051 ESSA 01130400
(SNOWTAM 0051
A) ESSA
B) 01130400 C) 01L E) 50 F) 17/17/17 G) 01/03/02 H) 4/4/4
L) TOTAL M) 0500 N) 127/GOOD
```

B) 01130352 C) 08 D) 2300 E) 30 F) 17/17/17 G) 01/01/01
 H) 4/4/3 J) 60/5LR K) YESL L) 2500/45 M) 0500 N) 127/GOOD
 P) YES8
 R) 127/MEDIUM-GOOD S) 01131000
 T) RWY 01L CONTAMINATION 10 PERCENT, RWY EDGES
 CONTAMINATION 60 PERCENT F) 5 G) 30,
 RWY 08 CONTAMINATION 50 PERCENT UNCLEARED PARTS
 CONTAMINATION 100 PERCENT F) 5 G) 50,
 TWY CONTAMINATION 10 PERCENT 1MM.
 TWY S CONTAMINATION 50 PERCENT F) 56 G) 20 H) 2,
 APRON CONTAMINATION 25 PERCENT 1MM.
 DEICING CHEMICALS USED ON RWY 01L AND 08.

Note: Item D is rarely used in SNOWTAM as the RWY is normally cleared full length. A reduction in length for IFR RWY affects declared distances.

5.2.3 Procedures for SNOWTAM processing

5.2.3.1 The format detailed in ICAO Doc 10066 PANS-AIM, Appendix 4 page 4-1 [Ref. 2] **shall** be strictly adhered to.

5.2.3.2 A list of aerodromes for which SNOWTAM are likely to be issued **shall** appear in an AIS publication (AIP, AIP SUP or AIC) together with details of the originators and of the numbering system to be used.

5.2.3.3 It will be necessary for systems to identify the latest SNOWTAM for each affected aerodrome by reference to the serial number and observation time.

5.2.3.4 Only one SNOWTAM can be valid for each affected aerodrome at any one time.

5.2.3.5 The next planned observation **may** be declared in Item S). At aerodromes where snow removal is not organised and not expected to be performed (e.g. in maritime climate areas), information about hazardous winter conditions may be issued by NOTAM.

5.2.3.6 The maximum validity of a SNOWTAM is 24 hours. The SNOWTAM self-expires after 24 hours, unless replaced earlier by a new SNOWTAM or a corrected one (COR).

5.2.3.7 The incorporation of SNOWTAM in PIB is highly **recommended**, as it improves pre-flight briefing and provides airline operators with more comprehensive information.

5.3 SNOWTAM (“new” format)

5.3.1 Definition

5.3.1.1 ‘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.’ [Ref. 1]

5.3.1.2 New SNOWTAM shall be issued whenever a new runway condition report (RCR) is received from the aerodrome operator.

5.3.2 Procedures for SNOWTAM creation and processing

5.3.2.1 SNOWTAM identification **shall** appear in the first line of the AFS message text (Abbreviated heading) and shall start with the SNOWTAM designator 'SW' followed by the geographical designator for the State, e.g. 'EF', and a serial number in a four-digit group, followed by a space and followed by the four-letter location indicator of the aerodrome to which the SNOWTAM refers. An eight-digit date-time group follows, based on Item B) date/time of observation/measurement (if only one runway is listed) or the latest observation/measurement in Item B) (when multiple Item B) are listed).

Example: SWEF0001 EFTP 11250800

Note: Contrary to NOTAM, the serial number refers to the aerodrome.

5.3.2.2 The SNOWTAM format detailed in ICAO Doc 10066 PANS-AIM Appendix 4 page 4-6 [Ref. 2] **shall** be strictly adhered to.

5.3.2.3 For the composition of the message and completion of SNOWTAM Items and examples, refer to ICAO Doc 10066 PANS-AIM Appendix 4 [Ref. 2] and ICAO Guidance on the Issuance of SNOWTAM [Ref. 5].

Note: For details on clearing requirements, refer to ICAO Doc 9981 PANS Aerodromes [Ref. 3].

5.3.2.4 A numbering sequence starting at the beginning of the calendar year **shall** be adopted.

5.3.2.5 It will be **required** for systems to identify the latest SNOWTAM for each affected aerodrome by reference to the serial number and observation time.

5.3.2.6 General AFS requirements such as

- maximum AFS single line length (69 characters and/or spaces)
- maximum AFS text of message length (1800 characters)

also apply to SNOWTAM.

It is recommended to respect the maximum AFS text message length limit and not to make use of the format provided by ICAO Annex 10 SARPS on splitting of AFS messages.

5.3.2.7 A list of aerodromes for which SNOWTAM are likely to be issued **shall** appear in an Aeronautical Information Product (AIP, AIP SUP or AIC) together with details of the originators.

5.3.2.8 The maximum validity of a SNOWTAM is 8 hours. The SNOWTAM self-expires after 8 hours, unless replaced earlier by a new SNOWTAM or a corrected one (COR) with the same serial number.

5.3.2.9 Only one SNOWTAM **shall** be valid for each affected aerodrome at any one time.

5.3.2.10 When the runway length is reduced and reported in (Item I), it is **recommended** to check if a NOTAM has already been issued in case published declared distances available for landing/takeoff cannot be assured anymore

5.3.2.11 The incorporation of SNOWTAM in PIB is highly **recommended**, as it improves pre-flight briefing and provides airspace users with more comprehensive information situational awareness.

5.4 ASHTAM

5.4.1 Definition

5.4.1.1 'A special series NOTAM notifying by means of a specific format change in activity of a volcano, a volcanic eruption and/or volcanic ash cloud that is of significance to aircraft operations.'

5.4.1.2 When notification of such activity is made, the ASHTAM provides information on the status of activity using a 'volcano level of alert colour code'.

5.4.1.3 The ASHTAM also provides information on the location, extent and movement of the ash cloud and on the air routes and flight levels affected.

Example:

```
161143 WRRRYNYX
VAWR0004 WAAF 05161137
(ASHTAM 0004
A) UJUNG PANDANG FIR
B) 1405161137
C) AWU 0607-04
D) 0340N12530E
E) YELLOW
F) 1320M/4331FT
G) SFC/FL100 WINDS SFC/FL100 260/10KT
I) CTN ADZ OVERFLYING FOR R590 R342
J) YMMCYMYX
```

5.4.1.4 For details of the format refer to ICAO Annex 15 [Ref. 1].

5.4.2 Procedures for ASHTAM creation

5.4.2.1 ASHTAM identification **shall** appear in the first line of the AFS message text and **shall** start with the ASHTAM indicator 'VA' followed by the designator for the State, e.g. 'LI', and a serial number in a four-digit group. The FIR to which the ASHTAM refers is indicated with its four-letter location indicator. The observation time is shown as an eight-digit group.

Example: VALI0001 LIRR 11250800

5.4.2.2 Item C) **shall** contain both the volcano name and its unique identification number as listed in ICAO Doc. 9691 [Ref. 9] Manual on Volcanic Ash, Radioactive Material and Toxic Chemical Clouds, Appendix F.

The name and identification number **shall** be separated by a space.

Example: C) AWU 0607-04

5.4.2.3 The maximum validity of an ASHTAM is 24 hours.

5.4.2.4 Whenever there is a change in the level of alert, a new ASHTAM **shall** be published.

5.4.2.5 If an ASHTAM is created for a volcano not listed in ICAO Doc. 9691 [Ref. 9], the 'existence' of the volcano shall be promulgated by normal NOTAM, Item C) to contain PERM.

Any observations on volcanic activities for this volcano **shall** also be published by normal NOTAM until ICAO Doc. 9691 [Ref. 9], Appendix F is updated. The NOTAM on observations remains in force for 24 hours (Item C) as for ASHTAM.

If information on observations is intended to be published by means of ASHTAM instead, this intention shall be clearly stated in the NOTAM containing the general information on the volcano, so the list of existing volcanoes can be manually updated in processing systems to allow for auto-processing.

5.4.2.6 Information about volcanic activity or the presence of volcanic ash plumes **may** also be reported by NOTAM.

Item B) actual date/time of NOTAM creation.

Item C) actual date/time of NOTAM creation + 24 hours.

Item E) the relevant information as contained in the ASHTAM.

Further guidance on information to be reported in NOTAM item E) for volcanic activity is provided in ICAO EUR Doc 019/NAT Doc 006 Volcanic Ash Contingency Plan [Ref. 11].

To ensure the speedy transmission of the initial information to aircraft, the first ASHTAM or NOTAM issued may simply contain information that an eruption and/or ash cloud has been reported and the date/time and location. For further details and additional distribution addresses refer to ICAO Doc 9766 [Ref. 10] International Airways Volcano Watch, Part 4.

5.4.3 Procedures for ASHTAM processing

5.4.3.1 The incorporation of ASHTAM in PIB is highly **recommended**, as it improves pre-flight briefing and provides airline operators with more comprehensive information.

5.4.3.2 An ASHTAM is normally auto-processed. Its abbreviated heading, Item C) and Item A) are checked before storage.

5.4.3.3 The identification (name and number) of the volcano in Item C) of an incoming new ASHTAM is compared with the volcanoes listed in ICAO Doc. 9691 [Ref. 9], Appendix F.

5.4.3.4 A volcano is identified if its name and identification number refer to the same volcano. The ASHTAM is stored in the database and made available for the FIR indicated in the abbreviated heading. Its storage will completely replace any ASHTAM previously issued for the same volcano. ASHTAM for other volcanoes remain valid instead.

5.4.3.5 An incorrect syntax in an ASHTAM Item used for identification or storage is corrected before further processing.

5.4.3.6 Item A) is roughly checked by the system before storage. If the system recognises FIR location indicator(s) in Item A) rather than plain language, automated processing of ASHTAM is discontinued if the FIR location indicator is different from the one in the Abbreviated heading or if Item A) contains more than one FIR.

If the location indicator indicated is different, it is either corrected or the 'NOTAM SUBJECT TO QUERY' procedure applies. If the ASHTAM is received with more than one FIR in Item A), a NOTAM series T shall be created for all FIR except for the one given in the abbreviated heading. Item E) of this series T NOTAM shall contain all Items from A) to K) inclusive. Items not completed by the Publishing NOF in the original ASHTAM shall be left blank.

5.4.3.7 An ASHTAM is self-expiring 24 hours after its creation unless it is replaced earlier by a new ASHTAM for the same volcano.

5.4.3.8 If the volcano cannot be clearly identified, 'NOTAM SUBJECT TO QUERY' procedure shall be applied.

5.5 Bird hazards

5.5.1 Definition

5.5.1.1 A bird hazard designates the presence of birds constituting a potential hazard to aircraft operations.

5.5.1.2 The permanent presence of birds is contained in the AIP, whereas the notification of such activities at short notice **shall** be published by NOTAM.

5.5.2 Procedure

5.5.2.1 Bird hazards, if operationally significant, **shall** be communicated by means of NOTAM.

5.5.2.2 The 4th and 5th letter 'HX' of the NOTAM Code serves as a means of identification for the publication of bird hazards, e.g. QFAHX.

5.5.2.3 Item E) **shall** contain clear text with standard ICAO abbreviations. Specific bird related abbreviations should be avoided to facilitate readability and to prevent queries.

6 Specific European Arrangements

6.1 Introduction

6.1.1 Additional creation and processing procedures may be used in Europe. These procedures, whilst not explicitly mentioned in ICAO documentation do not conflict with international SARPs:

- Rules for Multi-part NOTAM.
- Rules for urgent aeronautical information requiring extensive text and/or graphics.

6.1.2 Unless otherwise stated explicitly, the procedures described in this Chapter are applicable both to creation and to processing.

1.2 Multi-part NOTAM

1.2.1 General principles

6.1.2.1 In accordance with ICAO Doc 10066 PANS-AIM [Ref.2], each NOTAM **shall** be as brief as possible. In some cases, due to the nature of the information, the length of the AFS message exceeds 1800 characters including spaces (some states are limited to 1200 characters). When the AFS message exceeds the maximum number of characters permissible, the Multi-part NOTAM procedure **shall** be applied.

6.1.2.2 Even though the recommendation is that every endeavour should be made in order to avoid the creation of Multi-part NOTAM, a standard numbering scheme will facilitate the processing of Multi-part NOTAM when they are used.

1.2.2 Procedures for Multi-part NOTAM

6.1.2.3 Each part of the Multi-part NOTAM is a separate NOTAM message with each Item present from Item Q) to Item D) (if present) inclusive, and Item E) continuing text. Each part **shall** have the same NOTAM type and has the same NOTAM number followed by a Multi-part indicator. If present, Items F) and G) are transmitted with the last part only.

6.1.2.4 NOTAMR is not permitted for the replacement of an individual part of a Multi-part NOTAM.

6.1.2.5 In case of a Multi-part NOTAM is cancelled, all parts are cancelled by the NOTAMC. Cancellation of individual parts is not permitted.

6.1.2.6 The Multi-part indicator is placed immediately behind the year of the number/year combination, without a space.

6.1.2.7 The Multi-part indicator is identified by one letter ('part identifier' e.g. A = Part 1, B = Part 2, etc.) and a number, always consisting of 2 digits ('number of parts', e.g. 05 = 5 parts). This enables up to 26 part Multi-part NOTAM.

1.2.3 Examples:

A1234/14A02(means Part 1 of 2)

B1235/14B05(means Part 2 of 5)

A5678/14C03(means Part 3 of 3)

B6453/14D06(means Part 4 of 6)

The following example shows the NOTAM Identification of a Multi-part NOTAM consisting of 4 parts.

```
(A1234/14A04 NOTAMN
Q) .....
A) .....
B) .....
C) .....
E) ..... )

(A1234/14B04 NOTAMN
Q) .....
A) .....
B) .....
C) .....
E) ..... )

(A1234/14C04 NOTAMN
Q) .....
A) .....
B) .....
C) .....
E) ..... )

(A1234/14D04 NOTAMN
Q) .....
A) .....
B) .....
C) .....
E) ..... )
```

1.3 Notification of publication of urgent aeronautical information requiring extensive text and/or graphics in contingency/force majeure situations

6.1.3 With a view to improving the availability and timeliness of aeronautical information related to contingency situations, which contains extensive text and/or graphics for immediate notification to users, the ICAO Regional Director Europe and North Atlantic, urge States to take the following measures (*REF: ICAO State Letter - EUR/NAT 12-0056.TEC (SMM/HOI), dated 22 January 2013*):

6.1.3.1 Issue a NOTAM for the implementation of contingency measures in cases of anticipated or actual disruption, or partial disruption of air traffic services and related supporting services and providing reference to the AIP Supplement(s) published for the same purpose containing the detailed operational information (including graphs/maps).

6.1.3.2 In addition to the postal distribution, make the AIP Supplement(s) available electronically on the national CAA/ANSP/AIS website and/or EAD PAMS for a timely availability of the information.

6.1.3.3 Inform the users, through the contingency NOTAM, of the availability of the related AIP Supplement(s) on the national CAA/ANSP/AIS website and/or EAD PAMS; and

6.1.3.4 Ensure that the procedure above is included in the National ATS Contingency Plan.

7 Guidelines for the creation and provision of Pre-flight Information Bulletins (PIB)

7.1 Introduction

This Chapter is intended to present guidelines concerning the provision of Pre-flight Information Bulletin, focusing on:

- Bulletin types.
- Filtering for NOTAM based on the NSC and other related filters.
- The main PIB structure and layout when integrating various messages into the PIB.

Additionally, some aspects in relation to 'Integrated Briefing' are presented in order to enable addressing key user requirements for enhanced briefing services.

Relevant references are provided to existing EUROCONTROL documents covering the function of 'Integrated Briefing'. Requirements for automated pre-flight information systems are contained in ICAO Annex 15, paragraph 5.5 [Ref. 1], ICAO Doc 10066 PANS-AIM, paragraph 5.5 [Ref. 2] and ICAO Doc 8126 [Ref. 4] Chapter 9. Where Doc 8126 Chapter 9 did not provide any guidelines, Doc 8126 Chapter 8 has been taken into consideration.

7.1.1 Understanding and background

An aeronautical information service (AIS) is obliged to provide relevant aeronautical data and aeronautical information, which is mainly available in the form of the Aeronautical Information Products. The pilot is obliged to obtain and prepare before conducting a flight.

The process whereby a user, depending on flight intent or an ad-hoc need, is supplied with or obtains all relevant aeronautical data and aeronautical information in order to plan or execute a flight or to obtain generic information related to flight operations, is known as briefing. The facts and knowledge obtained support the process of taking the decision if a flight or flight related action can be performed safely and efficiently or not.

In an automated environment, AIS is often not personally present at aerodromes and the provision of relevant data is assured through (self-) briefing systems supported by means of consultation.

The typical system output of a briefing process concerning dynamic data (NOTAM and related special series NOTAM such as SNOWTAM and ASHTAM) is the 'Pre-flight Information Bulletin (PIB)'. Additionally, static data such as AIP, AIP SUP or AIC is provided either through consultation or in electronic format through briefing systems or is made available in paper form at the AIS or/and ARO offices.

7.1.2 The basic user requirements related to Briefing

Many users are currently 'over-supplied' with a large amount of information. Therefore, the obligation for any briefing function, whether automated or not, is to be able to support the pilot (user) with specific and relevant information whilst avoiding information overload through maximum customisation and filtering support.

The basic user requirements for a briefing facility/service can be summarised as follows:

- Enable a standard product to be produced as a minimum service.
- Provide the pre-flight information, which is relevant to a flight (user), on request.

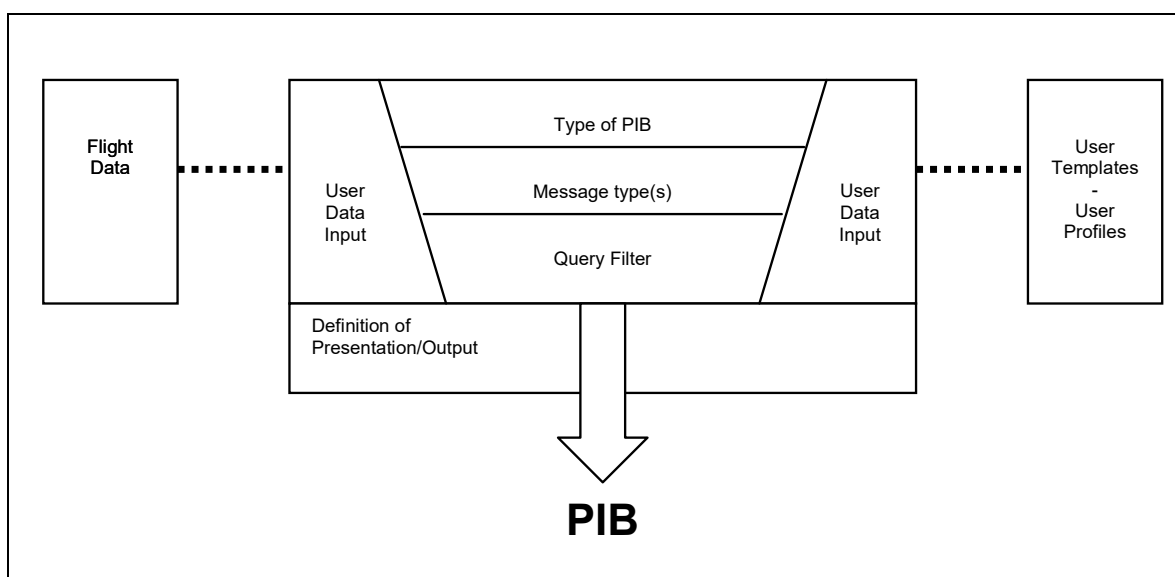
- Enable the pilot to obtain a briefing that is structured to suit their particular needs.
- Improve the ways briefings are conducted and delivered.
- Reduce the amount of time taken to obtain a briefing.
- Provide easy access to information incl. updates thereafter.
- Provide this information at any time and location the pilot wishes.

7.2 Data selection layers

The user will be able to select the information that will be included in the PIB at various levels. Those levels are:

- PIB type
- Message types
- Message filters
- User data/input

In order to retrieve NOTAM from a database, a range of criteria and filters shall be applied to enable customised and tailored briefing output based on individual user requirements. In addition, default settings would cater for standardised/generic output. The following figure shows the relationship between the different information selection levels that may be employed by the User for the retrieval of a PIB.



7.3 Types of Bulletins - PIB

The following main bulletin types are defined by ICAO:

- Area type Bulletin
- Route type Bulletin
- Aerodrome type Bulletin
- Administrative Bulletins

A general description of each of these types is given below. For further reference see ICAO Doc 8126 [Ref. 4], Chapter 8.

7.3.1 Area type Bulletin

Area type bulletins consist of relevant information such as NOTAM, SNOWTAM and ASHTAM containing information on facilities, services, procedures and possible hazards related to a specified area. They may also include selected aerodromes situated inside a selected area. The PIB **shall** only present NOTAM inside the selected area.

An Area type PIB may present:

- One or more FIR.
- A user defined area by:
 - Pre-defined (adjustable) areas or groups of countries (e.g. Benelux, Alpine, Central Europe).
 - Given airspace or special areas (special areas, TMA, CTR, ACC sectors etc.).
 - Single aerodrome information plus information from surrounding vicinity (selection of AD, range plus ground up to selected flight level). If range is requested, NOTAM irrespective of national boundaries are to be provided, including those of relevant fictitious airspaces.
 - Coordinates or AD names or AD location indicators plus radius.
 - A polygon.

The PIB will present NOTAM containing, if selected:

- NSC scope for Enroute information: E, W, AE, AW.
- NSC scope for aerodrome information: A, AE, AW.
- Requested FIR in Item A).
- Qualifying criteria in accordance with the filters applied (refer to paragraph 7.5).
- For inclusion of Aerodrome information, refer to paragraph 7.3.3.

When a fictitious airspace UUUU, ZBBB, KFDC, KICZ or KNMH is selected, or if an area intersects a FIR that lies within one of these countries, information of the fictitious airspace **shall** be provided.

The use of the radius value '999' **shall** allow an automated pre-flight information system to retrieve such information only against the FIR indicated in Item A). Adjacent FIR even within the radius of influence is never affected by this information.

7.3.2 Route type Bulletin

A Route type bulletin is a bulletin based on a generalised flight route that may also be the route information as contained in FPL field 15. It provides relevant NOTAM, SNOWTAM and ASHTAM containing information on facilities, services, procedures and possible hazards along the specific route flown. It presents the FIR crossed in the sequence of flight, plus the selected aerodromes.

For Route type bulletins based on FPL for IFR and mixed FPL, the acknowledged (ACK) route **shall** be taken into account, whenever possible.

A Route PIB presents information based on the following principle:

- Aerodrome information: aerodrome of departure, destination, alternate(s).
- Route information. FIR or the sequence of FIR crossed by the intercepted flight route (source FPL/RPL or user input).

The PIB will present NOTAM containing, if selected:

- NSC scope for Enroute information: E, W, AE, AW.
- NSC scope for aerodrome information: A, AE, AW.
- Requested FIR or country location indicator in Item A).
- Qualifying criteria in accordance with the filters applied (ref. paragraph 7.5).

For inclusion of Aerodrome information, refer to paragraph 7.3.3.

When a fictitious airspace UUUU, ZBBB, KFDC, KICZ or KNMH is selected, or if an area intersects a FIR that lies within one of these countries, information about the fictitious airspace **shall** be provided.

7.3.2.1 Narrow Route type Bulletin:

A Narrow Route Bulletin is a bulletin based on a specific flight route usually based on the route information as contained in FPL field 15. It may also be based on a flight path with a defined width along: significant points; airways; navigation aids; coordinates; direct between the aerodrome of departure (DEP) and the aerodrome of destination (DEST). Only NOTAM that intersect with the narrow route path and meet the other related filter criteria are included in the 'Narrow Route (path) PIB'.

The recommended default value for a route width is 20 NM (meaning 10NM left and right of the calculated flight path).

A Narrow Route PIB presents information based on the following principle:

- Aerodrome information: aerodrome of departure, destination, alternate(s).
- Route information (source FPL/RPL or user input).

The PIB will present only those NOTAM containing:

- A geographical reference intersecting with the defined route corridor.
- NSC scope for Enroute information: E, W, AE, AW.
- NSC scope for aerodrome information: A, AE, AW.
- A geographical reference intersecting with the route to the first alternate AD (ALTN) if not on the intersected flight path.
- Qualifying criteria in accordance with the filters applied (refer to paragraph 7.5).

For inclusion of Aerodrome information refer to paragraph 7.3.3.

Note: Departure and arrival aerodromes must be taken into account. Depending on the level of the briefing system, special filtering is to be applied so that either the flight level filtering takes full account of the SID/STAR flown, or within a radius or cylinder around the AD of DEP/DEST the flight-level limitation is neglected (irrespective of FIR boundaries).

When a fictitious airspace UUUU, ZBBB, KFDC or KNMH is selected, or if an area intersects an FIR that lies within one of these countries, information about the fictitious airspace **shall** be provided.

7.3.3 Aerodrome type Bulletin

Aerodrome type bulletins consist of dynamic messages such as NOTAM and SNOWTAM containing information on facilities, services and procedures related to an aerodrome/heliport and its vicinity.

This bulletin provides messages for aerodromes covering at least the following options:

- Single aerodrome information only (selecting aerodrome name or location indicator).

All aerodromes within one or more FIR. The PIB will present only those NOTAM containing:

- NSC scope for aerodrome information: A, AE, AW.
- An aerodrome indicator in Item A) plus those with country code and XX in Item A). Refer to paragraph 7.7.3 for the selection of aerodromes with country code and XX.
- If selected, NSC scope AE, AW if the geographical reference intersects with the defined area surrounding an AD.
- Qualifying criteria in accordance with the filters applied (refer to paragraph 7.5).

7.3.4 Administrative Bulletins

Administrative bulletins are reports that provide a list of valid NOTAM offering further selection options. This type of bulletin is foreseen mainly for AIS/NOF officers but also other users who are familiar with NOTAM procedures, the NOTAM format and the query procedures for PIB/reports.

Specialised functions should allow additional filter criteria enabling retrieval by e.g.:

- NOTAM number or range of numbers
- All NOTAM in force
- Country(ies)
- NOF
- NOTAM series
- all PERM NOTAM
- Trigger NOTAM (all valid; effective from (AIRAC date or user defined)
- NOTAM by subject
- EST NOTAM.
- Checklist

7.4 Types of messages/elements to be included in the PIB

Following types of dynamic messages **shall** be selectable for inclusion in the PIB.

- Civil / Military NOTAM (if available), or combinations.
- International series or national series, or combinations.
- National NOTAM in national language.
- Types of messages:
 - NOTAM
 - SNOWTAM
 - ASHTAM
- Other elements such as predefined maps or local information.

7.5 Criteria for PIB customisation – Query Filters

Apart from the selection based on PIB types and type specific entries (FIR(s) and/or AD, selection or definition of area or route), the following filters are applied to reduce the PIB output:

- Time window for PIB validity.

- NSC qualifiers applied.
- Vertical criteria (flight levels).
- Geographical criteria.

7.5.1 Time window for PIB validity:

- At a given date and time = current (time of retrieval)
Content: valid NOTAM.
Main purpose: overview/general planning.
Main users: airport authorities and other NOTAM originators, dispatcher/station manager/business aviation and other long term planning units, NOF, CAA.
PIB types: all PIB types and administrative bulletins (e.g. checklists).
- FPL based, i.e. for a given EOBT, all NOTAM that are active in the period between the time of retrieval and the next given number of hours.
Content: active NOTAM.
Main purpose: performing a flight.
Main users: crew/pilots.
PIB types: FPL based PIB (usually Route or Narrow Route PIB).
Possible default setting for a FPL based time window:
PIB validity by default: (EOBT-1 HR) till (ETA + 4HR).
A system should offer the possibility to adjust the default for a FPL based time window.
- For time periods e.g. current date/time plus 'x' hours, from-to.
Content: active NOTAM active.
Main purpose: performing a flight, specific overview.
Main users: crew/pilots, dispatcher/station manager/business aviation for short-term planning.
PIB types: all PIB types except for administrative bulletins.

For administrative bulletins the default values depend on the type of bulletin.

Further selection option for PIB types:

- Excluding those NOTAM active since more than a given time period.

7.5.2 NSC qualifiers applied

For NOTAM, NSC qualifiers including NOTAM code act as retrieval filters to tailor PIB content.

Specifics rules for the Qualifiers Traffic, Purpose and Scope:

- Traffic:
 - IFR: IFR PIB to include all NOTAM with traffic I and IV.
 - VFR: VFR PIB to include all NOTAM with traffic V and IV.
 - Combination IFR/VFR: PIB to include all NOTAM with traffic I, V and IV.
- Purpose:
 - N - NOTAM selected for the immediate attention of flight crew members.

- B - NOTAM of operational significance selected for PIB entry.
 - O - NOTAM concerning flight operations.
 - M - NOTAM carrying miscellaneous information.
- Scope:
This qualifier relates the NOTAM subject (2nd and 3rd letter) to a specific scope. This qualifier is used to determine under which category/section a NOTAM is presented inside a PIB:
 - A refers the NOTAM to the scope of Aerodromes.
 - E refers the NOTAM to the scope of 'Enroute information'.
 - W refers the NOTAM to the scope of 'Navigation Warnings'.
 - or the combinations AE, AW.

7.5.2.1 Purpose related PIB output

- Immediate Notification: filters set to include N will present active NOTAM with purpose NBO.
- Operationally significant information: filters set to include O will include active NOTAM with purpose BO and NBO.
- Bulletin: filters set to include B will include active NOTAM with purpose B, BO and NBO.
- Miscellaneous: filters set to include M will present active NOTAM with purpose M.
- All NOTAM: Filters set to B, BO, NBO and M will present all active NOTAM.

In a 'default briefing' (default filter setting; modifiable by a user) no filtering is performed by the system on the qualifier 'Purpose' and the PIB will display all NOTAM.

Note: The recommended 'default filter setting' is based on the fact that the NSC in their current form raise concerns by service providers and users and shortcomings are observed with respect to the qualification of the purpose for some subjects. Even if detailed filtering explanations are made available on briefing systems, the end-users' perception of what is operationally relevant and what is 'nice to know' varies considerably and is often not aligned with the ICAO NOTAM Selection Criteria. Therefore 'all NOTAM' are included in a default PIB setting with the possibility left to the individual user at its own discretion to change the default briefing output to a different setting via personal preferences or decide individually depending on the type of flight performed. The application of this default is also left for the individual service providers at their own discretion in interaction with their clients.

7.5.3 Vertical criteria (Flight Levels)

Flight levels will make it possible to tailor the PIB content whenever appropriate (lower/upper). System selection is based on the lower and upper limits of the Q-Line.

7.5.3.1 Departure and arrival

Departure and arrival aerodromes must be taken into account. Depending on the briefing system, special filtering is to be applied so that either the flight level filtering takes full account of the SID/STAR flown, or within a radius or cylinder around the AD of DEP/DEST the flight level limitation is neglected (irrespective of FIR boundaries).

7.5.4 Geographical criteria

System selection is done by the geographical reference of the Q-Line (coordinate and radius) and applies only to those area or route type PIB requiring more precise information about the location than Item A) provides, e.g. Narrow Route, user- or system-defined areas. NOTAM are only provided if the geographical reference intersects with the location of the selected area.

Fictitious FIR or NOTAM applicable to a whole country (radius 999) **shall** also be taken into account by the system if the area or route intersects with this country.

7.6 Principle structure of a PIB

A PIB (report) **should** be structured into the following main sections/parts and sequence:

- The PIB header:
 - PIB header provides information on the service provider, date and time of the PIB query, PIB validity, requested PIB type and content (e.g. requested aerodromes), selection criteria/filters applied as well as any other information regarding the PIB content, special symbols used, if applicable, e.g. PIB ID.
 - The chosen time window must be clearly indicated in the PIB header as PIB validity, e.g.: From 10 DEC 2008 11:55 To 12 DEC 2008 06:00.
- The Aerodrome section:
 - Departure
 - Destination
 - Alternate(s) according the FPL (including En-route alternatives).
- The Enroute (FIR) section:
 - FIR of departure.
 - FIRs in sequence of the flight.
 - FIR of destination.
 - Additional Information.
- The Navigation Warning section:
 - FIR of departure.
 - FIR in sequence of the flight.
 - FIR of destination.
 - Additional information.

Note 1: The Navigation Warning section may also be included in the Enroute section of the PIB.

Note 2: The FIR-sequence listed applies for Narrow Route PIB only. For all the other PIB types the sequence is based on the input form entries.

7.6.1 NOTAM sorting

Based on the above main PIB sections further default sorting criteria apply:

- NOTAM **shall** be sorted into the separate sections in the following order: Aerodrome, FIR, Additional Information.
- NOTAM **shall** be sorted in sequence by number within each section, with the most recent (newest) NOTAM on top.
- Enroute FIR NOTAM **shall** be split into separate sections: 'Enroute' (scope E and AE) and 'Navigation Warnings' (scopes W and AW).
- The same NOTAM **should** appear only once in a PIB, i.e. no duplication over the different sections. In further FIRs, if relevant, only a reference to the NOTAM

number **shall** be provided. The (online) system may offer a hyperlink to this NOTAM.

- Further sorting options **should** be offered for all PIB types e.g.: sorting according to effective date, NOTAM Codes' by subject group, by flight route, default by briefing type or user preferences, etc.

7.7 PIB - specific presentation considerations

PIB sections cluster the message sub-sections (see also paragraph 7.12.2.2) which themselves contain the message groups. Messages are integrated depending on the actual PIB type, e.g. a RWY NOTAM does not appear in the FIR section.

7.7.1 General layout considerations

The PIB **shall** be produced based on queried types of messages/elements, selected PIB type on the basis of the chosen time window, other customisation criteria and query filters applied.

In general all Items are presented in a self-explanatory form with the following exceptions:

- the Q-line which serves only as filtering feature and may be confusing for users; and
- Item A which is already present in the header and/or item E).

For the printed PIB, the pages **shall** be clearly indicated in the form of 'page of pages' e.g. 01/15.

If no NOTAM is valid for a requested aerodrome or FIR, the PIB would indicate 'no data available' for a requested aerodrome or FIR or area.

A 'disclaimer' section at the end of the PIB **should** provide a reminder of other parts of the Aeronautical Information Product also clearly indicating that trigger NOTAM will be listed for a period of 14 days only. Following this, other means than the PIB will have to be used to get access to the full IAIP information.

Example:

'Permanent and long-term information as well as short-term information containing extensive text and/or charts are not included. Consult AIP and AIP SUP in force for this type of information. A reminder (trigger NOTAM) of such data is usually only provided in PIB for 14 days.'

'End of PIB' **shall** be indicated.

7.7.2 Presentation of dates/times

Dates/times **shall** be generally encoded, e.g.: the 8th of August 2014 at 6h35 in the morning would be displayed in the PIB as: 08 AUG 2014 06:35.

7.7.3 Location indicators

Location indicators **should** be translated into plain language whenever possible. System help functions must be provided to enable flexible entry of the plain name, ICAO code or IATA code supported by search features.

Aerodromes without an allocated location indicator cannot be identified by Item A) of the NOTAM (country code and XX/XXX). They are stored by their plain name, which is provided on the first line of Item E). Selection is in this case done by the aerodrome's plain name. System features may also allow entering a country code and XX and provide a list of available aerodromes for further selection.

7.8 Delivery of PIB

A choice of methods or interfaces for (automatic) PIB delivery **shall** be provided to the customers e.g.:

- Fax
- World Wide Web
- Email
- Remote print
- Streaming service via system-to-system interfaces
- Scheduled delivery for large-scale customers.

7.9 PIB - additional elements to be considered

7.9.1 Provision of AIP Supplement in relation to PIB

In order to remain compliant with Annex 15 [Ref. 1] pilots need access to relevant AIP Supplement (SUP). Different means may apply and in the first instance it is the briefing officer who selects those elements for a briefing. However, considering the extensive use of location-independent means or self-briefing systems, a more user-friendly approach is required.

It is **recommended** that the system enables the user to select further elements such as AIP SUP.

In relation to automated pre-flight information systems it is to be noted that SUP do not have a structured field usable by a system which enables selective retrieval of this kind of information for a given pre-flight information bulletin.

The eAIP may serve such a need concerning rapid and easy access enabled by hyperlinked information. However, this is only relevant if those elements are integrated through the self-briefing system or relevant portal. On the contrary, it may be that a briefing service pre-selects specific SUP, which may then be automatically annexed to PIB.

Further considerations should be given as to whether special selection features can be provided to enable an end user to access SUP directly e.g. through the inclusion of an URL in Trigger NOTAM.

7.9.2 Special areas

Special areas (incl. shooting areas) in graphical form may either be directly attached to the PIB by default or may be referred through the system via web links, Trigger NOTAM or by storing AIP Supplement (SUP) in briefing systems including associated criteria such as NOTAM subject code(s) and traffic for direct inclusion in PIB if SUP is selected.

7.9.3 User information

An automated PIB pre-flight information system **shall** at the least provide user information on: service provision; available PIB types; default settings and explanations of selection options. An explanation of the meaning of and intention behind NOTAM qualifiers (NOTAM codes, Traffic, Purpose, Scope) shall be made available to the users.

Further useful information should be considered e.g. an explanation of IAIP package, a list of subjects (plain name) included in the available PIB types indicating the NSC qualifier purpose, a list of ICAO abbreviations and NOTAM/SNOWTAM/ASHTAM explanations. For systems allowing FPL filing, other information may be of help, e.g. ICAO aircraft type abbreviation, Route Availability Document (RAD), explanations on the FPL form.

Help desk: contact details shall be provided for further enquiries and/or where relevant parts of the IAIP not contained in the briefing system may be obtained from.

7.10 Update Services

7.10.1 Notification

An immediate automatic notification service **may** be offered either to supplement a PIB or for the provision of specific messages. It covers messages issued since the retrieval of a PIB or since subscription to the notification service and consists of single messages informing users directly for example about a hazard.

If a 'notification service' is available, it will provide single messages received after the initial briefing (lag time). For example, a NOTAM received after the initial PIB production, which fits the filtering criteria, will automatically be forwarded via the means specified by the user. The end date/time of the notification service is based upon the initial PIB query. All underlying notification criteria (type of message, type of event, filter, scope, end of notification period, etc.) must be defined by the user through an appropriate user profile. It should be possible to specify the transmission means for the notification, e.g. fax, SMS, email or data link when available.

The maximum lag time should be limited to a certain (default) number of hours and be adjustable by the user.

A typical example may be the event of a runway closure at a defined aerodrome or a SNOWTAM published for a defined aerodrome. Automatic notification will also provide NOTAMR and NOTAMC, in the case of NOTAM being selected. They are forwarded also displaying the relevant NOTAM number of the replaced/cancelled NOTAM.

Note: The ICAO term used for 'update notification service' is 'Immediate automatic notification of items of urgent operational significance'. This term suggests a limitation to NOTAM containing purpose 'N' only and would exclude other NOTAM of operational impact. Using the more general term 'Update Services' better reflects the use of the purpose letters and allows a wider, more user-friendly provision of such a customised service.

7.10.2 Update PIB

More sophisticated systems **should** support updates to previously requested PIBs in the form of an update briefing. If 'Update PIB' is selected, the user will have to specify the 'Master PIB reference' for which the update shall be generated.

Creation of an Update PIB will be possible only if:

- The same briefing system has been used for production of the Master PIB.

- The Master PIB has not been retrieved longer ago than a certain number of hours or days (e.g. 12 hours or 1 day).
Note: The definition of hours/days will depend on the storage capabilities of the Master PIB and the relevant underlying NOTAM. Considering the mass of messages published, the maximum should be limited to a few days.
- The basic filter settings are unchanged (e.g. traffic, route or level bands).
- The user specifies the criteria and type of transmission inside the master PIB.

For Update briefings NOTAMR as well as NOTAMC must be displayed with relevant numbers of the replaced/cancelled NOTAM.

7.11 User specific data

Modern briefing facilities are capable of providing a vast amount of information. It is essential to avoid overloading users as preparation time is limited.

This may be achieved by providing means whereby users may pre-select the type of information they receive in response to PIB query. For example, high-level wind information is not likely to be of any interest to a pilot flying VFR, whereas visibility condition information is essential.

Once set up by a user, such settings **should** be maintained as part of the 'user's profile' so that this user can apply them again for any future briefings. Profiling addresses:

- Personal Information (e.g. contact details).
- Product-relevant information (e.g. predefined PIB queries, sorting criteria) in the form of templates accessible at any time by the user.
- Standard message types which are part of the PIB.
- Default filters applied.
- Display format of messages and PIB structure (specific sorting of main parts e.g. AD of DEP – ENR – AD of DEST, ALTN, etc.)
- Notification/Update criteria.

More detailed reference on such data may be found in Chapter 5.3 of 'Integrated Briefing - Technical Concept Document' [AIM/AEP/BRIEF/0025] available at:
eurocontrol.int/publication/guidance-integrated-briefing

7.12 Possible evolution of Briefing services

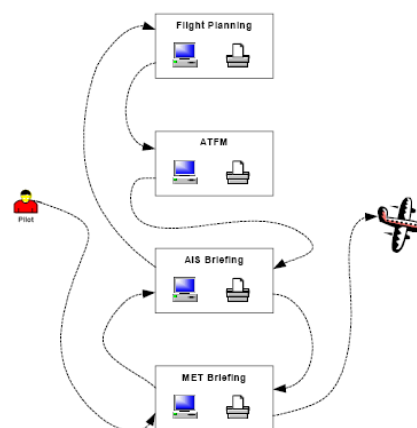
7.12.1 Integrated Briefing - the concept of the 'One Stop Shop'

Integrated Briefing is a system or service fulfilling the generic Briefing process and enhancing it by integrating access to and provision of additional data elements such as AIS, ARO (FPL), MET, ATFCM or other information, as required (see paragraph 7.12.2).

Note: By providing Integrated Briefing the process will seem to the end user to function as 'single entity'.

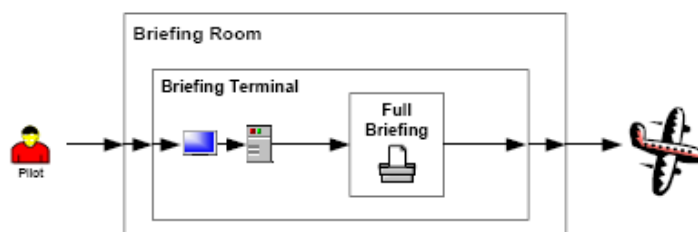
Today, the following briefing infrastructure prevails and it may be described as 'distributed Briefing service':

- Facilities/services are often in different locations (offices).
- Each 'facility' has to be visited at least once.
- Time taken to visit each facility may be extensive.
- Multiple entry of flight details may lead to errors.
- Multiple (briefing) reports are complex for a user.



The ultimate future solution may be the 'integration' of services at the system layer (portals), having the following advantages:

- Facilities/services with one application at one terminal (one-stop-shop).
- Single entry of flight details reducing the possibility of errors.
- Enabled user profiling and online services.
- Single, tailored briefing reports.



7.12.2 Data elements

- AIS (NOTAM, SNOWTAM, ASHTAM, static data elements of AIP, SUP etc.).
- ARO (flight plan and all related messages).
- MET (SIGMET, METAR, SPECI, TAF, upper wind and temperature, etc.).
- ATFCM (Flow messages related to the flight plan such as AIM, AUP/UUP or flight plan updates); if update notification service or update briefing is available this would also include slot messages (SAM, SRM, FLS etc.).
- Other information such as local service notes etc.

7.12.2.1 Integrating AIS and MET messages

The different message entities are selected differently for PIB entry.

For example:

- SNOWTAM and METAR are retrieved on the basis of their existence for a specific aerodrome and are presented in the PIB section for that specified aerodrome.
- SIGMET and TAF are retrieved on the basis of their existence for a specific area or FIR and are presented in the PIB section for that specified area/FIR.
- NOTAM allow most selective retrieval, such as Area (Aerodrome and FIR), Traffic, Purpose, Scope. They also allow specific output based on message, subject or condition if required as defined by the NOTAM selection criteria.

Note: The MET data/messages required for Integrated Briefing are described in ICAO Annex 3 [Ref. 7] which should be applied for system development.

7.12.2.2 Message subsections and the relevant message groups

Messages are integrated depending on the actual PIB type e.g. a METAR does not appear in the FIR section.

A user may prefer to sort subsections differently. The following default structure applies but should be customisable through user profiles.

For examples of a possible integrated PIB refer to 'Integrated Briefing – iPIB Guide' [AIM/AEP/BRIEF/0029] available on: eurocontrol.int/publication/guidance-integrated-briefing

7.12.2.2.1 MET messages:

- METAR
- SPECI
- TAF
- SIGMET
- GAMET
- AIRMET (IFR, turbulence, icing).

7.12.2.2.2 AIS messages:

- SNOWTAM
- ASHTAM

- NOTAM

7.12.2.2.3 ATFCM information:

- AUP/UUP
- ATFCM Information Message (AIM)
- ATFCM Notification Message (ANM)

7.12.2.2.4 Other information:

- Specific message text (domestic procedures, local service notes etc.).
- MET charts and AIP charts.
- Etc.

Appendix A1 – System Parameters

Data Definition

Databases used for dynamic data storage must contain the necessary static data, so that procedures for NOTAM Creation (Chapter 2), NOTAM Processing (Chapter 3) and NOTAM storage can be performed.

Static Data

The data usually designated by the term 'Static Data' is the data known to the aviation world and documented in publications such as AIP, e.g. FIR(s), Aerodromes, Navigation Aids, Areas, Maps, Rules, Subjects to which a NOTAM may be related and other aeronautical information such AIC, etc.

and,

Data required to enable NOTAM creation and processing, e.g. reference lists, standard routes, distribution files, selection criteria, association criteria, etc.

Dynamic Data

The data usually designated by the term 'Dynamic Data' is data conveyed by the means of NOTAM, SNOWTAM, ASHTAM, Checklists received or coherence messages.

The list of static data which might be used for NOTAM processing is contained in Chapter 9.5 'database content' of ICAO Doc 8126 [Ref. 4]. Elements of this list will also be used for NOTAM Creation, as well as for the creation of ASHTAM and SNOWTAM.

System Parameters

NOTAM database management is governed by a certain number of system parameters.

System Parameters for Data Storage

NOTAM are stored in the database from their publication/reception until their indicated end of validity, replacement or cancellation (including. removal from the monthly checklist).

Expired, replaced or cancelled NOTAM shall no longer appear in Pre-flight Information Bulletins, nor in the checklist.

Expired, replaced or cancelled NOTAM shall remain available from the database for a period of 3 month.

SNOWTAM and ASHTAM shall also be stored for a period of at least 30 days from their expired validity.

System Parameters for Data Archiving

When NOTAM and other messages are no longer valid for operational database needs (e.g. Pre-flight Information Bulletin production) storage is required to comply with legal obligations.

Long-term storage is possible on various media. The duration of the storage can vary from one Administration to another, depending upon the type of data and upon national legal requirements.

It is recommended that a NOTAM Processing Unit store NOTAM for a period of time (one to several years) to be defined, depending upon the source of information, i.e.:

- NOTAM produced by a client-NOF and retransmitted by the NPU.
- Original NOTAM received from a non-client NOF.
- Processed NOTAM version from the NOTAM Processing Unit.

Processing of 'EST' NOTAM by the Publishing NOF

NOTAM that contain 'EST' in the Item C (end of validity) require an action by the Publishing NOF for their replacement or cancellation before the 'EST' time is reached.

The NOF System shall ensure that a reminder is provided before the 'estimated' end of validity, to produce a NOTAMR or a NOTAMC. Individual parameters can be installed, depending upon the type of information, and the operational possibilities of the Unit.

The following parameters are indicative, depending on the estimated validity of the NOTAM:

- Up to 1 day : 6 hours before EST time
- More than 1 day and up to 1 month : 1 day before EST time
- More than 1 month and up to 3 months : 3 days before EST time

Processing of 'EST' NOTAM by a NOTAM Processing Unit

See Chapter 3.

Appendix A2 - GLOSSARY

ACTIVE NOTAM

A NOTAM is active between the dates and times stated in Items B) and C) subject to the time schedule in Item D).

AFS

Aeronautical Fixed Service.

AIP

Aeronautical Information Publication

AIP SUP

AIP Supplement

AIRAC

Aeronautical Information Regulation And Control as laid down in ICAO Annex 15 - Aeronautical Information Services (AIS) [Ref. 1].

AIRAC AIP AMENDMENT

Permanent changes to operationally significant information contained in the AIP, which are published in accordance with AIRAC procedures.

AIRAC AIP SUPPLEMENT

Temporary changes to operationally significant information contained in the AIP, which are published by means of special pages in accordance with AIRAC procedures.

AIRSPACE RESERVATION

Term used in the NSC to define a group of Navigation Warning activities.

AIRSPACE RESTRICTION

Any changes to the limits, structure and/or availability of airspace.

AIS MESSAGE

AFS message composed according to the rules in Annex 10, made up of a maximum of 1800 characters and containing a single NOTAM or an ASHTAM or a SNOWTAM or an unformatted service message inherent to AIS operative requests interchanged between NOF, originators, clients and/or NPU

AMC & GM

Acceptable Means of Compliance and Guidance Material.

ANSP

Air Navigation Services Provider

ATFCM

Air Traffic Flow and Capacity Management

ASHTAM

‘A special series NOTAM notifying by means of a specific format change in activity of a volcano, a volcanic eruption and/or volcanic ash cloud that is of significance to aircraft operations.’

AUP/UUP

Airspace Use Plan/Updated Airspace Use Plan.

AUTOMATIC PROCESSING

The processing and storing of NOTAM received from Publishing NOF without any human intervention.

CANCELLED NOTAM

A NOTAM that has been cancelled by another NOTAM before the Item C) date and time has been reached.

CHECKLIST

A NOTAM published regularly in each NOTAM series containing a list, grouped by year, of valid NOTAM numbers promulgated in that series.

CONVERSION

Transposition of a NOTAM received in the old format into a correctly formatted ICAO NOTAM.

DATA CORRECTION

Changing data elements where these are obviously wrong.

DEFAULT VALUES

A predetermined and agreed value to be inserted in fields that need to be filled but for which a specific value could not be defined.

EAD

European AIS Database.

EASA

The European Union Aviation Safety Agency.

EDITING

Changing the Item E) wording and/or layout of a NOTAM to make it clearer or to more explicitly express ideas that are implicit in that text.

END OF VALIDITY (NOTAM Item C)

The ten figure date-time group at which the NOTAM ceases to be in force and valid.

EST

Suffix added to the ten figure date-time group in Item C) for NOTAM with an estimated date and time of end of validity.

EST NOTAM

NOTAM of estimated validity represented by suffix EST (see **EST**).

EXPIRED NOTAM

A NOTAM for which the date and time of end of validity stated in Item C) has been reached.

FIR

Flight Information Region.

GA

General aviation.

GEOGRAPHICAL REFERENCE

Eighth field of the NOTAM Item Q), which contains one set of coordinates and a radius. Associates the NOTAM with the geographical coordinates of a centre point and a radius (to a precision of 1 nautical mile) that defines the sphere of influence to which the NOTAM refers.

LAT/LONG

Geographical latitude and longitude.

MULTI-PART NOTAM

A NOTAM exceeding the AFS message length (normally 1800 characters) and therefore requiring more than one message.

NOF

A NOTAM Office.

NOTAM CODE

A code group containing a total of five (5) letters, always starting with 'Q', to indicate the coding of information regarding the establishment, condition or change of radio aids, aerodrome and lighting facilities, dangers to aircraft in flight, or search and rescue facilities.

NOTAM CONDITION

Defined by the 4th and 5th letters of the NOTAM Code, which decode to describe the status of the NOTAM Subject (2nd and 3rd letters of the NOTAM Code) being reported on.

NOTAM IN FORCE

A NOTAM is in force once it has reached the date stated in Item B) and has neither been cancelled nor replaced nor reached its end of validity stated in Item C).

NOTAM PROCESSING UNIT (NPU)

Any Unit that is responsible for the reception, processing and further distribution of AIS messages to its Clients.

Note that this Unit may perform these functions for its own purposes only or may act on behalf of one or more Client.

The EAD (European AIS Database) is an example of a NOTAM Processing Unit.

NOTAM SELECTION CRITERIA (NSC)

The basis for the assignment of NOTAM Codes. The association criteria defined provide a subject related association of NOTAM with the qualifiers 'Traffic', 'Purpose' and 'Scope'.

NOTAM SUBJECT

Defined by the 2nd and 3rd letters of the NOTAM Code, which decode to identify the facility, service or hazard being reported upon.

NOTAM SUB-NUMBER

In the case of Multi-part NOTAM, a 3-character group placed immediately behind the year of the number/year combination and composed of one letter and a number consisting of 2 digits.

NPU

See 'NOTAM PROCESSING UNIT'.

NPU CLIENT

Any organisation, which has subscribed to the services provided by a NOTAM Processing Unit.

NSC

See 'NOTAM SELECTION CRITERIA'.

OPERATIONAL SIGNIFICANCE

Information essential for the safe and efficient conduct of a flight.

ORIGINAL NOTAM

A NOTAM as received by the NOTAM Processing Unit.

PAMS

Published AIP Management System (PAMS). A complete library available in the European AIS Database (EAD) of AIP and aeronautical charts for ECAC (European Civil Aviation Conference) States, also enabling the storage and management of aeronautical publications such as AIP, Amendments, Supplements, AIC and charts.

PIB

Pre-flight information bulletin, for the explanation see 7.1.1.

PROCESSING

The examination of NOTAM received from Publishing NOF in order to verify suitability for acceptance into an automated AIS system; undertaking conversion, translation, syntax correction, data correction, editing and/or summarising as required.

PUBLISHING NOF

The NOF (NOTAM Office) or non-governmental agency responsible for the creation of the original NOTAM.

QUALIFIER LINE (NOTAM Item Q)

This Item is divided into eight fields; each separated by a stroke, and contains the necessary qualifiers to facilitate data retrieval.

RADIUS

A three digit figure in nautical miles to be used in Item Q) that, together with the co-ordinates, defines a circle which encompasses the whole area of influence of the NOTAM.

REPLACED NOTAM

A NOTAM that has been replaced by another NOTAM before the Item C) date and time has been reached.

SNOWTAM

A special series NOTAM informing users of existence of hazardous conditions due to snow, ice, slush, frost, standing water or water associated with snow, slush, ice or frost on the movement area. The exact definition may vary depending on a version of a SNOWTAM format, please check respective paragraphs in Chapter 5 (5.2.1.1, 5.3.1.1).

SUMMARISING

Reducing text in order to make it more readable in a Pre-flight Information Bulletin (PIB).

SYNTAX CORRECTION

Changing the published format structure of the NOTAM where these are obviously wrong.

START OF ACTIVITY

The ten-figure date-time group indicating the date and the time at which the NOTAM comes in force.

START OF VALIDITY

The date and time at which the NOTAM message is published or issued.

TRANSLATION

Rendering the text of a NOTAM originated in French or Spanish, into the English language, while maintaining the original sense of the text.

TRIGGER NOTAM

A NOTAM alerting recipients and PIB users of the existence and subject content of AIP Amendments and Supplements.

VALID NOTAM

A NOTAM, which has been published and has not yet reached the end of its validity, and has neither been cancelled nor replaced.

Appendix A3 - Document Update Procedures

It is necessary to periodically check these EUROCONTROL Guidelines for consistency with referenced material. In addition, the content of these guidelines can evolve following feedback from implementation projects and field experience.

The main objectives of a regular review are:

- a) to improve the quality of the guidance (e.g. clarity, testability, etc.);
- b) to verify that the level of detail published is adequate;
- c) to make all stakeholders including industry aware of the latest developments.

The update of these guidelines is expected to be initiated by stakeholders directly or through specific EUROCONTROL working arrangements. Any stakeholder that wishes to request a change to these guidelines can submit a change request (CR) to the document editors (page **Error! Bookmark not defined.**) or the generic email address: standardisation@eurocontrol.int.

The CR needs to provide following minimum elements:

- Originator information (name, Organisation, contact details);
- Guideline title, number and edition date;
- Page, chapter, section (subsection) where the issue appears;
- Description of the issue and reason for change;
- Specific change proposal text (incl. potential alternatives, if any).

Main steps towards a revised version:

- EUROCONTROL will assess each CR and consult relevant working arrangements;
- The CR will be classified in terms of urgency and impact;
- A resolution proposal(s) will be prepared and, if needed, discussed with the originator;
- Agreed changes will be integrated into a revised version “Proposed Issue” including a summarised list of changes in the document record;
- The “Proposed Issue” will be consulted with relevant working arrangements).

Note: Identified errors which may cause potential problems when implementing, may be corrected directly via separate “Corrigendum”.

- End of Document -

Terms of Reference of the AIS-AIM Implementation Task Force (AAITF)

The objectives of the Task Force are to:

- a) study means of aeronautical data information management by civil aviation authorities and/or ATS service providers in other regions including globally interoperable aeronautical data and the aeronautical information exchange models (AIXM) and the electronic AIP (eAIP) digital data sets, and promote the implementation of these harmonized and interoperable methods/models in the Asia/Pacific Region;
- ~~b) examine the means of aeronautical data exchange used in other regions and application in the Asia/Pacific Region;~~
- c) assist States to implement Quality Management Systems for the aeronautical information service in an expeditious manner;
- d) assist States to develop competency-based training material and conduct workshops on the ~~Guidance Manual for AIS in the Asia/Pacific Region~~ Asia/Pacific Regional Plan for Collaborative AIM;
- ~~e) develop guidance material for Static Data Procedures and the AIS Automation Plan;~~
- f) review and update the ~~Guidance Manual~~ Regional Plan for Collaborative AIM taking into account amendments to ICAO SARPs, procedures and guidance material;
- g) monitor and review technical and operating developments in the AIS field especially in the area of automation and ~~database management~~ the exchange of digital data sets of aeronautical information in a SWIM environment; and
- h) monitor the transition from AIS to AIM, and in particular monitor developments ~~of the replacement of in Annexes 4 & 15, PANS-AIM (Doc 10066), PANS-Information Management (PANS-IM, when available) and related ICAO guidance documents under development by ICAO.~~

To achieve the above objectives, the Task Force shall consider:

- 1. results of the ICAO Information Management Panel (IMP);
- 2. amendments to Annex 4, Annex 15, PANS-AIM, PANS-IM (when available) the AIS Manual (Doc 8126), the Manual on the Quality Management System for AIS (Doc 9839), the Manual on AIS Training (Doc 9991), the Manual on System-wide Information Management Implementation (when available) and the Aeronautical Chart Manual (Doc 8697); ~~and~~
- 3. revisions to the EUROCONTROL *Operating Procedures for AIS Dynamic Data* (OPADD); ~~and~~

AAITF/18
Appendix F to the Report

4. implementation of the regional priorities and the performance objectives of the Asia/Pacific Seamless ANS Plan and the Regional Plan for Collaborative AIM.

The Task Force will maintain close coordination with other relevant bodies such as the System-Wide Information Management Task Force (SWIM TF)

The Task Force will report to the ATM Sub-Group of APANPIRG

(Adopted by the 14th Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/14), 2003, and most recently amended by ~~APANPIRG/31, 2020~~ APANPIRG/34, 2023)

CLEAN VERSIONTerms of Reference of the AIS-AIM Implementation Task Force (AAITF)

The objectives of the Task Force are to:

- i) study means of aeronautical information management by civil aviation authorities and/or service providers in other regions including globally interoperable aeronautical data, aeronautical information exchange models and digital data sets, and promote the implementation of harmonized and interoperable methods/models in the Asia/Pacific Region;
- j) assist States to implement Quality Management Systems for the aeronautical information service in an expeditious manner;
- k) assist States to develop competency-based training and conduct workshops on the Asia/Pacific Regional Plan for Collaborative AIM;
- l) review and update the Regional Plan for Collaborative AIM taking into account amendments to ICAO SARPs, procedures and guidance material;
- m) monitor and review technical and operating developments in the AIS field especially in the area of automation and the exchange of digital data sets of aeronautical information in a SWIM environment; and
- n) monitor the transition from AIS to AIM, and in particular monitor developments in Annexes 4 & 15, PANS-AIM (Doc 10066), PANS-Information Management (PANS-IM, when available) and related ICAO guidance documents.

To achieve the above objectives, the Task Force shall consider:

- 5. results of the ICAO Information Management Panel (IMP);
- 6. amendments to Annex 4, Annex 15, PANS-AIM, PANS-IM (when available) the AIS Manual (Doc 8126), the Manual on the Quality Management System for AIS (Doc 9839), the Manual on AIS Training (Doc 9991), the Manual on System-wide Information Management Implementation (when available) and the Aeronautical Chart Manual (Doc 8697);
- 7. revisions to the EUROCONTROL *Operating Procedures for AIS Dynamic Data* (OPADD); and
- 8. implementation of the regional priorities and the performance objectives of the Asia/Pacific Seamless ANS Plan and the Regional Plan for Collaborative AIM.

The Task Force will maintain close coordination with other relevant bodies such as the System-Wide Information Management Task Force (SWIM TF)

The Task Force will report to the ATM Sub-Group of APANPIRG

(Adopted by the 14th Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/14), 2003, and most recently amended by APANPIRG/34, 2023)