



ICAO

International Civil Aviation Organization

Fifteenth Meeting of the ICAO Aeronautical Information Services – Aeronautical Information Management Implementation Task Force (AAITF/15)

Video Teleconference, 01 – 05 June 2020

Agenda Item 5: AIS-AIM Updates

NOTAM PROLIFERATION ANALYSIS

(Presented by the Secretariat)

SUMMARY

This paper presents information about regional analysis for NOTAM proliferation.

1. INTRODUCTION

1.1 AAITF/13 discussed the continuing existence of NOTAM containing information of permanent validity that had not been transferred to AIP or AIP Supplement (AIP SUP) in a timely manner and developed the following Conclusion, subsequently agreed by ATM/SG/6:

Conclusion ATM/SG/6-14: Management of NOTAMs

That, States are urged to take immediate action to reduce the large numbers of permanent, long duration NOTAMs by:

- 1. conducting a full review of all NOTAMs issued by the State;*
- 2. expediting the transfer of valid permanent NOTAM information into AIP;*
- 3. expediting the transfer of valid temporary NOTAM information of long duration into AIP SUP; and*
- 4. cancelling the NOTAMs accordingly.*

1.2 AAITF/13 had agreed to the following Task:

Task number	13/4
Action Item:	Periodic sampling of NOTAM PIB to examine the proliferation of PERM and long-term temporary NOTAMs
Time Frame:	Ongoing
Responsible party:	Viet Nam and USA and Secretariat.

2. DISCUSSION

Regional NOTAM Analysis

2.1 ICAO APAC Regional Office conducted a NOTAM Analysis using Checklists of Valid NOTAM published by APAC Administrations in April. Checklists of valid NOTAMs were collected through the ICAO integrated Safety Trend Analysis and Reporting System (iSTARS).

2.2 In 2020, Regional Office has used a different methodology for NOTAM Analysis. As mentioned in the following PANS AIM procedures, all NOTAMs published before 01 January 2020 can be considered old aged NOTAMs. The number and percentage of old aged NOTAMs in total number of NOTAMs can be easily obtained and calculated from the checklist of valid NOTAM.

6.1.4.4 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.

6.1.4.5 Within three months from the issuing of a temporary NOTAM of long duration, the information contained in the NOTAM shall be included in the AIP Supplement.

2.3 As at the time of analysis, a total 5869 NOTAMs were active and 1724 NOTAMs were published in before 01 January 2020. The percentage of old aged NOTAMs is 29%, compared to 15% at AAITF/14. The oldest NOTAM was published in 1992.

2.4 **Figure 1** illustrates percentage of old aged NOTAMs of Asia/Pacific Administrations and Regional NOTAM Statistics of 2019 and 2020.

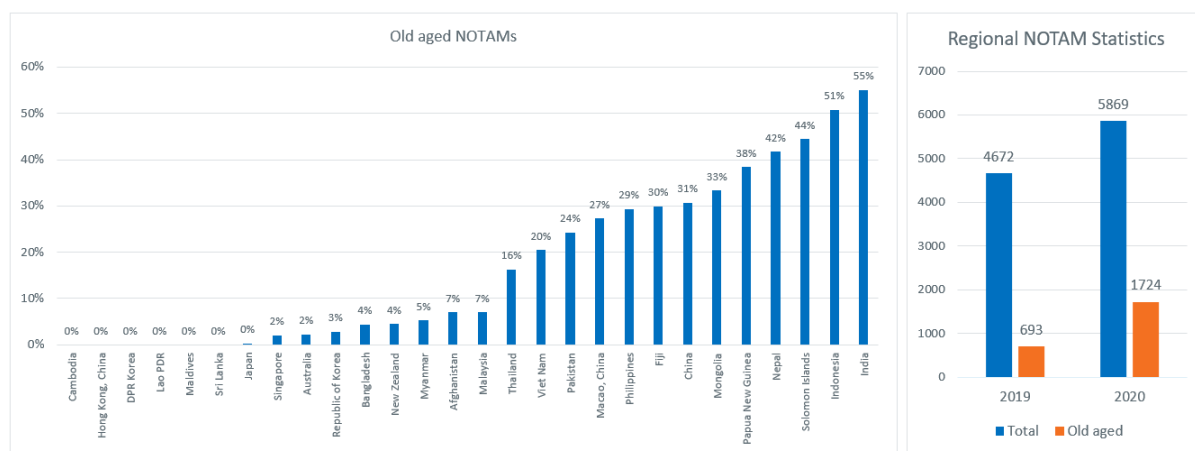


Figure 1: percentage of old aged NOTAMs and Regional NOTAM Statistics

2.5 **Table 1** shows the NOTAM statistics of Asia/Pacific Administrations. Administrations having less than 10 old aged NOTAMs are colored ‘Green’, Administrations having 11-100 old aged NOTAMs are colored ‘Orange’ and Administrations have more than 100 old aged NOTAMs are colored ‘Red’.

Administrations	NOTAM Series	Oldest	Old aged	Published in 2020	Total	Percent of old aged NOTAMs
Afghanistan	D, G	2019	7	93	100	7.0%
Australia	D, E, F, G, I, J, K, L, N, M	2018	10	427	437	2.3%
Bangladesh	A	2019	1	22	23	4.3%

Administrations	NOTAM Series	Oldest	Old aged	Published in 2020	Total	Percent of old aged NOTAMs
Cambodia	A	2020	0	2	2	0.0%
China	A, E, F, G, L, U, W, Y	2012	210	474	684	30.7%
Hong Kong, China	A	2020	0	28	28	0.0%
Macao, China	A	2016	3	8	11	27.3%
DPR Korea	A	2020	0	7	7	0.0%
Fiji	A	2015	26	61	87	29.9%
India	A, C, G	1992	859	703	1562	55.0%
Indonesia	A, B, C	2013	310	301	611	50.7%
Japan	A, B, C, E, F, G, H, J, K, L, M, P, Z	2019	1	419	420	0.2%
Lao PDR	A	2020	0	9	9	0.0%
Malaysia	A, C, D, F	2019	15	198	213	7.0%
Maldives	A	2020	0	15	15	0.0%
Mongolia	A, C	2019	4	8	12	33.3%
Myanmar	A	2019	1	18	19	5.3%
Nepal	A, B, C	2018	10	14	24	41.7%
New Zealand	B, P	2018	6	129	135	4.4%
Pakistan	A, C	2019	23	72	95	24.2%
Papua New Guinea	A	2014	56	90	146	38.4%
Philippines	B, C	2004	123	297	420	29.3%
Republic of Korea	A, C, D, E, Z	2018	10	348	358	2.8%
Singapore	A	2019	4	193	197	2.0%
Solomon Islands	A	2013	8	10	18	44.4%
Sri Lanka	A	2020	0	30	30	0.0%
Thailand	A, G, H, J	2010	20	103	123	16.3%
Viet Nam	A	2016	17	66	83	20.5%

Table 1: NOTAM statistics of Asia/Pacific Administrations

2.6 Detailed analysis information of red and orange colored Administrations is provided shown in **Attachment A**.

2.7 The percentage of old aged NOTAMs has increased by 14% this year. While this is a large increase, it must be noted that we have used different methodology, technique and coverage this year. To have consistent result and to improve the quality of analysis, Asia/Pacific Administrations are requested to send checklists of valid NOTAMs of each NOTAM series (only April) to ICAO APAC Regional Office no later than 30th April each year.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.

.....



ICAO BANGKOK

UNITING AVIATION

AAITF/15 - WP/08
Attachment A

AAITF/15

NOTAM Proliferation Analysis

Erdenebaatar Davaasuren,


*Associate Regional Officer - Aeronautical Information Management,
International Civil Aviation Organization (ICAO),
Asia and Pacific Regional Office*

Bangkok, Thailand, 01-05 June 2020



Introduction

- Task ‘13/4 – Periodic sampling of NOTAM PIB to examine the proliferation of PERM and long-term temporary NOTAMs’ was assigned by AAITF/13
- AAITF/13 developed the following Conclusion, subsequently agreed by ATM/SG/6:



Conclusion ATM/SG/6-14: Management of NOTAMs

That, States are urged to take immediate action to reduce the large numbers of permanent, long duration NOTAMs by:

- 1. conducting a full review of all NOTAMs issued by the State;*
- 2. expediting the transfer of valid permanent NOTAM information into AIP;*
- 3. expediting the transfer of valid temporary NOTAM information of long duration into AIP SUP; and*
- 4. cancelling the NOTAMs accordingly.*



NOTAM

Regional NOTAM Analysis

– Source

- Checklist of Valid NOTAM (April)
- Integrated Safety Trend Analysis and Reporting System (iSTARS)

– Methodology

- NOTAMs published before **01 January 2020** are considered old aged NOTAMs.
- Formula: (Old aged NOTAMs/Total valid NOTAMs)*100%

A1275/20 NOTAMR A1013/20
 Q) /QKKKK/K/K/K/000/999/1354N10036E999
 A) B) 2004010050 C) 2005012359 EST
 E) CHECKLIST

YEAR=2013 4629
 YEAR=2015 2069 4114 4115 4231
 YEAR=2016 1029 1423 2291
 YEAR=2017 0177 0332 0416 2266
 YEAR=2018 0106 1433 1616
 YEAR=2019 0200

← **Our target**

YEAR=2020 0784 0797 0798 0805 0821 0839 0846 0847 0851 0853 0874
 0895 1041 1052 1053 1100 1106 1107 1115 1130 1134 1135 1139 1147
 1148 1149 1159 1163 1169 1179 1201 1213 1221 1238 1239 1240
 1256 1257 1258 1261 1262 1264 1265 1268 1269 1271 1272

6.1.4.4 **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.

6.1.4.5 **Within three months from the issuing** of a temporary NOTAM of long duration, the information contained in the NOTAM shall be included in the AIP Supplement.

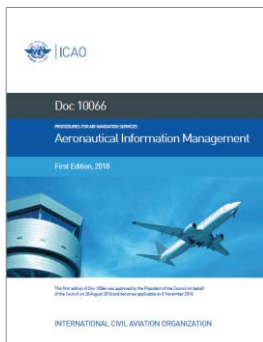
31 Dec 2019

+

3 month

=

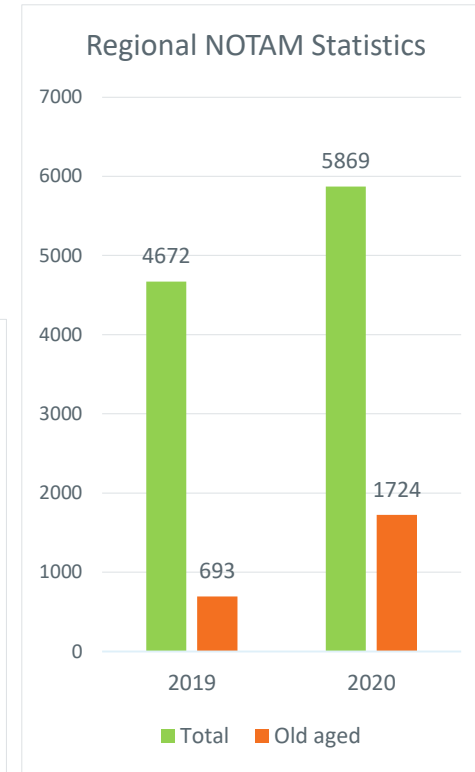
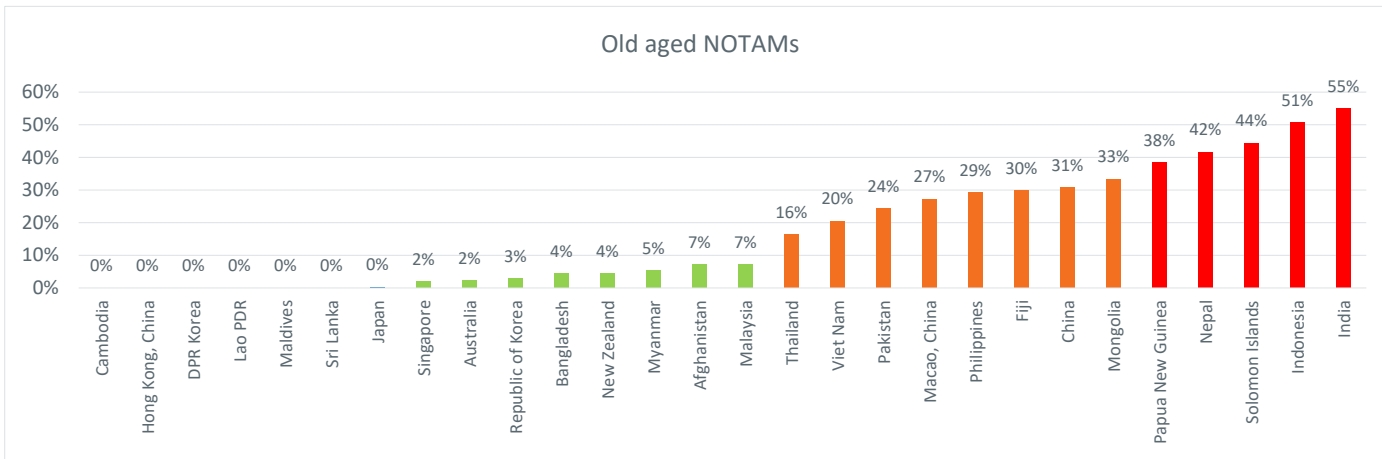
31 Mar 2020



PANS AIM

Regional NOTAM Statistic

- Total NOTAMs: **5869**
- Old aged NOTAMs: **1724**
- Percentage of old aged NOTAMs: **29%** (15% in 2019)
- Oldest NOTAM: **1992** (18 years old)

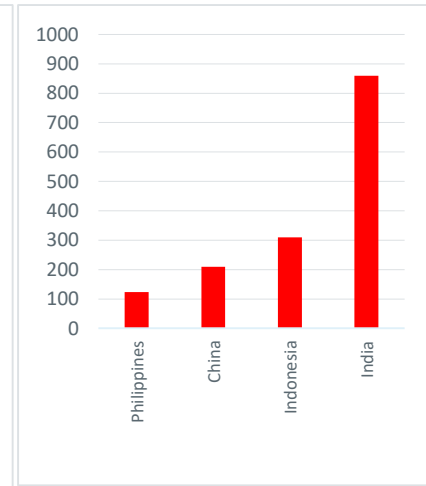
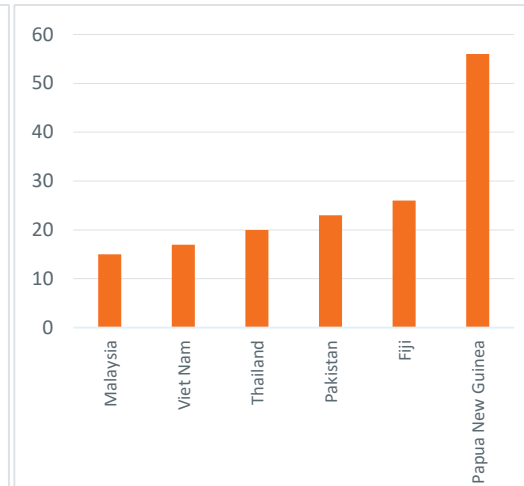
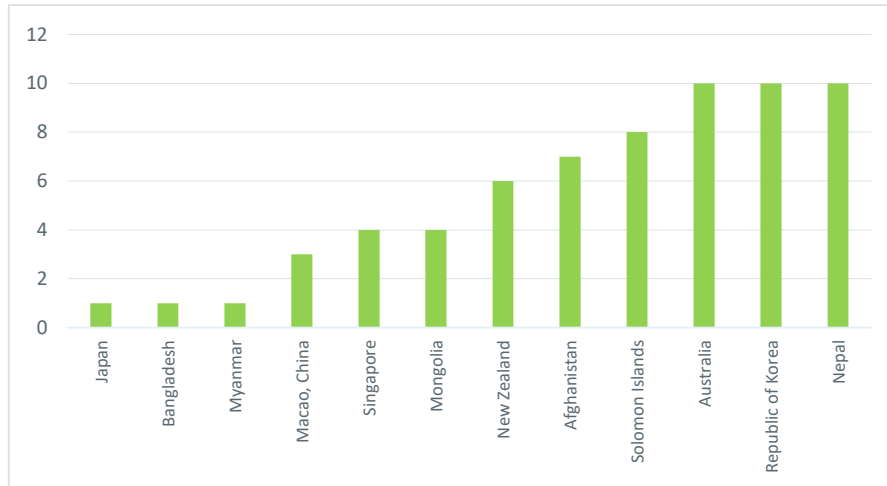


Old aged NOTAMs by States

Red (>100): India, Indonesia, China and Philippines

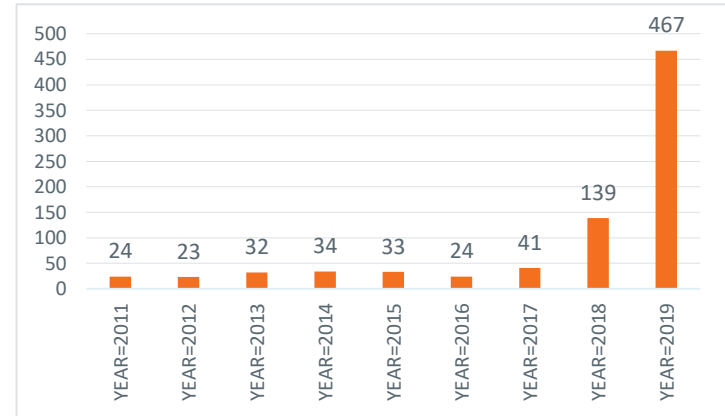
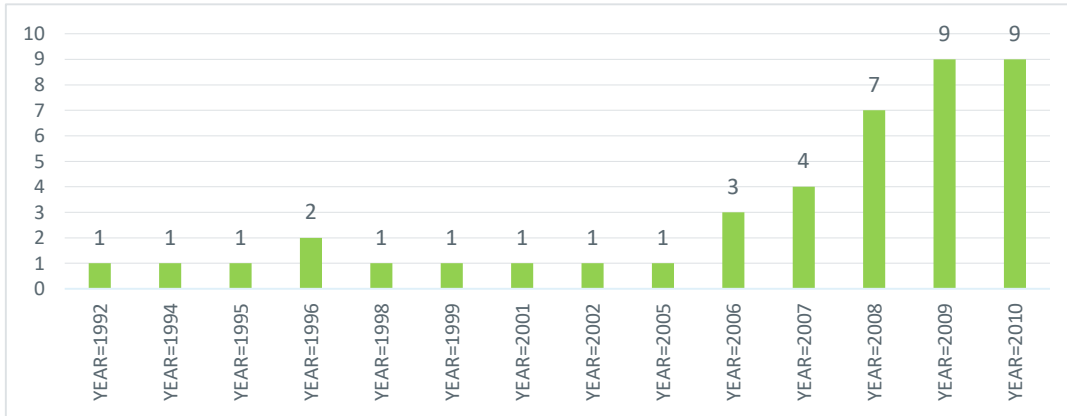
Orange (11-100): Papua New Guinea, Fiji, Pakistan, Thailand, Viet Nam and Malaysia

Green (<10): Nepal, Republic of Korea, Australia, Solomon Islands, Afghanistan, New Zealand, Mongolia, Singapore, Macao China, Myanmar, Bangladesh and Japan



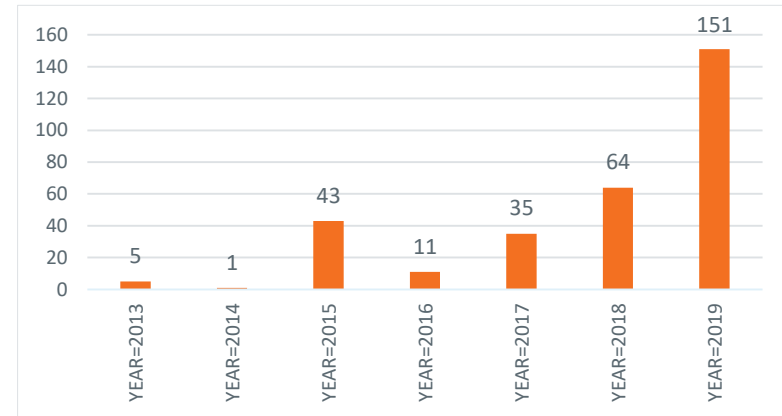
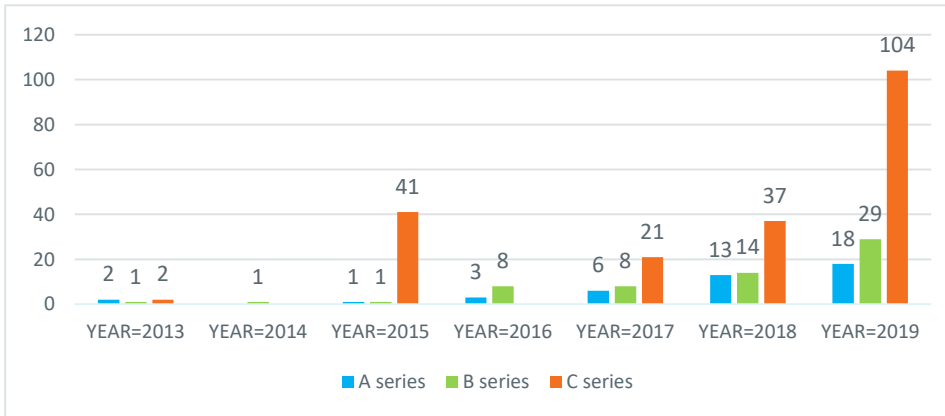
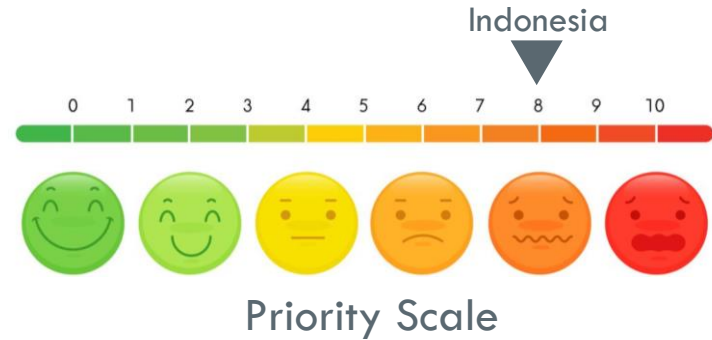
State NOTAM Statistic - India

- NOTAM Series: **A, C and G**
- Total NOTAMs: **1562**
- Old aged NOTAMs: **859**
- Oldest NOTAM: **1992** (18 years old)
- Percentage of old aged NOTAMs: **55.0%**



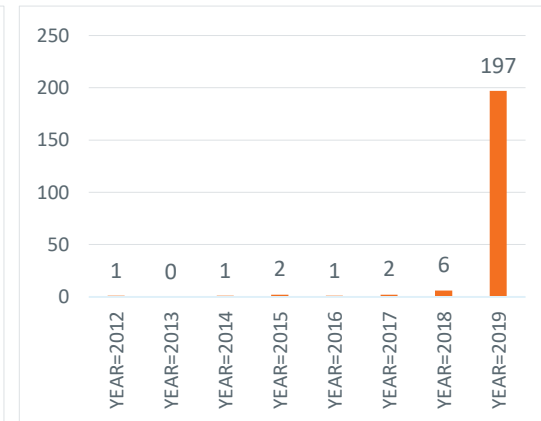
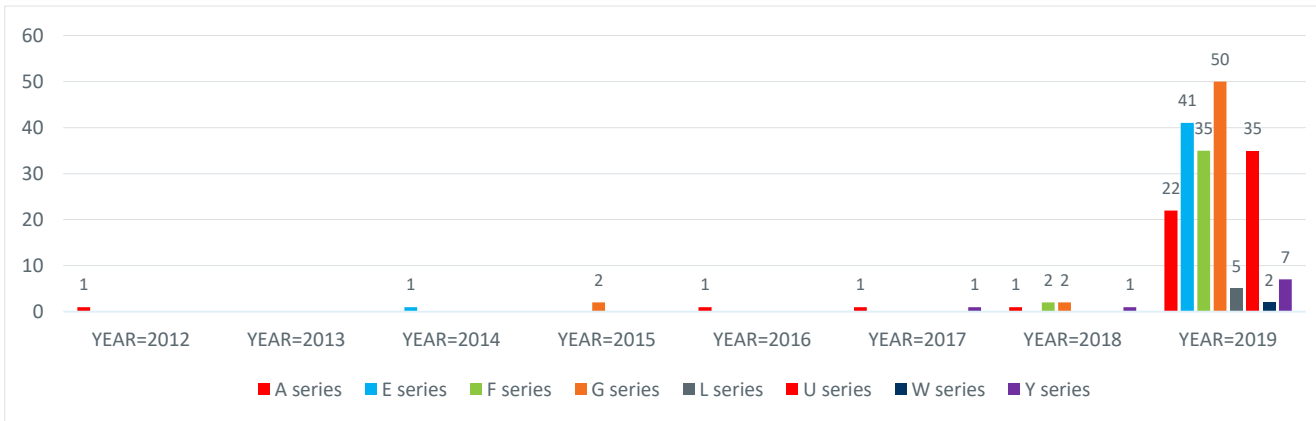
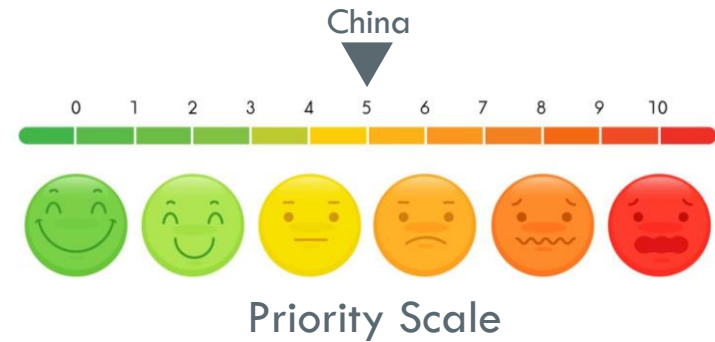
State NOTAM Statistic - Indonesia

- NOTAM Series: **A, B and C**
- Total NOTAMs: **611**
- Old aged NOTAMs: **310**
- Oldest NOTAM: **2013**
- Percentage of old aged NOTAMs: **50.7%**



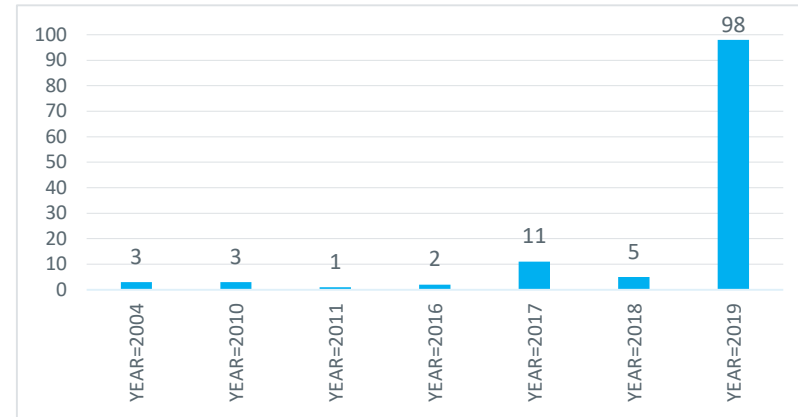
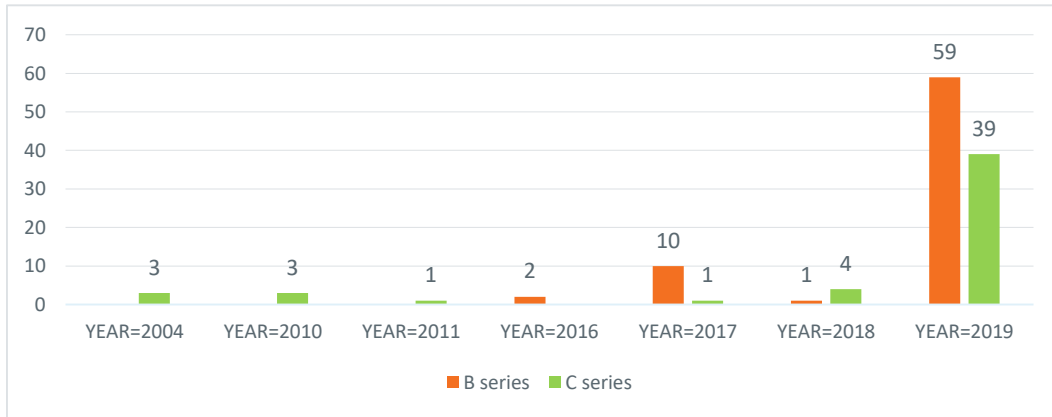
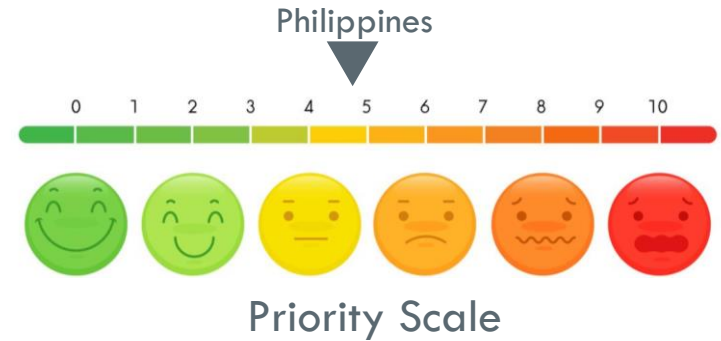
State NOTAM Statistic - China

- NOTAM Series: **A, E, F, G, L, U, W and Y**
- Total NOTAMs: **684**
- Old aged NOTAMs: **210**
- Oldest NOTAM: **2012**
- Percentage of old aged NOTAMs: **30.7%**



State NOTAM Statistic - Philippines

- NOTAM Series: **B and C**
- Total NOTAMs: **420**
- Old aged NOTAMs: **123**
- Oldest NOTAM: **2004**
- Percentage of old aged NOTAMs: **29.3%**



State NOTAM Statistic – Papua New Guinea

- NOTAM Series: **A**
- Total NOTAMs: **146**
- Old aged NOTAMs: **56**
- Oldest NOTAM: **2014**
- Percentage of old aged NOTAMs: **38.4%**

A0434/20 NOTAMR A0284/20

Q) AYPM/QK/000/999/

A) AYPM B) 2004010000 C) 2004302359 EST

E) CHECKLIST **OF CURRENT 'A' SERIES**

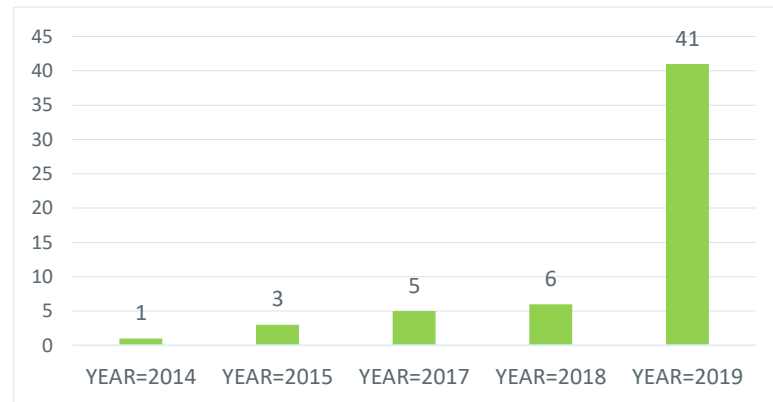
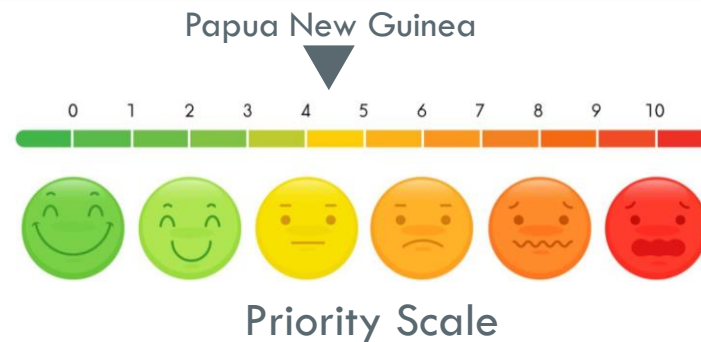
YEAR 2014 = 0047

YEAR 2015 = 0531 0534 0755

YEAR 2017 = 0053 0234 0649 0972 1289

YEAR 2018 = 0380 0406 0423 0958 1475 1476

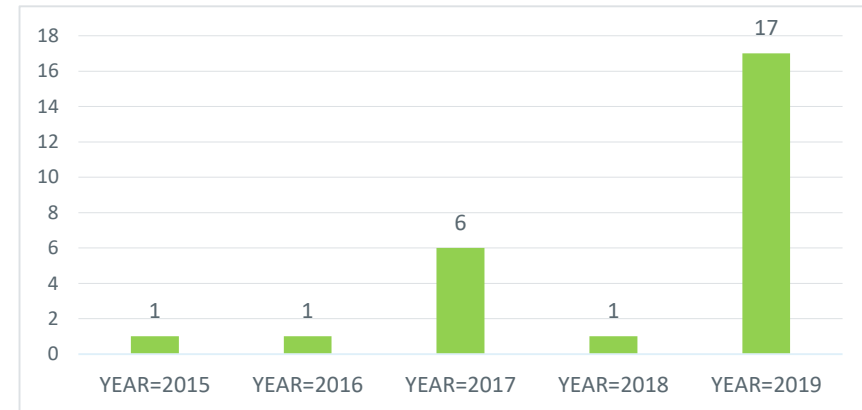
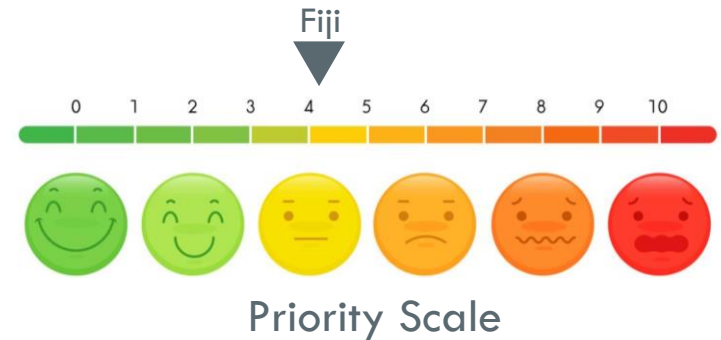
YEAR 2019 = 0083 0146 0430 0461 0564 0655 0660 0715 0716 0816 0833 1001
1008 1318 1361 1396 1408 1486 1495 1583 1643 1650 1651 1652 1654 1659 1674
1680 1690 1691 1694 1729 1730 1740 1757 1758 1759 1760 1763 1765 1766 ...



State NOTAM Statistic – Fiji

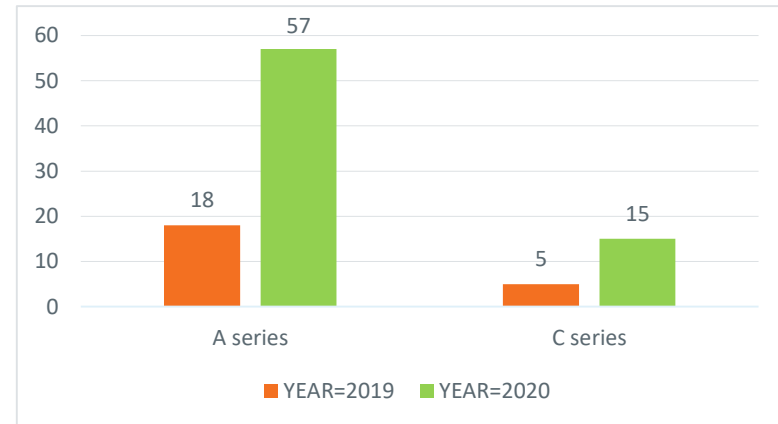
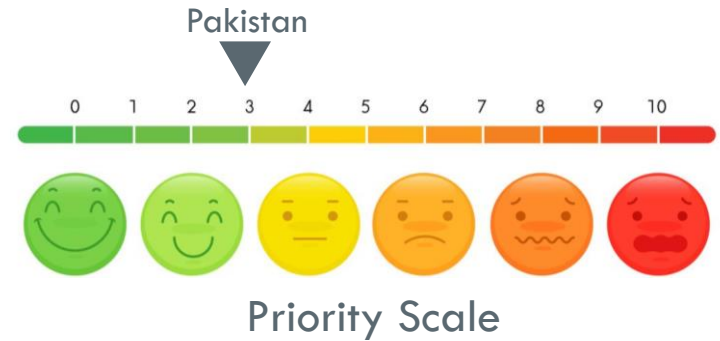
- NOTAM Series: **A**
- Total NOTAMs: **87**
- Old aged NOTAMs: **26**
- Oldest NOTAM: **2015**
- Percentage of old aged NOTAMs: **29.9%**

A0510/20 NOTAMR A0312/20
 Q) NFFX/QK KKK/K/K/K/000/999/**0000S00000E**999
 A) NFFF KZAK B) 2004010000 C) 2004302359 EST
 E) CHECKLIST
 YEAR=2015 1361
 YEAR=2016 1207
 YEAR=2017 0184 0900 0998 1073 1078 1346
 YEAR=2018 0162
 YEAR=2019 0310 0326 0327 0578 0594 1510 1667 1668 1669 1713
 1892 20132014 2017 2018 2346 2396
 YEAR=2020 0020 0021 0022 0026 0107 0108 0109 0119 0142 0143 0144



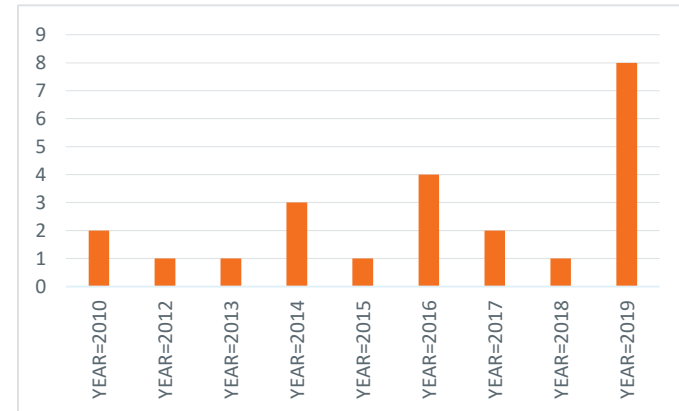
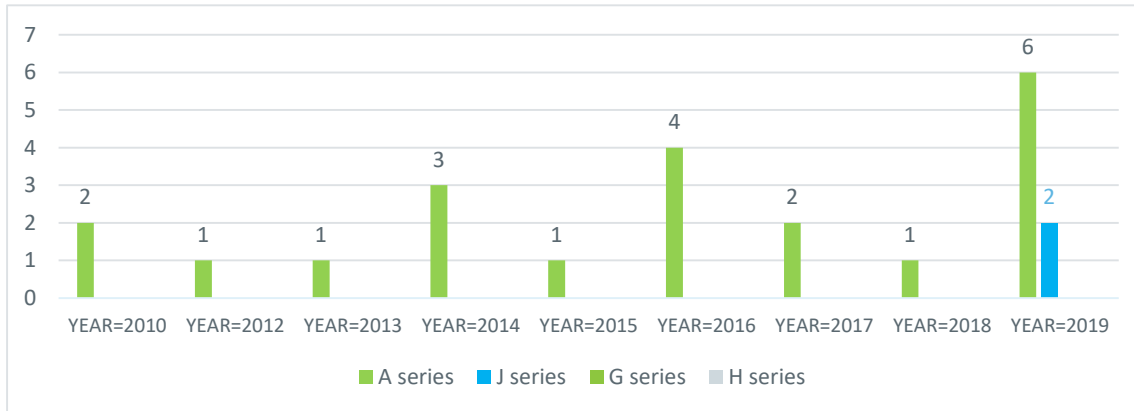
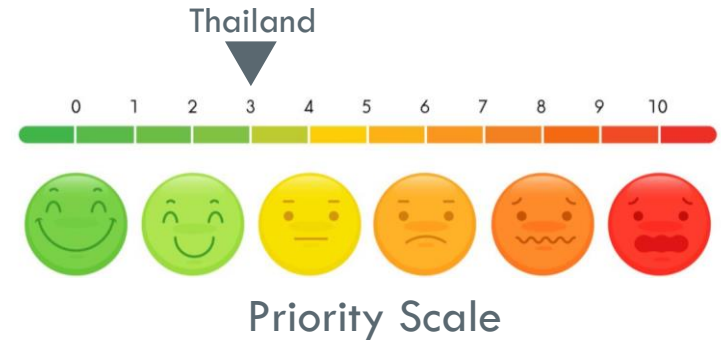
State NOTAM Statistic – Pakistan

- NOTAM Series: **A and C**
- Total NOTAMs: **95**
- Old aged NOTAMs: **23**
- Oldest NOTAM: **2019**
- Percentage of old aged NOTAMs: **24.2%**



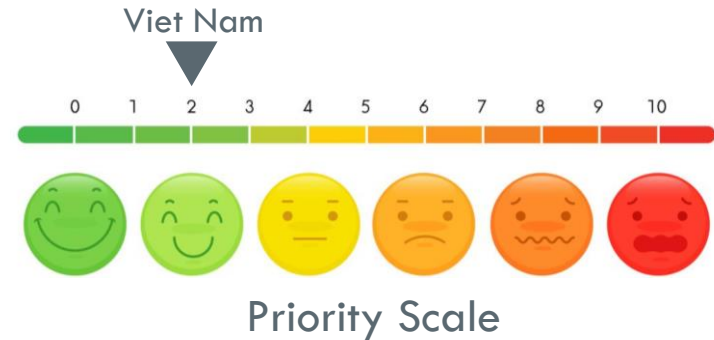
State NOTAM Statistic – Thailand

- NOTAM Series: **A, J, G and H**
- Total NOTAMs: **123**
- Old aged NOTAMs: **20**
- Oldest NOTAM: **2010**
- Percentage of old aged NOTAMs: **16.3%**



State NOTAM Statistic – Viet Nam

- NOTAM Series: **A**
- Total NOTAMs: **83**
- Old aged NOTAMs: **17**
- Oldest NOTAM: **2016**
- Percentage of old aged NOTAMs: **20.5%**

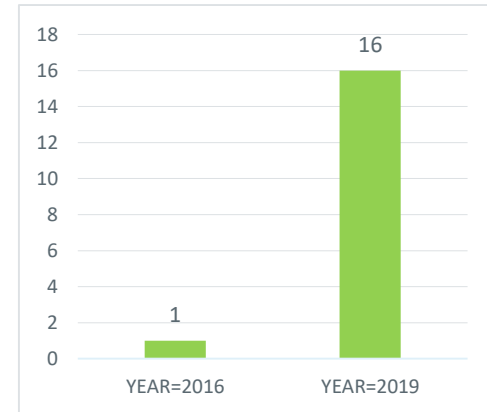


A0738/20 NOTAMR A3725/19

Q) VVXX/QOAXX/IV/BO/E/000/999/2023N10547E999

A) VVVV VVTS B) **2003290241** C) **2006292359 EST**

E) REF AIC A04/18 TRANSFERRING AND ASSIGNMENT OF AMHS ADDRESSES IN VIET NAM WEF **29 MAR 2018**
APPLICATION TIME STARTS FROM 0000 (UTC) 01 SEP 2018.



State NOTAM Statistic – Malaysia

- NOTAM Series: **A, C, D and F**
- Total NOTAMs: **213**
- Old aged NOTAMs: **15**
- Oldest NOTAM: **2019**
- Percentage of old aged NOTAMs: **7.0%**

D0482/20 NOTAMR D0387/20
Q) WBFC/QK K K K /K /K /K /000/999/
A) WBFC B) 2005010019 C) 2005312359 EST
E) CHECKLIST

SERIES D

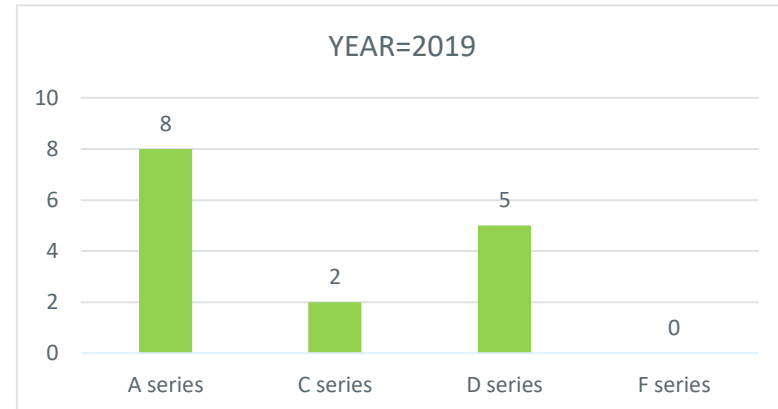
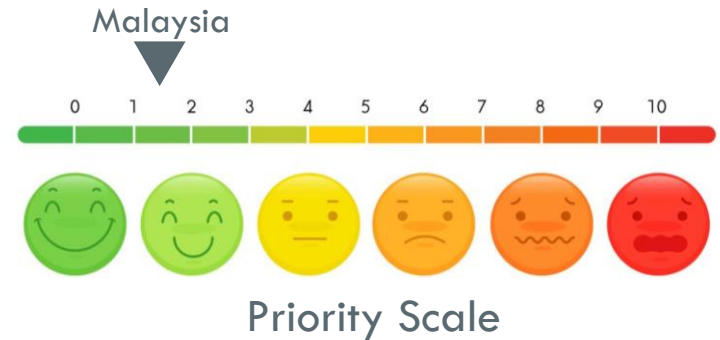
2019: 0306 0307

2020: 0029 0058 0066 0068 0135 0142 0156 0160 0198 0204 0205 0206 0212 0214 0218
0221 0265 0289 0290 0291 0345 0346 0353 0354 0355 0356 0357 0358 0361 0362 0367
0368 0369 0377 0378 0384 0385 0401 0406 0411 0415 0426 0439 0440 0445 0447 0448
0450 0451 0454 0455 0456 0457 0460 0461 0462 0463 0468 0473 0474 0479 0480 0481

LATEST AIP AMENDMENT : 01/2020 DATED 26 MAR 2020

LATEST AIP SUPPLEMENT : 04/2020 DATED 18 FEB 2020

LATEST AIC : 01/2020 DATED 16 JAN 2020





The Way Forward

- Use common method for analysis for next few years
- Cover all NOTAM series (both international and domestic distribution)
- APAC Administrations follow PANS AIM procedures and reduce old aged NOTAMs
- Regional Office continue to monitor old aged NOTAMs for next few years



Send Checklist of valid NOTAMs of each NOTAM series (*only April*) to ICAO APAC Regional Office no later than 30 April each year
Email: apac@icao.int



ICAO

North American
Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

ICAO
Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU