



International Civil Aviation Organization

**The Sixth Meeting of the APANPIRG ATM Sub-Group
(ATM/SG/6)**

Hong Kong, China, 30 July – 03 August 2018

Agenda Item 4: ATM Systems (Modernisation, Seamless ATM, CNS, ATFM)

PROPOSED NOTAM FORMAT FOR FLEXIBLE USE OF AIRSPACE (FUA)

(Presented by India, Japan and Thailand)

SUMMARY

This paper presents the jointly-proposed NOTAM format for Flexible Use of Airspace (FUA) operations based on continued coordination since the last AIS-AIM Implementation Task Force meeting (AAITF/13) for implementing a uniform format with Asia Pacific Region

1. INTRODUCTION

1.1 At ATM/SG/5 meeting in July-August 2017, India presented an Information Paper (IP) on Flexible Use of Airspace – Trial Operation of Delhi Airspace Management Cell (IP/19). It was recognized that format of NOTAMs notifying airspace use plan may differ among States that issued them and harmonization would be useful. ICAO proposed States that issue such NOTAM to engage in offline coordination with a view to harmonize and present a proposal to the next meeting of AIS-AIM Implementation Task Force (AAITF).

1.2 At AAITF/13 meeting in June 2018, Japan presented a proposal for NOTAM formats for Flexible Use of Airspace (FUA) operations with a view to harmonize the same within the Asia/Pacific Region (WP/6).

1.3 It was proposed to AAITF/13 meeting that States concerned conduct offline coordination with a view to present a proposal to ATM/SG/6 meeting in July/August 2018.

2. DISCUSSION

2.1 At AAITF/13 meeting, NOTAM formats were proposed for the following scenarios (detail in **Appendix A**):

- a) CDR 1: Route closure – single format proposed
- b) CDR1: Route not plannable (category change) – single format proposed
- c) CDR 2: State plannable time period and/or altitude – individual NOTAM format for each route segment / available time period / altitude range vs summary NOTAM format proposed

- d) Temporary Segregated Area (TSA) – individual NOTAM format for each route segment / available time period / altitude range vs summary NOTAM format proposed
- e) Temporary Reserved Area (TRA) – single format proposed
- f) Cross-Border Area (CBA) – single format proposed

2.2 Further offline coordination after AAITF/13 meeting on proposed format results in the following summary among India, Japan and Thailand:

Scenario	Format	India	Japan	Thailand
CDR 1: route closure	N/A	Acceptable	Acceptable	Acceptable
CDR 1: route not plannable (category change)	N/A	Acceptable, but scenario not used so far	Acceptable	Acceptable, but scenario not used so far
CDR 2: state plannable time period and/or altitude range	Individual NOTAM	Acceptable; individual NOTAM issued to activate CDR 2	Acceptable	Not preferred due to the need to issue more NOTAMs for multiple CDRs
	Summary NOTAM	Acceptable	Acceptable	Support to optimize number of NOTAMs issued
Temporary Segregated Area (TSA)	Individual NOTAM	Acceptable	Acceptable	No preference due to no TSA in use
	Summary NOTAM	Acceptable	Acceptable	
Temporary Reserved Area (TRA)	N/A	Acceptable	Acceptable	No preference due to no TRA in use
Cross-Border Area (CBA)	N/A	Acceptable, but has not published any CBA	Acceptable	No preference due to no CBA in use

2.3 As an interim step while current NOTAM are being migrated to Digital NOTAM as part of AIS to AIM transition, specifying harmonized regional NOTAM format would assist stakeholders in Flexible Use of Airspace (FUA) operations in automating and optimizing other resource allocation processes such as flight planning process.

2.4 The following draft Conclusion is presented for the meeting's consideration:

Draft Conclusion ATM/SG/6-X: Recommended NOTAM Format for FUA Operations			
What: That, States are urged to issue NOTAM for Flexible Use of Airspace (FUA) operations in accordance with the NOTAM format at Appendix X to the Report.		Expected impact: ☐ Political / Global ☐ Inter-regional ☐ Economic ☐ Environmental ☒ Ops/Technical	
Why: To ensure harmonization of NOTAMs issued for Flexible Use of Airspace (FUA) operations		Follow-up: ☒ Required from States	
When: 30-Nov-18		Status: Draft to be adopted by Subgroup	

Who: ☐ Sub groups ☒ APAC States ☐ ICAO APAC RO ☒ ICAO HQ ☐ Other:
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3. **ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this paper
- b) discuss specific NOTAM formats for Flexible Use of Airspace (FUA)
- c) discuss the Draft Conclusion recommending States/Administration to issue Flexible Use of Airspace (FUA) NOTAMs in accordance to harmonized format; and
- d) discuss any relevant matters as appropriate.

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Appendix A – Proposed NOTAM Formats and Examples

Scenario 1 – CDR 1: Route close

NOTAM Format 1.1:

(Series and number/year NOTAMN
Q) FIR/ NOTAM code/ Traffic/ Purpose/Scope/ Lower Limit/ Upper Limit/
Coordinates, Radius
A) LCTN indicator B) From (date-time-group) C) To (Perm or date-time-
group)
D) Time schedule
E) CDR 1 [Route designator] [significant point - significant point]
CLSD [due to xxxx]
F) Lower Limit G) Upper Limit)

Example 1.1:

(A0001/18 NOTAMN
Q) EDGG/QANLC/I/NBO/E/350/660/4931N00739E049
A) EDGG B) 18050231500 C) 18050231630
E) CDR 1 UZ210 KRG - NOSAP CLSD DUE TO MIL ACT
F) FL350 G) FL660)

Scenario 2 – CDR 1: Route not plannable (category change)

NOTAM Format 2.1:

(Series and number/year NOTAMN
Q) FIR/ NOTAM code/ Traffic/ Purpose/Scope/ Lower Limit/ Upper Limit/
Coordinates, Radius
A) LCTN indicator B) From (date-time-group) C) To (Perm or date-time-
group)
D) Time schedule
E) CDR 1 [Route designator] [BTN significant point AND significant
point] CHANGE TO CDR 3 REF AIP ENR 3.2
F) Lower Limit G) Upper Limit)

Example 2.1:

(A0002/18 NOTAMN
Q) LFMM/QANLC/I/NBO/E/350/660/4931N00739E049
A) LFMM B) 1805231500 C) 1805231630
E) CDR 1 UM984 KOLON - GANGU CHANGE TO CDR3)

Scenario 3 – CDR 2: State plannable time period and/or altitude range

NOTAM Format 3.1: individual NOTAM per time period / altitude range

```
(Series and number/year NOTAMN
Q) FIR/ NOTAM code/ Traffic/ Purpose/Scope/ Lower Limit/ Upper Limit/
Coordinates, Radius
A) LCTN indicator B) From (date-time-group) C) To (Perm or date-time-
group)
D) Time schedule
E) CDR 2 [Route designator] ACT
F) Lower Limit G) Upper Limit)
```

Example 3.1:

```
(A0003/18 NOTAMN
Q) RJJJ/QANCA/I/NBO/E/000/999/3310N14118E999
A) RJJJ B) 1805011500 C) 1805012100
E) CDR 2 Z29 ACT
F) F290 G) UNL)
```

NOTAM Format 3.2: summary NOTAM

```
(Series and number/year NOTAMN
Q) FIR/ NOTAM code/ Traffic/ Purpose/Scope/ Lower Limit/ Upper Limit/
Coordinates, Radius
A) LCTN indicator B) From (date-time-group) C) To (Perm or date-time-
group)
E) CDR ACT AS FLW:
[Route designator1] [Time schedule from1]-[Time schedule to1] [Lower
limit1]-[Upper Limit1]
[Route designator2] [Time schedule from2]-[Time schedule to2] [Lower
limit2]-[Upper Limit2]
...
[Route designatorn] [Time schedule fromn]-[Time schedule ton] [Lower
limitn]-[Upper Limitn])
```

Example 3.2:

```
(A0004/18 NOTAMN
Q) RJJJ/QANCA/I/NBO/E/000/999/3310N14118E999
A) RJJJ B) 1804302100 C) 1805012100
E) CDR ACT AS FLW:
Z29 1804302100-1805012000 MEA-UNL
Z31 1805011500-1805012100 MEA-UNL
Z32 1805011500-1805012100 MEA-UNL
Z34 1805011500-1805012100 MEA-UNL)
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Scenario 4 – Temporary Segregated Area (TSA)

NOTAM Format 4.1: individual NOTAM per time period / altitude range

```
(Series and number/year NOTAMN
Q) FIR/ NOTAM code/ Traffic/ Purpose/Scope/ Lower Limit/ Upper Limit/
Coordinates, Radius
A) LCTN indicator B) From (date-time-group) C) To (Perm or date-time-
group)
D) Time schedule
E) TSA [Name] ACT
F) Lower Limit G) Upper Limit)
```

Example 4.1:

```
(B0051/18 NOTAMN
Q) LECB/QRTCA/IV/BO/W/000/240/4148N00211E003
A) LECB B) 1805020600 C) 1806221800
E) TSA 31 ACT
F) SFC G) 4000FT AMSL)
```

NOTAM Format 4.2: summary NOTAM

```
(Series and number/year NOTAMN
Q) FIR/ NOTAM code/ Traffic/ Purpose/Scope/ Lower Limit/ Upper Limit/
Coordinates, Radius
A) LCTN indicator B) From (date-time-group) C) To (Perm or date-time-
group)
E) TSA ACT AS FLW:
[Name1] [Time schedule from1]-[Time schedule to1] [Lower limit1]-
[Upper Limit1]
[Name2] [Time schedule from2]-[Time schedule to2] [Lower limit2]-
[Upper Limit2]
...
[Namen] [Time schedule fromn]-[Time schedule ton] [Lower limitn]-
[Upper Limitn])
```

Example 4.2:

```
(B0006/18 NOTAMN
Q) LECB/QRTCA/IV/BO/W/000/040/4148N00211E003
A) LECB B) 1805020600 C) 1805021800
E) TSA ACT AS FLW:
TSA31 1805020600-1805021800 SFC-4000FT AMSL
TSA32 1805020900-1805021800 SFC-4000FT AMSL)
```

Scenario 5 – Temporary Reserved Area (TRA)

NOTAM Format 5.1:

(Series and number/year NOTAMN
Q) FIR/ NOTAM code/ Traffic/ Purpose/Scope/ Lower Limit/ Upper Limit/
Coordinates, Radius
A) LCTN indicator B) From (date-time-group) C) To (Perm or date-time-
group)
D) Time schedule
E) TRA [Name] ACT
F) Lower Limit G) Upper Limit)

Example 5.1:

(B0007/18 NOTAMN
Q) EGPX/QRMCA/I/NBO/E/000/999/3310N14118E999
A) EGPX B) 1804301700 C) 1804301930
E) TRA 007A ACT DUE TO MIL TRAINING
F) FL195 G) FL245)

Scenario 6 – Cross Border Area (CBA)

NOTAM Format 6.1:

(Series and number/year NOTAMN
Q) FIR/ NOTAM code/ Traffic/ Purpose/Scope/ Lower Limit/ Upper Limit/
Coordinates, Radius
A) LCTN indicator B) From (date-time-group) C) To (Perm or date-time-
group)
D) Time schedule
E) [CBA Name] ACT
F) Lower Limit G) Upper Limit)

Example 6.1:

(B0008/18 NOTAMN
Q) LFFF/QRRCA/IV/BO/W/065/999/4950N00441E24
A) LFFF B) 1805090630 C) 1805091600
E) LF-CBA16B ACT
F) FL065 G) UNL)