EUROCONTROL Guidelines Operating Procedures AIS Dynamic Data (OPADD)

DOCUMENT IDENTIFIER: EUROCONTROL - GUID - 121

Edition Number	**:**	**4.1**
Edition Date	**:**	**07/12/2020**
Status	**:**	**Released Issue**
Intended for	**:**	**General Public**
Category	**:**	**EUROCONTROL Guidelines**

DOCUMENT CHARACTERISTICS

TITLE		
EUROCONTROL Guidelines Operating Procedures AIS Dynamic Data (OPADD)		
	Publication Reference:	GUID - 121
	ISBN Number:	978-2-87497-078-8
Document identifier	**Edition Number:**	4.1
EUROCONTROL - GUID - 121	**Edition Date:**	07/12/2020

Abstract

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.
This document details operating procedures for:
- 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).

The procedures described herein should allow increased automation. However, they are also applicable in non-automated environment to cover worldwide AIS operational requirements.

Keywords

NOTAM	SNOWTAM	NSC	PIB
NOTAM Code	ASHTAM	Trigger NOTAM	

Contact Person(s)	E-mail
A. WOJTOWICZ	aim@eurocontrol.int standardisation@eurocontrol.int

STATUS, AUDIENCE AND ACCESSIBILITY					
Status		**Intended for**		**Accessible via**	
Working Draft	☐	General Public	☒	Intranet	☐
Draft	☐	EUROCONTROL	☐	Extranet	☐
Proposed issue	☐	Restricted	☐	Internet (www.eurocontrol.int)	☒
Released issue	☒				

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 *(Note: all graphics are the property of NAV CANADA)*, 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

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 partcipants: 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) - SNOWTAM together with a publication of ICAO EUR Doc 041 Guidance on the Issuance of SNOWTAM 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 SNOWTAM 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 k*eywords 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:

№	Title	Edition	Date
1	ICAO International Standards and Recommended Practices Aeronautical Information Services - Annex 15	16th, 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	175th	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 Templates[1]

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 QMK**LC** (parking area closed) instead of QMK**HW** (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).

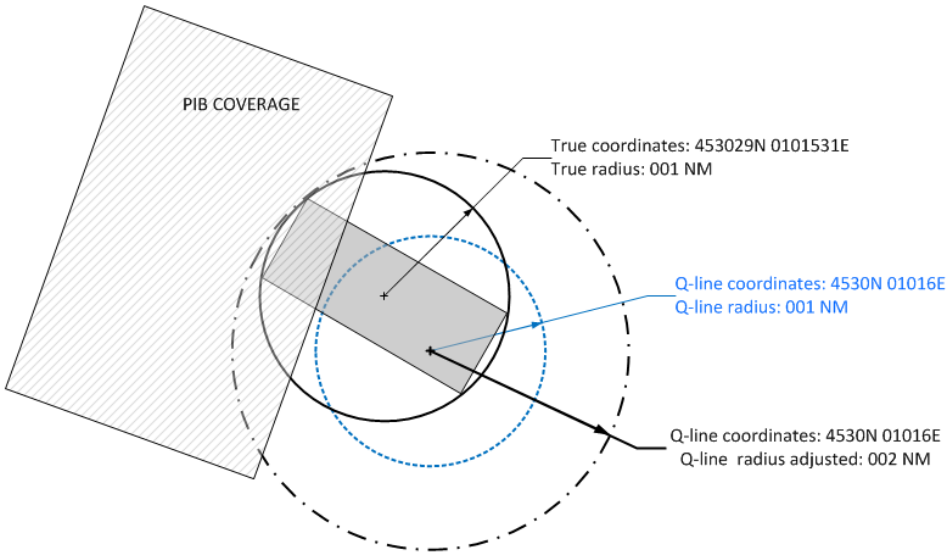
2.3.13 Qualifier 'GEOGRAPHICAL REFERENCE' – Radius

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/000/999/5120N01030E999
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. Note: 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

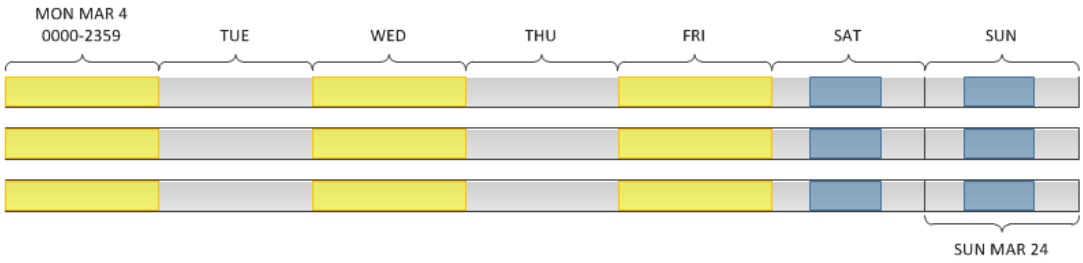
2.3.18.1 This Item needs to be inserted only when the information contained in a NOTAM is relevant for users only at certain periods within the overall 'in force' period, i.e. between the dates and times given in Items B) and C). In these cases, Item D) will detail the actual periods of activation with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

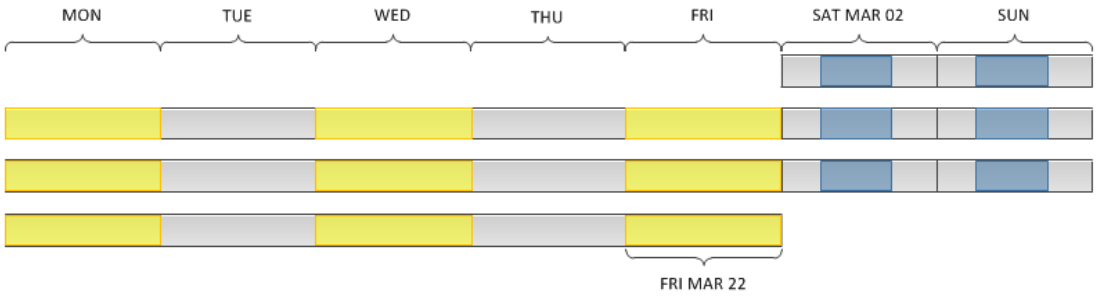
2.3.18.3 If the NOTAM is issued during an activity period that is defined by days of the week and that will be repeated, then the first day given in Item D) **may** not equate literally to the date in Item B).

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
```



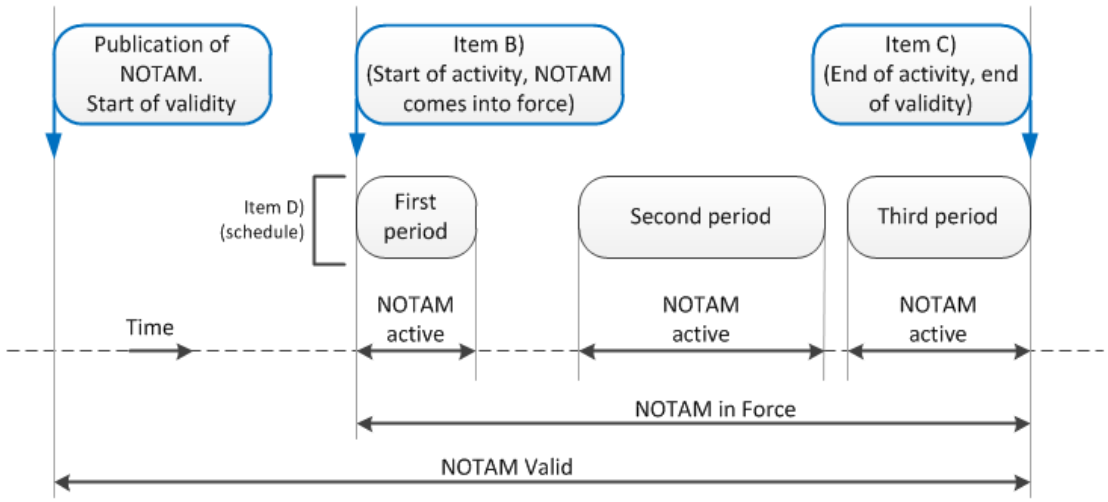

```
B) 1303020600 C) 1303222359
D) MON WED FRI H24, SAT SUN 0600-1700
```



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) YYMMDD1000
C) YYMMDD2000
E) OPERATION HOURS OF ATC CHANGED TO 1200-
1900
```

Example 2: Operating hours of ATC are changed from **1000**-1800 to 1200-**1900**:

```
B) YYMMDD1000
C) YYMMDD1900
E) OPERATION HOURS OF ATC CHANGED TO 1200-
1900
```

Example 3: Operating hours of ATC are changed from 1000-1800 to **0800**-**1900**:

```
B) YYMMDD0800
C) YYMMDD1900
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

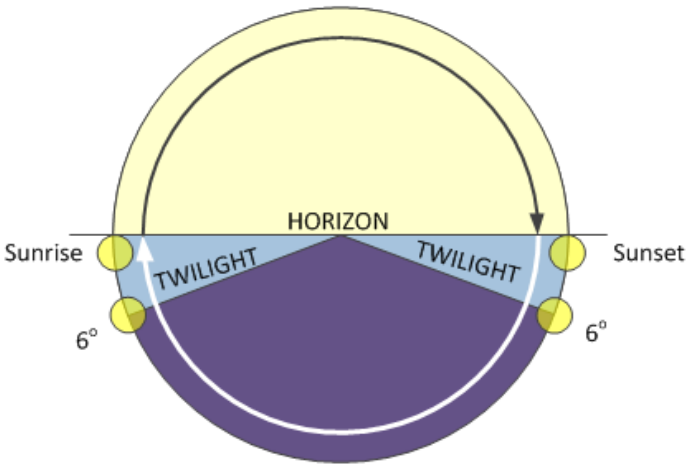
2.3.20.1 Sunrise (SR) and Sunset (SS): If the active time of a NOTAM corresponds to sunrise or sunset, the actual times of sunrise on the first day of validity and of sunset on the last day of validity **should** be inserted in Items B) and C) respectively.

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

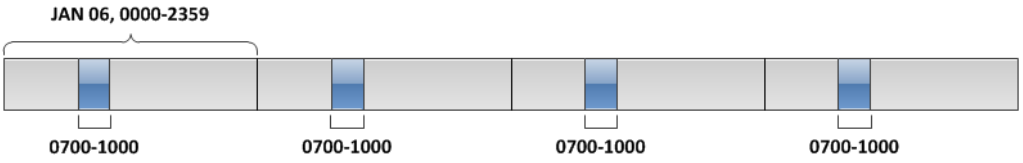
2.3.21.1 The following examples pre-suppose a correct calendar and the application of the rule that the start of the first activity in Item D) coincides with the Item B) date and time, and the end of the last activity with that in Item C). Therefore, Items B) and C) (i.e. the defined time periods) are not shown in the examples unless required for clarification.

Example 1: **Repetitive event active every day:**

```
D) 0700-1000
```

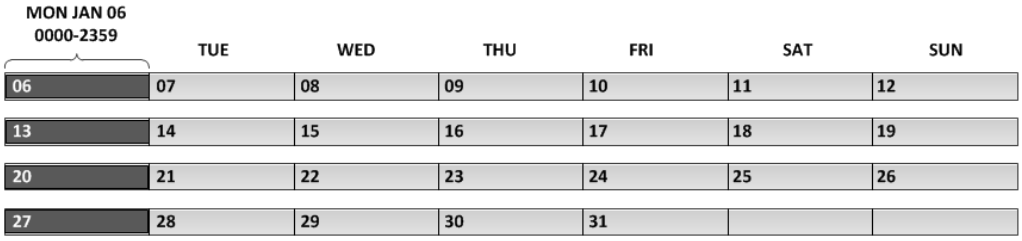
or

```
D) DAILY 0700-1000
```



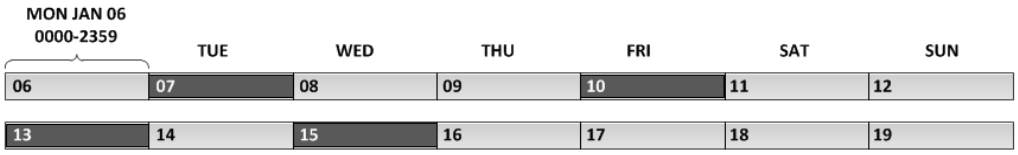
Example 2: **Repetitive event active on a certain weekday:**

```
B) 1401060000    C) 1401272359
D) EVERY MON H24
```



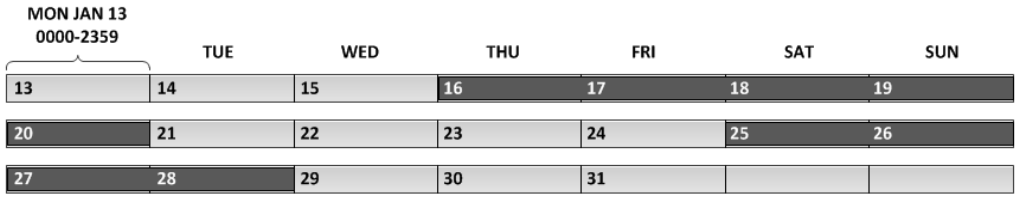
Example 3: **Activity only on specific days within the period**:

```
B) 1401070000   C) 1401152359
D) 07 10 13 15 H24
```



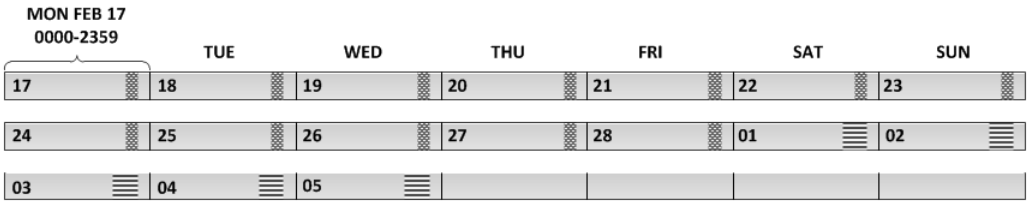
Example 4: **Various day-periods explained by FROM-TO:**

```
D) 16-20 25-28 H24
```

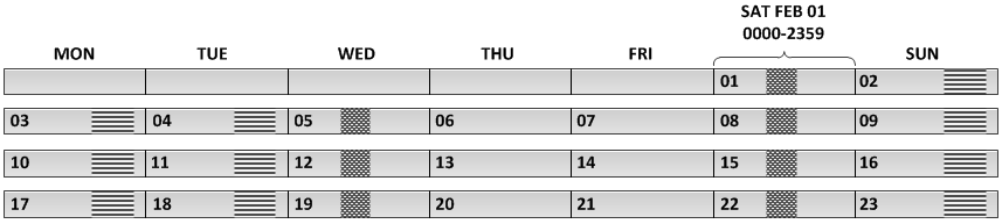


Example 5: **Combination of day-periods and time-periods:**

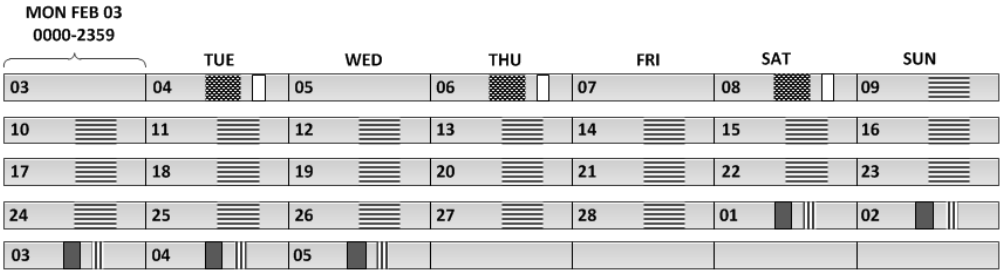
```
D) FEB 17-28 2000-2200, MAR 01-05 1800-2200
```



D) WED SAT 0900-1400, SUN-TUE 1500-2200



D) FEB 04 06 08 1000-1600 1800-2000, 09-28 1200-1900, MAR 01-05 1000-1300 1500-1700



Example 6: **Combination of whole day-periods (H24) with part day-periods:**

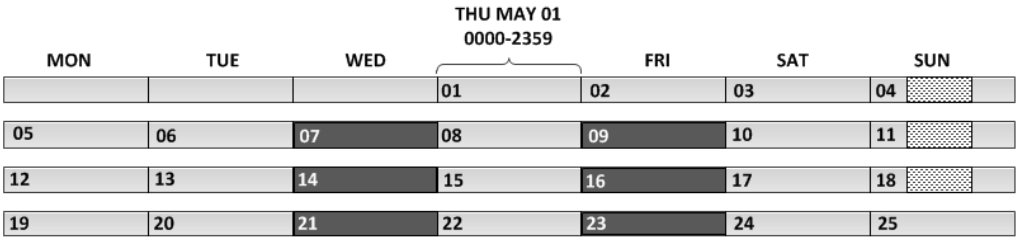
Activity H24 on WED and FRI, and from 0600 to 1700 on SUN:

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



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						
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					

October 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	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					

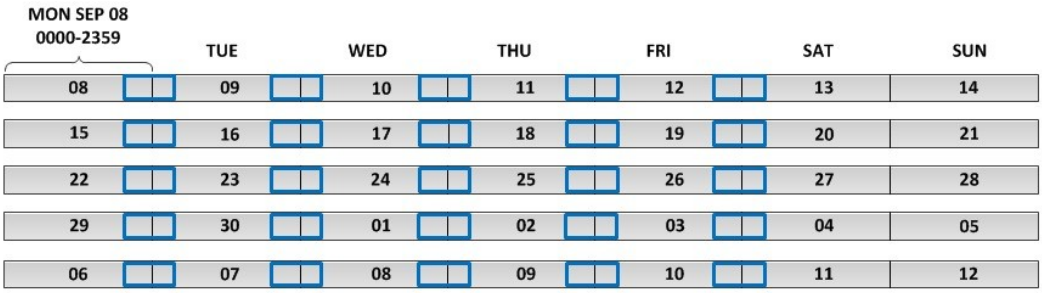
Exceptions with periods spanning midnight:

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.

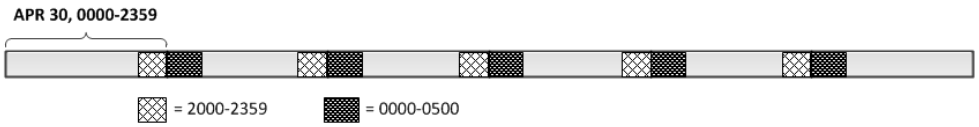
B) 1406041900 C) 1406130600
D) WED 1900-FRI 0600

or

D) 04 1900-06 0600, 11 1900-13 0600

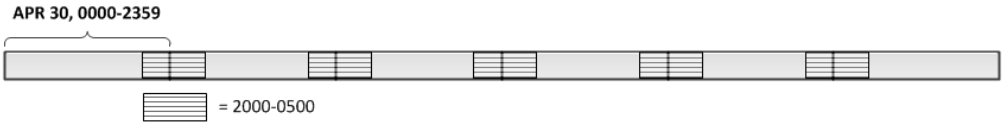
Example 9: The activity takes place every day between 2000 and 0500. The periods start on April 30 at 2000 and ends on May 05 at 0500:

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:

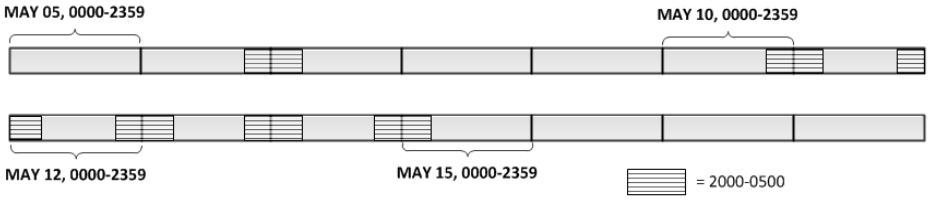
a) First period of activity starts on May 06 at 2000 and ends on May 07 at 0500 and a series of subsequent 2000-0500 periods start on May 10 at 2000 and ends on May 15 at 0500:

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:

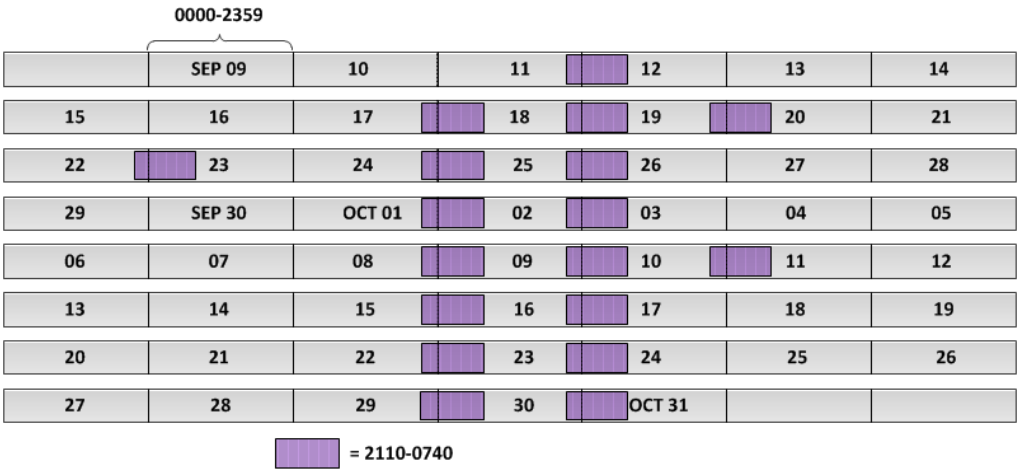
```
B) 1405062300    C) 1405101300
D) 06-09 2300-1300
```

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:

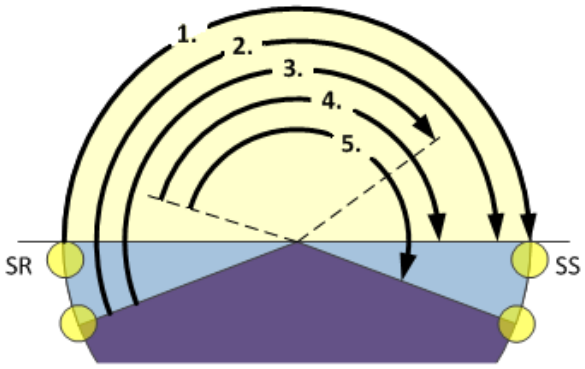
1: D) SR-SS

2: D) SR MINUS30-SS

3: D) SR MINUS30-1500

4: D) 0800-SS

5: D) 0800-SS PLUS30

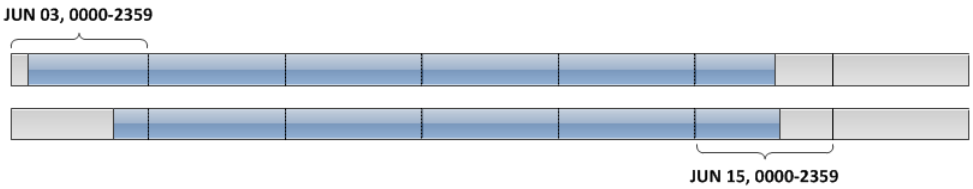


Example 13: Periods of activity longer than 24 hours:

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**42N**

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:

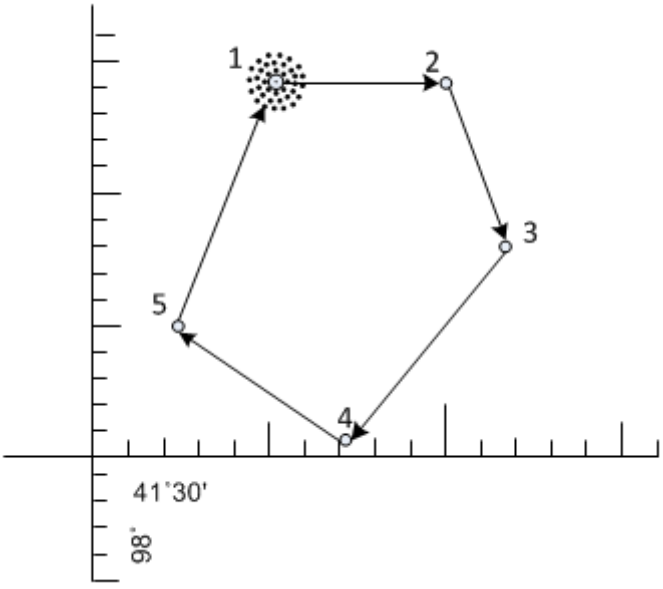
```
E) DANGER AREA LYD12 ACT.
```

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).



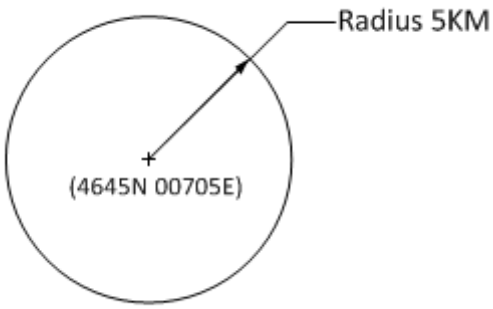
Example:

```
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:

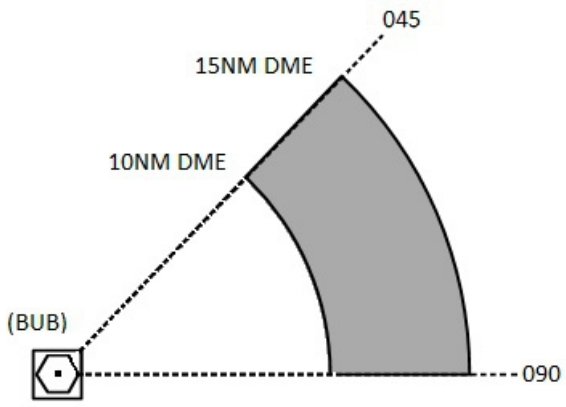
E) AIR DISPLAY WILL TAKE PLACE WITHIN: 5KM RADIUS CENTRED ON 4645N 00705E (ECUVILLENS AD).

The lateral limits of the affected area can also be defined by the appropriate radial and distance from a navigation aid.

c) Circle Sector

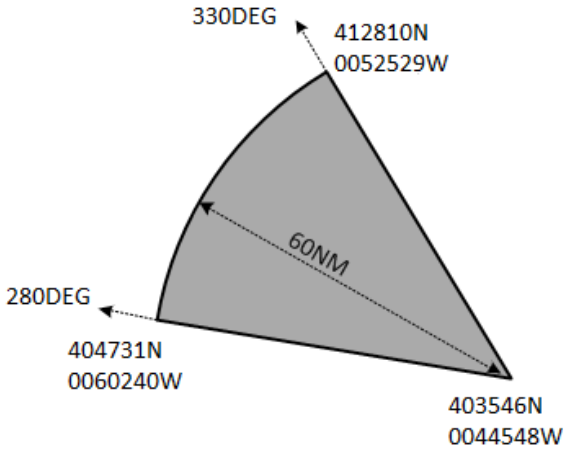
A circle sector is a part of a disc between two specified angular values and between an inner and outer arc of a circle.

Example 1:



E) EXERCISE X WILL TAKE PLACE WITHIN A SECTOR DEFINED BY: 505407N 0043217E (BUB VOR/DME) BETWEEN BUB RDL 045 BUB AND RDL 090, INNER ARC 10NM RADIUS OUTER ARC 15NM RADIUS CLOCKWISE.

Example 2:

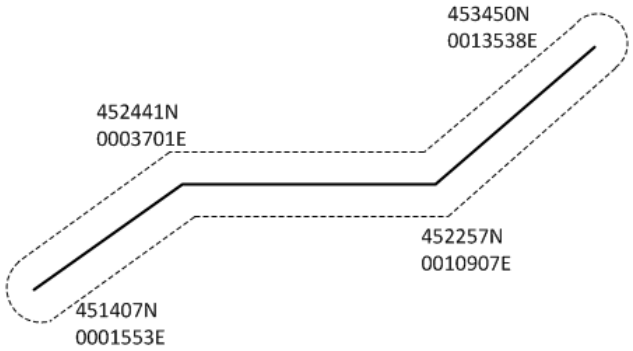


E) EXERCISE X WILL TAKE PLACE WITHIN A SECTOR CENTRED ON 403546N 0044548W BTN BRG 280 AND 330DEG AND ARC 60NM RADIUS CLOCKWISE.

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.

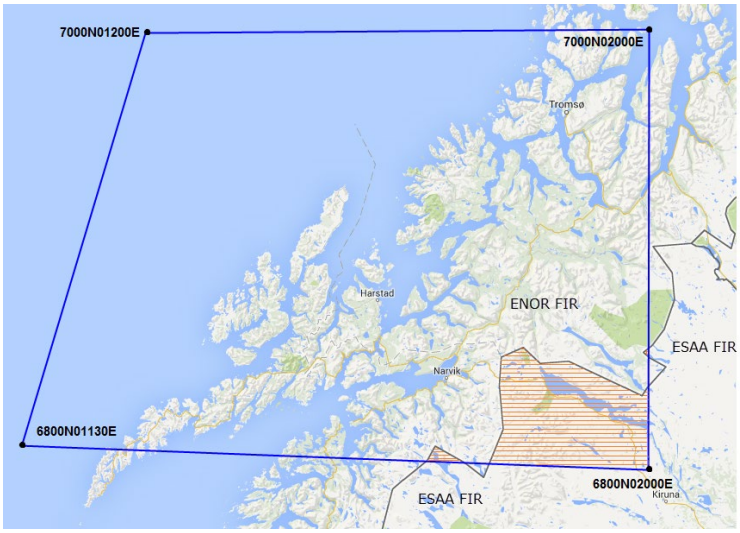
Example 1:

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 LSGP: 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:

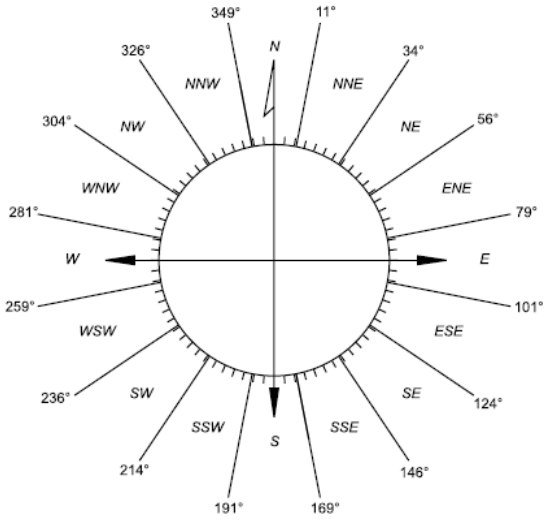
Examples:

```
-500FT SOUTH OF TWR.
-250M 023DEG FM ARP.
-3.5KM NE OF ARP LSPV.
```

Guidance for direction information:

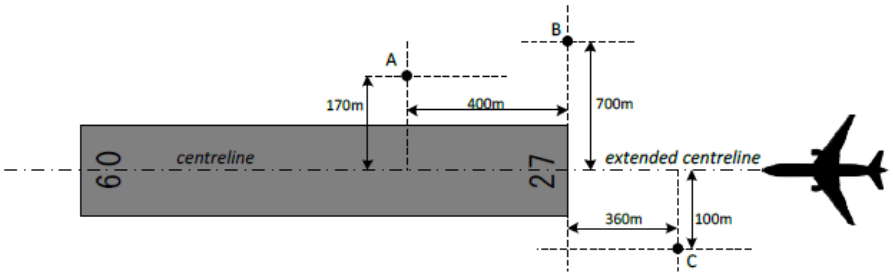
a) indicating the exact number of degrees for direction

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):
SFC
GND
XXXXXFT AGL
XXXXXFT AMSL
XXXXXM AGL
XXXXXM AMSL
FLXXX (see 2.3.23.9)

Item G):
UNL
XXXXXFT AGL
XXXXXFT AMSL
XXXXXM AGL
XXXXXM AMSL
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 checklist

Example 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 NOTAM N
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 NOTAM**N** 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 NOTA RM A00122/14
Q) EDGG/QQMRLC/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 DROPING
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) 1407231639
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 EDDZYNYX
160900 LFFAYNYX
RQN EPWW A1253/14
```

Reply:
```
ZCZC ...
GG LFFAYNYX
160905 EDDZYNYX
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 EDDZYNYX
281030 LFFAYNYX
RQN LCNC A0199/14-A0210/14
```

Reply:
```
ZCZC ...
GG LFFAYNYX
281035 EDDZYNYX
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 EDDZYNYX
281530 LFFAYNYX
RQN UUUU A0400/14 A0410/14 A0420/14-
A0425/14
```

Reply:
```
ZCZC ...
GG LFFAYNYX
281540 EDDZYNYX
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 EDDZYNYX
091430 LFFAYNYX
RQR GOOO A0213/14
NOTAM REQUESTED
```

or if the NOTAM number is greater than the last one received:

```
ZCZC ...
GG EDDZYNYX
091430 LFFAYNYX
RQR GOOO A0213/14
NOTAM NOT ISSUED
```

or if the NOTAM was cancelled, replaced or deleted:

```
ZCZC ...
GG EDDZYNYX
091430 LFFAYNYX
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 LIIAYNYX
301235 LFFAYNYX
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 EDDZYNYX
110925 LEANYNYX
RQR MUHA A1577/14
NOTAM NOT ISSUED
```

Example 13: The requested Korean NOTAM A0449/14 was replaced.

Reply:

```
ZCZC ...
GG LFFAYNYX
282055 LIIAYNYX
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 EDDZYNYX
310840 LIIAYNYX
RQL EGGN B G
```

Reply:
```
ZCZC ...
GG LIIAYNYX
310850 EDDZYNYX
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`	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 EDDZYNYX
RQN LEMD LEBL
```

Reply:

```
ZCZC …
GG EDDZYNYX
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
```

Example 19:

Request:

```
ZCZC …
GG EBBRYNYN
151030 LOWWYNYX
RQN EBBR A0523/14-A0626/14
```

Reply:

```
ZCZC …
GG LOWWYNYX
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 LOWWYNYX
RQN EBBA A0523/14-A0626/14
```

Reply:

```
ZCZC …
GG LOWWYNYX
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.

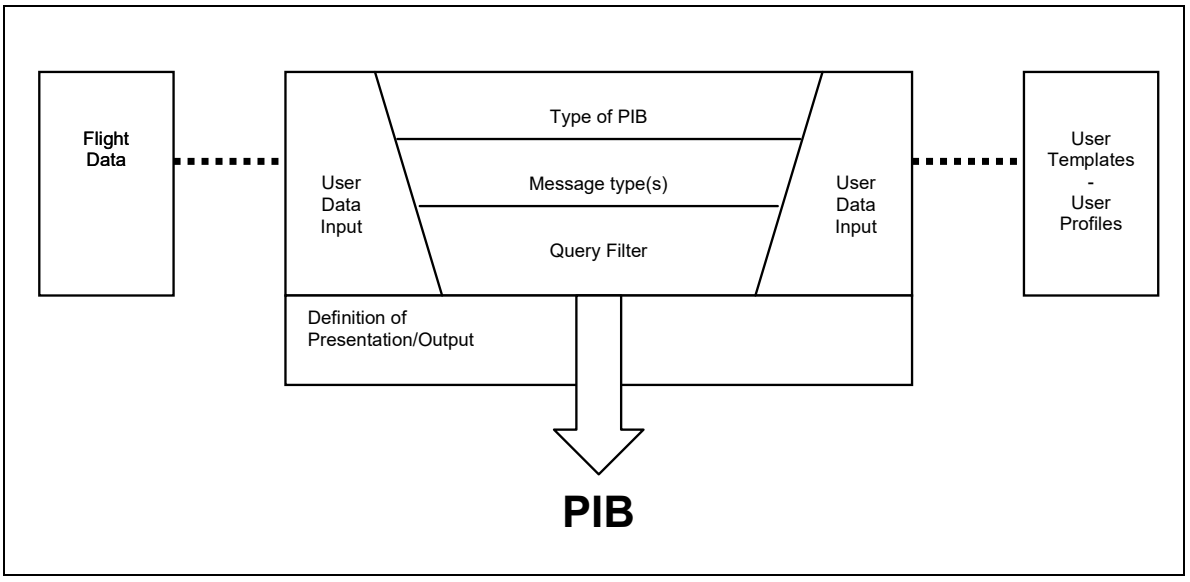
- Enable the pilot to obtain a briefing that is structured to suit their particular needs.
- Improve the ways briefings are conducted and delivered.
- Reduce the amount of time taken to obtain a briefing.
- Provide easy access to information incl. updates thereafter.
- Provide this information at any 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.

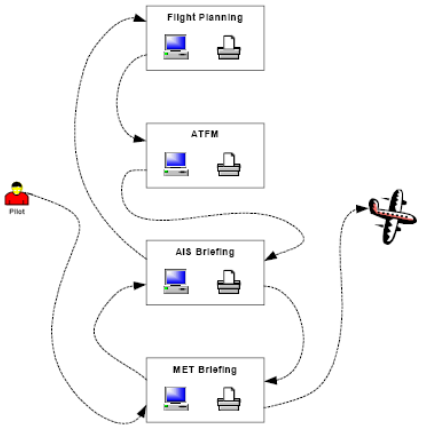
More detailed reference on such data may be found in Chapter 5.3 of 'Integrated Briefing - Technical Concept Document' [AIM/AEP/BRIEF/0025] available at:
eurocontrol.int/publication/guidance-integrated-briefing

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'.

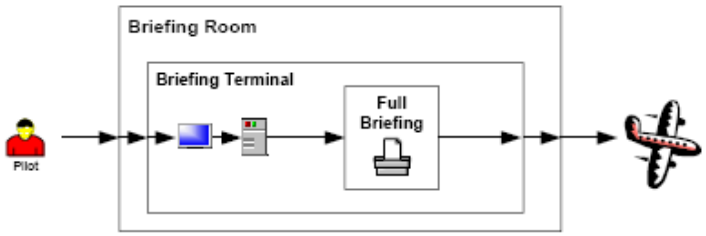


Today, the following briefing infrastructure prevails and it may be described as 'distributed Briefing service':

- 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 -