



## AIC B 32/07. Minimum Requirements and Operating Practices and Procedures for RVSM Airspace

(Erstatter AIC B 14/06)

### 1. Background.

As outlined in B-57/2002 (published 6 NOV) and BL 5-55, (published 19 DEC 2000), European Reduced Vertical Separation Minimum (EUR RVSM) was introduced 24 January 2002.

Each aircraft, that an aircraft operator intends to use in a RVSM airspace, should have received RVSM airworthiness approval and the operator should have an approval of a continued airworthiness program from the responsible authority.

Airspace where RVSM is applied should be considered special qualification airspace. The specific aircraft type or types that the operator intends to use will need to be approved by the responsible authority, before the operator conducts flight in RVSM airspace. In addition, where operations in specified airspace require approval in accordance with an ICAO Regional Navigation Agreement, an operational approval will be needed.

Flight crews will need to have an awareness of the criteria for operating in RVSM airspace and be trained accordingly, all in the name of safety.

### 2. Procedures.

Use Joint Aviation Authorities Administrative and Guidance Material, Section 1: General Part 3: Temporary Guidance Leaflet No.6. Revision 1, (generally referred to as "JAA TGL6 Rev 1")

The items detailed in paragraphs 2 to 7 in appendix 4 in TGL6 Rev.1 should be standardized and incorporated into training programmes (Training Manual), and operating practices and procedures into Operations Manual, and will be the minimum acceptable for an operational approval by CAA Denmark for EUR RVSM. The document is designed to present all required actions.

New technology, for instance, may remove the need for certain actions, if this is so, then the intent of this guidance can of course be considered as met.

The following notes must be incorporated into the minimum equipment list (MEL): see Leaflet 26 item 34-50.

Also in order to get an operational approval, you have to carry ICAO document 7030/4 in the aircraft, either in the Operations Manual or appropriate crew guidance. The areas of applicability of RVSM airspace, in identified ICAO regions, are contained in the relevant sections of this document e.g. (EUR, NAT, WATRS, NAM, CAR, SAM, MEAST, ASIA, PAC). In addition these sections contain operational contingency procedures unique to the regional airspace concerned, specific flight planning requirements, and the approval requirements for aircraft in the designated region.

For the North Atlantic Minimum Navigation Performance Specification (MNPS) Airspace, where RVSM have been in operation since 1997, further guidance is contained in the North Atlantic MNPS Airspace Operational Manual (latest edition). This document is specifically aimed at aircraft operators and should also be carried in the aircraft either in the Operations Manual or appropriate crew guidance, (only if NAT Region approved though).

In accordance with the agreed RVSM Implementation Programme, airspace users intending to operate in RVSM airspace are requested to obtain full RVSM approval, including operational approval, from the CAA Denmark.

The responsibility for gaining the necessary approval must rest with the aircraft operator.

EUROCONTROL RVSM Web site <http://www.ecacnav.com/rvsm> provides documentation for download, and BL 5-55 provides information on definitions and so on.

**For aircraft operators, not previously approved for RVSM operations or operators wanting to introduce a new type of aircraft, use the following procedure:**

### 3. RVSM approval

3.1 An acceptable means of RVSM compliance is described in [JAA TGL6 Rev 1](#). In line with this JAA TGL6, to be granted RVSM approval, the following material should be made available to the Department of Safety Regulation, in sufficient time to allow for evaluation:

- a) *Airworthiness Documents*: Documentation that shows that the aircraft meets RVSM airworthiness requirements and/or has an RVSM airworthiness approval. This should include an Approved Flight Manual amendment or supplement,
- b) *Description of Aircraft Equipment*: A description of the aircraft equipment appropriate to operations in an RVSM environment,
- c) *Training Programmes, Operating Practices and Procedures*: The material will need to show that the operating practices, procedures and training items, related to RVSM operations, are incorporated. The procedures to be applied in RVSM airspace are stated in Doc 7030/4. Further guidance can be found on the [EUR RVSM](#) web site and/or obtained from the Department of Safety Regulation,
- d) *Operations Manuals and Checklists*: The appropriate manuals and checklists should be revised to include information/guidance on standard operating procedures as required for RVSM operations in selected regions.
- e) *Past Performance*: Relevant operating history, where available, should be included in the application,
- f) *Minimum Equipment List*: Where applicable, a minimum equipment list (MEL), adapted from the master minimum equipment list (MMEL) and relevant operational regulations, should include items pertinent to operating in RVSM airspace, (see also §2) and
- g) *Maintenance Programme*: When application is made for operational approval, the operator should establish a maintenance programme acceptable to the responsible authority.

3.2 As indicated in ICAO Doc 7030, an RVSM approval is not restricted to a specific region. Instead, it is valid globally on the understanding that any operating procedures specific to a given region should be stated in the operations manual or appropriate crew guidance.

3.3 For EUR RVSM, monitoring data is not a pre-requisite for the RVSM certification of an airframe. The EUR RVSM monitoring programme is required to provide a safety case associated with the height keeping accuracy of MASPS compliant aircraft, and as such is not related to RVSM approval.

3.4 More detailed information on the RVSM approval process and requirements can be found in JAA TGL6, Rev1. Guidance on RVSM approval is also available from the EUR RVSM web site or the EUROCONTROL User Support Cell.

The documentation listed above must be forwarded to the Danish CAA, Airworthiness Division, along with a form [USC F4](#) with the first 8 lines and line 13 completed.

When the documentation has been accepted, the Danish CAA will complete the form and notify Eurocontrol as soon as possible.

To obtain RVSM approval the operators must also document that they have instituted flight crew procedures for operation in RVSM airspace. That means an amendment to Operations Manual, Training Manual and Minimum Equipment List, all as described above. The first time an operator applies for RVSM approval the operator shall fill-out an [USC FORM 2](#) with contact details and send it to Eurocontrol as stated on the form.

When an RVSM approved aircraft is removed from Danish register the operator shall forward a form [USC F5](#) to SLV.

#### 4. Contacts.

For further information on the RVSM approval process and requirements, please refer to

##### **Civil Aviation Administration**

Ellebjergervej 50  
DK 2450 Copenhagen SV  
TEL: +45 3618 6000  
FAX: +45 3618 6001

##### **Department of Safety Regulation**

Søren H. Nielsen  
Operations Division  
Peter Lundsgaard  
Airworthiness Division

(TO/TL)

### **Notes to Aid Completion of USC Forms F4 and F5.**

*Please read these notes before attempting to complete forms USC F4 & USC F5.*

- The operator shall only fill-in the first eight (8) lines and line 13 on Form USC F4.
  - Please note that the Forms USC F4 and USC F5 will be completed and forwarded to Eurocontrol by **Statens Luftfartsvæsen (SLV)**. The numbers below refer to the superscript numbers on the blank forms USC F4 and F5.
1. Enter the 2 letter ICAO identifier as laid down in ICAO Doc 7910. In the event of there being more than one identifier for the same State, the one that appears first in the list should be used.
  2. Enter the operator's 3 letter ICAO identifier as laid down in ICAO Doc 8585. If military, write 'MIL' and put the name of the aircraft's unit in the 'Remarks' field. If IGA, write 'IGA' and put the name of the operator/owner in the 'Remarks' field.
  3. Enter the ICAO designator as laid down in ICAO Doc 8643 e.g. B767-200 = B762.
  4. Enter Mark or Series of aircraft type e.g. 200.
  5. Enter Aircraft Mode S address code in hexadecimal format. e.g. 0001 0010 0011 0100 1101 1111 is equivalent to 1234DF in hexadecimal.
  6. Enter Yes or No.
  7. Example: For 26 June 1997 write 26:06:97.
  8. Indicate for which region(s) the aircraft operator has included specific regional RVSM procedures in the Operations Manual or appropriate flight crew guidance, i.e. for which region the RVSM operational approval is applicable
  9. Use a separate sheet of paper if insufficient space available.