

AIC A-16 / 01. European RVSM Flight Planning Requirements

Introduction

A vertical separation minimum of 300 metres (1000 feet) between flight levels 290 and 410 inclusive, which is referred to as Reduced Vertical Separation Minimum (RVSM), will be implemented in the European (EUR) RVSM airspace on **24 January 2002**. A chart depicting the European RVSM airspace and the European/North Atlantic RVSM interface, as well as a list of the States participating in the European RVSM Programme, is contained in Annex A.

The EUROCONTROL European Air Traffic Management Programme (EATMP) is responsible for the management of European RVSM, within the framework of International Civil Aviation Organization (ICAO) European Region activities. The EUROCONTROL RVSM Programme manages the activities required in order to implement RVSM in the European RVSM airspace.

The implementation of European RVSM will permit the use of six additional cruising levels between flight levels 290 and 410. The additional cruising levels will increase airspace capacity, provide more fuel-efficient flight profiles, and afford greater operational flexibility to air traffic control units responsible for the provision of air traffic control in the European RVSM airspace. The cruising levels appropriate to the direction of flight in the European RVSM airspace, as prescribed in the ICAO publication "**RULES OF THE AIR, Annex 2 To The Convention On International Civil Aviation**", are illustrated in Annex B.

The requirements for European RVSM are published in the ICAO document "**European Regional Supplementary Procedures - Fourth Edition (Doc 7030/4 - EUR)**", which specifies:

- the area of applicability for European RVSM airspace;
- the means of compliance;
- flight planning requirements;
- ATC clearances;
- the vertical separation minimum;
- the area of applicability and special procedures for European RVSM transition airspace;
- the European/North Atlantic RVSM interface;
- operational procedures for computer-assisted co-ordination between air traffic control units;
- special procedures for in-flight contingencies; and
- controller/pilot radiotelephony phraseology.

Additional information can also be found in the Danish Aeronautical Information Publication (AIP), specifically in Aeronautical Information Circular (AIC) A 17/99 published 12 AUG, AIC A 06/2000 published 20 APR, AIC A 11/2000 published 30 NOV and AIC A 03/2001 published 22 FEB.

Denmark is participating in the European RVSM Programme. As such, effective 24 January 2002, the requirements for European RVSM, as specified in ICAO Doc 7030/4 - EUR and as described in this Aeronautical Information Circular, will be applicable in the København FIR. Detailed information on the ATS routes and associated flight level allocation, in the København FIR, will be published in the Danish AIP on 1 November 2001.

Definitions and descriptions of terms and phrases used in this Aeronautical Information Circular are contained in Annex C.

Purpose

The purpose of this Aeronautical Information Circular is to:

- notify operators of the mandatory flight planning requirements for European RVSM, applicable from 24 January 2002 onward;

Effective 24 January 2002, the vertical separation minimum applied by ATC between aircraft operating within the European RVSM airspace will be based upon the RVSM approval status of the aircraft, as contained in the filed flight plan. Consequently, it is important that operators strictly adhere to the flight planning requirements for European RVSM, as contained in Annexes D, E, F, and G to this Aeronautical Information Circular.

- notify operators of the European RVSM flight planning evaluation from 4 October 2001 to 23 January 2002; and
- provide detailed information on the output messages which will be generated, from 4 October 2001 onward, by the EUROCONTROL Central Flow Management Unit (CFMU) Integrated Initial Flight Plan Processing System (IFPS) to aircraft operators/flight plan originators when a filed flight plan does not comply with the flight planning requirements for European RVSM.

The output messages that will be generated by the EUROCONTROL CFMU IFPS for the period from 4 October 2001 to 23 January 2002, and from 24 January 2002 onward, as a result of the flight planning requirements for European RVSM, are contained in Annex H to this Aeronautical Information Circular.

Additional sources of information for European RVSM are as follows:

Eurocontrol EUR RVSM

Website: <http://www.eur-rvsm.com>

Eurocontrol RVSM Programme Support Office

Tel: +32 2 729 4628

Fax: +32 2 729 4629

E-mail: rvsm.office@eurocontrol.int

Eurocontrol AMN User Support Cell

Tel: +32 2 729 4781

Fax: +32 2 729 4634

E-mail: amn.user.support@eurocontrol.int

Eurocontrol Central Flow Management Unit

Website: <http://www.cfm.eurocontrol.be/urb/rvsm/rvsm.htm>
(EUR RVSM entry/exit points)

National RVSM Programme Manager

Bo Feldberg

Tel: +45 3247 7907

Fax: +45 3247 8805

E-mail: bof@naviair.dk

European RVSM Requirements - General

Effective 24 January 2002, the following requirements will apply within the European RVSM airspace:

1. Flights shall be conducted in accordance with instrument flight rules (IFR) when operated within or above the EUR RVSM airspace.
2. Except for operations within the EUR RVSM transition airspace, and within airspace designated for the purpose of transitioning non-RVSM approved aircraft operating to and from the North Atlantic Region, only RVSM approved aircraft and non-RVSM approved State aircraft shall be issued an ATC clearance into the EUR RVSM airspace.
3. ATC clearance into the EUR RVSM airspace shall not be issued to formation flights of civil aircraft.
4. Operators shall ensure that any change to the RVSM approval status of a flight resulting from a change of aircraft or flight crew is addressed to the EUROCONTROL CFMU IFPS in the form of a modification (CHG) or a Cancellation (CNL) message, as appropriate.
5. All operators filing repetitive flight plans (RPLs) shall include in Item Q of the repetitive flight plan all equipment and capability information in conformity with Item 10 of the ICAO flight plan form.

In preparation for the implementation of EUR RVSM on 24 January 2002, operators shall ensure that their repetitive flight plans are reviewed in accordance with the EUR RVSM flight planning requirements.

Note: It is essential that repetitive flight plan (RPL) files, New Lists (NLST) and Revised Lists (RLST) are co-ordinated in time to allow processing by the EUROCONTROL CFMU IFPS and all ATS units within EUR RVSM airspace located outside the CFMU IFPS Zone.

6. Operators shall ensure that flight plans for aircraft intending to operate within EUR RVSM airspace from FIRs/UIRs located outside the CFMU IFPS Zone are also addressed to all appropriate ATS units concerned with the provision of air traffic services to that aircraft. The flight plans for these aircraft shall be completed in accordance with the flight planning requirements for EUR RVSM, as described in this Aeronautical Information Circular. Operators shall also ensure that any change to the RVSM approval status of a flight due to a change of aircraft or flight crew is addressed to all appropriate ATS units located outside the CFMU IFPS Zone, in the form of a modification (CHG) or a Cancellation (CNL) message, as applicable.

Note 1: In order to ensure operational consistency between the flight plan data distributed within the IFPS Zone and flight plan data distributed outside, it is strongly recommended to use the IFPS Re-addressing Function. Details on the IFPS Re-addressing Function can be found in the IFPS Users Manual that is available on the CFMU website (www.cfm.eurocontrol.int).

Note 2: The EUR RVSM airspace is not co-incident with the CFMU IFPS Zone. Full IFPS checking and flight plan distribution will therefore not be applied within the Flight Information Regions/Upper Flight Information Regions of those States located outside the CFMU IFPS Zone. However, RVSM entry/exit conditions and EUR RVSM airspace penetration will be checked for the entire EUR RVSM airspace.

(Refer to Annexes D, E, F, and G for the flight planning requirements for European RVSM)

Modifications to the Eurocontrol CFMU IFPS for RVSM

The EUROCONTROL Central Flow Management Unit, in co-ordination with the European RVSM Programme, has progressively phased in modifications to the EUROCONTROL CFMU IFPS to ensure compliance with the flight planning requirements for European RVSM.

Phase 1 began on 30 November 2000, following notification to Aircraft Operators to insert the letter W in Item 10 of the ICAO flight plan form for RVSM approved operations within the planned European RVSM airspace. The objective is to continue to collect data on the number of RVSM approved civil and State flights operating in the European Region as General Air Traffic. The analysis of this data provides the EUROCONTROL RVSM Programme with actual rates of equipage, trends and estimations of the projected flights and numbers of aircraft in European RVSM airspace, as well as the impact of non-RVSM approved aircraft that will be required to operate below flight level 290 after 24 January 2002. This data collection is also being used by the RVSM Programme, in co-ordination with State authorities, to ensure that Operators inserting W in Item 10 of the ICAO flight plan form have met the full European RVSM approval requirements.

Note 1: The data collection of RVSM approved flights is being conducted independently of the height-keeping monitoring programme, which began in May 2000. RVSM approved aircraft are still required to participate in the European RVSM height-monitoring programme, as part of the ongoing safety assessment required to ensure that the technical Target Level of Safety (TLS) is being met. For further information on the requirements for monitoring, refer to Denmark AIC A 06/2000 20 APR, or contact the EUROCONTROL Airspace Management and Navigation Unit (AMN) User Support Cell.

Note 2: Joint Aviation Authority Temporary Guidance Leaflet No. 6, Revision 1, provides guidance on how to obtain a full RVSM approval, which includes compliance with the RVSM Minimum Aircraft Systems Performance Specifications (MASPS), procedures for continued airworthiness, and flight crew procedures.

Phase 2 began on 19 April 2001 following modification of the CFMU IFPS for compliance with the flight planning requirements for European RVSM. Since then, a warning message has been generated by the CFMU IFPS in the Operational Reply Message (ORM) to each aircraft operator and/or originator filing a flight plan for a non-RVSM approved civil flight intending to operate between flight levels 290 and 410 inclusive within the European RVSM airspace. The warning in the **COMMENT** field of an **ACKNOWLEDGEMENT** (ACK) message indicates to the originator that this flight plan would not comply with the flight planning requirements for European RVSM if filed after 24 January 2002.

Phase 3 begins on 4 October 2001 and continues until 23 January 2002. During this period, the CFMU IFPS will insert additional warnings in the **COMMENT** field of the Operational Reply Message (ORM), as applicable, for flight plans that do not comply with the flight planning requirements for European RVSM. This will essentially reflect the output messages of the CFMU IFPS from 24 January 2002 onward.

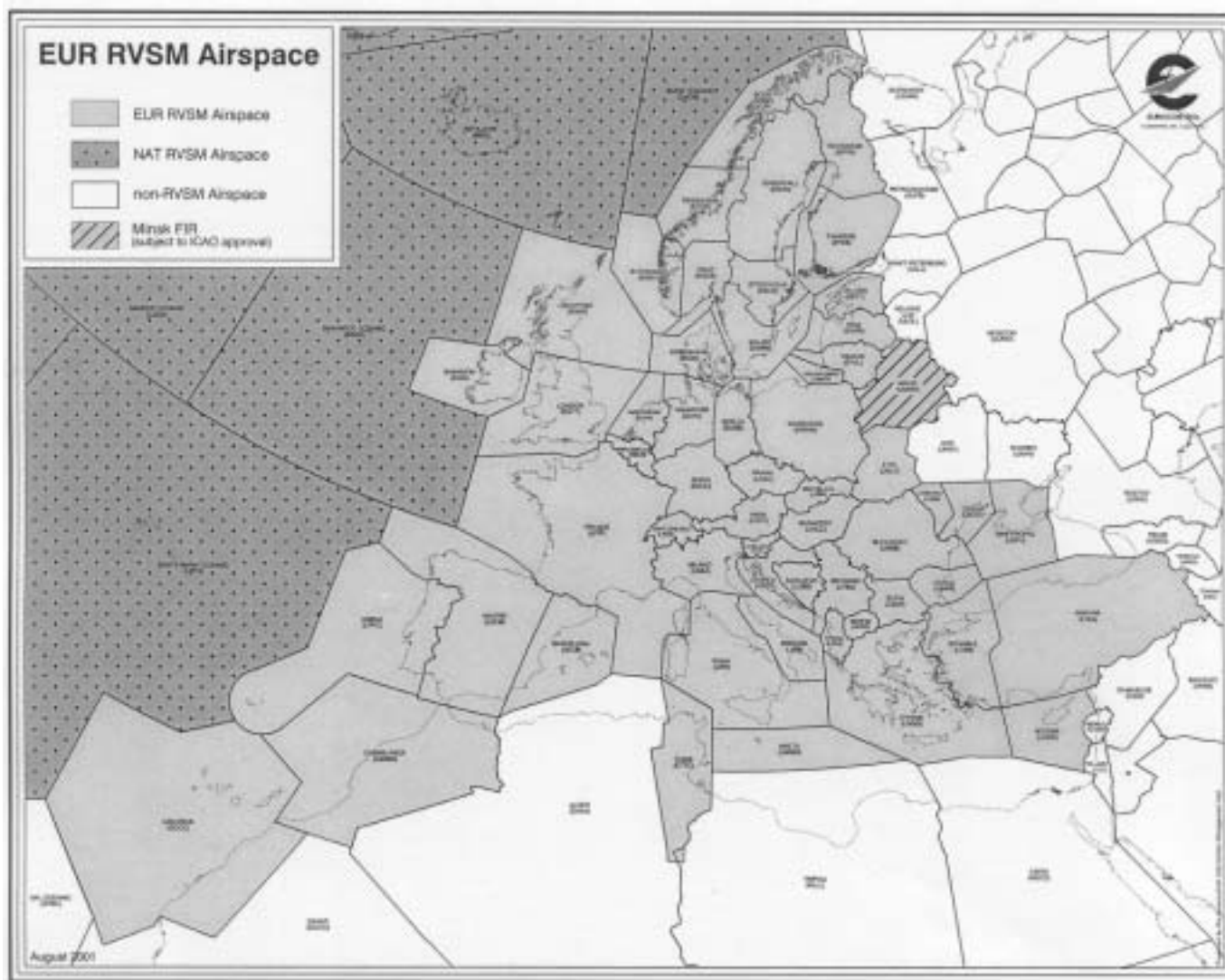
Phase 4 will begin on 24 January 2002, with the implementation of European RVSM. **From 24 January 2002 onward, the CFMU IFPS may invalidate a flight plan that does not comply with the flight planning requirements for European RVSM.** **ERROR** messages will be inserted in **REJECT** (REJ) Operational Reply Messages and also within Item 18 of the ICAO flight plan form as applicable, for flight plans that do not comply with the flight planning requirements for European RVSM.

The following table summarises the four phases of modifications to the EUROCONTROL CFMU IFPS to ensure compliance with the flight planning requirements for European RVSM:

	DESCRIPTION	START	END
Phase 1	Assessment of the number of RVSM approved flights in EUR RVSM airspace.	30 November 2000	23 January 2002
Phase 2	Distribution by CFMU IFPS of a warning message in Operational Reply Messages for non-RVSM approved civil flights that plan to enter the EUR RVSM airspace.	19 April 2001	03 October 2001
Phase 3	Insertion by CFMU IFPS of warning messages in Operational Reply Messages for flights planning to enter EUR RVSM airspace not meeting EUR RVSM flight planning requirements.	04 October 2001	23 January 2002
Phase 4	Flight plans that do not comply with EUR RVSM requirements may be invalidated. ERROR messages will be inserted in the CFMU IFPS REJECT messages.	from 24 January 2002 onward	

(Refer to Annex H for the EUROCONTROL CFMU IFPS output messages that will be generated from 4 October 2001 onward, as a result of the flight planning requirements for European RVSM.)

Annex A - Chart of the European RVSM airspace



States participating in the European RVSM Programme

Albania	France	Norway
Austria	Germany	Poland
<i>Belarus*</i>	Greece	Portugal
Belgium	Hungary	Romania
Bosnia and Herzegovina	Ireland	Slovak Republic
Bulgaria	Italy	Slovenia
Croatia	Latvia	Spain
Cyprus	Lithuania	Sweden
Czech Republic	Luxembourg	Switzerland
Denmark	Malta	Tunisia
Estonia	Moldova	Turkey
Federal Republic of Yugoslavia	Monaco	Ukraine
Finland	Morocco	United Kingdom
The Former Yugoslav Republic of Macedonia	The Netherlands	

* *Belarus is not participating in the European RVSM Programme but is expected to implement RVSM on 24 January 2002, subject to approval by ICAO.*

Annex B – Cruising Levels applicable in European RVSM airspace

The Cruising Levels that will apply within European RVSM airspace, in accordance with ICAO Annex 2, Appendix 3 a), are illustrated below:

CRUISING LEVELS APPROPRIATE TO DIRECTION OF FLIGHT - EUROPEAN REGION (FL 280 TO FL 430)	
Track* from 180 degrees to 359 degrees	Track* from 000 degrees to 179 degrees
← FL 430	(outside RVSM airspace)
	FL 410 →
← FL 400	
	FL 390 →
← FL 380	
	FL 370 →
← FL 360	
	FL 350 →
← FL 340	
	FL 330 →
← FL 320	
	FL 310 →
← FL 300	
	FL 290 →
← FL 280	(outside RVSM airspace)

* Except where, on the basis of regional air navigation agreements, from 090 to 269 degrees and from 270 to 089 degrees is prescribed to accommodate predominant traffic directions and appropriate transition procedures to be associated therewith are specified.

Annex C - Definitions and Descriptions

European (EUR) RVSM airspace:

RVSM shall be applicable in that volume of airspace between flight levels 290 and 410 inclusive in the following Flight Information Regions (FIRs)/Upper Flight Information Regions (UIRs):

Amsterdam, Ankara, Athinaï, Barcelona, Beograd, Berlin, Bodø, Bratislava, Bremen, Brest, Brindisi, Bruxelles, Bucuresti, Budapest, Düsseldorf, France, Frankfurt, Hannover, Istanbul, Kaliningrad, Kishinau, København, Lisboa, Ljubljana, London, Madrid, Malmö, Malta, Milano, Minsk*, München, Nicosia, Oslo, Praha, Rhein, Riga, Roma, Rovaniemi, Sarajevo, Scottish, Shannon, Skopje, Sofia, Stavanger, Stockholm, Sundsvall, Switzerland, Tallinn, Tampere, Tirana, Trondheim, Varna, Vilnius, Warszawa, Wien, Zagreb.

* Minsk is expected to implement RVSM on 24 January 2002, subject to approval by ICAO.

RVSM shall also be applicable in either all, or part of, that volume of airspace between flight levels 290 and 410 inclusive in the following Flight Information Regions/Upper Flight Information Regions:

Canaries (ICAO AFI Region), Casablanca, Lvov, Odesa, Simferopol, Tunis.

EUR RVSM transition airspace:

Transition tasks associated with the application of a 300 m (1 000 ft) vertical separation minimum within the European RVSM airspace shall be carried out in all, or parts of, the following Flight Information Regions/Upper Flight Information Regions:

Ankara, Athinaï, Barcelona, Bodø, Canaries (ICAO AFI Region), Casablanca, France, Kishinau, Lvov, Madrid, Malta, Minsk, Nicosia, Odesa, Riga, Rovaniemi, Simferopol, Tallinn, Tampere, Tunis.

EUR/North Atlantic (NAT) Interface:

In addition to the European RVSM transition airspace, the State authorities responsible for the following Flight Information Regions may establish designated airspace within their Flight Information Regions for the purpose of transitioning non-RVSM approved aircraft operating to/from the North Atlantic Region:

Bodø (Domestic), Brest, Lisboa, London, Madrid, Scottish, Shannon, Stavanger, Trondheim.

General Air Traffic (GAT):

All flights which are conducted in accordance with the rules and procedures of ICAO and/or the national civil aviation regulations and legislation.

Integrated Initial Flight Plan Processing System (IFPS) Zone:

The objective of the EUROCONTROL Central Flow Management Unit (CFMU) Integrated Initial Flight Plan Processing System (IFPS) is to rationalise the reception, initial processing and dis-

tribution of Instrument Flight Rules (IFR)/General Air Traffic (GAT) flight plan data within the area covered by the participating States known as the IFPS Zone (IFPZ). The EUROCONTROL CFMU IFPS Zone covers the FIR/UIRs within the EUR RVSM airspace with the exception of the following:

Casablanca, Kaliningrad, Lvov, Minsk, Odesa, Riga, Sarajevo, Simferopol, Tallinn, Tunis, Vilnius.

Reduced Vertical Separation Minimum (RVSM):

A vertical separation minimum of 300 m (1 000 ft) which is applied between flight levels 290 and 410 inclusive, on the basis of regional air navigation agreements and in accordance with conditions specified therein.

RVSM Approval:

The approval that is issued by the appropriate authority of the State in which the Operator is based, or of the State in which the aircraft is registered. To obtain such RVSM approval, Operators shall satisfy the said State that:

1. aircraft for which the RVSM Approval is sought have the vertical navigation performance capability required for RVSM operations through compliance with the criteria of the RVSM Minimum Aircraft Systems Performance Specifications (MASPS);
2. they have instituted procedures in respect of continued airworthiness (maintenance and repair) practices and programmes; and
3. they have instituted flight crew procedures for operations in the EUR RVSM airspace.

RVSM Approved Aircraft:

Aircraft that have received State approval for RVSM operations within the EUR RVSM airspace.

RVSM Entry Point:

The first reporting point over which an aircraft passes or is expected to pass immediately before, upon, or immediately after initial entry into EUR RVSM airspace, normally the first reference point for applying a 300 m (1 000 ft) vertical separation minimum between RVSM approved aircraft.

RVSM Exit Point:

The last reporting point over which an aircraft passes or is expected to pass immediately before, upon, or immediately after leaving EUR RVSM airspace, normally the last reference point for applying a 300 m (1 000 ft) vertical separation minimum between RVSM approved aircraft.

State Aircraft:

For the purposes of EUR RVSM, only aircraft used in military, customs or police services shall qualify as State aircraft.

Annex D - Flight Planning Requirements for RVSM Approved Civil Aircraft

Effective 24 January 2002, the following flight planning requirements will apply to operators of RVSM approved civil aircraft intending to conduct flights within the European RVSM airspace:

1. Operators of RVSM approved civil aircraft shall indicate the approval status by inserting the letter W in Item 10 of the ICAO flight plan form, regardless of the requested flight level.

*Note: The insertion of the letter W in Item 10 of the ICAO flight plan form and/or the filing of other RVSM-related information does **not** imply that cruising levels which become effective **on** 24 January 2002 may be flight-planned or requested by the pilot **before** 24 January 2002, unless this is explicitly promulgated by a State for operations in the airspace of that State.*

2. Operators of RVSM approved civil aircraft filing repetitive flight plans (RPL) shall also include the letter W in Item Q of the RPL (or in line 4 of the IFPS RPL format) within the EQPT/ element, regardless of the requested flight level. If a change of crew or aircraft operated in accordance with the repetitive flight plan results in a modification of the RVSM approval status as stated in Item Q, a modification message (CHG) shall be submitted by the operator.

Note: In all cases, if a modification message (CHG) would result in changes to the filed or repetitive flight plan that constitute a reason for rejection of that flight plan, the modification message will be rejected by the CFMU IFPS. It is therefore essential for operators to indicate all the modifications that are required in order to reproduce a valid flight plan.

3. Operators of RVSM approved civil aircraft intending to operate within the EUR RVSM airspace shall include the following in Item 15 of the ICAO flight plan form:

- a. the entry point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM entry point; and
- b. the exit point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM exit point.

The following table illustrates the flight planning requirements for **RVSM approved civil** aircraft:

RVSM Approved Civil Aircraft	Flight Planning Requirements for European RVSM
Operators of RVSM approved civil aircraft.	Insert the letter W in Item 10 of the ICAO flight plan form, regardless of the requested flight level.
Operators of RVSM approved civil aircraft filing repetitive flight plans.	<p>Insert the letter W in Item Q of the repetitive flight plan (or in line 4 of the IFPS repetitive flight plan format) within the EQPT/ element, regardless of the requested flight level.</p> <p>If a change of crew or aircraft operated in accordance with the repetitive flight plan results in a modification of the RVSM approval status as stated in Item Q, a modification message (CHG) shall be submitted by the operator.</p> <p><i>Note: In all cases, if a CHG message would result in changes to the filed or repetitive flight plan that constitute a reason for rejection of that flight plan, the CHG message will be rejected by the CFMU IFPS. It is therefore essential to indicate all the modifications that are required in order to reproduce a valid flight plan.</i></p>
Operators of RVSM approved civil aircraft intending to operate within the EUR RVSM airspace.	<p>Insert the following in Item 15 of the ICAO flight plan form:</p> <ul style="list-style-type: none"> • the entry point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM entry point; and • the exit point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM exit point.

Annex E - Flight Planning Requirements for Non-RVSM Approved Civil Aircraft

Effective 24 January 2002, the following flight planning requirements will apply to operators of non-RVSM approved civil aircraft:

1. Except for operations within the European RVSM transition airspace and within airspace at the European/North Atlantic interface designated for transitioning non-RVSM approved civil aircraft operating to and from the North Atlantic Region, operators of non-RVSM approved civil aircraft shall flight plan to operate outside the European RVSM airspace.
2. Operators of non-RVSM approved civil aircraft intending to operate from a departure aerodrome outside the lateral limits of the EUR RVSM airspace to a destination aerodrome within the lateral limits of the EUR RVSM airspace shall include the following in Item 15 of the ICAO flight plan form:
 - a. the entry point at the lateral limits of the EUR RVSM airspace; and
 - b. a requested flight level below FL 290 for that portion of the route commencing immediately after the entry point.
3. Operators of non-RVSM approved civil aircraft intending to operate from a departure aerodrome to a destination aerodrome, both of which are within the lateral limits of the EUR RVSM airspace, shall include in Item 15 of the ICAO flight plan form a requested flight level below FL 290.
4. Operators of non-RVSM approved civil aircraft intending to operate from a departure aerodrome within the lateral limits of the EUR RVSM airspace to a destination aerodrome outside the

lateral limits of the EUR RVSM airspace shall include the following in Item 15 of the ICAO flight plan form:

- a. a requested flight level below FL 290 for that portion of the route within the lateral limits of the EUR RVSM airspace; and
 - b. the exit point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the exit point.
5. Operators of non-RVSM approved civil aircraft intending to operate from a departure aerodrome to a destination aerodrome, both of which are outside the lateral limits of the EUR RVSM airspace, with a portion of the route within the lateral limits of the EUR RVSM airspace, shall include the following in Item 15 of the ICAO flight plan form:
 - a. the entry point at the lateral limits of the EUR RVSM airspace and a requested flight level below FL 290 or above FL 410 for that portion of the route commencing immediately after the entry point; and
 - b. the exit point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the exit point.

The following table illustrates the flight planning requirements for **non-RVSM approved civil** aircraft:

Annex E - Flight Planning Requirements for Non-RVSM Approved Civil Aircraft

FLIGHT PLANNING REQUIREMENTS FOR EUROPEAN RVSM NON-RVSM APPROVED CIVIL AIRCRAFT		
	Destination aerodrome <u>within</u> the lateral limits of European RVSM airspace	Destination aerodrome <u>outside</u> the lateral limits of European RVSM airspace
Departure aerodrome <u>within</u> the lateral limits of Eu- ropean RVSM airspace	In Item 15 of the ICAO flight plan form insert a requested flight level below FL 290 .	In Item 15 of the ICAO flight plan form insert: <ul style="list-style-type: none"> • a requested flight level below FL 290 for that portion of the route within the lateral limits of the EUR RVSM airspace; and • the exit point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the exit point.
Departure aerodrome <u>outside</u> the lateral limits of European RVSM airspace	In Item 15 of the ICAO flight plan form insert: <ul style="list-style-type: none"> • the entry point at the lateral limits of the EUR RVSM airspace; and • a requested flight level below FL 290 for that portion of the route commencing immediately after the entry point. 	In Item 15 of the ICAO flight plan form insert: <ul style="list-style-type: none"> • the entry point at the lateral limits of the EUR RVSM airspace and a requested flight level below FL 290 or above FL 410 for that portion of the route commencing immediately after the entry point; and • the exit point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the exit point.

Annex F - Flight Planning Requirements for RVSM Approved State Aircraft

Effective 24 January 2002, the following flight planning requirements will apply to operators of RVSM approved State aircraft intending to conduct flights within the European RVSM airspace:

1. In addition to military operations, operators of customs or police aircraft shall insert the letter M in Item 8 of the ICAO flight plan form.
2. Operators of RVSM approved State aircraft shall indicate the approval status by inserting the letter W in Item 10 of the ICAO flight plan form regardless of the requested flight level, except that operators of formation flights of State aircraft shall **not** insert the letter W in Item 10 of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned.
3. Operators of formation flights of State aircraft intending to operate within the EUR RVSM airspace as General Air Traffic (GAT) shall include STS/NONRVSM in Item 18 of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned.

4. Operators of RVSM approved State aircraft intending to operate within the EUR RVSM airspace shall include the following in Item 15 of the ICAO flight plan form:

- a. the entry point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM entry point; and
- b. the exit point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM exit point.

The following table illustrates the flight planning requirements for **RVSM approved State** aircraft:

RVSM Approved State Aircraft	Flight Planning Requirements for European RVSM
In addition to military operations, operators of customs or police aircraft.	Insert the letter M in Item 8 of the ICAO flight plan form.
Operators of RVSM approved State aircraft (except for formation flights of State aircraft).	Insert the letter W in Item 10 of the ICAO flight plan form, regardless of the requested flight level.
Operators of formation flights of State aircraft.	Do not insert the letter W in Item 10 of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned.
Operators of formation flights of State aircraft intending to operate within the EUR RVSM airspace as General Air Traffic (GAT).	Insert STS/NONRVSM in Item 18 of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned.
Operators of RVSM approved State aircraft intending to operate within the EUR RVSM airspace.	Insert the following in Item 15 of the ICAO flight plan form: <ul style="list-style-type: none"> • the entry point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM entry point; and • the exit point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM exit point.

Annex G - Flight Planning Requirements for Non-RVSM Approved State Aircraft

Effective 24 January 2002, the following flight planning requirements will apply to operators of non-RVSM approved State aircraft intending to conduct flights within the European RVSM airspace:

1. In addition to military operations, operators of customs or police aircraft shall insert the letter M in Item 8 of the ICAO flight plan form.

*Note: Operators of non-RVSM approved State aircraft shall **not** insert the letter W in Item 10 of the ICAO flight plan form.*

2. Operators of non-RVSM approved State aircraft with a requested flight level of FL 290 or above shall insert STS/NONRVSM in Item 18 of the ICAO flight plan form.

3. Operators of formation flights of State aircraft shall **not** insert the letter W in Item 10 of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned. Operators of formation flights of State aircraft intending to operate within

the EUR RVSM airspace as General Air Traffic (GAT) shall include STS/NONRVSM in Item 18 of the ICAO flight plan form.

4. Operators of non-RVSM approved State aircraft intending to operate within the EUR RVSM airspace shall include the following in Item 15 of the ICAO flight plan form:

a. the entry point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM entry point; and

b. the exit point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM exit point.

The following table illustrates the flight planning requirements for **non-RVSM approved State** aircraft:

Non-RVSM Approved State Aircraft	Flight Planning Requirements for European RVSM
In addition to military operations, operators of customs or police aircraft.	Insert the letter M in Item 8 of the ICAO flight plan form.
<i>Note: Operators of non-RVSM approved State aircraft shall not insert the letter W in Item 10 of the ICAO flight plan form.</i>	
Operators of non-RVSM approved State aircraft with a requested flight level of FL 290 or above.	Insert STS/NONRVSM in Item 18 of the ICAO flight plan form.
Operators of formation flights of State aircraft.	Do not insert the letter W in Item 10 of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned.
Operators of formation flights of State aircraft intending to operate within the EUR RVSM airspace as General Air Traffic (GAT).	Insert STS/NONRVSM in Item 18 of the ICAO flight plan form.
Operators of non-RVSM approved State aircraft intending to operate within the EUR RVSM airspace.	Insert the following in Item 15 of the ICAO flight plan form: <ul style="list-style-type: none"> • the entry point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM entry point; and • the exit point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM exit point.

Annex H - EUROCONTROL CFMU IFPS Output Messages related to RVSM

The following table illustrates the EUROCONTROL CFMU IFPS output messages that will be generated from 4 October 2001 to 23 January 2002 (Phase 3) and from 24 January 2002 onward (Phase 4), when potential violations of the flight planning requirements for European RVSM are detected.

<p>FILED FLIGHT PLAN (FPL) FOR OPERATION IN THE EUR RVSM AIRSPACE</p>	<p>IFPS "COMMENT" in "ACK" Opera- tional Reply Messages</p> <p>PHASE 3 (4 Oct. 2001 to 23 Jan. 2002)</p>	<p>IFPS "ERROR" in "REJ" Operational Reply Messages</p> <p>PHASE 4 (24 Jan. 2002 onward)</p>
<p>A non-RVSM approved civil aircraft with a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace.</p>	<p>FLIGHT PLAN MAY BE REJECTED IF FILED AFTER 23/01/2002</p> <p>NON RVSM APPROVED FLIGHT WITH- IN EUR RVSM AIRSPACE</p>	<p>NON RVSM APPROVED FLIGHT WITHIN EUR RVSM AIRSPACE</p> <p><i>(as non-RVSM approved civil aircraft shall flight plan to operate outside the EUR RVSM airspace except for operations within the EUR RVSM transition airspace)</i></p>
<p>A non-RVSM approved civil aircraft with a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace and which has inserted the STS/NONRVSM indicator in Item 18.</p>	<p>FLIGHT PLAN MAY BE REJECTED IF FILED AFTER 23/01/2002</p> <p>NON RVSM APPROVED FLIGHT WITH- IN EUR RVSM AIRSPACE AND STS/ NONRVSM IS NOT EXPECTED FOR A CIVIL AIRCRAFT</p>	<p>NON RVSM APPROVED FLIGHT WITHIN EUR RVSM AIRSPACE AND STS/NONRVSM IS NOT EXPECTED FOR A CIVIL AIRCRAFT</p> <p><i>(as non-RVSM approved civil aircraft are not allowed to operate in the EUR RVSM airspace and therefore an indication to ATS units for Special Handling (STS) is not applicable to non-RVSM approved civil aircraft)</i></p>
<p>A non-RVSM approved State aircraft with a requested flight level of FL 290 or above and no STS/NONRVSM indicator in Item 18.</p>	<p>FLIGHT PLAN MAY BE REJECTED IF FILED AFTER 23/01/2002</p> <p>STS/NONRVSM IS REQUIRED FOR NON RVSM APPROVED STATE FLIGHT</p>	<p>STS/NONRVSM IS REQUIRED FOR NON RVSM APPROVED STATE FLIGHT</p> <p><i>(as non-RVSM approved State aircraft penetrating EUR RVSM airspace shall insert STS/NON-RVSM in Item 18 to indicate to ATS units the reason for Special Handling)</i></p>
<p>A formation flight of State aircraft with a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace and indicating a combination other than no W in Item 10 and STS/NONRVSM in Item 18.</p>	<p>FLIGHT PLAN MAY BE REJECTED IF FILED AFTER 23/01/2002</p> <p>FIELDS 10 AND/OR 18 INCORRECT FOR STATE FORMATION FLIGHT IN EUR RVSM AIRSPACE</p>	<p>FIELDS 10 AND/OR 18 INCORRECT FOR STATE FORMATION FLIGHT IN EUR RVSM AIRSPACE</p> <p><i>(as formation flights of State aircraft will not be considered as RVSM approved regardless of the RVSM capability of the aircraft in the formation)</i></p>

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<p>FILED FLIGHT PLAN (FPL) FOR OPERATION IN THE EUR RVSM AIRSPACE</p>	<p>IFPS "COMMENT" in "ACK" Operational Reply Messages</p> <p>PHASE 3 (4 Oct. 2001 to 23 Jan. 2002)</p>	<p>IFPS "ERROR" in "REJ" Operational Reply Messages</p> <p>PHASE 4 (24 Jan. 2002 onward)</p>
<p>An RVSM approved aircraft with a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace and with an Aerodrome of Departure and/or Aerodrome of Destination outside the EUR RVSM airspace and which has failed to indicate the entry/exit conditions into/from the EUR RVSM airspace.</p>	<p>FLIGHT PLAN MAY BE REJECTED IF FILED AFTER 23/01/2002</p> <p>INVALID EUR RVSM AIRSPACE ENTRY/EXIT CONDITION</p>	<p>INVALID EUR RVSM AIRSPACE ENTRY/EXIT CONDITION</p> <p><i>(as flights intending to operate in EUR RVSM airspace shall specify in Item 15 of the filed flight plan:</i></p> <ul style="list-style-type: none"> • <i>the entry point at the lateral limits of EUR RVSM airspace, and</i> • <i>the exit point at the lateral limits of EUR RVSM airspace,</i> <p><i>as designated in the AIP of the State concerned)</i></p>
<p>An RVSM approved aircraft with a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace and with an Aerodrome of Departure and/or Aerodrome of Destination outside the EUR RVSM airspace which has indicated the entry/exit conditions into/from the EUR RVSM airspace but has requested an invalid Flight Level.</p>	<p>FLIGHT PLAN MAY BE REJECTED IF FILED AFTER 23/01/2002</p> <p>INVALID RFL AT EUR RVSM AIRSPACE ENTRY/EXIT AGAINST CURRENT FL ALLOCATION SCHEME</p>	<p>INVALID RFL AT EUR RVSM AIRSPACE ENTRY/EXIT</p> <p><i>(as flights intending to operate in the EUR RVSM airspace shall specify in Item 15 of the filed flight plan:</i></p> <ul style="list-style-type: none"> • <i>the requested flight level for that portion of the route immediately after the RVSM entry point; and</i> • <i>the requested flight level for that portion of the route immediately after the RVSM exit point,</i> <p><i>as designated in the AIP of the State concerned)</i></p>
<p>An aircraft which has indicated a VFR portion of the route within or above the EUR RVSM airspace.</p>	<p>FLIGHT PLAN MAY BE REJECTED IF FILED AFTER 23/01/2002</p> <p>VFR NOT PERMITTED IN OR ABOVE EUR RVSM AIRSPACE</p>	<p>VFR NOT PERMITTED IN OR ABOVE EUR RVSM AIRSPACE</p> <p><i>(as flights shall be conducted in accordance with the IFR within and above the EUR RVSM airspace)</i></p>
<p>A formation flight of civil aircraft with a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace.</p>	<p>FLIGHT PLAN MAY BE REJECTED IF FILED AFTER 23/01/2002</p> <p>CIVIL FORMATION FLIGHT NOT PERMITTED IN EUR RVSM AIRSPACE</p>	<p>CIVIL FORMATION FLIGHT NOT PERMITTED IN EUR RVSM AIRSPACE</p> <p><i>(as formation flights of civil aircraft are not permitted to operate in EUR RVSM airspace)</i></p>
<p>An aircraft which has indicated W in Item 10, STS/NONRVSM in Item 18 and a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace.</p>	<p>FLIGHT PLAN MAY BE REJECTED IF FILED AFTER 23/01/2002</p> <p>STS/NONRVSM IS NOT EXPECTED FOR AN RVSM APPROVED FLIGHT WITHIN EUR RVSM AIRSPACE</p>	<p>STS/NONRVSM IS NOT EXPECTED FOR AN RVSM APPROVED FLIGHT WITHIN EUR RVSM AIRSPACE</p> <p><i>(as the indication of Special Handling to ATS units is not required for RVSM approved flights)</i></p>

Annex H - EUROCONTROL CFMU IFPS Output Messages related to RVSM

<p align="center">FILED FLIGHT PLAN (FPL) FOR OPERATION IN THE EUR RVSM AIRSPACE</p>	<p align="center">IFPS "WARNING" MESSAGES PHASE 4 (24 Jan. 2002 onward)</p>
<p>Aerodrome of Departure is located outside the CFMU IFPS Zone.</p>	<p>The IFPS may, in some circumstances, force acceptance of the flight plan. In such cases, the following text will be inserted in the COMMENT field of the ACKNOWLEDGEMENT (ACK) message:</p> <p align="center">THIS FLIGHT PLAN DOES NOT COMPLY WITH EUR RVSM REQUIREMENTS</p>
<p>Aerodrome of Departure is located outside the CFMU IFPS Zone, and the flight plan cannot be corrected in co-ordination with the originator in one of the following cases:</p> <p>A non-RVSM approved civil aircraft with a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace.</p> <p>A non-RVSM approved civil aircraft with a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace and which has inserted the STS/NONRVSM indicator in Item 18.</p> <p>A non-RVSM approved State aircraft with a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace and no STS/NONRVSM indicator in Item 18.</p>	<p>The following IFP/ indicator shall be inserted in Item 18 of the output flight plan (FPL) message distributed to ATS units:</p> <p>IFP/NONRVSM</p> <p>and</p> <p>in the COMMENT field of the ACK message:</p> <p align="center">THIS FLIGHT PLAN DOES NOT COMPLY WITH EUR RVSM REQUIREMENTS</p>

Annex H - EUROCONTROL CFMU IFPS Output Messages related to RVSM

<p align="center">FILED FLIGHT PLAN (FPL) FOR OPERATION IN THE EUR RVSM AIRSPACE</p>	<p align="center">IFPS "WARNING" MESSAGES PHASE 4 (24 Jan. 2002 onward)</p>
<p>Aerodrome of Departure is located outside the CFMU IFPS Zone, and the flight plan cannot be corrected in co-ordination with the originator in one of the following cases:</p> <p>A formation flight of State aircraft with a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace that indicates any combination other than <u>STS/NONRVSM</u> in Item 18 and <u>no W</u> in Item 10.</p> <p>An RVSM approved aircraft with a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace and with an Aerodrome of Departure and/or Aerodrome of Destination outside the EUR RVSM airspace and which has failed to indicate the entry/exit conditions into/from the EUR RVSM airspace.</p> <p>An RVSM approved aircraft with a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace and with an Aerodrome of Departure and/or Aerodrome of Destination outside the EUR RVSM airspace which has indicated the entry/exit conditions into/from the EUR RVSM airspace but has requested an invalid Flight Level.</p> <p>An aircraft which has indicated a VFR portion of the route within or above the EUR RVSM airspace.</p> <p>A formation flight of civil aircraft with a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace.</p> <p>An aircraft which has indicated W in Item 10, STS/NONRVSM in Item 18 and a requested flight level between FL 290 and FL 410 (inclusive) in the EUR RVSM airspace.</p>	<p>The following IFP/ indicator shall be inserted in Item 18 of the output flight plan (FPL) message distributed to ATS units:</p> <p>IFP/RVSMVIOLATION</p> <p>and</p> <p>in the COMMENT field of the ACK message:</p> <p>THIS FLIGHT PLAN DOES NOT COMPLY WITH EUR RVSM REQUIREMENTS</p>
<p>One or more of the following conditions exists:</p> <p>ATC Flight Plan (APL) resulting from an ATC Flight Plan Proposal Message (AFP) for a flight which is calculated to enter the EUR RVSM airspace, where Item 10 information is not known.</p> <p>Air-Filed Flight Plan (AFIL) for a flight which is calculated to enter the EUR RVSM airspace, where Item 10 information is not known.</p> <p>Note: Wherever possible, ATC Flight Plan Proposal Message (AFP) and Air-Filed Flight Plan (AFIL) submissions by ATS units should also contain Item 8, Item 10, and Item 18 information.</p>	<p>The following IFP/ indicator will be inserted in Item 18 of the output ATC Flight Plan (APL) or Air-Filed Flight Plan (AFIL) message distributed to ATS units:</p> <p>IFP/RVSMUNKNOWN</p> <p>and</p> <p>in the COMMENT field of the ACK message:</p> <p>THIS FLIGHT PLAN DOES NOT COMPLY WITH EUR RVSM REQUIREMENTS</p>