

**DRAFT**

**LETTER OF AGREEMENT BETWEEN**

**..... AREA CONTROL CENTRE AND ....AREA CONTROL CENTRE**

**1. PREAMBLE**

The authorized representatives of ..... and ..... agree that the procedures contained in this document shall remain in force from the effective date specified until either amended or cancelled.

This letter of Agreement supersedes and cancels the existing Letters of Agreement between ..... and ..... dated .....

**2. EFFECTIVE DATE**

The provisions in the Letter of Agreement shall be implemented on ..... at 0001 UTC.

**3. OBJECTIVE**

The objective of this Letter of Agreement is to specify co-ordination procedures between ..... and .....

**4. SCOPE**

4.1 The procedures contained herein are supplementary to the ICAO Standards and Recommended Practices in Annexes 2 and 11, the Procedures for Air Navigation Services in Document 4444 and the Regional Supplementary Procedures (Doc 7030). They detail the conditions under which the responsibility for the provision of air traffic services shall be transferred between the ATS units mentioned in paragraph 3 above.

4.2 This Letter of Agreement also formalises the delegation of responsibility from ..... to ..... and vice versa for the provision of air traffic services within those portions of airspace which lie between the FIR boundaries and the agreed points of transfer of responsibility as defined in paragraph 7.4.1. The establishment of transfer points is based on operational considerations only and does not therefore contribute to, neither can it be invoked for, any other purpose beyond this context.

**5. AMENDMENTS**

5.1 Any change to this Letter of Agreement, including its cancellation or replacement, requires the consent of the ATS units concerned. This applies to the substance of the change as well as to its date of applicability. Any change shall be made either in the context of a meeting between the two units, or by exchange of correspondence, or by exchange of AFTN messages, with acknowledgement by all signatories.

5.2 Whilst temporary deviations from these procedures may be agreed between the ACC supervisors concerned, as specified in paragraph 8.1 below, permanent amendments to this document shall be effective only in the form of a written amendment duly signed by authorized representatives.

**6 (NAME) FIR RVSM TRANSITION AREA AIRSPACE *[Only if applicable]***

6.1 The Transition Area for transition from Reduced Vertical Separation Minimum (RVSM) airspace into Non-RVSM airspace, and vice versa, within the (Name) FIR is as follows:

6.2 The (Name) FIR RVSM Transition Area adjacent to the (name) FIR Non-RVSM airspace is that airspace between FL 290 and FL 410 inclusive, contained within the confines of the following Airways:

(name): Between (Position) and (Position)

(name) : Between (Position) and (Position)

6.3 The following are the EXIT and ENTRY Points between the (Name) FIR RVSM Transition Area airspace and the (Name) FIR :

FIR	ENTRY POINT	EXIT POINT	AIRWAY	DIRECTION
(Name) FIR	(Name)	*****	(ie. UM998)	(ie. INBOUND)
(Name) FIR	*****	(Name)	(ie. UM 714)	(ie. OUTBOUND)

## 6.4 PROCEDURES FOR CONTROLLING RVSM COMPLIANT AND NON-RVSM COMPLIANT AIRCRAFT

6.4.1 (Name) ACC shall ensure that:

- a) Both RVSM Compliant aircraft and Non-RVSM Compliant aircraft entering the (Name) FIR RVSM Airspace from (Name) FIR Non-RVSM airspace are to be accommodated within the (Name) RVSM Transition Area airspace (*Only where applicable*);
- b) The appropriate vertical separation minimum is applied, based on the RVSM Compliant status of the aircraft;
- c) Aircraft are established at cruising levels appropriate for the (Name) FIR RVSM Airspace or (Name) FIR Non-RVSM airspace, as applicable, and that the appropriate vertical separation minimum is achieved before the aircraft passes the EXIT Point of the RVSM Transition Area into the (Name) FIR; and
- d) Non-RVSM Compliant civil aircraft operating from (Name) FIR Non-RVSM airspace into the (Name) RVSM Airspace are to be established at a cruising level outside the vertical dimensions of the (Name) FIR RVSM Airspace before the aircraft passes the ENTRY Point of the RVSM Transition Area into the (Name) FIR.
- e) The cruising levels appropriate to direction of flight for RVSM Compliant and Non-RVSM Compliant aircraft conform to those listed in ICAO Annex 2, Appendix 3, (a) & (b).

6.4.2 The cruising levels appropriate to direction of flight between the (Name) FIR Non-RVSM airspace and (Name) FIR RVSM airspace is shown in Figure 1 below.

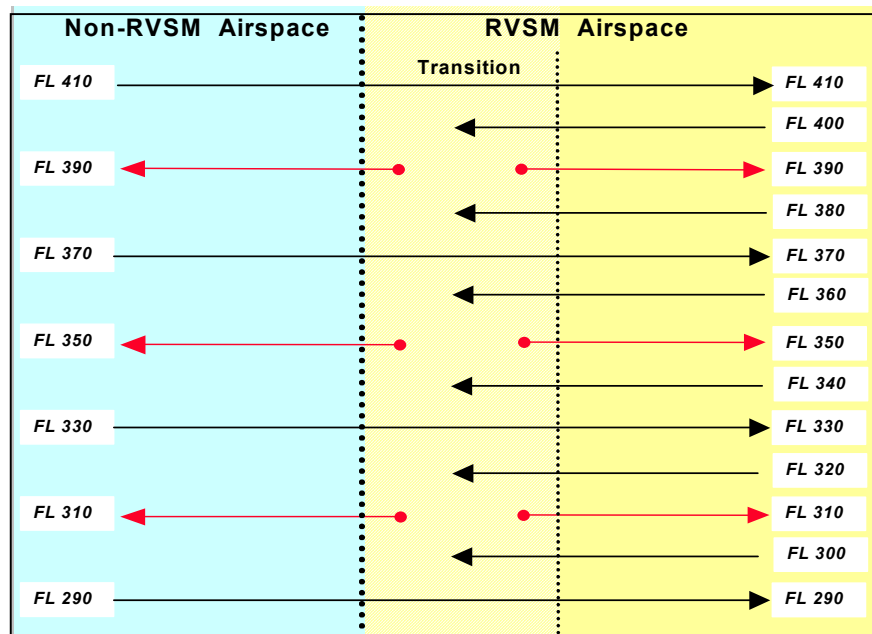


Figure 1.

6.4.3 It is important to note that in the above Figure, the "Opposing Directions" cruising levels are FL 310, FL 350 and FL390.

## 6.5 ATC PROCEDURES FOR RVSM COMPLIANT AIRCRAFT AND NON-RVSM COMPLIANT AIRCRAFT TRANSITING FROM THE (NAME) FIR RVSM AIRSPACE INTO THE (NAME) FIR NON-RVSM AIRSPACE AND VICE VERSA.

6.5.1 RVSM Compliant aircraft and Non-RVSM Compliant aircraft entering the (Name) FIR RVSM Airspace from the (Name) FIR Non-RVSM airspace shall be established at a flight level in accordance with the ICAO Tables of Cruising Levels, as published in ICAO.

Annex 2, Appendix 3, (a).

6.5.2 Any changes for RVSM Compliant aircraft from Non-RVSM cruising levels to RVSM cruising levels shall be initiated by (Name) ACC after the aircraft enters the RVSM Transition Area (See Figure 2).

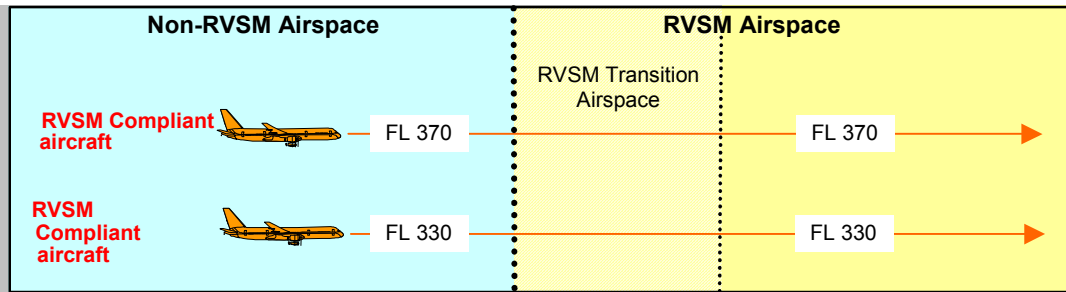


Figure 2.

6.5.3 RVSM Compliant aircraft entering the (Name) FIR Non-RVSM airspace from the (Name) RVSM Transition Area shall be established with the applicable vertical separation minimum by (Name) ACC before the aircraft passes the Transition Area EXIT Point into the (Name) FIR Non-RVSM airspace. Such aircraft shall be established at a flight level in accordance with the ICAO Tables of Cruising Levels, as published in ICAO Annex 2, Appendix 3 (b). (See Figure 3).

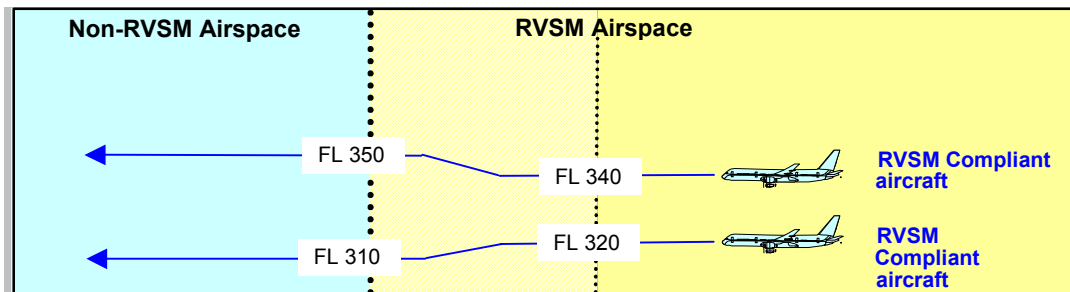


Figure 3.

6.5.4 Non-RVSM Compliant aircraft operating from a departure aerodrome to a destination aerodrome which are both outside of the lateral limits of the (Name) FIR RVSM airspace, with a portion of the route within the lateral limits of the (Name) FIR RVSM airspace, shall be cleared to FL 280 or below or at FL 430 or above by (Name) ACC and any such flight level changes shall be achieved before the aircraft passes the ENTRY Point to the (Name) RVSM Transition Area airspace. (See Figure 4).

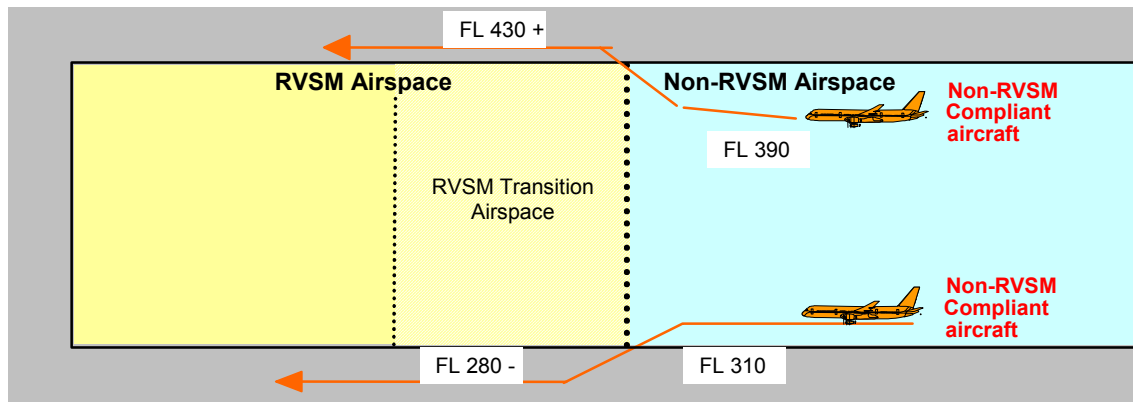


Figure 4.

6.5.5 Non-RVSM Compliant aircraft operating from a departure aerodrome outside of the lateral limits of the (Name) FIR RVSM airspace with a destination aerodrome within the lateral limits of the (Name) FIR RVSM airspace shall be cleared to a flight level at or below FL 280 by the (Name) ACC and the Non-Compliant RVSM aircraft must be at or below FL 280 before reaching the ENTRY point to the (Name) RVSM Transition Area. (See Figure 5)

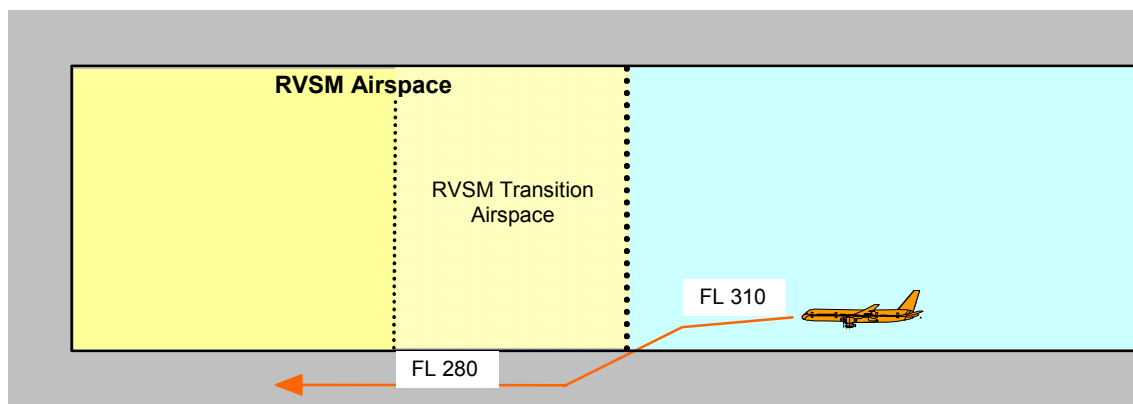


Figure 5.

6.5.6 Non-RVSM Compliant aircraft operating from a departure aerodrome within the lateral limits of the J(Name) FIR RVSM airspace to a destination aerodrome in the (Name) FIR Non-RVSM airspace shall be cleared by (Name) ACC to a flight level at or below FL 280; and, if the (Name) ACC approves, may be cleared to FL 290 or above by the (Name) ACC provided any such flight level changes shall be achieved within the (Name) RVSM Transition Area and before the aircraft passes the Transition Area EXIT point into the (Name) FIR Non-RVSM airspace. (See Figure 6)

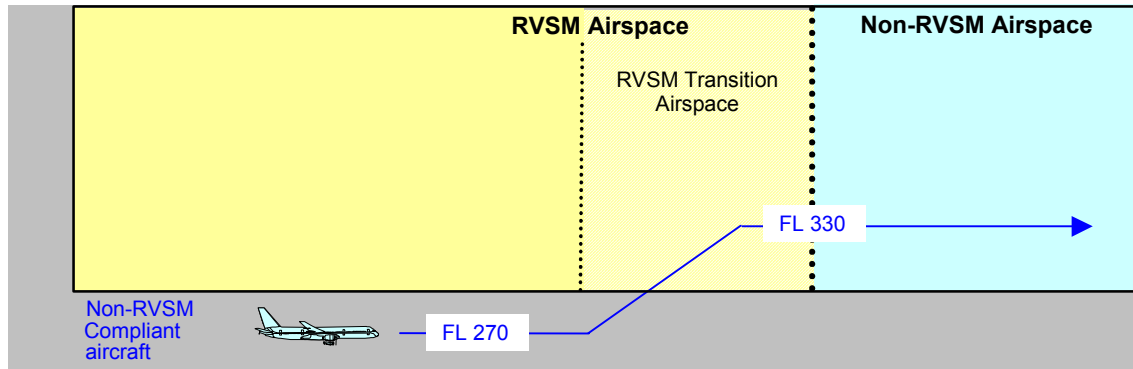


Figure 6.

## 6.6 PROCEDURES FOR SUSPENSION OF RVSM

6.6.1 (Name) ACC will consider suspending RVSM procedures within affected areas of the (Name) FIR RVSM airspace when there are pilot reports of greater than moderate turbulence. Within areas where RVSM procedures are suspended, the vertical separation minimum between all aircraft will be at least 2,000 ft.

### PROCEDURES

#### 7.1 Movement and control messages

##### 7.1.1 Flight plans

Filed Flight Plan (FPL) messages shall be transmitted for flights originating within one FIR and entering the other, not less than ..... minutes before the estimated time of the aircraft over the common FIR boundary.

##### 7.1.2 Departures

Departure (DEP) messages shall be transmitted for all flights mentioned in 7.1.1 above, as soon as practicable after the aircraft is airborne.

##### 7.1.3 Estimates

Estimate (EST) messages shall be transmitted for all flights crossing the common FIR boundary, in sufficient time to permit its receipt by the receiving ATS unit at least .... minutes before the estimated time of the aircraft over the transfer points specified in paragraph 7.4.1 below.

##### 7.1.4 Revisions

Co-ordination (CDN) messages shall be transmitted as soon as practicable whenever the estimated time of the aircraft over the transfer point differs by .... minutes or more from the estimated time originally passed or when a change of cleared level and/or crossing condition is planned.

### **7.1.5 Acceptance**

Co-ordination messages (EST and CDN) require an operational acceptance, in the form of an acceptance (ACP) message, to be transmitted to the transferring unit.

## **7.2 Message transmission and co-ordination procedures**

7.2.1 FPL Messages shall be transmitted via AFTN. DEP messages shall be transmitted by AFTN or ATS/DS or both as applicable.

7.2.2 Co-ordination messages (EST, CDN and ACP) shall be transmitted using (the ATS direct speech circuits (ATS/DS) as applicable.

7.2.3 In case of non-availability of the ATS direct speech circuit between the ATS units concerned, the transferring ATS unit shall forward the relevant flight data to the receiving ATS unit by means of HF radiotelephone (RTF) and/or AFTN.

7.2.4 When effecting the necessary co-ordination by use of the AFTN or HF RTF the transferring ATS unit shall send the appropriate co-ordination message in sufficient time to permit its receipt by the receiving ATS unit at least ..... minutes prior to the aircraft's estimated time over the transfer point.

7.2.5 After co-ordination of the transfer, the conditions of transfer shall not be changed by the transferring unit, unless prior agreement has been obtained from the accepting unit.

7.2.6 In case of flights departing from aerodromes (.....) for which, due to their proximity to the FIR boundary, application of the procedures set out in 6.1.3 above would not be possible after departure, co-ordination between the transferring ATS unit and the accepting ATS unit shall be effected prior to the issuance of the ATC clearance to the aircraft concerned.

7.2.7 In the event of communications failure between the ATS units concerned, a departing aircraft shall be cleared only to such a level as can be reached before it arrives within 10 minutes flying time from the transfer of control point. If such a level is lower than that specified in the flight plan, the aircraft shall be instructed to request approval for a higher level direct from the accepting unit and then obtain clearance from the transferring unit to climb to the level approved by the accepting unit.

## **7.3 Transfer of communications**



7.3.1 Aircraft shall be instructed to establish communications with the accepting unit **5** minutes before the transfer of control point. Transfer of communications does not constitute transfer of control.

7.3.2 In case of communications failure between the ATS units concerned, the transferring ATS unit will inform the aircraft of the absence of co-ordination between the two ATS units and will instruct the aircraft to establish contact with the accepting ATS unit 10 minutes before the boundary in order to provide it with the necessary flight data.

7.3.3 Whenever the accepting ATS unit is unable to establish contact with an aircraft within .... minutes after its estimated time over the transfer point, it shall inform the transferring ATS unit so that appropriate measures may be taken.

7.3.4 With reference to paragraph 4.2.12 of Part VIII of the PANS-RAC, the accepting ATS unit need not, as a matter of routine, notify the transferring ATS unit that radiocommunication has been established with an aircraft being transferred.

7.3.5 Whenever an aircraft is unable to establish or maintain radio communication with the ATS unit responsible for the provision of air traffic services in the airspace in which it is operating, other ATS units shall, if possible, assume relay functions between them.

7.3.6 Primary frequency assignment for transfer of communications is as follows:

<b>ATS route</b>	<b>ATS unit call sign</b>	<b>Frequency</b>
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7.3.7 Secondary frequency assignment, for use when no contact can be made on the primary frequencies, is as follows:

<b>ATS route</b>	<b>ATS unit call sign</b>	<b>Frequency</b>
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## **7.4 Transfer of responsibility**

7.4.1 Responsibility for the provision of air traffic services shall be transferred to the accepting unit at the following significant points:

<b>ATS route</b>	<b>Transfer of Control point</b>
a)	(e.g. ABAB at 3030S 9015E, or bearing a distance from a VOR/DME)

b)

7.4.2 If transfer of responsibility is required at points other than those specified in 6.4.1 above, this shall be co-ordinated individually for each flight.

7.4.3 The accepting unit shall assume responsibility of a transferred aircraft as soon as it has reported to that unit passing the appropriate transfer point. There is no requirement for additional transfer or acceptance messages unless requested.

7.4.4 Control of traffic communicating with the accepting unit shall not be assumed prior to the aircraft passing the transfer point, unless specifically agreed by the transferring unit.

## **7.5 Flight levels**

7.5.1 Aircraft outside ATS route shall be assigned flight levels as follows:

<b>ATS route</b>	<b>From</b>	<b>To</b>	<b>Flight Levels</b>
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## **7.6 Separation**

7.6.1 Aircraft at the same level shall be longitudinally separated by not less than **10** minutes.

7.6.2 When the succeeding aircraft is faster than the preceding aircraft, the transferring unit shall notify the accepting unit and seek its approval of the transfer of control. The accepting unit shall have the right to determine the transfer of control conditions.

## **7.7 Clearance limit**

7.7.1 The clearance limit shall normally be the destination aerodrome. However, if the necessary co-ordination cannot be effected in good time (paragraph 6.4 refers) e.g. due to communications failure between ATS units, the clearance limit shall be the transfer point and the aircraft instructed to request onward clearance from the accepting unit before proceeding beyond that point.

## **7.8 Weather Information**

7.8.1 ATS units shall keep each other informed of SIGMET information and of weather conditions at destination aerodromes within their respective FIRs whenever such conditions may

fall below aircraft operating minima and consequently may result in diversion or holding for weather improvement.

## **7.9 Flow control (if applicable)**

7.9.1 Should it become necessary to implement flow control to avoid excessive delays at destination aerodromes within their respective FIRs, ATS units shall negotiate and agree a mutually acceptable number of aircraft per hour. All such agreements shall be terminated at \_\_\_\_\_ as soon as circumstances permit resumption of normal operations. The decision of the ACC supervisors shall be sufficient authority in all such cases.

**8. Flow Control**

7.1 Should it be necessary to implement flow control to avoid excessive delays .....ACC and ..... ACC would coordinate for an acceptance number of aircraft per hour. All such coordination shall be terminated as soon as circumstances permit for normal flow of air traffic movement.

**9. Deviations**

9.1 Deviation from the procedures specified in this Letter of Agreement shall only be permitted in exceptional circumstances and not without prior co-ordination on a case-by-case basis.

9.2 Any deviations from these provisions, that arise due to an emergency or are applied to ensure the safety of air traffic, shall immediately be notified to the other ATS unit(s) concerned and shall be terminated as soon as the circumstances that caused the deviation cease to exist.

**10. Search and Rescue**

10.1 Search and Rescue cooperation within the respective areas of responsibility of \_\_\_\_\_ and \_\_\_\_\_ shall be conducted in full compliance with the Standards and Recommended practices indicated in Annex 12 to the Chicago Convention and the related organization of National Search and Rescue procedure.

