in conjunction with

Document prepared for:

Kevin EWELS
Manager
AFI Regional Monitoring Agency

AFI RVSM Pre-Implementation Safety Case

Appendices

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Document review

Name	Position	Date/Visa
Thierry LELIEVRE	Project Manager Head of CNS/ATM Division Altran Technologies	

Document approval

Name	Position	Date/Visa
DIOUF Semou	Business Manager Altran Technologies	

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Appendix A: AFI RVSM System

A.1 Introduction

This section provides an overview of the AFI RVSM (Reduced Vertical Separation Minima) System used for the Pre-Implementation Safety Assessment, purpose of this document.

This AFI RVSM System is a generic system designed following the Application of the ICAO RVSM Concept in the AFI Region. States shall implement its elements into their national airspace, in compliance with its generic design and with additional requirements that may prevail.

It should be noted that a higher-level System decomposition is used in the FHA (refer to section 2 of **[63]**). This one has been further detailed in this document for the purpose of the allocation and apportionment of the System Element Requirements (refer to **section 3.3.5**).

A.2 System definition

The AFI RVSM System is defined (in the ATM sense) by the elements of the AFI Air Navigation System (ANS) involved in RVSM operations. It composed of a ground based ATM component and an airborne ATM component providing RVSM services.

The AFI RVSM System, as an ATM system (refer to **Annex 2** for definitions), includes three constituent elements that are human, procedures and equipment (hardware and software). It assumes the existence of a supporting CNS system.

A.3 System purpose

The purpose of the AFI RVSM System is to provide - between FL290 and FL410 inclusive – a 1000 feet vertical separation service to Civil and State RVSM approved aircraft and 2000 feet to State aircraft. In other words, the purpose of the System is to provide six additional flight levels between FL290 and FL410.

Non-RVSM approved civil aircraft are not allowed to operate within the AFI RVSM Airspace but are allowed to transit through (descent from above FL410 to below FL290 or climb from below FL290 to above FL410), provided the aircraft climbs or descends at no less than standard rate and does not stop at any intermediate flight level in RVSM airspace[1].

The operational concept of AFI RVSM is provided in *the ATC operations manual for Implementation of RVSM in the AFI Region* **[39]**. It has been captured in the form of operational scenarios and operating methods for the purpose of the FHA (refer to Appendix C of **[63]**).

[1] The transit through RVSM airspace of non RVSM-approved civil aircraft is also part of the CAR/SAM RVSM operational concept **[87]** but is not allowed in EUR RVSM airspace (except in transition airspace, if any) **[72]**.

A.4 System boundaries

A.1.1 Geographical boundaries

The AFI RVSM airspace is composed of the following Flight Information Regions/Upper Information Regions (FIRs/UIRs):

Accra	Addis Ababa	Algiers	Antananarivo
Asmara	Beira	Brazzaville	Cairo
Canarias	Cape Town	Casablanca	Dakar
Dakar Oceanic	Dar es Salaam	Entebbe	Gaborone
Harare	Johannesburg	Johannesburg Oceanic	Kano
Khartoum	Kinshasa	Lilongwe	Luanda
Lusaka	Mauritius	Mogadishu	Nairobi
N'Djamena	Niamey	Roberts	Sal Oceanic
Seychelles	Tripoli	Tunis	Windhoek

Table 1: AFI RVSM Airspace

It includes airspace where RVSM operations are already conducted as a result of RVSM implementation in the EUR/SAM corridor and in the ICAO CAR/SAM, EUR and MID Regions.

It is assumed that all States whose sovereign airspace falls within this description will implement RVSM at the same date and time, with the above exception. The States participating to the AFI RVSM Programme are listed in **section 1.2.1**.

A.1.1 Operational boundaries

RVSM operations will be conducted provided between FL290 and FL410 inclusive.

A.5 Environmental Types

The AFI operational environment in which RVSM will be operated is in homogeneous in terms of ATM procedures and CNS capabilities. The AFI FIRs offer different level of Air Traffic Services from Flight Information Services to radar ATC.

The following Environmental Types are considered:

Reference	Environmental Conditions
ENV_1	Controlled airspace with radar or ADS surveillance capability. Surveillance enables the controller to detect incorrect aircraft movement.
ENV_2	Controlled airspace without radar and ADS surveillance capabilities. Surveillance is procedural and based on communications.
ENV_3	Non controlled (FIS) airspace with radar or ADS surveillance capability. Surveillance enables the controller to detect incorrect aircraft movement.
ENV_4	Non controlled (FIS) airspace without radar and ADS surveillance capabilities.

Table 2: AFI RVSM environmental types

A.6 System Elements

For the purpose of the Pre-implementation Safety Assessment, the AFI RVSM System is considered to comprise the following elements, as detailed in section 6 of **[59]**:

- Overall system (RVSM)
- System monitoring (SM)
- Airspace Design (AD)
- Flight Crew and Operator Procedures (FCOP), sub-composed of:
    - Normal Procedures (FCOP_1)
    - Planning Procedures (FCOP_2)
    - Contingency Procedures (FCOP_3)
    - Transiting Procedures (FCOP_4)
- Flight Crew and Operator Training (FCOT), sub-composed of:
    - Training for normal procedures (FCOT_1)
    - Training for planning procedures (FCOT_2)
    - Training for contingency procedures (FCOT_3)
    - Training for transiting procedures (FCOT_4)
- Aircraft and operator equipment (ACOE)
- ATS Procedures (ATSP) sub-composed of:
    - Normal Procedures (ATSP_1)
    - Contingency Procedures (ATSP_2)
    - Transiting Procedures (ATSP_3)
- ATS Training (ATST), sub-composed of:
    - Training for normal procedures (ATST_1)
    - Training for contingency procedures (ATST_2)
    - Training for transiting procedures (ATST_3)
- ATS Equipment (ATSE).

It should be noted that the ATS personnel encloses both civil and military ATS controllers, as well as the technical staff responsible for equipment maintenance. The transiting procedures refer to the transit of non-RVSM civil aircraft through the RVSM airspace, as part of the AFI RVSM Concept.

This structure of the AFI RVSM System gives six basic elements, namely FCOP, FCOT, FCOE, ATSP, ATST and ATSE, resulting from the subdivision into a ground and an airborne ATM components, and into the three constituent elements of the System (in the ATM sense): training, procedures and equipment (hardware and software).

These six basic elements are combined with three more elements at System level, namely RVSM, AD and SM.

Appendix B: Functional Hazard Assessment

B.1 Introduction

This section presents a summary of the AFI RVSM Functional Hazard Assessment documented in **[63]**.

It includes a brief explanation of the purpose, scope and objectives, an overview of the methodology, and a brief summary of the conclusion.

The aim is only to provide understanding elements. The complete details can be found in the document itself.

B.2 Purpose

The Functional Hazard Assessment **[63]** has been conducted for the AFI RVSM Programme following the Safety Objective **(i)** (refer to **section 2.2.3**) of the AFI RVSM Safety Policy **[2]**:

"The RVSM Programme shall conduct a full Functional Hazard Analysis looking at the whole system including air and ground segments and the proposed operational concept. This analysis shall adopt a total aviation system perspective and a risk based approach to the classification of hazards. The analysis shall include, but not be restricted to, those risks already identified by ICAO for RVSM implementation"

B.3 Scope

The AFI RVSM Safety Policy **[2]** requires the AFI RVSM FHA "to look at the whole RVSM concept" and to cover :

- The situation whereby RVSM has been operational for one year, is fully operational and all introductory problems have been resolved; so-called "AFI RVSM Core Airspace";
- A 24 hours period of time around the actual change-over from CVSM to RVSM, so-called "AFI RVSM Switch-over period"

The particular situation in States which have to ensure the transition between RVSM and non-RVSM airspace, so-called transition airspace, has been removed from the initial scope of the FHA as a result of CAR/SAM RVSM Implementation in January 2005. The assessment nevertheless historically completed so far for that particular situation can be found in **[64]**.

B.4 Objectives

The FHA objectives were:

- To identify and classify all hazards and risks associated with RVSM,
- To specify the AFI RVSM FHA Safety Objectives related to the hazards identified,
- To specify the AFI RVSM FHA-based Safety Requirements to be met by the AFI RVSM System,
- To allocate the requirements to the high-level elements of the generic AFI RVSM System

B.5 Methodology

The AFI RVSM FHA was developed in compliance with the EUROCONTROL EATMP Safety Assessment Methodology (SAM) **[79]** developed by the EUROCONTROL Safety & Quality Management and Standardisation Unit.

With reference to the SAM process, the AFI RVSM FHA consists of:

- a SAM Functional Hazard Assessment
- a SAM Preliminary System Safety Assessment (first steps)[2]

The detailed process can be found in Annex C of **[63]**.

B.6 Environmental types

In addition, as the surveillance capabilities and level of ATM services differ from FIR to FIR within the AFI Region, four different environmental types when identifying and assessing the hazards:

Reference	Environnemental conditions
ENV_1	Controlled airspace with radar or ADS surveillance capability. Surveillance enables the controller to detect incorrect aircraft movement.
ENV_2	Controlled airspace without radar and ADS surveillance capabilities. Surveillance is procedural and based on communications.
ENV_3	Non controlled (FIS) airspace with radar or ADS surveillance capability. Surveillance enables the controller to detect incorrect aircraft movement.
ENV_4	Non controlled (FIS) airspace without radar and ADS surveillance capabilities.

B.7 Severity Classification Scheme

The Severity Classification Scheme (SCS) constitutes one fundamental of the methodology. It provides the framework for assigning a severity class to a defined hazard. This severity class gives an indication on the impact on the safety of RVSM operations in case the hazard arises.

The SCS applicable for the AFI RVSM FHA is based on the EUROCONTROL Safety Regulatory Requirement 4 “Risk Assessment and Mitigation in ATM” **[79]** with minor modifications for communicating and understanding.

It is presented in Annex D of **[63]**, as approved by the AFI RVSM Task Force 5 **[20]**.

As the severity assessment is a subjective process, an additional matrix has been developed in compliance with the SCS, in order to enhance communicating and understanding and to support decisions during the brainstorming sessions. This so-called ‘decision matrix’ is provided in Annex D of **[63]**.

[2] In the sense that the allocation of the safety objectives and requirements has been conducted at a high level of the ATM architecture

B.8 Risk Classification Scheme

The Risk Classification Scheme (RCS) constitutes the second fundamental of the methodology. It provides the risk tolerance criteria, i.e the framework for deriving a safety objective (maximum likelihood at which a hazard can be tolerated to occur) according to a severity class.

To be completed in edition 0.3

It is presented in Annex E of **[63]**, as approved by the AFI RVSM Task Force 5 **[20]**.

B.9 Brainstorming sessions

Three brainstorming sessions have been conducted in support of the FHA process as detailed in Appendix A of **[63]**:

- Session 1: 1-5 November 2004 **[64] [67]**
- Session 2: 31 January- 4 February 2005 **[65] [68]**
- Session 3: 4-8 April 2005 **[66] [69]**

The three sessions were attended by 57 participants from AFI States and International Organisations, namely ICAO, ARMA, IATA and IFALPA. These 57 delegates form the AFI RVSM FHA Brainstorming Group. The composition is detailed in Appendix B of **[63]**.

The Group has been structured into five categories:

- Air traffic controllers
- Pilots
- Flight safety inspectors, airworthiness and certification engineers
- ATM experts, National Program Managers (NPM), and
- CNS engineers.

Its composition can be illustrated as follows:

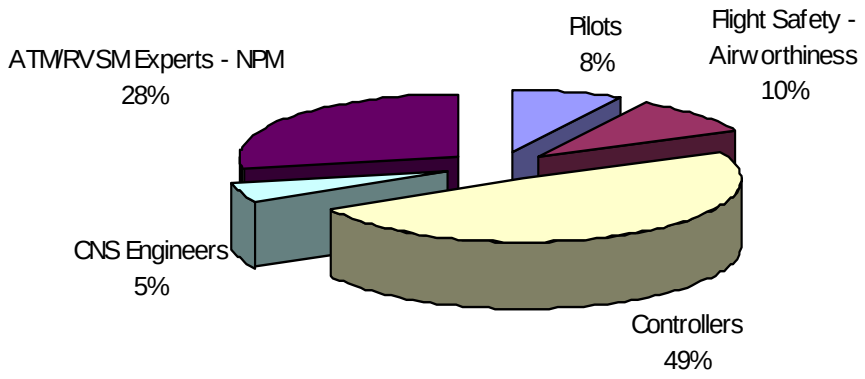

Figure 1: AFI RVSM working group composition

This composition reflects that the experts represents the various groups of people who will design or develop as well as work with the future AFI RVSM system, ensuring the representative outcome of the sessions.

In addition, it has been mentioned the great involvement from the delegates and the maturity reached by the Group in a very short time, giving further confidence in the relevance and completeness of the results.

B.10 Conclusion

The FHA process leads to the identification, assessment and classification of twenty eight (28) hazards for the Core Airspace and twenty (20) hazards. This outcome is detailed in the Hazard Classification Tables provided in Appendix D of **[63]**.

In addition, the risk mitigation strategy has introduced a set of 104 safety requirements for the core airspace and 63 for the switch-over period, allowing to consider all the hazards as not safety critical, except for the hazard AH_{core}_11 'pilot deviates from clearance'. This outcome is detailed in the Hazard Classification Tables provided in Appendix E **[63]**.

This set of safety requirements have been allocated to the AFI RVSM System elements, as detailed in the Allocation Tables provided in Appendix F **[63]**.

The FHA concludes of follows:

"All the risks identified for the AFI RVSM Core Airspace (except AH_{core}_11 in ENV_2) and Switch-Over Period have been assessed as tolerable provided the proposed mitigation is implemented"

Appendix C: AFI RVSM System Elements Requirements specification

This appendix presents the AFI RVSM System Elements Requirements (SER) as resulting from the allocation and apportionment to the System Elements, as discussed in **section 3.3.5**.

It presents the following elements as extracted from **[59]**:

- Firstly, the table form used for the presentation of the SER; and then,
- The SER themselves respectively for the AFI RVSM Core Airspace and Switch-Over Period.

C.1 Introduction

The System Elements Requirements (SER) are presented in tables which take the following form:

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
System element or sub-element designation	**SER reference**	**SER statement**	**Source of the requirement (FHASR ou HLSR)**	**Backward reference to the FHA risks associated with the FHASR (if appropriate)**	**Operationnal environment(s) in which the SER is applicable**

Table 3 : System Elements Requirements table form

Referencing rules of FHA hazards, safety requirements and operational environments (environmental types) can be found in Annex F of [63]

C.2 AFI RVSM Core Airspace

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
FCOP_1: Flight Crew and Operator Normal Procedures	FCOP1	Flight Crew procedures shall be specified for RVSM operations (including use of new FLAS/FLOS)	AFI RVSM 2	-	AIR
	FCOP_1-1	Flight Crew procedures for read back shall be reinforced	Req Core_29	AH Core 9, AH Core 10, AH Core 11	AIR
	FCOP_1-2	New operator procedures shall include the checking/assurance that for operation in AFI RVSM airspace, the aircraft equipment meets the RVSM MASPS requirements	Req Core_1	AH Core 1, AH Core 2, AH Core 3, AH Core 4	AIR
	FCOP_1-3	New Flight Crew Procedures to check RVSM Status before departure shall be specified	Req Core_60	AH Core 17	AIR
	FCOP_1-4	Transferring procedure for flight crew shall be defined (e.g. State Level/RVSM Status before FIR entry)	Req Core_41	AH Core 12	AIR
	FCOP_1-5	Flight Crew procedures to limit Climbing/descent rate during the level change to avoid nuisance RA (e.g.500ft/min to 1000ft/min) shall be defined	Req Core_87	AH Core 25	AIR
FCOP_2: Flight Crew and Operator Planning Procedures	FCOP2	Flight planning procedures shall be revised and reinforced for RVSM	AFI RVSM 1 Req Core_58	AH Core 17, AH Core 18	AIR
	FCOP_2-1	Operators Flight planning procedures shall take into account weather forecast	Req Core_66 Req Core_73	AH Core 19 AH Core 20 AH Core 21	AIR
	FCOP_2-2	Weather forecast shall be in place to inform flight crew and operators about areas with potential severe turbulence and/or bad weather conditions	Req Core_65 Req_Core_72	AH Core 19 AH Core 20 AH Core 28	AIR
	FCOP_2-3	Operator shall send CHG message when appropriate	Req Core_57	AH Core 17, AH Core 18	AIR
FCOP_3: Flight Crew and Operator Contingency Procedures	FCOP3	Flight Crew in flight contingencies shall be specified	AFI RVSM 7	-	AIR
	FCOP_3-1	New Flight Crew Procedures to suspend RVSM shall be specified	Req Core_101	AH Core 19, AH Core 20	AIR
	FCOP_3-2	Flight Crew Procedures to report encountered vortices shall be defined	Req Core_83	AH Core 21	AIR
	FCOP_3-3	Flight Crew Contingency Procedures shall be defined to provide 2000 feet separation for non RVSM civil aircraft	Req Core_2	AH Core 1, AH Core 2, AH Core 3, AH Core 4, AH_Core 5	AIR
	FCOP_3-4	Flight Crew Contingency Procedures shall be defined to execute lateral/level deviation from RVSM level for non RVSM civil aircraft	Req Core_3	AH Core 1, AH Core 2, AH Core 3, AH Core 4	AIR

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
	FCOP_3-5	Flight Crew Contingency Procedures shall be defined to exit non RVSM civil aircraft from RVSM Airspace	Req Core_4	AH Core 1, AH Core 2, AH Core 3, AH Core 4, AH Core 5	AIR
	FCOP_3-6	Flight Crew Radio Communications Failure procedures shall be defined	Req Core_9	AH Core 6, AH Core 7	AIR
	FCOP_3-7	Flight Crew Contingency procedures regarding not forecast severe turbulence shall be defined	Req Core_69 Req Core_75	AH Core 19, AH Core 20	AIR
	FCOP_3-8	Flight Crew Contingency procedures regarding wake turbulence shall be defined	Req Core_80	AH Core 21	AIR
	FCOP_3-9	Flight Crew Contingency procedures for Non-RVSM civil aircraft facing severe icing or turbulence shall be defined	Req Core_98	AH Core 28	AIR
	FCOP_3-10	Flight Crew Specific procedures to avoid deviation due to incorrect visual perspective shall be defined	Req Core_90	AH Core 26	AIR
	FCOP_3-11	Flight Crew emergency contingencies shall be specified	Req Core_84	AH Core 22, AH Core 23	AIR
FCOP_4: Flight Crew and Operator Transiting Procedures	FCOP4	Non RVSM-approved civil aircraft transiting procedures (including contingencies) shall be defined	AFI RVSM 3	AH Core 5	AIR
FCOT_1: Flight Crew and Operator Training for Normal Procedures	FCOT1	Flight Crew shall be trained regarding AFI RVSM procedures	AFI RVSM 2	-	AIR
	FCOT_1-1	Flight Crew Training shall include use of procedures for the checking/assurance that, for operation in AFI RVSM airspace, the aircraft equipment meets the RVSM MASPS Requirement	Req Core_1	AH Core 1, AH Core 2, AH Core 3, AH Core 4	AIR
	FCOT_1-2	Flight crew shall be trained appropriately regarding RVSM Status checking before departure	Req Core_61	AH Core 17	AIR
	FCOT_1-3	Flight Crew shall be trained to report negative RVSM Status on the initial call on any frequency within the AFI RVSM airspace	Req Core_64	AH Core 18	AIR

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
	FCOT_1-4	Flight Crew shall be trained appropriately with regards to RVSM Procedures including correct use of FLAS	Req Core_25	AH Core 9, AH Core 10, AH Core 11	AIR
	FCOT_1-5	Flight Crew shall be trained appropriately with regards to RVSM Procedures (including read back for clearance and leaving/reaching level)	Req Core_31 Req Core_35	AH Core 9, AH Core 10, AH Core 11	AIR
	FCOT_1-6	Flight Crew Training shall include use of procedures for limiting Climbing/descent rate during the level change to avoid nuisance RA (e.g.500ft/min to 1000ft/min)	Req Core_87	AH Core 25	AIR
	FCOT_1-7	Pilots shall be trained appropriately to TCAS operations (initial and continuous training)	Req Core_89	AH Core 25, AH Core 26	AIR
	FCOT_1-8	Flight crew shall be trained appropriately with regards to the transfer procedures	Req Core_42	AH Core 12	AIR
	FCOT_1-9	Pilots awareness on reporting accuracy shall be reinforced by training	Req Core_33	AH Core 9, AH Core 10	AIR
FCOT_2: Flight Crew and Operator Training for Planning Procedures	FCOT2	Operator and flight crew shall be appropriately trained with regards to flight planning procedures revised for RVSM operations	AFI RVSM 1 Req Core_59	AH Core 17	AIR
	FCOT_2-1	Operator staff shall be trained to send CHG message when appropriate	Req Core_57	AH Core 17, AH Core 18	AIR
	FCOT_2-2	Operator and flight crew shall be appropriately trained with regards to the consideration of turbulence and bad weather forecast when flight planning	Req Core_67 Req Core_74	AH Core 19 AH Core 20, AH Core 28	AIR
FCOT_3: Flight Crew and Operator Training for Contingency Procedures	FCOT3	Flight crew shall be trained appropriately with regards to in flight contingencies	AFI RVSM 5	-	AIR
	FCOT_3-1	Flight crew shall be trained to report significant weather encountered en-route	Req Core_68 Req Core_97	AH Core 19, AH Core 20, AH Core 28	AIR
	FCOT_3-2	Flight Crew shall be trained appropriately regarding suspension of RVSM	Req Core_104	AH Core 19, AH Core 20	AIR
	FCOT_3-3	Flight crew shall be trained appropriately with regards to contingency procedures in case of MASPS requirements failure	Req Core_6	AH Core 1, AH Core 2, AH Core 3, AH Core 4	AIR
	FCOT_3-4	Flight crew shall be trained appropriately regarding contingency procedures related to not forecast turbulence	Req Core_71 Req Core_77	AH Core 19 AH Core 20	AIR
	FCOT_3-5	Flight crew shall be trained appropriately regarding contingency procedures related to wake turbulence	Req Core_82	AH Core 21	AIR

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
	FCOT_3-6	Flight crew operating Non-RVSM aircraft shall be trained appropriately to contingency procedures related to Non-RVSM aircraft facing severe icing or turbulence	Req Core_100	AH Core 28	AIR
	FCOT_3-7	Flight crew shall be trained appropriately with regards to emergency contingencies	Req Core_85	AH Core 22, AH Core 23	AIR
	FCOT_3-8	Flight crew shall be trained appropriately with regards to Radio Communications Failure procedures	Req Core_11	AH Core 6, AH Core 7	AIR
	FCOT_3-9	Flight crew shall be trained appropriately with regards to ATS/DS failure (awareness training)	Req Core_20	AH Core 8	AIR
FCOT_4: Flight Crew and Operator Training for Transiting Procedures	FCOT4-1	Flight crew shall be trained appropriately with regards to Non-RVSM approved civil aircraft transiting procedures (including contingencies)	Req Core_8	AH Core 5	AIR
ACOE_1: Operator and Aircraft Equipment	AC1	RVSM- approved aircraft height-keeping shall be consistent with a TLS of 2.5 x 10-9	RVSM 4	-	AIR
	AC2	RVSM- approved aircraft height-keeping shall continue to be consistent with a TLS of 2.5 x 10-9	RVSM 8	-	AIR
	ACOE_1-1	Aircraft shall meet MASPS requirements	Req Core_1	AH Core 1, AH Core 2, AH Core 3, AH Core 4	AIR
	ACOE_1-2	Aircraft shall be equipped with ACAS II (TCAS version 7.0)	Req Core_88	AH Core 25	AIR
	ACOE_1-3	Weather forecast equipment shall be in place to inform flight crew and operators about areas with severe turbulence	Req Core_65	AH Core 19	AIR
	ACOE_1-4	Weather forecast equipment shall be in place to inform flight crew and operators about bad weather conditions	Req Core_72	AH Core 20, AH Core 28	AIR
	ACOE_1-5	Operator equipment to send CHG message when appropriate shall be in place	Req Core_57	AH Core 17, AH Core 18	AIR
	ACOE_1-6	Operator flight plan filling capabilities shall be reinforced	Req Core_58	AH Core 17, AH Core 18	AIR
ATSP_1: ATS Normal	ATSP1	Clearance procedures shall be revised to clear only RVSM civil aircraft and State aircraft into the RVSM airspace	-	AFI RVSM 1	ENV1 ENV3

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
Procedures	ATSP2	ATS Procedures shall be specified for RVSM operations (including use of new FLAS/FLOS)	-	AFI RVSM 2	All
	ATSP_1-1	ATS Procedures for read back shall be reinforced	Req Core_29	AH Core 9, AH Core 10, AH Core 11	ENV 1 ENV 2 ENV 3 ENV 4
	ATSP_1-2	Crosscheck between controllers shall be performed	Req Core_28	AH Core 9, AH Core 10	ENV 1 ENV 2 ENV 3 ENV 4
	ATSP_1-3	ATS Transfer procedures (including read back and RVSM/Non RVSM Status) shall be defined in LoA	Req Core_16 Req Core_37 Req Core_39 Req Core_41 Req Core_56	AH Core 8, AH Core 12, AH Core 16	ENV 1 ENV 2 ENV 3 ENV 4
		ATS Coordination procedures shall be defined in the Civil – Military LoA	Req Core_91	AH Core 27	ENV 1 ENV 2 ENV 3 ENV 4
	ATSP_1-4	ATS Procedures regarding knowledge of RVSM status shall be defined	Req Core_62	AH Core 17	ENV 1 ENV 2 ENV 3 ENV 4
	ATSP_1-5	Climbing/descent rate shall be limited during the level change to avoid nuisance RA (e.g.500ft/min to 1000ft/min)	Req Core_87	AH Core 25	ENV 1 ENV 2 ENV 3 ENV 4
	ATSP_1-6	Air/Ground Communications system maintenance procedures shall be defined to ensure a communication system recovery in MTTR defined in Service Level Agreement	Req Core_13	AH Core 7	ENV 1 ENV 2 ENV 3 ENV 4

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
	ATSP_1-7	Ground/Ground Communication system maintenance procedures shall be defined to ensure a communication system recovery in MTTR defined in Service Level Agreement	Req Core_21	AH Core 8	ENV 1 ENV 2 ENV 3 ENV 4
	ATSP_1-8	FDPS/RDPS/ ADS system maintenance procedures shall be defined to ensure a communication system recovery in MTTR defined in Service Level Agreement.	Req Core_45 Req Core_48 Req Core_52	AH Core 13 AH Core 14 AH Core 15	ENV 1 ENV 3
		FDPS system maintenance procedures shall be defined to ensure a communication system recovery in MTTR defined in Service Level Agreement.	Req Core_48	AH Core 14	ENV 2 ENV 4
	ATSP_1-9	Weather forecast procedures shall be in place to inform ATC about areas with potential severe turbulence and/or bad weather conditions	Req Core_65 Req Core_72	AH Core 19 AH Core 20 AH Core 28	ENV 1 ENV 2 ENV 3 ENV 4
	ATSP_1-10	Appropriate separation standards shall be specified with regards to wake turbulences	Req Core_78	AH Core 21	ENV 1 ENV 2 ENV 3 ENV 4
ATSP_2: ATS Contingency Procedures	ATSP_2-1	ATS Procedures to suspend RVSM shall be defined	Req Core_101	AH Core 19, AH Core 20	ENV 1 ENV 2 ENV 3 ENV 4
	ATSP_2-2	ATS Procedures to coordinate RVSM suspension with adjacent ACCs shall be defined	Req Core_102	AH Core 19, AH Core 20	ENV 1 ENV 2 ENV 3 ENV 4
	ATSP_2-3	ATS Contingency Procedures shall be defined to provide 2000 feet separation for non RVSM civil aircraft	Req Core_2	AH Core 1, AH Core 2, AH Core 3, AH Core 4, AH Core 5	ENV 1 ENV 2 ENV 3 ENV 4
	ATSP_2-4	ATS Contingency Procedures shall be defined to exit non RVSM civil aircraft from RVSM Airspace	Req Core_4	AH Core 1, AH Core 2, AH Core 3, AH Core 4,	ENV 1 ENV 2

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
				AH_Core 5	ENV 3
					ENV 4
	ATSP_2-5	ATS Contingency Procedures shall be defined to execute lateral/level deviation from RVSM level for non RVSM civil aircraft	Req Core_3	AH Core 1, AH Core 2, AH Core 3, AH Core 4	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATSP_2-6	ATS Radio Communications Failure procedures shall be defined	Req Core_9	AH Core 6, AH Core 7	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATSP_2-7	ATS Procedures to revert to procedural control shall be specified (due to RDPS/ADS system failure)	Req Core_43	AH Core 13	ENV 1
					ENV 3
		ATS Procedures to revert to procedural control shall be specified (due FDPS / RDPS/ADS system failure)	Req Core_50	AH Core 15	ENV 1
					ENV 3
	ATSP_2-8	ATS Procedures regarding Non-receipt of flight plan shall be defined	Req Core_54	AH Core 16	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATSP_2-9	ATS Contingency procedures regarding not forecast severe turbulence shall be defined	Req Core_69 Req Core_75	AH Core 19 AH Core 20	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATSP_2-10	ATS Contingency procedures regarding wake turbulence shall be defined	RVSM 5 Req Core_80	AH Core 21	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATSP_2-11	ATS Contingency procedures for Non-RVSM aircraft facing severe icing or turbulence shall be defined	Req Core_98	AH Core 28	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATSP_2-12	Emergency contingencies shall be specified	Req Core_84	AH Core 22, AH Core	ENV 1

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
				23	ENV 2
					ENV 3
					ENV 4
	ATSP_2-13	ATS Transfer procedures shall be defined in the LoA (including communication failure contingencies)	Req Core_16, Req Core_18	AH Core 8	ENV 1
					ENV 2
					ENV 3
					ENV 4
		Military – Civil coordination Contingency procedures shall be defined in the civil-military LoA	Req Core_94	AH Core 27	ENV 1
					ENV 2
					ENV 3
					ENV 4
ATSP_3: ATS transiting procedures	ATSP3	Procedures facilitating the transit of non-RVSM civil aircraft through the RVSM airspace without intermediate stops shall be defined	AFI RVSM3	TBC	TBC
ATST_1: ATS Training for Normal Procedures	ATST1a	Controllers shall be trained appropriately regarding revised clearance procedures	AFIRVSM 1	-	ENV 1
					ENV 3
	ATST1b	Controllers shall be trained appropriately regarding ATS procedures for RVSM operations	AFI RVSM 2		All
	ATST_1-1	Controllers shall be trained appropriately regarding knowledge of RVSM status procedures	Req Core_63	AH Core 17	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATST_1-2	Controllers shall be trained appropriately with regards to RVSM Procedures including correct use of FLAS	Req Core_24	AH Core 9, AH Core 10	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATST_1-3	Controllers shall be trained appropriately with regards to RVSM Procedures including read back for clearance	Req Core_30	AH Core 9	ENV 1
					ENV 3
		Controllers shall be trained appropriately with regards to RVSM Procedures including read back for report leaving/reaching level	Req Core_34	AH Core 9, AH Core 10	ENV 2
					ENV 4
	ATST_1-4	Controllers shall be trained appropriately with regards to RVSM Coordination Procedures	Req Core_36	AH Core 12	ENV 1
					ENV 2

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
					ENV 3
					ENV 4
	ATST_1-5	Controllers shall be trained appropriately with regards to RVSM civil - military Coordination Procedures	Req Core_92	AH Core 27	ENV 1
					ENV 2
					ENV 3
					ENV 4
		Military controllers shall be trained appropriately with regards to RVSM Coordination Procedures	Req Core_93	AH Core 27	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATST_1-6	Controllers shall be trained appropriately with regards to transfer procedures	Req Core_17 Req Core_40	AH Core 8, AH Core 12, AH Core 16	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATST_1-7	Controllers shall be trained on limitation of Climbing/descent rate during the level change to avoid nuisance RA (e.g.500ft/min to 1000ft/min)	Req Core_87	AH Core 25	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATST_1-8	Air/Ground Communications Maintenance team shall be trained appropriately with regards to Air/Ground Communication system maintenance procedures	Req Core_14	AH Core 7	ENV 1
					ENV 2
					ENV 3
					ENV 4
		Maintenance team shall be trained appropriately with regards to Ground/Ground Communication system maintenance procedures	Req Core_22	AH Core 8	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATST_1-9	Maintenance team shall be trained appropriately with regards to FDPS/RDPS/ADS systems maintenance procedures	Req Core_46 Req Core_53	AH Core 13 AH Core 15	ENV 1
					ENV 3
		Maintenance team shall be trained appropriately with regards to FDPS systems maintenance procedures	Req Core_49	AH Core 14	ENV 2
					ENV 4
	ATST_1-10	Controllers shall be trained appropriately regarding Appropriate separation	Req Core_79	AH Core 21	ENV 1

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
		standards related to wake turbulence			ENV 2 ENV 3 ENV 4
ATST_2: ATS Training for Contingency Procedures	ATST2	Controllers shall be trained appropriately with regards to RVSM contingencies	AFI RVSM 5	-	ENV1 ENV2 ENV3 ENV4
	ATST_2-1	Controllers shall be trained appropriately regarding suspension of RVSM (including coordination with adjacent ACCs)	Req Core_103	AH Core 19, AH Core 20	ENV 1 ENV 2 ENV 3 ENV 4
	ATST_2-2	Controllers shall be trained appropriately with regards to contingency procedures in case of MASPS requirements failure	Req Core_5	AH Core 1, AH Core 2, AH Core 3, AH Core 4	ENV 1 ENV 2 ENV 3 ENV 4
	ATST_2-3	Controllers shall be trained appropriately with regards to ATS/DS failure contingency procedures	Req Core_19	AH Core 8	ENV 1 ENV 2 ENV 3 ENV 4
	ATST_2-4	Controllers shall be trained appropriately with regards to Radio Communications Failure procedures	Req Core_10	AH Core 6, AH Core 7	ENV 1 ENV 2 ENV 3 ENV 4
	ATST_2-5	Controllers shall be trained appropriately to revert to procedural control in case of FDPS / RDPS/ADS system failure	Req Core_44 Req Core_51	AH Core 13 AH Core 15	ENV 1 ENV 3
	ATST_2-6	Controllers shall be trained appropriately to operate without FDPS system (blank strip,…)	Req Core_47	AH Core 14	ENV 1 ENV 2 ENV 3 ENV 4
	ATST_2-7	Controllers shall be trained appropriately regarding Non-receipt of flight plan	Req Core_55	AH Core 16	ENV 1 ENV 2 ENV 3

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
					ENV 4
	ATST_2-8	Controllers shall be trained appropriately with regards to coordination Contingency procedures (including Military coordination)	Req Core_95	AH Core 27	ENV 1
					ENV 2
					ENV 3
					ENV 4
		Military Controllers shall be trained appropriately with regards to coordination Contingency procedures	Req Core_96	AH Core 27	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATST_2-9	Controllers shall be trained appropriately regarding contingency procedures related to not forecast turbulence	Req Core_70 Req Core_76	AH Core 19 AH Core 20	ENV 1
					ENV 2
					ENV 3
					ENV 4
		ATC controller shall be trained appropriately regarding contingency procedures related to Non-RVSM aircraft facing severe icing or turbulence	Req Core_99	AH Core 28	ENV 1
					ENV 2
					ENV 3
					ENV 4
		Controllers shall be trained appropriately regarding contingency procedures related to wake turbulence	Req Core_81	AH Core 21	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATST_2-10	Controllers shall be trained appropriately with regards to emergency contingencies	Req Core_86	AH Core 22, AH Core 23	ENV 1
					ENV 2
					ENV 3
					ENV 4
ATST_3: ATS Training for Transiting Procedures	ATST3	Controllers shall be trained appropriately with regards to Non-RVSM civil aircraft transiting procedures (including contingencies)	AFI RVSM 3 Req Core_7	AH Core 5	ENV 1
					ENV 2
					ENV 3
					ENV 4
ATSE_1: ATS Equipment	ATSE1	ATS equipment shall be modified to indicate and display RVSM status	AFI RVSM 1 Req Core_26	AH Core 9, AH Core 10	ENV1
					ENV2
					ENV3

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
					ENV4
	ATSE2	Existing conflict detection/alerting capabilities shall be updated to be consistent with RVSM operations	AFI RVSM 2 Req Core_32	AH Core 9, AH Core 10, AH Core 11, AH Core 12	ENV1
					ENV3
	ATSE_1-1	Air/Ground Communication system shall be designed to ensure a total coverage of the RVSM airspace with a minimum MTBF of 2 months for a given FIR	Req Core_12	AH Core 7	ENV 1
					ENV 2
					ENV 3
					ENV 4
		ATS/DS Communications system shall be designed to ensure point-to-point between all adjacent ACCs with a minimum MTBF of 2 months for a given Radar / ADS FIR	Req Core_15	AH Core 8	ENV 1
					ENV 3
		ATS/DS Communication system shall be designed to ensure point-to-point communications between all adjacent ACCs with a minimum MTBF of 60 years for a given non Radar / ADS FIR	Req Core_23	AH Core 8	ENV 2
					ENV 4
	ATSE_1-2	RVSM/Non RVSM Status shall be provided by transferring controller (including when status is downgraded)	Req Core_37	AH Core12	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATSE_1-3	Suitable and reliable ground communications means shall be implemented	Req Core_38	AH Core 12	ENV 1
					ENV 2
					ENV 3
					ENV 4
	ATSE_1-4	Weather forecast equipment shall be in place to inform ATC about areas with severe turbulence	Req Core_65	AH Core 19	ENV 1
					ENV 2
					ENV 3
					ENV 4
		Weather forecast equipment shall be in place to inform ATC about bad weather conditions	Req Core_72	AH Core 20, AH Core 28	ENV 1
					ENV 2
					ENV 3
					ENV 4
AD: Airspace Design	AD1	An appropriate Flight Level Orientation Scheme shall be developed	AFI RVSM 2	-	All
	AD2	Airspace facilities for emergency situations shall be provided	AFI RVSM 7	-	All

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
SM: System Monitoring	SM1	The exclusion of non-RVSM approved non-State aircraft from AFI RVSM airspace shall be monitored	AFI RVSM 1	-	All
	SM2	The height-keeping performance of RVSM-approved aircraft shall be monitored	AFI RVSM 8	-	All
	SM3	Data on operational errors shall be collected for collision risk estimation	AFI RVSM 8	-	All
	SM4	Data on risk exposure shall be collected for collision risk estimation	AFI RVSM 8	-	All
	SM5	Data on ACAS/TCAS events shall be collected and evaluated	AFI RVSM 8	-	All
RVSM: Overall System	RVSM5	The probability of any system failure leading to a mid-air collision shall be sufficiently low for the risk of mid-air collision due to the loss of vertical separation from all causes in AFI RVSM airspace to meet a TLS of 5×10^{-9} fatal accidents per flight hour.	AFI RVSM 5	-	All
	RVSM6	The system shall be sufficiently reliable for the number of ATM-induced accidents and serious or risk-bearing incidents in AFI RVSM airspace not to increase from current CVSM levels and, where, possible to decrease.	AFI RVSM 6	-	All

Table 4 : AFI RVSM “Core Airspace” System Element Requirements

C.3 AFI RVSM Switch-over period

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
FCOP_1: Flight Crew and Operator Normal Procedures	S_FCOP_1-1	A NOTAM shall be issued for the activation of the new FLAS during the switch-over period	Req Swit_10	AH Swit 2, AH Swit 3, AH Swit 4, AH Swit 5, AH Swit 7, AH Swit 8, AH Swit 9, AH Swit 20	AIR
	S_FCOP_1-2	Flight Crew Switch-over Procedures shall be in place to impose the read back for level clearance during the switch-over period	Req Swit_11	AH Swit 2, AH Swit 4	AIR
	S_FCOP_1-3	Flight Crew Switch-over Procedures shall be in place to impose the surveillance of the level change during the switch-over period	Req Swit_18	AH Swit 3, AH Swit 5, AH Swit 7	AIR
	S_FCOP_1-4	Use of Eastbound RVSM FL (FL310, FL350 and FL390) shall be suspended for a period of 02 hours after the T0.	Req Swit_24	AH Swit 5, AH Swit 7, AH Swit 8, AH Swit 9, AH Swit 17, AH Swit 18, AH Swit 20	AIR
	S_FCOP_1-5	A NOTAM shall be produced to suspend FL310, FL350 and FL390 for RVSM operations after ToS during a period of 02 hours	Req Swit_25	AH Swit 5, AH Swit 7, AH Swit 8, AH Swit 9, AH Swit 17, AH Swit 18, AH Swit 20	AIR
	S_FCOP_1-6	Transit of non-RVSM civil a/c shall be suspended for a period of 02 hours after T0	Req Swit_35	AH Swit 10, AH Swit 11	AIR
	S_FCOP_1-7	Operation above FL410 shall be suspended for non-RVSM a/c for a period of 02 hours after T0	Req Swit_36	AH Swit 10, AH Swit 11	AIR
	S_FCOP_1-8	The traffic flow management capabilities shall be available before the switch-over period	Req Swit_38	AH Swit 12	AIR
FCOP_2: Flight Crew and Operator Planning Procedures	S_FCOP_1	Level change and time/point for non RVSM civil aircraft to leave the FL band 290-410 and above-410 before ToS shall be indicated in the flight plan	Req Swit_62	AH Swit 20	AIR
	S_FCOP_2	Level change and time/point for non RVSM civil aircraft to leave the FL band 290-410 before ToS shall be indicated in the flight plan	Req Swit_33	AH Swit 9	AIR

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
FCOT_1: Flight Crew and Operator Training for Normal Procedures	S_FCOT_1-1	Awareness campaigns about RVSM Status shall be organized before the switch-over period	Req Swit_1	AH Swit 1	AIR
	S_FCOT_1-2	Flight crew shall be trained appropriately with regards to RVSM procedures before Switch-over period	Req Swit_5	AH Swit 2, AH Swit 3, AH Swit 4, AH Swit 5, AH Swit 6, AH Swit 16, AH Swit 20	AIR
	S_FCOT_1-3	Awareness campaigns shall be organized before the switch-over period to reinforce the knowledge of the new FLAS (after completion of training for all staff)	Req Swit_6	AH Swit 2, AH Swit 3, AH Swit 4, AH Swit 5, AH Swit 6, AH Swit 7, AH Swit 8, AH Swit 9, AH Swit 20	AIR
	S_FCOT_1-4	Flight crew shall be trained appropriately with regards to switch-over procedures(read back for level clearance)	Req Swit_13	AH Swit 2, AH Swit 4	AIR
	S_FCOT_1-5	Flight crew shall be trained appropriately with regards to switch-over procedures related Report reaching level	Req Swit_20	AH Swit 3, AH Swit 5, AH Swit 7	AIR
	S_FCOT_1-6	Awareness campaigns shall be organized before the switch-over period to reinforce the importance of read back	Req Swit_23	AH Swit 5, AH Swit 7	AIR
	S_FCOT_1-7	Flight Crew shall be briefed on the suspension of Eastbound RVSM FL (Fl310, FL350 and FL390) for a period of 02 hours after the T0.	Req Swit_24	AH Swit 5, AH Swit 7, AH Swit 8, AH Swit 9, AH Swit 17, AH Swit 18, AH Swit 20	AIR
	S_FCOT_1-8	Awareness campaigns shall be organized before the switch-over period to reinforce the knowledge of the new FLAS for operators	Req Swit_26	AH Swit 6	AIR
	S_FCOT_1-9	Flight Crew shall be briefed on the suspension of transit of non-RVSM civil a/c for a period of 02 hours after T0	Req Swit_35	AH Swit 10, AH Swit 11	AIR
	S_FCOT_1-10	Flight Crew shall be briefed on the suspension of operations above FL410 for non-RVSM a/c for a period of 02 hours after T0	Req Swit_36	AH Swit 10, AH Swit 11	AIR
ATSP_1: ATS Normal	S_ATSP_1-1	ATC shall verify the RVSM status of each aircraft within its area of responsibility before the ToS	Req Swit_3	AH Swit 1	ENV 1 ENV 2

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
Procedures					ENV 3
					ENV 4
	S_ATSP_1-2	ATC team shall be reinforced during the switch-over period	Req Swit_7	AH Swit 2, AH Swit 3, AH Swit 4, AH Swit 8, AH Swit 9, AH Swit 12, AH Swit 17, AH Swit 20	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATSP_1-3	Switch-over Procedures shall be in place to impose the surveillance of the execution of the level clearance during the switch-over period	Req Swit_8	AH Swit 2, AH Swit 4	ENV 1
					ENV 2
	S_ATSP_1-4	A NOTAM shall be issued for the activation of the new FLAS during the switch-over period	Req Swit_10	AH Swit 2, AH Swit 3, AH Swit 4, AH Swit 5, AH Swit 7, AH Swit 8, AH Swit 9, AH Swit 20	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATSP_1-5	Switch-over Procedures shall be in place to impose the read back for level clearance during the switch-over period	Req Swit_11	AH Swit 2, AH Swit 4	ENV 1
					ENV 2
	S_ATSP_1-6	Switch-over Procedures shall be in place to recover from incorrect clearance issue	Req Swit_14	AH Swit 2	ENV 1
					ENV 2
	S_ATSP_1-7	Switch-over Procedures shall be in place to impose the surveillance of the execution of the level information during the switch-over period	Req Swit_16	AW Swit 3	ENV 3
					ENV 4
	S_ATSP_1-8	Switch-over Procedures shall be in place to impose the surveillance of the level change during the switch-over period	Req Swit_18	AH Swit 3, AH Swit 5, AH Swit 7	ENV 3
					ENV 4
	S_ATSP_1-9	Switch-over Procedures shall be in place to recover from incorrect information issue	Req Swit_21	AH Swit 3	ENV 3
					ENV 4
	S_ATSP_1-10	Use of Eastbound RVSM FL (Fl310, FL350 and FL390) shall be suspended for a period of 02 hours after the T0.	Req Swit_24	AH Swit 5, AH Swit 7, AH Swit 8, AH Swit 9, AH Swit 17, AH Swit 18, AH Swit 20	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATSP_1-11	A NOTAM shall be produced to suspend FL310, FL350 and FL390 for RVSM operations after ToS during a period of 02 hours	Req Swit_25	AH Swit 5, AH Swit 7, AH Swit 8, AH Swit 9, AH Swit 17, AH Swit 18, AH Swit 20	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATSP_1-12	Switch-over Procedures shall be in place to ensure the delivery of relevant	Req Swit_29	AH Swit 8	ENV 1

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
		level clearance for non RVSM civil aircraft to leave the FL band 290-410 before ToS			ENV 2
	S_ATSP_1-13	Switch-over Procedures shall be in place to ensure the delivery of relevant level information for non RVSM civil aircraft to leave the FL band 290-410 before ToS	Req Swit_31	AH Swit 9	ENV 3
					ENV 4
	S_ATSP_1-14	Transit of non-RVSM civil a/c shall be suspended for a period of 02 hours after T0	Req Swit_35	AH Swit 10, AH Swit 11	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATSP_1-15	Operation above FL410 shall be suspended for non-RVSM a/c for a period of 02 hours after T0	Req Swit_36	AH Swit 10, AH Swit 11	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATSP_1-16	The traffic flow management capabilities shall be available before the switch-over period	Req Swit_38	AH Swit 12	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATSP_1-17	Modification to existing reliable communication systems (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed	Req Swit_43	AH Swit 13	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATSP_1-18	Maintenance staff shall be reinforced during switch over period	Req Swit_45	AH Swit 13, AH Swit 14, AH Swit 15	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATSP_1-19	Flight plan shall be checked for non RVSM civil aircraft to leave the FL band 410 and above before ToS (Level change and time/point)	Req Swit_63	AH Swit 20	ENV 3
					ENV 4
	S_ATSP_1-20	Flight plan shall be checked for non RVSM civil aircraft to leave the FL band 290-410 before ToS (Level change and time/point)	Req Swit_34	AH Swit 9	ENV 3
					ENV 4
	S_ATSP_1-21	LoAs and Procedures shall be in place before Switch-over period	Req Swit_53	AH Swit 17	ENV 1
					ENV 2

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
					ENV 3
					ENV 4
	S_ATSP_1-22	Civil/Military coordination procedures shall be in place before Switch-over period	Req Swit_56	AH Swit 18	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATSP_1-23	Switch-over Procedures shall be in place to ensure the delivery of relevant level information for non RVSM civil aircraft to leave the FL band 290-410 before ToS	Req Swit_61	AH Swit 20	ENV 3
					ENV 4
ATSP_2: ATS Contingency Procedures	S_ATSP_2-1	RDPS/ADS system failure contingencies shall be defined before the switch over period	Req Swit_47	AH Swit 14	ENV 1
					ENV 3
	S_ATSP_2-2	HMI failure contingencies shall be defined before the switch over period	Req Swit_46	AH Swit 14	ENV 1
					ENV 3
	S_ATSP_2-3	FDPS failure contingencies shall be defined before the switch over period	Req Swit 50	AH Swit 15	ENV 1
					ENV 2
					ENV 3
					ENV 4
ATST_1: ATS Training on Normal Procedures	S_ATST_1-1	Awareness campaigns about RVSM Status shall be organized before the switch-over period	Req Swit_1	AH Swit 1	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATST_1-2	Controllers shall be trained with regards to the verification of the RVSM status of each aircraft within its area of responsibility before the ToS	Req Swit_3	AH Swit 1	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATST_1-3	Controllers shall be trained appropriately with regards to RVSM procedures before Switch-over period	Req Swit_4	AH Swit 2, AH Swit 3, AH Swit 4, AH Swit 5, AH Swit 16, AH Swit 20	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATST_1-4	Awareness campaigns shall be organized before the switch-over period to reinforce the knowledge of the new FLAS (after completion of training for	Req Swit_6	AH Swit 2, AH Swit 3, AH Swit 4, AH Swit 5,	ENV 1
					ENV 2

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
		all staff)		AH Swit 6, AH Swit 7, AH Swit 8, AH Swit 9, AH Swit 20	ENV 3 ENV 4
	S_ATST_1-5	Controller shall be trained appropriately with regards to switch-over procedures (surveillance of the execution of the level clearance)	Req Swit_9	AH Swit 2, AH Swit 4	ENV 1 ENV 2
	S_ATST_1-6	Controller shall be trained appropriately with regards to switch-over procedures (read back for level clearance)	Req Swit_12	AH Swit 2, AH Swit 4	ENV 1 ENV 2
	S_ATST_1-7	Controller shall be trained appropriately with regards to switch-over procedures (recovering from incorrect clearance issue)	Req Swit_15	AH Swit 2	ENV 1 ENV 2
	S_ATST_1-8	Controller shall be trained appropriately with regards to switch-over procedures (surveillance of the execution of the level information)	Req Swit_17	AH Swit 3	ENV 3 ENV 4
	S_ATST_1-9	Controller shall be trained appropriately with regards to switch-over procedures related to the level change	Req Swit_19	AH Swit 3, AH Swit 5, AH Swit 7	ENV 3 ENV 4
	S_ATST_1-10	Controller shall be trained appropriately with regards to switch-over procedures (recovering from incorrect information issue)	Req Swit_22	AH Swit 3	ENV 3 ENV 4
	S_ATST_1-11	Controller shall be briefed on the suspension of Eastbound RVSM FL (FL310, FL350 and FL390) for a period of 02 hours after the T0.	Req Swit_24	AH Swit 5, AH Swit 7, AH Swit 8, AH Swit 9, AH Swit 17, AH Swit 18, AH Swit 20	ENV 1 ENV 2 ENV 3 ENV 4
	S_ATST_1-12	Controllers shall be trained appropriately with regards to broadcast the switch-over countdown : ToS - 60mn, 45mn, 30mn,15 mn , ToS-5 mn and ToS	Req Swit_28	AH Swit 7, AH Swit 8, AH Swit 9, AH Swit 20	ENV 1 ENV 2 ENV 3 ENV 4
	S_ATST_1-13	Controllers shall be trained appropriately with regards to deliver relevant level clearance for non RVSM civil aircraft to leave the FL band 290-410 before ToS	Req Swit_30	AH Swit 8	ENV 1 ENV 2
	S_ATST_1-14	Controllers shall be trained appropriately with regards to deliver relevant level information for non RVSM civil aircraft to leave the FL band 290-410 before ToS	Req Swit_32	AH Swit 9	ENV 3 ENV 4
	S_ATST_1-15	Controller shall be briefed on the suspension of transit of non-RVSM civil a/c for a period of 02 hours after T0	Req Swit_35	AH Swit 10, AH Swit 11	ENV 1 ENV 2

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
					ENV 3
					ENV 4
	S_ATST_1-16	Controllers shall be briefed on the suspension of operations above FL410 for non-RVSM a/c for a period of 02 hours after T0	Req Swit_36	AH Swit 10, AH Swit 11	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATST_1-17	Controllers shall be trained with regards to the checking of flight plan for non RVSM civil aircraft to leave the FL band 290-410 before ToS (Level change and time/point)	Req Swit_34	AH Swit 9	ENV 3
					ENV 4
	S_ATST_1-18	Controllers shall be trained with regards to the checking of flight plan for non RVSM civil aircraft to leave the FL band 410 and above before ToS (Level change and time/point)	Req Swit_63	AH Swit 20	ENV 3
					ENV 4
	S_ATST_1-19	Controller shall be trained appropriately with regards to the checking into the flight plan that FL310, FL350 and FL390 are not intended to be used after ToS	Req Swit_27	AH Swit 7	ENV 3
					ENV 4
	S_ATST_1-20	ATS technical staff shall be aware that modification to existing reliable FDPS (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed	Req Swit_51	AH Swit 15	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATST_1-21	Awareness campaigns shall be organized before the switch-over period to reinforce the knowledge of the new LOA	Req Swit_55	AH Swit 17	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATST_1-22	Controller shall be trained appropriately with regards to LoAs and procedures before Switch-over period	Req Swit_54	AH Swit 17	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATST_1-23	Controller shall be trained appropriately with regards Civil/Military coordination procedures before Switch-over period	Req Swit_57	AH Swit 18	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_ATST_1-24	Military Controller shall be trained appropriately with regards Civil/Military	Req Swit_58	AH Swit 18	ENV 1

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
		coordination procedures before Switch-over period			ENV 2 ENV 3 ENV 4
	S_ATST_1-25	Awareness campaigns shall be organized before the switch-over period to reinforce the knowledge of the new Civil/Military coordination procedures	Req Swit_59	AH Swit 18	ENV 1 ENV 2 ENV 3 ENV 4
	S_ATST_1-26	Maintenance staff shall be trained appropriately with regards to modified systems before Switch-over period	Req Swit_44	AH Swit 13, AH Swit 14, AH Swit 15	ENV 1 ENV 2 ENV 3 ENV 4
	S_ATST_1-27	ATS technical staff shall be aware that modification to existing reliable HMI (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed	Req Swit_48	AH Swit 14	ENV 1 ENV 3
	S_ATST_1-28	ATS technical staff shall be aware that modification to existing reliable RDPS/ADS system (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed	Req Swit_49	AH Swit 14	ENV 1 ENV 3
ATST_2: ATS Training on Contingency Procedures	S_ATST_2-1	Maintenance staff shall be trained with regards to RDPS/ADS system failure contingencies before the switch over period	Req Swit_47	AH Swit 14	ENV 1 ENV 3
	S_ATST_2-2	Maintenance staff shall be trained with regards to FDPS failure contingencies before the switch over period	Req Swit_50	AH Swit 15	ENV 1 ENV 2 ENV 3 ENV 4
	S_ATST_2-3	Maintenance staff shall be trained with regards to HMI failure contingencies before the switch over period	Req Swit_46	AH Swit 14	ENV 1 ENV 3
ATSE_1: ATS Equipment	S_ATSE_1-1	Upgraded ground system shall be in place to manage the RVSM status information before the switch-over period	Req Swit_2	AH Swit 1	ENV 1 ENV 2 ENV 3 ENV 4

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
	S_ATSE_1-2	ATS Equipment shall enable controller to check flight plan for non RVSM civil aircraft to leave the FL band 290-410 before ToS (Level change and time/point)	Req Swit_34	AH Swit 9	ENV 3 ENV 4
	S_ATSE_1-3	The traffic flow management capabilities shall be available before the switch-over period	Req Swit_38	AH Swit 12	ENV 1 ENV 2 ENV 3 ENV 4
	S_ATSE_1-4	SAT Phone and/or PSTN shall be available for point to point communications during the switch over period	Req Swit_42	AH Swit 13	ENV 1 ENV 2 ENV 3 ENV 4
	S_ATSE_1-5	Modification to existing reliable communication systems (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed	Req Swit_43	AH Swit 13	ENV 1 ENV 2 ENV 3 ENV 4
	S_ATSE_1-6	Modification to existing reliable HMI (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed	Req Swit_48	AH Swit 14	ENV 1 ENV 3
	S_ATSE_1-7	Modification to existing reliable RDPS/ADS system (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed	Req Swit_49	AH Swit 14	ENV 1 ENV 3
	S_ATSE_1-8	Modification to existing reliable FDPS (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed	Req Swit_51	AH Swit 15	ENV 1 ENV 2 ENV 3 ENV 4
	S_ATSE_1-9	ATS equipment shall enable controller to check flight plan for non RVSM civil aircraft to leave the FL band 410 and above before ToS (Level change and time/point)	Req Swit_63	AH Swit 20	ENV 3 ENV 4
RVSM: Overall system	S_RVSM1	The switch-over period shall be performed during an appropriate low traffic density period	Req Swit_37	AH Swit 12	ENV 1 ENV 2 ENV 3

System Elements	Reference	System Element Requirement (SER)	Source	FHA Backtrace	Env.
					ENV 4
	S_RVSM2	The switch-over period shall be determine out of Hadj period	Req Swit_39	AH Swit 12	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_RVSM3	Traffic density shall be limited during switch-over period as appropriate	Req Swit_40	AH Swit 12	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_RVSM4	The FIR airspace shall be optimized to reduce controller workload	Req Swit_41	AH Swit 12	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_RVSM5	The date of switchover shall take into account the effect of adverse weather (thunderstorm, sandstorm, …) to minimize the effect on switch over operations	Req Swit_52	AH Swit 16	ENV 1
					ENV 2
					ENV 3
					ENV 4
	S_RVSM6	Civil/Military coordination committee shall be in place	Req Swit_60	AH Swit 18	ENV 1
					ENV 2
					ENV 3
					ENV 4

Table 5 : AFI RVSM “Switch-over Period” System Element Requirements

Appendix D: AFI RVSM System Element Requirements realisation

This appendix presents the realisation of the AFI RVSM System Elements Requirements (SER) as resulting from the agreed approach of satisfaction, as discussed in sections 4 and 5.

It presents the following elements as extracted from **[59]**:

- Firstly, the table form used for the presentation of the results; and then,
- The results themselves respectively for the AFI RVSM Core Airspace and Switch-Over Period.

D.1 Introduction

The realisation of the System Elements Requirements (SER) is presented in tables which take the following form:

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)		Realisation at Implementation level	
		Approach *the realisation is addressed by the design of…*	**Result**	**Approach** *the realisation is addressed by…*	**Result**
Requirement reference	**Requirement statement**	**Mean of realisation at a concept level**	**Realisation result**	**Mean of realisation at an implementation level**	**Realisation result**

Table 6 : System Elements Requirements realisation table form

In this edition 0.1, additional columns are provided to indicate the actual result of realisation. For this purpose, the following indicators are used:

YES: the evidence has been provided and is considered as sufficient

PARTIALLY: some evidence has been found and it should be confirmed if is appropriate and/or sufficient

NO: No evidence has been found

OPEN: Not yet addressed

D.2 AFI RVSM Core Airspace

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOP_1	**Flight Crew and Operator Normal Procedures**						
FCOP1	Flight Crew Procedures shall be specified for RVSM operations (including use of new FLAS/FLOS)	Appropriate Flight Crew Procedures (including use of new FLAS/FLOS) to be provided in ICAO 7030	It is shown to have been successfully addressed in section 4.0, 6 and 8.1 of ICAO 7030 **[40]**.Addressed also Annex 2 Appendix 3	NO (strikeout and grey shading in section 16 of 7030)	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **2** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in ~~Appendix X~~	OPEN
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**).	YES			
FCOP_1-1	Flight Crew Procedures for read back shall be reinforced	Appropriate R/T phraseology for read back to be provided in ICAO 7030	It is shown to have been successfully addressed in section 9.0 of ICAO 7030 **[40]**. Also contained in the PANS/ATM doc 4444	NO (strikeout and grey shading in section 16 of 7030)	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before	It is shown to have been successfully addressed in the section **2** of the National Safety Plan template. State	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section	YES	operating in RVSM airspace	commitment to this realisation is contained within the National Safety Plans, reviewed and reported in ~~Appendix X~~	
FCOP_1-2	New operator procedures shall include the checking/assurance that for operation in AFI RVSM airspace, the aircraft equipment meets the RVSM MASPS requirements	Procedures to obtain RVSM approval for aircraft, ensuring compliance with the MASPS to be contained in guidance material to be provided to States	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (sections **6,** and **9**). This issue is addressed in section	YES	The requirements placed on States to ensure that aircraft, from whom they have responsibility, obtain RVSM approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **2.5** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in ~~Appendix X~~	OPEN
		On-going maintenance programmes and procedures to be contained in guidance material to be provided to States	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **10**). This issue is addressed in section	YES	The requirements placed on States about RVSM approval suspension, revocation and reinstatement for that aircraft from whom they have responsibility		

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOP_1-3	New Flight Crew Procedures to check RVSM Status before departure shall be specified	Procedures to obtain RVSM approval for operator, containing pre-flight procedures at the aircraft for each flight to determine the condition of equipment required for flight in the RVSM airspace	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (Appendix 4). This issue is addressed in section	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section.2 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	OPEN
FCOP_1-4	Transferring Procedure for Flight crew shall be defined (e.g State Level/RVSM Status before FIR entry)	Appropriate transferring procedures to be contained in the ICAO 7030	It is shown to have been successfully addressed in section 18.0 of ICAO 7030 **[40]**. The design of FC procedures for normal operations is described in section	PART.	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section 2 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	OPEN
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section 11). This issue is addressed in section	YES			

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOP_1-5	Flight Crew Procedures to limit Climbing/descent rate during the level change to avoid nuisance RA (e.g.500ft/min to 1000ft/min) shall be defined	Appropriate procedures for TCAS operations	It is shown to have been successfully addressed in 8168 –PANS OPS volume 1	PART.	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **2.3** of the NSP template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	OPEN
		Appropriate procedures for limitation of climbing/descent rate during level change, to be contained in the ICAO 7030	It is shown to have been successfully addressed in section 5.0 of ICAO 7030 **[40]**. The design of FC procedures for normal operations is described in section	NO			
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section	YES			
FCOP_2	**Flight Crew and Operator Planning Procedures**						
FCOP2	Flight planning procedures shall be revised and reinforced for RVSM	Specialised procedures for RVSM flight planning to be contained in the ICAO 7030	It is shown to have been successfully addressed in section **2.** of the ICAO 7030 **[40]**. The design of flight planning procedures is addressed in section	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this.	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section	YES	airspace. In addition, States will publish AICs, NOTAMs etc…	also realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. It is also in ATS ops manual para.9.6**	
FCOP_2-1	Operators Flight planning procedures shall take into account weather forecast	Specialised procedures for flight planning to be contained in the ICAO 7030	It is shown to have been successfully addressed in section **2.0** of the ICAO 7030 **[40]**. The design of flight planning procedures is addressed in section	NO	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace. In addition, States will publish AICs, NOTAMs etc…	It is shown to have been successfully addressed in the section **2.3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X.It is addressed in the ATS ops Manual 9.6**	OPEN
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section	YES			

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOP_2-2	Weather forecast shall be in place to inform flight crew and operators about areas with potential severe turbulence and/or bad weather conditions	Specialised procedures to inform operator and flight crew on weather forecast to be contained in the ICAO 7030	It is shown to have been successfully addressed in section **4.4** of the ICAO 7030 **[40]**. The design of flight planning procedures is addressed in section	PART.	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace. In addition, States will publish AICs, NOTAMs etc…	It is shown to have been successfully addressed in the section **2.3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. It is in the ATS Ops manual 9.6**	OPEN
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section	YES			
FCOP_2-3	Operator shall send CHG message when appropriate	Procedures for operator to submit a modification message (CHG) when RVSM approval status is changed, to be contained in ICAO 7030	It is shown to have been successfully addressed in section **2.0** of the ICAO 7030 **[40]**. The design of flight planning procedures is addressed in section	PART. (only on RPL)	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM	It is shown to have been successfully addressed in the section **2.3** of the National Safety Plan template. State commitment to this	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section	YES	airspace	realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. It is in the ATS ops Manual 5.0**	
FCOP_3	**Flight Crew and Operator Contingency Procedures**						
FCOP3	Flight Crew in flight contingencies shall be specified	In-flight contingencies to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4.0** of the ICAO 7030. The design of FC contingency procedures is addressed in section	NO	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X.It is in the ATS Ops manual 5.0**	OPEN
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section **xx**	YES			

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOP_3-1	New Flight Crew Procedures to suspend RVSM shall be specified	Contingency procedures for suspending RVSM operations in the event of severe turbulence and when aircraft capability(ies) to maintain flight level(s) are impacted, to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4.2** of the ICAO 7030 **[40]**. The design of FC contingency procedures is addressed in section **xx**	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	OPEN
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section **xx**	YES			
FCOP_3-2	Flight Crew Procedures to report encountered vortices shall be defined	Contingency procedures for flight crew to report encountered vortices that impact the aircraft capability to maintain flight level, to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4.3** of the ICAO 7030 **[40]**. The design of FC contingency procedures is addressed in section **xx**	PART. for ENV1 and ENV2 + No evidence for ENV3 and ENV4	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section **xx**	YES		within the National Safety Plans, reviewed and reported in Appendix **X**	
FCOP_3-3	Flight Crew Contingency Procedures shall be defined to provide 2000 feet separation for non RVSM civil aircraft	Contingency procedures to provide immediately 2000 feet separation to non RVSM civil-aircraft operating in the FL band 290-410, to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4.2** of the ICAO 7030 **[40]**. The design of FC contingency procedures is addressed in section **~~xx~~**	PART. for loss of vertical separation. No evidence for ENV3 and ENV4	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	OPEN
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section **xx**	YES			

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOP_3-4	Flight Crew Contingency Procedures shall be defined to execute lateral/level deviation from RVSM level for non RVSM civil aircraft	contingency procedures to obtain (when RVSM status of civil a/c is downgraded or when a non RVSM civil a/c transiting through the airspace levelling off) ATC clearance whenever possible / to inform ATC, prior the initiation of any lateral/level deviation from RVSM level, to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4.2** of the ICAO 7030 **[40]**. The design of FC contingency procedures is addressed in section **xx**	PART. for loss of vertical separation. No evidence for ENV3 and ENV4	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	OPEN
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section **xx**	YES			
FCOP_3-5	Flight Crew Contingency Procedures shall be defined to exit non RVSM civil aircraft from RVSM Airspace	contingency procedures to clear out any non RVSM civil aircraft from RVSM airspace when it is possible to do so, to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4.2** of the ICAO 7030 **[40]**. The design of FC contingency procedures is addressed in section **xx**	PART. for loss of vertical separation. No evidence for ENV3 and ENV4	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section **xx**	YES		within the National Safety Plans, reviewed and reported in Appendix **X**	
FCOP_3-6	Flight Crew Radio Communications Failure procedures shall be defined	Contingency procedures for handling loss of R/T communications, to be contained in ICAO 7030	It is shown to have been successfully addressed in section 3.0 of the ICAO 7030 **[40]**. The design of FC contingency procedures is addressed in section **xx**	PART. To be confirmed if sufficient + No evidence for ENV3 and ENV4	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X.It is also in ATS Ops Manual 8.0**	OPEN
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section **xx**	YES			

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOP_3-7	Flight Crew Contingency procedures regarding not forecast severe turbulence shall be defined	Contingency procedures for handling unexpectedly encountered turbulence (affecting the capability to maintain the assigned flight level), to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4.3** of the ICAO 7030. The design of FC contingency procedures is addressed in section **xx**	PART. To be confirmed if sufficient + No evidence for ENV3 and ENV4	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section 5.5of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	OPEN
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section **xx**	YES			
FCOP_3-8	Flight Crew Contingency procedures regarding wake turbulence shall be defined	Contingency procedures for handling encountered wake turbulence (affecting the capability to maintain the assigned flight level), to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4.3** of the ICAO 7030. The design of FC contingency procedures is addressed in section **xx**	PART. To be confirmed if sufficient + No evidence for ENV3 and ENV4	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM	It is shown to have been successfully addressed in the section 5.5of the National Safety Plan template. State commitment to this	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section **xx**	YES	airspace	realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	
FCOP_3-9	Flight Crew Contingency procedures for Non-RVSM civil aircraft facing severe icing or turbulence shall be defined	Contingency procedures for handling non-RVSM civil aircraft facing severe icing and turbulence (affecting the capability for ATC to clear aircraft at flight level below FL290), to be contained in ICAO 7030	It is shown to have been successfully addressed in section 4.3 of the ICAO 7030. The design of FC contingency procedures is addressed in section **xx**	NO	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section 5.5of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	OPEN
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). Institution of FC procedures is addressed in **xx**	YES			

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOP_3-10	Flight Crew specific procedures to avoid deviation due to incorrect visual perspective shall be defined	Guidance on flight crew training programmes including special emphasis of problem of visual perception.	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (Appendix **4**) . Institution of FC procedures is addressed in **xx**	YES			
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures, and flight crew training programmes.	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (Section **11**) . Institution of FC procedures is addressed in **xx**	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	
FCOP3-11	Flight Crew emergency contingencies shall be specified	Contingency procedures for handling aircraft emergencies, to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4.3** of the ICAO 7030. The design of FC contingency procedures is addressed in section **xx**	NO	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM	It is shown to have been successfully addressed in the section 5.5of the National Safety Plan template. State commitment to this	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section **xx**	YES	airspace	realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	
FCOP_4	**Flight Crew and Operator Transiting Procedures**						
FCOP4	Non RVSM-approved civil aircraft transiting procedures (including contingencies) shall be defined	Procedures for the transit of non-RVSM civil aircraft at a descend/climbing rate no less than standard rate and prohibiting stop at any intermediate flight level in RVSM airspace, to be contained in ICAO 7030	It is shown to have been successfully addressed in section 8.0 of the ICAO 7030. The design of FC procedures facilitating the transit of non-RVSM approved civil aircraft is addressed in section **xx**	NO	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	
		Contingency procedures for handling non-RVSM civil aircraft levelling off in the RVSM airspace, to be contained in ICAO 7030	It is shown to have been successfully addressed in section **8.0.** of the ICAO 7030. The design of FC procedures facilitating the transit of non-RVSM approved civil aircraft is addressed in section **xx**	NO			

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of operating practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 **[36]** (section **11**). This issue is addressed in section **xx**	YES			
FCOT_1	**Flight Crew and Operator Training for Normal Procedures**						
FCOT1	Flight Crew shall be trained regarding AFI RVSM procedures	This contained FC material developed at TF/10 ~~To be completed~~	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix **4**). This issue is addressed in section **X.X**	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
FCOT_1-1	Flight Crew Training shall include use of procedures for the checking/assurance that, for operation in AFI RVSM airspace, the aircraft equipment meets the RVSM MASPS Requirement	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes and operating practises and procedures.	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	OPEN
FCOT_1-2	Flight crew shall be trained appropriately regarding RVSM Status checking before departure	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes for pre-flight procedures (at the aircraft, determination for each flight of the condition of equipment required to flight in the RVSM airspace)	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
FCOT_1-3	Flight Crew shall be trained to report negative RVSM Status on the initial call on any frequency within the AFI RVSM airspace	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes to be in line with RVSM regional procedures detailed in the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	OPEN
FCOT_1-4	Flight Crew shall be trained appropriately with regards to RVSM Procedures including correct use of FLAS	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes to be in line with RVSM regional procedures detailed in the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOT_1-5	Flight Crew shall be trained appropriately with regards to RVSM Procedures including read back for clearance	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes to be in line with RVSM regional procedures and phraseology detailed in the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	OPEN
	Flight Crew shall be trained appropriately with regards to RVSM Procedures including read back + leaving/reaching level	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes to be in line with RVSM regional procedures and phraseology detailed in the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOT_1-6	Flight Crew Training shall include use of procedures for limiting Climbing/descent rate during the level change to avoid nuisance RA (e.g.500ft/min to 1000ft/min)	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes to be in line with RVSM regional procedures detailed in the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	
FCOT_1-7	Pilots shall be trained appropriately to TCAS operations (initial and continuous training)	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes and operating practices and procedures.	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOT_1-8	Flight crew shall be trained appropriately with regards to the transfer procedures	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes to be in line with RVSM regional procedures detailed in the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	
FCOT_1-9	Pilots awareness on reporting accuracy shall be reinforced by training	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes and operating practises and procedures.	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	
FCOT_2	**Flight Crew and Operator Training for Planning Procedures**						

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
FCOT2	Flight crew and operator shall be appropriately trained with regards to flight planning procedures revised for RVSM operations	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes for flight planning procedures	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	
FCOT2-1	Operator staff shall be trained to send CHG message when appropriate	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes for flight planning procedures	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOT2-2	Operator and flight crew shall be appropriately trained with regards to the consideration of turbulence and bad weather forecast when flight planning	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes for flight planning procedures	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	
FCOT_3	**Flight Crew and Operator Training for Contingency Procedures**						
FCOT3	Flight crew shall be trained appropriately with regards to in flight contingencies	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes for in-flight contingencies to be in line with RVSM regional procedures detailed in ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOT_3-1	Flight crew shall be trained to report significant weather encountered en-route	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes to be in line with RVSM regional procedures detailed in the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	
FCOT_3-2	Flight Crew shall be trained appropriately regarding suspension of RVSM	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes to be in line with RVSM regional procedures detailed in the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
FCOT_3-3	Flight crew shall be trained appropriately with regards to contingency procedures in case of MASPS requirements failure	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes for in-flight contingencies to be in line with RVSM regional procedures detailed in ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	
FCOT_3-4	Flight crew shall be trained appropriately regarding contingency procedures related to not forecast turbulence	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes for in-flight contingencies to be in line with RVSM regional procedures detailed in ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
FCOT_3-5	Flight crew shall be trained appropriately regarding contingency procedures related to wake turbulence	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes for in-flight contingencies to be in line with RVSM regional procedures detailed in ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	OPEN
FCOT_3-6	Flight crew operating Non-RVSM aircraft shall be trained appropriately to contingency procedures related to Non-RVSM aircraft facing severe icing or turbulence	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes for in-flight contingencies to be in line with RVSM regional procedures detailed in ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	OPEN(

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
FCOT3-7	Flight crew shall be trained appropriately with regards to emergency flight contingencies	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes for emergency contingencies to be in line with RVSM regional procedures detailed in ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	OPEN
FCOT_3-8	Flight crew shall be trained appropriately with regards to Radio Communications Failure procedures	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes for in-flight contingencies to be in line with RVSM regional procedures detailed in ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4). This issue is addressed in section X.X	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
FCOT_3-9	Flight crew shall be trained appropriately with regards to ATS/DS failure (awareness training)	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes for in-flight contingencies to be in line with RVSM regional procedures detailed in ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4).	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	
FCOT_4-1	**Flight Crew and Operator Training for Transiting Procedures**						
FCOT_4-1	Flight crew shall be trained appropriately with regards to Non-RVSM approved civil aircraft transiting procedures (including contingencies)	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of training programmes for in-flight contingencies to be in line with RVSM regional procedures detailed in ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix 4).	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	
ACOE_1	**Aicraft and Operator Equipment**						

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
AC1	RVSM- approved aircraft height-keeping shall be consistent with a TLS of 2.5 x 10-9	Develop height-keeping requirements in MASPS for RVSM	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (section **7**) and the CRA report (section **3**). This issue is addressed in section **X.X**	YES	Not applicable	Not applicable	
AC2	RVSM- approved aircraft height-keeping shall continue to be consistent with a TLS of 2.5 x 10-9	Develop maintenance requirements for RVSM height-keeping in MASPS	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (section **10**) and the CRA report (section **3**). This issue is addressed in section **X.X**	YES	Not applicable	Not applicable	
ACOE_1-1	Aircraft shall meet MASPS requirements	Procedures to obtain RVSM airworthiness approval for aircraft (including height-keeping requirement in MASPS)	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix **5, 6, 7**). This issue is addressed in section **X.X**	YES	The requirements placed on States to ensure that aircraft, from whom they have responsibility, obtain RVSM airworthiness approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
		On-going maintenance programmes and procedures to be contained in guidance material to be provided to States	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (section 10). This issue is addressed in section X.X	YES	The requirements placed on States about RVSM approval suspension, revocation and reinstatement for that aircraft from whom they have responsibility	and reported in Appendix X	
ACOE_1-2	Aircraft shall be equipped with ACAS II (TCAS version 7.0)	Requirements on the mandatory carriage of ACAS II (TCAS version 7.0)	It is shown to have been successfully addressed in ICAO Annex **6/ ATC manual section 11**	YES	The requirements placed on States to ensure that aircraft, from whom they have responsibility, obtain approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	
ACOE_1-3	Weather forecast equipment shall be in place to inform ATC, flight crew and operators about areas with severe turbulence	Requirements on the mandatory carriage of MET equipment	**Document : ATC Manual (Sction 5.0)**	NO	Not applicable to RVSM. Already implemented as part of CVSM		

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
ACOE_1-4	Weather forecast equipment shall be in place to inform ATC, flight crew and operators about bad weather conditions	Requirements on the mandatory carriage of MET equipment	**Document: ATC manual (Section 5.0)l**	NO	Not applicable to RVSM. Already implemented as part of CVSM		
ACOE_1-5	Operator equipment to send CHG message when appropriate shall be in place	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of flight planning practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix **4**). This issue is addressed in section **X.X**	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ACOE_1-6	Operator flight plan filling capabilities shall be reinforced	Procedures to obtain RVSM approval for operator requiring the submission to the approval authority of flight planning practices and procedures to be in line with RVSM regional procedures provided by the ICAO 7030	It is shown to have been successfully addressed through the guidance material provided in TGL6 revision 1 (Appendix **4**). This issue is addressed in section **X.X**	YES	The requirements placed on States to ensure that operators, from whom they have responsibility, obtain RVSM operational approval before operating in RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	
ATSP_1	**ATS Normal Procedures**						
ATSP1	Clearance procedures shall be revised to clear only RVSM civil aircraft and State aircraft into the RVSM airspace	Revised clearance procedures to be detailed in ICAO 7030	It is shown to have been successfully addressed in section **5.0** of the ICAO 7030 **[40]**.	YES	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ATSP2	ATS Procedures shall be specified for RVSM operations (including use of new FLAS/FLOS)	ATS procedures for AFI RVSM operations to be detailed in ICAO 7030	It is shown to have been successfully addressed in section **4.0** and 6.0 of the ICAO 7030 **[40]**.	YES	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**. It is also contained in the ATS Ops Manual 5.0	OPEN
ATSP_1-1	ATS Procedures for read back shall be reinforced	Appropriate R/T phraseology for read back to be detailed in ICAO 7030.	It is shown to have been successfully addressed in section 4.0 and 6.0. of ICAO 7030. The design of ATS procedures is described in section **X.X**	NO (strikeout and grey shading in section 16 of 7030)	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.It is ATS Ops.Manual at 5.0	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ATSP_1-2	Crosscheck between controllers shall be performed	Procedures to reinforce cross check to be detailed in the guidance provided to States in the RVSM ATC Operations Manual provided to States	It is shown to have been successfully addressed in section 12of the PANS/ATM (Doc.4444) ~~RVSM ATC Operations Manual. The design of ATS procedures is described in section **X.X**~~	NO	The requirements placed on States to amend their ACC operations manual to be consistent with the RVSM ATC Operations Manual that provides further amplification of ICAO 7030 implementation in the AFI region	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	OPEN
ATSP_1-3	ATS Transfer procedures (including read back and RVSM/Non RVSM status) shall be defined in LoA	ATS transfer procedures including read back to be contained in the guidance provided to States in the LoA Template	It is shown to have been successfully addressed in section **10.6** of AFI LoA Template. The design of ATS procedures is described in section **X.X**	NO	The requirements placed on States to coordinate ATS procedures with adjacent ACCs and to develop/amend Letter of Agreement/Procedures (LoA/P).	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	OPEN
	ATS Coordination procedures shall be defined in the Civil – Military LoA	Design of guidance on civil-military coordination	It is shown to have been successfully addressed in Part 2 Section 1, chapter 2 of ICAO Doc 9426	YES	The APIRG Conclusion 15/52 and the issuance of a dedicated State letter addressing civil-military coordination seminars and attendance by military ATS trainers.	It is shown to have been successfully addressed by the State letter n° **XX**	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
					The requirement placed on States to form a coordinating committee with State-aircraft authorities to ensure high standards of cooperation and coordination	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	OPEN
					The provision by States of details of planned seminars and record of proceedings (program, outcome...) (**stated in the State letter?**)	**Evidence document (to be untitled)**	OPEN

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ATSP_1-4	ATS Procedures regarding knowledge of RVSM status shall be defined	Appropriate R/T phraseology for knowledge of RVSM status to be detailed in ICAO 7030	It is shown to have been successfully addressed in section **2.0** of ICAO 7030. The design of ATS procedures is described in section **X.X**	NO (strikeout and grey shading in section 16 of 7030)	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	
ATSP_1-5	Climbing/descent rate shall be limited during the level change to avoid nuisance RA (e.g.500ft/min to 1000ft/min)	Appropriate procedures for limitation of climbing/descent rate during level change, to be contained in ICAO 7030	It is shown to have been successfully addressed in section 5.0 of ICAO 7030. The design of ATS procedures is described in section **X.X**	PART. To be confirmed if sufficient + No evidence for ENV3 and ENV4	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ATSP_1-6	Air/Ground Communications system maintenance procedures shall be defined to ensure a communication system recovery in MTTR defined in Service Level Agreement	Maintenance procedures requiring an Air/Ground communications system recovery in MTTR defined in Service Level Agreement, to be detailed in the guidance provided to States in the RVSM ATC Operations Manual	It is shown to have been succesfully addressed in section 5 of RVSM ATC Operations Manual.The design of ATS procedures is described in ACC Station Standing Instructions ~~section X.X~~	NO	The requirement placed on State to develop ACC operations manual in compliance with RVSM ATC Operations Manual	It is shown to have been successfully addressed in the section 6.0 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X.	
ATSP_1-7	Ground/Ground Communication system maintenance procedures shall be defined to ensure a communication system recovery in MTTR defined in Service Level Agreement	Maintenance procedures requiring a Ground/Ground communications system recovery in MTTR defined in Service Level Agreement, to be detailed in the guidance provided to States in the RVSM ATC Operations Manual	It is shown to have been succesfully addressed in section **5** of RVSM ATC Operations Manual.The design of ATS procedures is described in section X.X	NO	The requirement placed on State to develop ACC operations manual in compliance with RVSM ATC Operations Manual	It is shown to have been successfully addressed in the section **6.0** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X.	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ATSP_1-8	FDPS/RDPS/ ADS system maintenance procedures shall be defined to ensure a communication system recovery in MTTR defined in Service Level Agreement. (ENV 1 and 3)	FDPS/RDPS/ADS maintenance procedures requiring a system recovery in MTTR defined in Service Level Agreement, to be detailed in the guidance provided to States in the RVSM ATC Operations Manual	It is shown to have been succesfully addressed in section **9.1** of RVSM ATC Operations Manual.The design of ATS procedures is described in section **X.X**	NO	The requirement placed on State to develop ACC operations manual in compliance with RVSM ATC Operations Manual	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	
	FDPS maintenance procedures shall be defined to ensure a communication system recovery in MTTR defined in Service Level Agreement. (ENV 2 and 4)	FDPS maintenance procedures requiring a system recovery in MTTR defined in Service Level Agreement, to be detailed in the guidance provided to States in the RVSM ATC Operations Manual	It is shown to have been succesfully addressed in section **9.2** of RVSM ATC Operations Manual.The design of ATS procedures is described in section **X.X**	NO	The requirement placed on State to develop ACC operations manual in compliance with RVSM ATC Operations Manual	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	
ATSP_1-9	Weather forecast procedures shall be in place to inform ATC about areas with potential severe turbulence and/or bad weather conditions	Requirements and procedures for informing ATC about areas with severe turbulence to be detailed in the ICAO Annex 3	It is shown to have been succesfully addressed in section **7** of ICAO Annex 3.The design of ATS procedures is described in section **X.X**	OPEN	Not applicable to RVSM. Already implemented as part of CVSM		

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ATSP_1-10	Appropriate separation standards shall be specified with regards to wake turbulences	Separation standards with regards to wake turbulence, to be detailed in ICAO 7030	It is shown to have been successfully addressed in section **4.3** of ICAO 7030. The design of ATS procedures is described in section **X.X**	**PART.** **(to be confirmed for ENV 3 and 4)**	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	
ATSP_2	**ATS Contingency Procedures**						
ATSP_2-1	ATS Procedures to suspend RVSM shall be defined	Contingency procedures for suspending RVSM operations in the event of severe turbulence and when aircraft capability(ies) to maintain flight level(s) are impacted, to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4.2** of the ICAO 7030	YES	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ATSP_2-2	ATS Procedures to coordinate RVSM suspension with adjacent ACCs shall be defined	Contingency procedures for coordinating RVSM suspension with adjacent ACCs, to be detailed in ICAO 7030 and in the LoA template.	It is shown to have been successfully addressed in section **4.2** of the ICAO 7030 and in section **6.4** of the AFI LoA Template.	PART. LoA template evidence to be confirmed	The requirement placed on State to develop ACC operations manual in compliance with ICAO 7030 and RVSM ATC Operations Manual and to coordinate RVSM suspension with adjacent ACCs and develop/amend Letter of Agreement/Procedures (LoA/P).	It is shown to have been successfully addressed in the section X.X of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X	
ATSP_2-3	ATS Contingency Procedures shall be defined to provide 2000 feet separation for non RVSM civil aircraft	Contingency procedures to provide immediatly 2000 feet separation to non RVSM civil-aircraft operating in the FL band 290-410, to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4.2** of the ICAO 7030.	PART. In ENV1 and ENV2, only the loss of nav perfo is considered + ENV3, ENV4 and transit of Non RVSM civil a/c are not addressed	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
ATSP_2-4	ATS Contingency Procedures shall be defined to exit non RVSM civil aircraft from RVSM Airspace	Contingency procedures to clear out any non RVSM civil aircraft from RVSM airspace when it is possible to do so, to be contained in ICAO 7030	It is shown to have been successfully addressed in section 8.0 of the ICAO 7030.Also in ATS Ops Manual 5.3	**NO**	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	
ATSP_2-5	ATS Contingency Procedures shall be defined to execute lateral/level deviation from RVSM level	Contingency procedures to obtain (when RVSM status of civil a/c is downgraded or when a non RVSM civil a/c transiting through the airspace levelling off) ATC clearance whenever possible / to inform ATC, prior the initiation of any lateral/level deviation from RVSM level, to be contained in ICAO 7030	It is shown to have been successfully addressed in section 8.0 of the ICAO 7030. In ATS Ops Manual 5.3	**NO**	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ATSP_2-6	ATS Radio Communications Failure procedures shall be defined	Contingency procedures for handling loss of R/T communications, to be contained in ICAO 7030	It is shown to have been successfully addressed in section 3.0 of the ICAO 7030. In ATS Ops Manual 8.0	**PART. Is the evidence sufficient? + only ENV1 and ENV2 have been addressed**	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	
ATSP_2-7	ATS Procedures to revert to procedural control shall be specified (due to RDPS/ADS system failure) (ENV 1 et 3)	Appropriate procedures for reverting to procedural control due to RDPS/ADS system failure to be contained in the guidance provided to States in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section **5.0** of the RVSM ATC Operations Manual. ~~The design of ATS procedures is described in section X.X~~	**NO**	The requirements placed on States to amend their ACC operations manual to be consistent with the RVSM ATC Operations Manual that provides further amplification of ICAO 7030 implementation in the AFI region	It is shown to have been successfully addressed in the section **5.0** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
	ATS Procedures to revert to procedural control shall be specified (due FDPS / RDPS/ADS system failure) (ENV 1 et 3)	Appropriate procedures for revertion to procedural control due to FDPSRDPS/ADS system failure to be contained in the guidance provided to States in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section **5.0** of the RVSM ATC Operations Manual. The design of ATS procedures is described in section **X.X**	**NO**	The requirements placed on States to amend their ACC operations manual to be consistent with the RVSM ATC Operations Manual that provides further amplification of ICAO 7030 implementation in the AFI region	It is shown to have been successfully addressed in the section 5.0 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	
ATSP_2-8	ATS Procedures regarding Non-receipt of flight plan shall be defined	Appropriate procedures regarding non-receipt of fligh plan to be provided in the guidance provided to States in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section 5.0 of the RVSM ATC Operations Manual. ~~The design of ATS procedures is described in section **X.X**~~	**YES**	The requirements placed on States to amend their ACC operations manual to be consistent with the RVSM ATC Operations Manual that provides further amplification of ICAO 7030 implementation in the AFI region	It is shown to have been successfully addressed in the section 5.0 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ATSP_2-9	ATS Contingency procedures regarding not forecast severe turbulence shall be defined	Contingency procedures for handling unexpectedly encountered turbulence (affecting the capability to maintain the assigned flight level), to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4.3** of the ICAO 7030	**PART.** **Is the evidence sufficient? + only ENV1 and ENV2 have been addressed**	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	
ATSP_2-10	ATS Contingency procedures regarding wake turbulence shall be defined	Contingency procedures for handling encountered wake turbulence (affecting the capability to maintain the assigned flight level), to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4.3** of the ICAO 7030	**PART.** **Is the evidence sufficient? + only ENV1 and ENV2 have been addresed**	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
ATSP_2-11	ATS Contingency procedures for Non-RVSM aircraft facing severe icing or turbulence shall be defined	Contingency procedures for handling non-RVSM civil aircraft facing severe icing and turbulence (affecting the capability for ATC to clear aircraft at flight level below FL290), to be contained in ICAO 7030	It is shown to have been successfully addressed in section 4.3 and 4.4 of the ICAO 7030	**NO**	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	
ATSP_2-12	Emergency contingencies shall be specified	Contingency procedures for handling aircraft contingencies, to be contained in ICAO 7030	It is shown to have been successfully addressed in section **4..3 and 4..4** of the ICAO 7030	**NO**	The requirements placed on States to amend their ACC operations manual to be consistent with the ICAO 7030.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ATSP_2-13	ATC Transfer procedures shall be defined in the LoA (including communication failure contingencies)	Contingency procedures for handling ground-ground communication failure, to be contained in AFI LoA Template provided to States	It is shown to have been successfully addressed in section **7.3** of AFI LoA Template. ~~The design of ATS procedures is described in section **X.X**~~	**YES**	The requirements placed on States to coordinate ATS procedures with adjacent ACCs and to develop/amend Letter of Agreement/Procedures (LoA/P).	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.	
	Military – Civil coordination Contingency procedures shall be defined in the civil-military LoA	Design of guidance on civil-military coordination	It is shown to have been successfully addressed in Part 2 Section 1, chapter 2 of ICAO Doc 9426	**YES**	The APIRG Conclusion 15/52 and the issuance of a dedicated State letter addressing civil-military coordination seminars and attendance by military ATS trainers.	It is shown to have been successfully addressed by the State letter n° **XX**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
					The requirement placed on States to form a coordinating committee with State-aircraft authorities to ensure high standards of cooperation and coordination	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
					The provision by States of details of planned seminars and record of proceedings (program, outcome...) (**stated in the State letter?**)	**States continue conducting seminars. ICAO has continued conducting seminars. We have held 3 Seminars so far** ~~**Evidence document (to be untitled)**~~	
ATSP_3	**ATS transiting procedures**						

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ATSP3	Procedures facilitating the transit of non-RVSM civil aircraft through the RVSM airspace without intermediate stops shall be defined	Contingency procedures for handling aircraft contingencies, to be contained in ICAO 7030	It is shown to have been successfully addressed in section 5.0 of the ICAO 7030	NO	TBC	TBC	
ATST_1	**ATS Training for Normal Procedures**						
ATST1a	Controllers shall be trained appropriately regarding revised clearance procedures	To be completed		YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the RVSM airspace	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X.The plans show how the provision of ATS Training is being addressed by States	
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section 3.,0 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X.The plans show how the design of ATS Training is being addressed by States	OPEN			

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ATST1b	Controllers shall be trained appropriately regarding ATS procedures for RVSM operations	To be completed		YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the RVSM airspace	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section 3.0 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN			
ATST_1-1	Controllers shall be trained appropriately regarding knowledge of RVSM status procedures	Training session on RVSM status procedures, to be contained in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **4** of AFI RVSM Training Guidance Material.	YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the RVSM airspace	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN		within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_1-2	Controllers shall be trained appropriately with regards to RVSM Procedures including correct use of FLAS	Training session on correct use of FLAS, to be contained in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in sections **5** and **7** of AFI RVSM Training Guidance Material.	YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN	RVSM airspace	realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_1-3	Controllers shall be trained appropriately with regards to RVSM Procedures including read back for clearance (ENV 1 and 3)	Training session on correct use of R/T phraseology (including read back for clearance), to be contained in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in sections **6** and **7** of AFI RVSM Training Guidance Material.	YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the RVSM airspace	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN		within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
	Controllers shall be trained appropriately with regards to RVSM Procedures including read back for report leaving/reaching (ENV 2 et 4)	Training session on correct use of R/T phraseology (including read back for report leaving/reaching level), to be contained in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in sections **6** and **7** of AFI RVSM Training Guidance Material.	YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the RVSM airspace	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN		Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_1-4	Controllers shall be trained appropriately with regards to RVSM Coordination Procedures	Training session on RVSM coordination procedures , to be contained in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in sections **5** and **7** of AFI RVSM Training Guidance Material.	YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN	RVSM airspace	realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_1-5	Controllers shall be trained appropriately with regards to RVSM civil - military Coordination Procedures	Training session on RVSM civil-military coordination procedures , to be contained in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **5** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	PART. To be confirmed	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the	It is shown to have been successfully addressed in the section **3**of the National Safety Plan template. State commitment to this realisation is	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN	RVSM airspace	contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
	Military controllers shall be trained appropriately with regards to RVSM Coordination Procedures	Design of guidance on civil-military coordination	It is shown to have been successfully addressed in Part **2** Section **1**, chapter 2 of ICAO Doc 9426.	YES	The APIRG Conclusion 15/52 and the issuance of a dedicated State letter addressing civil-military coordination seminars	It is shown to have been successfully addressed by the State letter n° **XX**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
					The requirement placed on States to form a coordinating committee with State-aircraft authorities to ensure high standards of cooperation and coordination	It is shown to have been successfully addressed in the section **5** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
					The provision by States of details of planned seminars and record of proceedings (attendance by military trainers, program, outcome…) (**stated in the State letter?**)	**Evidence document (to be untitled)**	
ATST_1-6	Controllers shall be trained appropriately with regards to transfer procedures	Training session on RVSM transfer procedures, to be contained in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in sections **5** and **7** of AFI RVSM Training Guidance Material.	YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the	It is shown to have been successfully addressed in the section **5** of the National Safety Plan template. State commitment to this	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **4** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN	RVSM airspace	realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_1-7	Controllers shall be trained on limitation of Climbing/descent rate during the level change to avoid nuisance RA (e.g.500ft/min to 1000ft/min)	Training session on transition of non RVSM civil aircraft transiting through the RVSM airspace, to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **10.7.4** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	NO	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the RVSM airspace	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **4** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X.The plans show how the design of ATS Training is being addressed by States	OPEN		within the National Safety Plans, reviewed and reported in Appendix X.The plans show how the provision of ATS Training is being addressed by States	
ATST_1-8	Air/Ground Communications Maintenance team shall be trained appropriately with regards to Air/Ground Communication system maintenance procedures	Training session for technical staff on Air/Ground communications system recovery to be required in the guidance provided to States in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section 9.0 of RVSM ATC Operations Manual.	OPEN	The requirements placed on States to manage and mitigate all RVSM identified risks	It is shown to have been successfully addressed in the section 4.0 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix X.The plans show how RVSM risks are managed by States	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
	Maintenance team shall be trained appropriately with regards to Ground/Ground Communication system maintenance procedures	Training session for technical staff on Air/Ground communications system recovery to be required in the guidance provided to States in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section **10.7.4** of RVSM ATC Operations Manual.	OPEN	The requirements placed on States to manage and mitigate all RVSM identified risks	It is shown to have been successfully addressed in the section 3.0 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how RVSM risks are managed by States	
ATST_1-8	Maintenance team shall be trained appropriately with regards to RDPS/FDPS/ADS systems maintenance procedures (ENV 1 and 3)	Training session for technical staff on FDPS/RDSPS/ADS system recovery to be required in the guidance provided to States in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section **10.7.4** of RVSM ATC Operations Manual.	OPEN	The requirements placed on States to manage and mitigate all RVSM identified risks	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how RVSM risks are managed by States	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
	Maintenance team shall be trained appropriately with regards to FDPS systems maintenance procedures (ENV 1 and 2)	Training session for technical staff on FDPS system recovery to be required in the guidance provided to States in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section **9.1** of RVSM ATC Operations Manual.	OPEN	The requirements placed on States to manage and mitigate all RVSM identified risks	It is shown to have been successfully addressed in the section xx of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how RVSM risks are managed by States	
ATST_1-9	Controllers shall be trained appropriately regarding appropriate separation standards related to wake turbulence	Training session on application of appropriate separation standards with regards to wake turbulence, to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **7** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the RVSM airspace	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**. The plans show how the design of ATS Training is being addressed by States	OPEN		within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_2	**ATS Training for Contingency Procedures**						
ATST2	Controllers shall be trained appropriately with regards to RVSM contingencies	To be completed		YES			
ATST_2-1	Controllers shall be trained appropriately regarding suspension of RVSM (including coordination with adjacent ACCs)	Training session on RVSM suspension and coordination with adjacent ACC, to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **10.7.4** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	NO	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the RVSM airspace	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN		within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_2-2	Controllers shall be trained appropriately with regards to contingency procedures in case of MASPS requirements failure	Training session on degradation of aircraft performance, to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **7** of AFI RVSM Training Guidance Material.	YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3.4.2** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN	RVSM airspace	realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_2-3	Controllers shall be trained appropriately with regards to ATS/DS failure contingency procedures	Training session on ATS/DS failure contingency, to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **10.7.4** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	NO	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN	RVSM airspace	realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_2-4	Controllers shall be trained appropriately with regards to Radio Communications Failure procedures	Training session on RCF procedures, to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in sections **5** and **7** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN	RVSM airspace	realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_2-5	Controllers shall be trained appropriately to revert to procedural control in case of RDPS/ADS system failure (ENV 1 and 3)	Training session on reversion to procedural control, to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **10.7.4** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	NO	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3.4.2** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN	RVSM airspace	realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_2-6	Controller shall be trained appropriately to operate without FDPS system (blank strip,…)	Training session on operations without FDPS system, to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **10.7.4** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	NO	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN	RVSM airspace	realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_2-7	Controllers shall be trained appropriately regarding Non-receipt of flight plan procedures	Training session on operations without receipt of flight plan, to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **10.7.1** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	NO	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN	RVSM airspace	realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_2-8	Controllers shall be trained appropriately with regards to coordination Contingency procedures (including Military coordination)	Training session on coordination (civil and military) contingencies (for handling ground-ground communications failure), to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **5.4** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	NO	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the RVSM airspace	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **4** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN		Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
	Military Controllers shall be trained appropriately with regards to coordination Contingency	Design of guidance on civil-military coordination	It is shown to have been successfully addressed in **Part 2 Section 1, chapter 2 of ICAO Doc 9426.**	YES	The APIRG Conclusion 15/52 and the issuance of a dedicated State letter addressing civil-military coordination seminars	It is shown to have been successfully addressed by the State letter n° **XX**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
	procedures				The requirement placed on States to form a coordinating committee with State-aircraft authorities to ensure high standards of cooperation and coordination	It is shown to have been successfully addressed in the section **5.4.2** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
					The provision by States of details of planned seminars and record of proceedings (attendance by military trainers, program, outcome…) (**stated in the State letter?**)	**Evidence document (to be untitled)**	
ATST_2-9	Controllers shall be trained appropriately regarding contingency procedures related to not forecast turbulence	Training session on contingencies for handling encountered turbulence, to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **7** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN	RVSM airspace	realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
	ATC controller shall be trained appropriately regarding contingency procedures related to Non-RVSM aircraft facing severe icing or turbulence	Training session on contingencies for non RVSM civil aircraft facing severe icing and turbulence (affecting the capability for ATC to clear aircraft below (FL290), to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **7** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the RVSM airspace	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **4** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN		show how the provision of ATS Training is being addressed by States	
	Controllers shall be trained appropriately regarding contingency procedures related to wake turbulence	Training session on contingencies for handling encountered wake turbulence, to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **7** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the RVSM airspace	It is shown to have been successfully addressed in the section **3**of the National Safety Plan template. State commitment to this realisation is contained within the	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **4** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN		National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_2-10	Controllers shall be trained appropriately with regards to emergency contingencies	Training session on handling of aircraft emergencies, to be detailed in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **5 and 7** of AFI RVSM Training Guidance Material.	YES	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the	It is shown to have been successfully addressed in the section **4**of the National Safety Plan template. State commitment to this realisation is	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **4** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN	RVSM airspace	contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATST_3	**ATS Training for Transiting Procedures**						
ATST_3-1	Controllers shall be trained appropriately with regards to Non-RVSM civil aircraft transiting procedures (including contingencies)	Training session on transiting procedures (including contingencies) for non-RVSM civil aircraft, to be contained in the AFI RVSM Training Guidance Material provided to the States	It is shown to have been successfully addressed in section **10.7.4** of AFI RVSM Training Guidance Material. The design of ATS training is described in section **X.X**	NO	The requirements placed on States to provide training, making full use of the approved training material, to all controllers who will have operational responsibility in the RVSM airspace	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		The requirements placed on States to develop national RVSM training material in compliance with the AFI RVSM Training guidance material	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the design of ATS Training is being addressed by States	OPEN		within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the provision of ATS Training is being addressed by States	
ATSE_1	**ATS Equipment**						
ATSE1	ATS equipment shall be modified to indicate and display RVSM status	Refer to section XX NSP 4.4	Refer to section XX NSP 4.4				
ATSE2	Existing conflict detection/alerting capabilities shall be updated to be consistent with RVSM operations	Refer to section XX ATS Ops Manual 9.5	Refer to section XX ATS Ops Manual 9.5				

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
ATSE_1-1	Air/Ground Communication system shall be designed to ensure a total coverage of the RVSM airspace with a minimum MTBF of 2 months for a given FIR	Specific requirement to be included in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section **8** of RVSM ATC Operations Manual. The design of ATS equipment is described in section **X.X**	NO	The requirement placed on State to provide changes to ATS Equipment in compliance with the RVSM ATC Operations Manual	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the changes to ATS Equipment is being addressed by States	
	ATS/DS Communications system shall be designed to ensure point-to-point between all adjacent ACCs with a minimum MTBF of 2 months for a given Radar / ADS FIR (ENV 1 and 3)	Specific requirement to be included in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section **10.7** of RVSM ATC Operations Manual. The design of ATS equipment is described in section **X.X**	NO	The requirement placed on State to provide changes to ATS Equipment in compliance with the RVSM ATC Operations Manual	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the changes to ATS Equipment is being addressed by States	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
	ATS/DS Communication system shall be designed to ensure point-to-point communications between all adjacent ACCs with a minimum MTBF of 60 years for a given non Radar / ADS FIR (ENV 2 and 4)	Specific requirement to be included in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section **10.7** of RVSM ATC Operations Manual. The design of ATS equipment is described in section **X.X**	NO	The requirement placed on State to provide changes to ATS Equipment in compliance with the RVSM ATC Operations Manual	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the changes to ATS Equipment is being addressed by States	
ATSE_1-2	RVSM/Non RVSM Status shall be provided by transferring controller (including when status is downgraded)	Specific requirement on the display to the controller, during coordination (data), of the RVSM status of the entering aircraft, to be included in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section **9.4** of RVSM ATC Operations Manual.	YES	The requirement placed on State to provide changes to ATS Equipment in compliance with the RVSM ATC Operations Manual	It is shown to have been successfully addressed in the section **3** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the changes to ATS Equipment is being addressed by States	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
ATSE_1-3	Suitable and reliable ground communications means shall be implemented	Specific requirement on the suitability and reliability of communications equipment, to be included in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section **10.7** of RVSM ATC Operations Manual. The design of ATS equipment is described in section **X.X**	NO	The requirement placed on State to provide changes to ATS Equipment in compliance with the RVSM ATC Operations Manual	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the changes to ATS Equipment is being addressed by States	
ATSE_1-4	Weather forecast equipment shall be in place to inform ATC about areas with severe turbulence	Requirement on weather forecast equipment about severe turbulence function, to be included in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section **5.5.2** of RVSM ATC Operations Manual. The design of ATS equipment is described in section **X.X**	NO	The requirement placed on State to provide changes to ATS Equipment in compliance with the RVSM ATC Operations Manual	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the changes to ATS Equipment is being addressed by States	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
	Weather forecast equipment shall be in place to inform ATC about bad weather conditions	Requirement on weather forecast equipment about bad weather conditions function, to be included in the RVSM ATC Operations Manual	It is shown to have been successfully addressed in section **5.4.2** of RVSM ATC Operations Manual. The design of ATS equipment is described in section **X.X**	NO	The requirement placed on State to provide changes to ATS Equipment in compliance with the RVSM ATC Operations Manual	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**.The plans show how the changes to ATS Equipment is being addressed by States	
AD	**Airspace Design**						
AD_1	An appropriate Flight Level Orientation Scheme shall be developed	Review suitability of FLOS and/or FLAS, route network and sectorisation and adapt as required	It is shown to have been successfully addressed in section 5.4 and **10.4** of the AFI RVSM ATC Operations Manual. This issue is addressed in section In Doc 7030 8.0 ~~Error! Reference source not found.~~		The guidance and support provided to States through the AFI RVSM ATC Operations Manual and the requirement placed on States to use the Manual as guidance material	It is shown to have been successfully addressed in section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
AD_2	Airspace facilities for emergency situations shall be provided	Review suitability of emergency procedures contained in AFI RVSM ATC Operations Manual and design airspace as required	It is shown in AFI RVSM TF/3 that no additional changes to AFI RVSM airspace design are necessary. This issue is addressed in section ~~Error! Reference source not found.~~		Not applicable	Not applicable	
SM	**System Monitoring**						
SM1	The exclusion of non-RVSM approved non-State aircraft from AFI RVSM airspace shall be monitored	Establish an RMA. Develop and maintain RVSM approvals data base. Cross-check flight plan approval status against data base	It is shown to have been successfully addressed through the guidance material provided in the AFI RMA Manual (section **2**). This issue is addressed in section ~~Error! Reference source not found.~~		The requirement on States to provide the RMA with up to date information on the RVSM approval status of aircraft/operators for whom they have responsibility as set out in the AFI RVSM Manual and the AFI RMA Manual	It is shown to have been succesfully addressed in section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
SM2	The height-keeping performance of RVSM-approved aircraft shall be monitored	Establish an RMA. Develop an AFI RVSM Monitoring Policy. Collect height monitoring data Estimate technical vertical risk	It is shown to have been successfully addressed through the guidance material provided in the AFI RMA Manual (section **2**) and the CRA report (section **3**). ~~This issue is addressed in section Error! Reference source not found.~~		Not applicable	Not applicable	
SM3	Data on operational errors shall be collected for collision risk estimation	Establish an RMA. Collect data on operational errors Estimate total vertical risk	It is shown to have been successfully addressed through the guidance material provided in the AFI RMA Manual (section **2**) and the CRA report (section **4**). ~~This issue is addressed in section Error! Reference source not found.~~		The requirement on States to provide data on operational errors as set out in the AFI RMA manual and ICAO State Letter **Z.Z**	It is shown to have been succesfully addressed in section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix A	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
SM4	Data on risk exposure shall be collected for collision risk estimation	Establish an RMA. Collect data on traffic flows and navigation performance Estimate total vertical risk	It is shown to have been successfully addressed through the guidance material provided in the AFI RMA Manual (section **2**) and the CRA report (section 3). This issue is addressed in section Error! Reference source not found.		The requirement on States to provide data on traffic flows and navigation performance as set out in the AFI RMA manual and ICAO State Letter **Z.Z**	It is shown to have been succesfully addressed in section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix A	
SM5	Data on ACAS/TCAS events shall be collected and evaluated	Establish an RMA. Collect data on ACAS/TCAS events Estimate total vertical risk	It is shown to have been successfully addressed (deleted as it in the Annex 6) ~~6tedin section 14.3 of ICAO 7030~~, in section **2** of the AFI RMA manual and in section **4** of the CRA report. This issue is addressed in section **X.X**		The requirement on States to provide data on ACAS/TCAS events as set out in ICAO Doc 7030 and the AFI RMA Manual (and also covered by ICAO State letter **Z.Z**)	It is shown to have been successfully addressed in section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix A	
RVSM	**Overall System**						

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
RVSM5	The probability of any system failure leading to a mid-air collision shall be sufficiently low for the risk of mid-air collision due to the loss of vertical separation from all causes in AFI RVSM airspace to meet a TLS of 5×10^{-9} fatal accidents per flight hour.	Establish and RMA Estimate total vertical risk	CRA report		Not applicable		
RVSM6	The system shall be sufficiently reliable for the number of ATM-induced accidents and serious or risk-bearing incidents in AFI RVSM airspace not to increase from current CVSM levels and, where, possible to decrease.	Establish and RMA Estimate total vertical risk			Not applicable		

Table **7** : Realisation of System Element Requirements (AFI RVSM Core Airspace)

D.3 AFI RVSM Switch-over Period

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
FCOP_1	**Flight Crew and Operator Normal Procedures**						
S_FCOP_1-1	A NOTAM shall be issued for the activation of the new FLAS during the switch-over period	Detailed switch-over plan prepared by ICAO and provided to States for dissemination to operators through State IAIP (Integrated Aeronautical Information Package). This plan is to provide mitigations for all the switch-over hazards.	It is shown to have been successfully addressed in section 2.5.4 of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	NO	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. The requirements placed on States through State letter to disseminate it to operators through IAIP. States are required to acknowledge receipt of the State letter	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	
		Detailed flight crew switchover bulletin	It is shown to have been successfully addressed in section **X.X** of the flight crew switchover bulletin.	OPEN	The dissemination of the flight crew bulletin by IFALPA	**Evidence document TBD**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		Awareness workshop for operators, by ICAO/TF, to be facilitated by States and the inclusion in the switch-over plan of the requirement to organise such workshops	**Workshop facilitation document 3 seminars has been conducted .** It is shown that the requirement is stated in section 6.0 of the AFI RVSM Switch-over plan	NO	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. The requirements placed on States through State letter to disseminate it to operators through IAIP. States are required to acknowledge receipt of the State letter	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X.** **+ State letter + State acknowledgement** **State Letter sent by ICAO to all States May 2006**	
S_FCOP_1-2	Flight Crew Switch-over Procedures shall be in place to impose the read back for level clearance during the switch-over period	The realisation of this requirement is a specific aspect of the development of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The design of flight crew switch-over and operator procedures is detailed in section **X.X**	OPEN	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of flight crew and operator switch-over procedures is detailed in section **X.X**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_FCOP_1-3	Flight Crew Switch-over Procedures shall be in place to impose the surveillance of the level change during the switch-over period	The realisation of this requirement is a specific aspect of the development of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The design of flight crew switch-over and operator procedures is detailed in section **X.X**	OPEN	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of flight crew and operator switch-over procedures is detailed in section **X.X**	
S_FCOP_1-4	Use of Eastbound RVSM FL (FL310, FL350 and FL390) shall be suspended for a period of 02 hours after the T0.	The realisation of this requirement is a specific aspect of the development of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The design of flight crew switch-over and operator procedures is detailed in section 2.5 **X.X**	NO	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of flight crew and operator switch-over procedures is detailed in section **X.X**	
S_FCOP_1-5	A NOTAM shall be produced to suspend FL310, FL350 and FL390 for RVSM operations after ToS during a period of 02 hours	The realisation of this requirement is a specific aspect of the development of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The design of flight crew switch-over and operator procedures is detailed in section 2.5 **X.X**	NO	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of flight crew and operator switch-over procedures is detailed in section **X.X**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_FCOP_1-6	Transit of non-RVSM civil a/c shall be suspended for a period of 02 hours after T0	The realisation of this requirement is a specific aspect of the development of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The design of flight crew switch-over and operator procedures is detailed in section 2.5	NO	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of flight crew and operator switch-over procedures is detailed in section **X.X**	
S_FCOP_1-7	Operation above FL410 shall be suspended for non-RVSM a/c for a period of 02 hours after T0	The realisation of this requirement is a specific aspect of the development of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The design of flight crew switch-over and operator procedures is detailed in section 2.5	NO	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of flight crew and operator switch-over procedures is detailed in section **X.X**	
S_FCOP_1-8	The traffic flow management capabilities shall be available before the switch-over period	The realisation of this requirement is a specific aspect of the development of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	It is shown to have been successfully addressed in section **4.4** of the AFI RVSM switch-over plan The design of flight crew switch-over and operator procedures is detailed in section **X.X**	YES	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of flight crew and operator switch-over procedures is detailed in section **X.X**	
FCOP_2	**Flight Crew and Operator Planning Procedures**						

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_FCOP_2-1	Level change and time/point for non RVSM civil aircraft to leave the FL band 410 and above-410 before ToS shall be indicated in the flight plan	The realisation of this requirement is a specific aspect of the development of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The design of flight crew switch-over and operator procedures is detailed in section **X.X**	NO	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of flight crew and operator switch-over procedures is detailed in section **X.X**	
S_FCOP_2-2	Level change and time/point for non RVSM civil aircraft to leave the FL band 290-410 before ToS shall be indicated in the flight plan	The realisation of this requirement is a specific aspect of the development of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The design of flight crew switch-over and operator procedures is detailed in section **7**	NO	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of flight crew and operator switch-over procedures is detailed in section **7**	
FCOT_1	**Flight Crew and Operator Training for Normal Procedures**						
S_FCOT_1-1	Awareness campaigns about RVSM Status shall be organized before the switch-over period	Detailed switch-over plan prepared by ICAO and provided to States for dissemination to operators through State IAIP (Integrated Aeronautical Information Package). This plan is to provide mitigations for all the switch-over hazards.	It is shown to have been successfully addressed in section **7** of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	NO	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. The requirements placed on States through State letter to disseminate it to operators through IAIP. States are required to acknowledge receipt of the State letter	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
		Detailed flight crew switchover bulletin	It is shown to have been successfully addressed in section **7** of the flight crew switchover bulletin.	OPEN	The dissemination of the flight crew bulletin by IFALPA	**Evidence document TBD**	
		Awareness workshop for operators, by ICAO/TF, to be facilitated by States and the inclusion in the switch-over plan of the requirement to organise such workshops	**Workshop facilitation document TBD. 3 seminars were held by ICAO** It is shown that the requirement is stated in section 6.1of the AFI RVSM Switch-over plan	NO	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. The requirements placed on States through State letter to disseminate it to operators through IAIP. States are required to acknowledge receipt of the State letter	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	
S_FCOT_1-2	Flight crew shall be trained appropriately with regards to RVSM procedures before Switch-over period	The realisation of this requirement is a specific aspect of the development of the flight crew and operator awareness campaign for the switch-over period and is covered by S_FCOT_1-1.	The design of the flight crew and operator awareness campaign for the switch-over period is detailed in section **7**	OPEN	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of the flight crew and operator awareness campaign for switch-over is detailed in section **X.X**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_FCOT_1-3	Awareness campaigns shall be organized before the switch-over period to reinforce the knowledge of the new FLAS (after completion of training for all staff)	The realisation of this requirement is a specific aspect of the development of the flight crew and operator awareness campaign for the switch-over period and is covered by S_FCOT_1-1.	The design of the flight crew and operator awareness campaign for the switch-over period is detailed in section 7	NO	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of the flight crew and operator awareness campaign for switch-over is detailed in section 7	
S_FCOT_1-4	Flight crew shall be trained appropriately with regards to switch-over procedures(read back for level clearance)	The realisation of this requirement is a specific aspect of the development of the flight crew and operator awareness campaign for the switch-over period and is covered by S_FCOT_1-1.	The design of the flight crew and operator awareness campaign for the switch-over period is detailed in section 7	OPEN	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of the flight crew and operator awareness campaign for switch-over is detailed in section 7	
S_FCOT_1-5	Flight crew shall be trained appropriately with regards to switch-over procedures related Report reaching level	The realisation of this requirement is a specific aspect of the development of the flight crew and operator awareness campaign for the switch-over period and is covered by S_FCOT_1-1.	The design of the flight crew and operator awareness campaign for the switch-over period is detailed in section 7	OPEN	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of the flight crew and operator awareness campaign for switch-over is detailed in section 7	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_FCOT_1-6	Awareness campaigns shall be organized before the switch-over period to reinforce the importance of read back	The realisation of this requirement is a specific aspect of the development of the flight crew and operator awareness campaign for the switch-over period and is covered by S_FCOT_1-1.	The design of the flight crew and operator awareness campaign for the switch-over period is detailed in section 7	OPEN	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of the flight crew and operator awareness campaign for switch-over is detailed in section 7	
S_FCOT_1-7	Flight Crew shall be briefed on the suspension of Eastbound RVSM FL (Fl310, FL350 and FL390) for a period of 02 hours after the T0.	The realisation of this requirement is a specific aspect of the development of the flight crew and operator awareness campaign for the switch-over period and is covered by S_FCOT_1-1.	The design of the flight crew and operator awareness campaign for the switch-over period is detailed in section 7	NO	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of the flight crew and operator awareness campaign for switch-over is detailed in section 7	
S_FCOT_1-8	Awareness campaigns shall be organized before the switch-over period to reinforce the knowledge of the new FLAS for operators	The realisation of this requirement is a specific aspect of the development of the flight crew and operator awareness campaign for the switch-over period and is covered by S_FCOT_1-1.	The design of the flight crew and operator awareness campaign for the switch-over period is detailed in section 7	NO	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of the flight crew and operator awareness campaign for switch-over is detailed in section 7	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_FCOT_1-9	Flight Crew shall be briefed on the suspension of transit of non-RVSM civil a/c for a period of 02 hours after T0	The realisation of this requirement is a specific aspect of the development of the flight crew and operator awareness campaign for the switch-over period and is covered by S_FCOT_1-1.	The design of the flight crew and operator awareness campaign for the switch-over period is detailed in section 7	OPEN	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of the flight crew and operator awareness campaign for switch-over is detailed in section 7	
S_FCOT_1-10	Flight Crew shall be briefed on the suspension of operations above FL410 for non-RVSM a/c for a period of 02 hours after T0	The realisation of this requirement is a specific aspect of the development of the flight crew and operator awareness campaign for the switch-over period and is covered by S_FCOT_1-1.	The design of the flight crew and operator awareness campaign for the switch-over period is detailed in section 7	OPEN	The realisation of this requirement is a specific aspect of the implementation of the flight crew and operator switch-over procedures and is covered by S_FCOP_1-1.	The implementation of the flight crew and operator awareness campaign for switch-over is detailed in section 7	
ATSP_1	**ATS Normal Procedures**						

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATSP_1-1	ATC shall verify the RVSM status of each aircraft within its area of responsibility before the ToS	Detailed switch-over plan prepared by ICAO and provided to States. This plan is to provide mitigations for all the switch-over hazards.	It is shown to have been successfully addressed in section **2.3** of the AFI RVSM switch-over plan. The design of this plan is described in section 7	YES	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	
		Detailed controller switchover bulletin	It is shown to have been successfully addressed in section **X.X** of the controller switchover bulletin.	OPEN	The dissemination by ARPO and the issuance of a dedicated State letter.	**State letter**	
S_ATSP_1-2	ATC team shall be reinforced during the switch-over period	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	It is shown to have been successfully addressed in section **4.5** of the AFI RVSM switch-over plan. The design of ATS switch-over procedures is detailed in section 7	YES	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATSP_1-3	Switch-over Procedures shall be in place to impose the surveillance of the execution of the level clearance during the switch-over period (ENV 1 and 2)	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section **X.X**	PART. Appropri-atness of section 4.8 if SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section **7**	
S_ATSP_1-4	A NOTAM shall be issued for the activation of the new FLAS during the switch-over period	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section **7**	PART. Appropri-atness of section 4.8 if SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section **7**	
S_ATSP_1-5	Switch-over Procedures shall be in place to impose the read back for level clearance during the switch-over period (ENV 1 and 2)	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section **7**	PART. Appropri-atness of section 4.8 if SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section **7**	
S_ATSP_1-6	Switch-over Procedures shall be in place to recover from incorrect clearance issue (ENV 1 and 2)	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section **7**	PART. Appropri-atness of section 4.8 of SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section **7**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_ATSP_1-7	Switch-over Procedures shall be in place to impose the surveillance of the execution of the level information during the switch-over period (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section 7	PART. Appropri-atness of section 4.8 of SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	
S_ATSP_1-8	Switch-over Procedures shall be in place to impose the surveillance of the level change during the switch-over period (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section 7	PART. Appropri-atness of section 4.8 of SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	
S_ATSP_1-9	Switch-over Procedures shall be in place to recover from incorrect information issue (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section 7	PART. Appropri-atness of section 4.8 of SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	
S_ATSP_1-10	Use of Eastbound RVSM FL (Fl310, FL350 and FL390) shall be suspended for a period of 02 hours after the T0.	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section 7	PART. Appropri-atness of section 4.8 of SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATSP_1-11	A NOTAM shall be produced to suspend FL310, FL350 and FL390 for RVSM operations after ToS during a period of 02 hours	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section 7	PART. Appropri-atness of section 4.8 of SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	
S_ATSP_1-12	Switch-over Procedures shall be in place to ensure the delivery of relevant level clearance for non RVSM civil aircraft to leave the FL band 290-410 before ToS (ENV 1 and 2)	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section X.X	PART. Appropri-atness of section 4.8 of SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	
S_ATSP_1-13	Switch-over Procedures shall be in place to ensure the delivery of relevant level information for non RVSM civil aircraft to leave the FL band 290-410 before ToS (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section 7	PART. Appropri-atness of section 4.8 of SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	
S_ATSP_1-14	Transit of non-RVSM civil a/c shall be suspended for a period of 02 hours after T0	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section 7	PART. Appropri-atness of section 4.8 of SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATSP_1-15	Operation above FL410 shall be suspended for non-RVSM a/c for a period of 02 hours after T0	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section 7	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	
S_ATSP_1-16	The traffic flow management capabilities shall be available before the switch-over period	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	It is shown to have been successfully addressed in section 4.4 of the AFI RVSM switch-over plan. The design of ATS switch-over procedures is detailed in section 7	YES	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	
S_ATSP_1-17	Modification to existing reliable communication systems (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section X.X	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATSP_1-18	Maintenance staff shall be reinforced during switch over period	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	It is shown to have been successfully addressed in section **4.5** of the AFI RVSM switch-over plan. The design of ATS switch-over procedures is detailed in section 7	YES	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	
S_ATSP_1-19	Flight plan shall be checked for non RVSM civil aircraft to leave the FL band 410 and above before ToS (Level change and time/point) (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	It is shown to have been successfully addressed in section **2.3** of the AFI RVSM switch-over plan. The design of ATS switch-over procedures is detailed in section 7	YES	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	
S_ATSP_1-20	Flight plan shall be checked for non RVSM civil aircraft to leave the FL band 290-410 before ToS (Level change and time/point) (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	It is shown to have been successfully addressed in section **2.3** of the AFI RVSM switch-over plan. The design of ATS switch-over procedures is detailed in section 7	YES	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATSP_1-21	LoAs and Procedures shall be in place before Switch-over period	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	It is shown to have been successfully addressed in section **2.6** of the AFI RVSM switch-over plan. The design of ATS switch-over procedures is detailed in section **7**	YES	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section **7**	
S_ATSP_1-22	Civil/Military coordination procedures shall be in place before Switch-over period	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	It is shown to have been successfully addressed in section **2.6** of the AFI RVSM switch-over plan. The design of ATS switch-over procedures is detailed in section **7**	PART. Does section 2.6 includes Civil military coordina.?	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section **7**	
S_ATSP_1-23	Switch-over Procedures shall be in place to ensure the delivery of relevant level information for non RVSM civil aircraft to leave the FL band 290-410 before ToS (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section **7**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section **7**	
ATSP_2	**ATS Contingency Procedures**						

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATSP_2-1	RDPS/ADS system failure contingencies shall be defined before the switch over period	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section 7	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	
S_ATSP_2-2	HMI failure contingencies shall be defined before the switch over period (ENV 1 and 3)	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section 7	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	
S_ATSP_2-3	FDPS failure contingencies shall be defined before the switch over period (ENV 1 and 3)	The realisation of this requirement is a specific aspect of the development of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The design of ATS switch-over procedures is detailed in section 7	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS switch-over procedures and is covered by S_ATSP_1-1.	The implementation of the ATS switch-over procedures is detailed in section 7	
ATST_1	**ATS Training for Normal Procedures**						

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATST_1-1	Awareness campaigns about RVSM Status shall be organized before the switch-over period	Detailed switch-over plan prepared by ICAO and provided to States. This plan is to provide mitigations for all the switch-over hazards.	It is shown to have been successfully addressed in section **7** of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section **7** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	
		Detailed controller switchover bulletin	It is shown to have been successfully addressed in section **X.X** of the controller switchover bulletin.	OPEN	The dissemination by ARPO and the issuance of a dedicated State letter.	**State letter**	
S_ATST_1-2	Controllers shall be trained with regards to the verification of the RVSM status of each aircraft within its area of responsibility before the ToS	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **7**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **7**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_ATST_1-3	Controllers shall be trained appropriately with regards to RVSM procedures before Switch-over period	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section 7	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section 7	
S_ATST_1-4	Awareness campaigns shall be organized before the switch-over period to reinforce the knowledge of the new FLAS (after completion of training for all staff)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section 7	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section 7	
S_ATST_1-5	Controller shall be trained appropriately with regards to switch-over procedures (surveillance of the execution of the level clearance)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section 7	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section 7	
S_ATST_1-6	Controller shall be trained appropriately with regards to switch-over procedures (read back for level clearance) (ENV 1 and 2)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section 7	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section 7	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_ATST_1-7	Controller shall be trained appropriately with regards to switch-over procedures (recovering from incorrect clearance issue) (ENV 1 and 2)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATST_1-8	Controller shall be trained appropriately with regards to switch-over procedures (surveillance of the execution of the level information) (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATST_1-9	Controller shall be trained appropriately with regards to switch-over procedures related to the level change (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATST_1-10	Controller shall be trained appropriately with regards to switch-over procedures (recovering from incorrect information issue) (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_ATST_1-11	Controller shall be briefed on the suspension of Eastbound RVSM FL (Fl310, FL350 and FL390) for a period of 02 hours after the T0.	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATST_1-12	Controllers shall be trained appropriately with regards to broadcast the switch-over countdown : ToS - 60mn, 45mn, 30mn,15 mn , ToS-5 mn and ToS	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATST_1-13	Controllers shall be trained appropriately with regards to deliver relevant level clearance for non RVSM civil aircraft to leave the FL band 290-410 before ToS (ENV 1 and 2)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATST_1-14	Controllers shall be trained appropriately with regards to deliver relevant level information for non RVSM civil aircraft to leave the FL band 290-410 before ToS (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_ATST_1-15	Controller shall be briefed on the suspension of transit of non-RVSM civil a/c for a period of 02 hours after T0	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATST_1-16	Controllers shall be briefed on the suspension of operations above FL410 for non-RVSM a/c for a period of 02 hours after T0	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATST_1-17	Controllers shall be trained with regards to the checking of flight plan for non RVSM civil aircraft to leave the FL band 290-410 before ToS (Level change and time/point) (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATST_1-18	Controllers shall be trained with regards to the checking of flight plan for non RVSM civil aircraft to leave the FL band 290-410 and above before ToS (Level change and time/point) (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_ATST_1-19	Controller shall be trained appropriately with regards to the checking into the flight plan that FL310, FL350 and FL390 are not intended to be used after ToS (ENV 3 and 4)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section X.X	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section X.X	
S_ATST_1-20	ATS technical staff shall be aware that modification to existing reliable FDPS (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section X.X	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section X.X	
S_ATST_1-21	Awareness campaigns shall be organized before the switch-over period to reinforce the knowledge of the new LOA	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section X.X	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section X.X	
S_ATST_1-22	Controller shall be trained appropriately with regards to LoAs and procedures before Switch-over period	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	It is shown to have been successfully addressed in section 2.6 of the AFI RVSM switch-over plan. The design of ATS training for switch-over is detailed in section X.X	PART. Is is sufficient?	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section X.X	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATST_1-23	Controller shall be trained appropriately with regards Civil/Military coordination procedures before Switch-over period	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATST_1-24	Military Controller shall be trained appropriately with regards Civil/Military coordination procedures before Switch-over period	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATST_1-25	Awareness campaigns shall be organized before the switch-over period to reinforce the knowledge of the new Civil/Military coordination procedures	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATST_1-26	Maintenance staff shall be trained appropriately with regards to modified systems before Switch-over period	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATST_1-27	ATS technical staff shall be aware that modification to existing reliable HMI (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed (ENV 1 and 3)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATST_1-28	ATS technical staff shall be aware that modification to existing reliable RDPS/ADS system (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed (ENV 1 and 3)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
ATST_2	**ATS Training for Contingency Procedures**						
S_ATSP_2-1	Maintenance staff shall be trained with regards to RDPS/ADS system failure contingencies before the switch over period (ENV 1 and 3)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATSP_2-2	Maintenance staff shall be trained with regards to FDPS failure contingencies before the switch over period	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
S_ATSP_2-3	Maintenance staff shall be trained with regards to HMI failure contingencies before the switch over period (ENV 1 and 3)	The realisation of this requirement is a specific aspect of the development of the ATS training for switch-over and is covered by S_ATST_1-1.	The design of ATS training for switch-over is detailed in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The realisation of this requirement is a specific aspect of the implementation of the ATS training for switch-over and is covered by S_ATST_1-1.	The implementation of ATS training for switch-over is detailed in section **X.X**	
ATSE_1	**ATS Equipment**						
S_ATSE_1-1	Upgraded ground system shall be in place to manage the RVSM status information before the switch-over period	Detailed switch-over plan prepared by ICAO and provided to States. This plan is to provide mitigations for all the switch-over hazards.	It is shown to have been successfully addressed in section **7** of the AFI RVSM switch-over plan. The design of this plan is described in section **7**	PART. Appropri-atness of section 4.8 in SW plan to be discussed	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section **7** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_ATSE_1-2	ATS Equipment shall enable controller to check flight plan for non RVSM civil aircraft to leave the FL band 290-410 before ToS (Level change and time/point) (ENV 3 and 4)	Detailed switch-over plan prepared by ICAO and provided to States. This plan is to provide mitigations for all the switch-over hazards.	It is shown to have been successfully addressed in section **X.X** of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section 4.0 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	
S_ATSE_1-3	The traffic flow management capabilities shall be available before the switch-over period	Detailed switch-over plan prepared by ICAO and provided to States. This plan is to provide mitigations for all the switch-over hazards.	It is shown to have been successfully addressed in section **4.4** of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	YES	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATSE_1-4	SAT Phone and/or PSTN shall be available for point to point communications during the switch over period	Detailed switch-over plan prepared by ICAO and provided to States. This plan is to provide mitigations for all the switch-over hazards.	It is shown to have been successfully addressed in section **2.5** of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	PART. Is it sufficient?	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	
S_ATSE_1-5	Modification to existing reliable communication systems (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed	Detailed switch-over plan prepared by ICAO and provided to States. This plan is to provide mitigations for all the switch-over hazards.	It is shown to have been successfully addressed in section **X.X** of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section 4.5 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATSE_1-6	Modification to existing reliable HMI (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed (ENV 1 and 3)	Detailed switch-over plan prepared by ICAO and provided to States. This plan is to provide mitigations for all the switch-over hazards.	It is shown to have been successfully addressed in section **X.X** of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section 9.0 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	
S_ATSE_1-7	Modification to existing reliable RDPS/ADS system (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed (ENV 1 and 3)	Detailed switch-over plan prepared by ICAO and provided to States. This plan is to provide mitigations for all the switch-over hazards.	It is shown to have been successfully addressed in section **X.X** of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section 9.0 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_ATSE_1-8	Modification to existing reliable FDPS (and related procedures) which compromise reliability prior to switch over and during switch over period shall not be performed	Detailed switch-over plan prepared by ICAO and provided to States. This plan is to provide mitigations for all the switch-over hazards.	It is shown to have been successfully addressed in section **X.X** of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section 9.0 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	
S_ATSE_1-9	ATS equipment shall enable controller to check flight plan for non RVSM civil aircraft to leave the FL band 410 and above before ToS (Level change and time/point) (ENV 3 and 4)	Detailed switch-over plan prepared by ICAO and provided to States. This plan is to provide mitigations for all the switch-over hazards.	It is shown to have been successfully addressed in section **X.X** of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	PART. Appropri-atness of section 4.8 in SW plan to be dicsussed	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section 9.0 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	
RVSM	**Overall System**						

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_RVSM1	The switch-over period shall be performed during an appropriate low traffic density period	Design of the switchover period and time by the ICAO/TF and of a detailed switch-over plan by ICAO. This plan is provided to States and is to provide mitigations for all the switchover hazards	It is shown to have been successfully addressed respectively in TF/**9** report and in section **4.2** of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	YES	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	
S_RVSM2	The switch-over period shall be determine out of Hadj period	Design of the switchover period and time by the ICAO/TF and of a detailed switch-over plan by ICAO. This plan is provided to States and is to provide mitigations for all the switchover hazards	It is shown to have been successfully addressed respectively in TF/**9** report and section **4.2** of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	YES	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section **7** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	**Result**	**Status**	**Approach** *the realisation is addressed by…*	**Realisation result**	**Status**
S_RVSM3	Traffic density shall be limited during switch-over period as appropriate	Design of the switchover period and time by the ICAO/TF and of a detailed switch-over plan by ICAO. This plan is provided to States and is to provide mitigations for all the switchover hazards	It is shown to have been successfully addressed respectively in TF/8 report and section 7 of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	YES	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section 7 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	
S_RVSM4	The FIR airspace shall be optimized to reduce controller workload	Not applicable	-	**-**	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section 7 of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	

Reference	System Element Requirement (SER)	Realisation at a Concept level (design)			Implementation level		
		Approach *the realisation is addressed by the design of…*	Result	Status	Approach *the realisation is addressed by…*	Realisation result	Status
S_RVSM5	The date of switchover shall take into account the effect of adverse weather (thunderstorm, sandstorm, …) to minimize the effect on switch over operations	Design of the switchover period and time by the ICAO/TF and of a detailed switch-over plan by ICAO. This plan is provided to States and is to provide mitigations for all the switchover hazards	It is shown to have been successfully addressed respectively in TF/**9** report and section **4.2** of the AFI RVSM switch-over plan. The design of this plan is described in section **X.X**	YES	The requirements placed on States through NSP to develop a national version of the AFI RVSM switch-over plan. A state letter is issued for the dissemination of the plan and States are required to acknowledge receipt.	It is shown to have been successfully addressed in the section **X.X** of the National Safety Plan template. State commitment to this realisation is contained within the National Safety Plans, reviewed and reported in Appendix **X. + State letter + State acknowledgement**	
S_RVSM6	Civil/Military coordination committee shall be in place	The realisation of this requirement is not a specific aspect of switch-over and is covered by ATSP_1-5 (Core Airspace)					

Table **8** : Realisation of System Element Requirements (AFI RVSM Core Airspace)

Appendix E: Airspace Design

To be completed.

Appendix F: Height Monitoring

To be completed.

Appendix G: Collision Risk Assessment

To be completed.

Appendix H: National Safety Plans and State Safety Awareness (or readiness)

To be completed in edition 0.3

H.1 Introduction

This section aims to provide all details on the elements provided in section 5.3

H.2 State's Safety Readiness

Table to filled following the update on NSP review to be discussed in Dakar

State	Safety plan submitted to NSPVP I	Safety plan submitted to NSPVP II	Safety plan validated by NSPVP	Safety plan approved	DGCA confirmation letter received	Comments
Algeria						
Angola						
Benin						
Botswana						
Burkina Faso						
Burundi						
Cameroon						
Cabo Verde						
Central African Republic						
Chad						
Comores						
Congo						
Côte d'Ivoire						
Djibouti						
Democratic Republic of Congo						
Egypt						
Equatorial Guinea						
Eritrea						
Ethiopia						
Gabon						
Ghana						
Guinea Bissau						
Guinea						
Kenya						
Lesotho						
Liberia						

State	Safety plan submitted to NSPVP I	Safety plan submitted to NSPVP II	Safety plan validated by NSPVP	Safety plan approved	DGCA confirmation letter received	Comments
Libyan Araba Jamahiriya	NO	NO	NO	-	-	Refer to NSPVP II report
Madagascar						
Malawi						
Mali						
Mauritania						
Mauritius						
Morocco						
Mozambique						
Namibia						
Niger						
Nigeria						
Reunion						
Rwanda						
Sao Tome						
Senegal						
Seychelles						
Sierra Leone						
Somalia						
South Africa						
Sudan	NO	NO	NO	-	-	
Swaziland	NO	NO	NO	-	-	
Tanzania						
The Gambia						
Togo						
Tunisia						
Uganda						
Zambia						
Zimbabwe						

Appendix I: Summary of the study of operational errors

To be completed.

Appendix J: List of assumptions

To be completed.

Annex 1: References

Applicable documents

[1] Manual on Implementation of a 300 m (1000 ft) Vertical separation Minimum Between FL290 and FL410 inclusive, Doc 9574 AN/934, Second edition - 2002, International Civil Aviation Organisation.
[2] AFI Reduced Vertical Separation Minimum (RVSM) RVSM Safety Policy, ARPO/ICAO, 30 July 2004

Reference documents

ICAO documents:

[3] ICAO Annex 2, Rules of the Air, Ninth edition – July 1990, including all amendments and corrigenda up to applicability date XXXX
[4] ICAO Annex 11, Air Traffic Services, Thirteenth Edition, July 2001
[5] ICAO Doc 9426, Air Traffic Services Planning Manual, 1984;
[6] ICAO Doc 4444, Procedures for Air Navigation Services
[7] ICAO Doc 9536, Review of the General Concept of Separation Panel, 6th Meeting, report, RGCSP/6 Volumes 1 et 2, 1988;
[8] ICAO Doc 9572, Review of the General Concept of Separation Panel, 7th Meeting, report, RGCSP/7, 1990;
[9] ICAO Doc 9689-AN/953, Manual on airspace planning methodology for the determination of separation minima, First edition, 1998.
[10] ICAO Safety net policy
[11] TCAS logic V6.04a and 2000ft
[12] ICAO on TCAS RA follow up

AFI RVSM Programme:

[13] Report of the 15th meeting of the AFI Planning and Implementation Regional Group (APIRG), Nairobi, Kenya, 26-30 September 2005
[14] Report of the 14th meeting of the AFI Planning and Implementation Regional Group (APIRG), Yaoundé, Cameroon, 23-27 June 2003
[15] Report of the 13th meeting of the AFI Planning and Implementation Regional Group (APIRG), Sal, Capo Verde, June 2001
[16] AFI RVSM Task Force 1 report, Dakar, Senegal, 17-18 June 2002
[17] AFI RVSM Task Force 2 report, Dakar, Senegal, 19-21 November 2003
[18] AFI RVSM Task Force 3 report, Nairobi, Kenya, 22-23 April 2004
[19] AFI RVSM Task Force 4 report, Lagos, Nigeria, 29-30 July 2004
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