

INTERNATIONAL CIVIL AVIATION ORGANIZATION TWELFTH MEETING ON THE IMPROVEMENT OF THE AIR TRAFFIC SERVICES IN THE SOUTH ATLANTIC

(Sal, Cape Verde, 15 – 17 December 2004)

Agenda Item 3: Air Traffic Management

Results from AFI RVSM Stakeholders Coordination Meeting (Go/Delay Coordination Meeting) (Dakar, Senegal 18 – 19 November 2004)

(Presented by the Secretariat)

Summary

This paper contains the list of conclusions of the AFI RVSM Stakeholders Coordination Meeting (Go/Delay Coordination Meeting) which was held in Dakar from 18 to 19 November 2004.

References:

- RVSM/RNAV/RNP/TF/5 Meeting Report
- RVSM Stakeholders Coordination Meeting Report.
- 1. The AFI RVSM Stakeholders Coordination Meeting (Go/Delay Coordination Meeting) was held in Dakar from 18 to 19 November 2004.
- 2. The meeting endorsed a number of conclusions from the Fifth Meeting of RVSM/RNAV/RNP (Dakar, 16-17 November 2004) which appear at the Attachment to this working paper.

Action by the Meeting

3. The meeting is invited to take note of the conclusions and the AFI Strategy/Action Plan at the **Appendices A** and **B** respectively and take appropriate action.

Conclusions of the Fifth RVSM/RNAV/RNP TF MEETING (Dakar, 16 – 17 November 2004)

Number	Title							
Conclusion 5/1:	Safety assessment data							
	That States continue to provide the required safety assessment data to ARMA on monthly basis initially for a period of eight months.							
Conclusion 5/2:	Civil/military coordination							
	That in order to ensure the safe and coordinated implementation of RVSM in the AFI Region, States should ensure that the military aviation authorities are fully involved in the planning and implementation process.							
Conclusion 5/3:	Nomination of a National RVSM programme manager							
	That States providers who have not done so, as a matter of urgency, nominate, a National RVSM Programme Manager who will be responsible for ensuring that the proper mechanisms are put in place for the safe implementation of the RVSM programme and will also act as the focal point or contact person.							
Conclusion 5/4	Reporting of data for monitoring and/or carrying out safety assessment							
	That: a) All States institute procedures for reporting of data, incidents and conditions necessary for performing the collision risk calculations prerequisite for RVSM implementation to the AFI monitoring agency. The data will include, but not necessarily be limited to:							
	 i) Height deviations of 300 ft or more. ii) Total number of IFR movements for each month. iii) The average time per movement spent in the level band FL 290 to FL 410. iv) ATC coordination failures. v) Turbulence; and vi) Traffic data. 							
	 All States institute procedures for reporting to the AFI monitoring agency data, incidents and conditions necessary for performing the collision risk calculations prerequisite for RVSM implementation; and 							
	c) GMU will be used for height monitoring in AFI Region which will be coordinated by the ARMA.							

Number	Title
Conclusion 5/5:	Implementation of RVSM in the AFI Region
	That:
	a) All RVSM implementation preparation works (safety, assessment, training) be done taking into consideration the FL band between 290 and 410 inclusive;
	b) RVSM implementation date of 20 January 2005 be postponed by one year to facilitate States/Operators to complete their required action Plan.
	c) Implementation of RVSM in the AFI Region be harmonized and coordinated within the AFI Region as well as the adjacent Regions.
Conclusion 5/6:	Training of all personnel involved with the implementation of RVSM in the AFI Region
	That:
	a) Seminars be organized in the Region for training of air traffic services personnel in the RVSM field; and
	b) States having difficulties in implementing RVSM implementation programme, may either individually or in group explore the possibility of seeking outside expertise.
	c) On site training be conducted to expedite the training process.
Conclusion 5/7:	Guidance material for Airworthiness and Operational Approval
	That States in the AFI Region be urged to include in their national legislation and regulations the Airworthiness and Operational Approval process for aircraft and operators intending to operate within a designated RVSM airspace based on provisions of ICAO Annex 6 Part 1 Chapt 7 para. 7.2.3 and the guidance material contained in JAA Temporary Guidance Leaflet (TGL) N°6.
Conclusion 5/8:	Enforcement in national legislation
	That:
	States which have not done so, take the appropriate measures in order:
	a) to publish as a matter of urgency, an AIC informing the users of their intention to implement RVSM; and

Number	Title
	b) to include the necessary provisions in their national legislation (AIPS).Guidance material for Airworthiness and Operational Approval
Conclusion 5/9:	Amendment to ICAO Doc. 7030
	That ICAO process as soon as possible an amendment proposal to the AFI SUPPs (Doc 7030) to include relevant provisions for RVSM implementation.
Conclusion 5/10:	Funding of the RVSM implementation programme
	That National Governments, Regulatory bodies, operators, service providers and other stakeholders be granted budgetary allocations for acquisitions and other activities necessary for ensuring that all the requirements are met in a timely manner in order to safely implement RVSM in the AFI Region.
Conclusion 5/11:	AFI RVSM Strategy/Action Plan
	That the updated RVSM Strategy/Action Plan at Appendix B to the report be circulated to States for action.
Conclusion 5/12:	Aircraft/Operators readiness survey
	That the results of ICAO/ARMA surveys be updated and presented at the RVSM TF/6 meeting for consideration.
Conclusion 5/13:	Monitoring of Height Deviations
	That:
	a) ICAO request the States of Botswana, Cape Verde, Egypt, Ghana, Kenya, Nigeria, South Africa, Spain, Tanzania and Tunisia to establish at the ACC where radar is implemented, a unit to conduct monitoring of aircraft height deviations in the AFI RVSM airspace; and
	b) The data collected at a) above be forwarded to AFI RMA for action.
Conclusion 5/14:	Organization of AFI airspace in respect of AFI RVSM airspace
	That the ATS/SG of APIRG consider as one of its tasks the issue of restructuring of the AFI Region airspace in light of the introduction of RVSM.
Conclusion 5/15:	Campaign to enhance RVSM Implementation
	That sensitisation of Civil Aviation CEO/DGs by Regional Directors of ICAO and IATA on importance of RVSM and the need for its early implementation in the AFI Region be accorded priority during ICAO and IATA missions to States.

SAT/12 - WP/05

Number	Title
Conclusion 5/16:	AFI Safety Policy
	That the States expedite the publication of national RVSM safety policy using the sample at Appendix C <i>to the</i> report.
Conclusion 5/17:	National Safety Plan
	That State expedite the publication of their National Safety Plan using the sample at Appendix D to the report.
Conclusion 5/18:	Strategic Lateral Offset Procedures
	That the APIRG ATS Sub-Group address the issue relating to Strategic Lateral Offset Procedures taking into account the work being done by the ICAO Separation and Airspace Safety Panel (SASP).
Conclusion 5/19:	State Readiness Assessment:
	That ICAO urge States which have not done so, to provide the State RVSM readiness assessment using the attached form at Appendix E <i>to the</i> report.
Conclusion 5/20:	Exchange of RVSM data:
	That ASECNA forward to AFI RMA the RVSM data collected from their member States.
Conclusion 5/21:	Exchange of RVSM data:
	That States send the RVSM data to ARMA is a timely manner.
Conclusion 5/22:	AFI RVSM Functional Hazard Assessment meetings:
	That the ARMA arrange for two FHA Sessions before March 2005.
Conclusion 5/23:	Functional Hazard Assessment
	That ARMA provide the FHA and all Safety objectives and requirements to ICAO for inclusion in the AFI Pre-Implementation Safety case.
Conclusion 5/24:	Collision Risk Assessment:
	That RMA provide the CRA to ICAO for inclusion in the AFI Pre- Implementation Safety Case.
Conclusion 5/25:	Continuation of AFI RVSM Programme Office (ARPO)
	That the AFI RVSM Programme Office (ARPO) be continued until the Pre- Implementation Safety Case (PISC) documents is completed.

5

ACTION PLAN FOR IMPLEMENTATION OF REDUCED VERTICAL SEPARATION MINIMA IN THE AFRICA-INDIAN OCEAN REGION

18 November 2004

Prepared by the AFI RVSM Program Office [ARPO]

	AFI RVSM	M IMPLEMENTA	ATION ACTIO	N PLAN	
ID	Description	Target Date	Status	Resources	Remarks
	Program Management				
1	Agree on structure of TF to enable efficient handling of specialist technical tasks	21/11/03	Completed	Secretariat Support Team: ASECNA, SA, IATA, Nigeria, Tunisia	Completed 21 Nov 2003
2	RVSM SIP Report	21/11/03	Completed	RVSM/ITF2	Completed 21 Nov 2003
3	RVSM/RNAV/RNP TF/2 Meeting	21/11/03	Completed	RVSM/ITF2	Completed 21 Nov 2003
4	Identify resources for performing specialist	21/11/03	Completed	RVSM/ITF2	Completed 21 Nov 2003
	technical tasks				
5	Investigate methods of funding any outside	31/03/04	Completed	ICAO/IATA	To address future funding as/when required
	assistance required				
6	Finalize the RVSM Implementation Strategy/	31/12/03	Completed	ICAO	Sent 05 Dec 2003
	Action Plan				
7	Circulate RVSM Implementation Strategy/Action	5/01/04	Completed	ICAO	Sent 05 Dec 2003
	Plan for comments from States				
8	(a) Doc 7030 amendment Proposal(b) Circulate proposal to States© ANC Approval	01/06/04 15/06/04 15/11/04	Completed Completed In Progress	ICAO ICAO ICAO	* Completed 31 May * Circulated to States - T/Date for comments 15 Aug
9	States comments on RVSM implementation Strategy/Action Plan	31/-3/04	Completed	States, ICAO RVSM/ITF3	Completed 31 March 04
10	Regional RVSM informational Website	31/03/04	Completed	IACO/IATA/States	Completed 1 Feb 04
11	RVSM Seminar/RVSM ITF3	19- 22/04/04	Completed	ICAO	Completed on Time
12	RVSM Seminar /RVSM/ITF/4	26- 30/07/04	Completed	ICAO/RVSM ITF/4	Completed on Time
3	Coordination and harmonization of procedures with adjacent Regions	Ongoing	Ongoing	ICAO and AFI RMA	Continuous contact
14	States to send AIC re RVSM Implementation intention	31/05/04	In	ICAO/States	

Description		AFI	RVSM IMPLEMENTA	ATION ACTIO	N PLAN	
Confirm target AIRAC implementation date (AIP Supplement to be published) Regional RVSM implementation status reports Ongoing Ongoing ICAO Monthly State Readiness Assessment May 2005 In Progress RVSM/ARTF/5 I5- Completed I6/11/04 ColDelay Meeting I7- I19/11/04 RVSM/ARTF/6 May 2005 RVSM/ARTF/7 August 2005 RVSM/ARTF/8 October O5- Progress Progress Publish Trigger NOTAM October O5- Progress Publish Trigger NOTAM October O5- Progress Regional OPS/Airworthiness Regional OPS/Airworthiness RVSM Guidance Doc Develop regional Pilot Training RVSM Guidance Material Aircraft Operational approval process guidelines Aircraft RVSM/Approval Survey May 2005 In progress Air Traffic Management 15/11/05 In progress ICAO States ICAO Monthly ICAO ARTF Progress ICAO ICAO Monthly ICAO ARTF ARTF Progress ICAO ICAO ARTF ARTF ARTF ARTF ARTF ARTF ARTF ART	ID	Description	Target Date	Status	Resources	Remarks
Regional RVSM implementation status reports				Progress		
State Readiness Assessment May 2005 In Progress ICAO TF/6 RVSM/ARTF/5 15-	15		15/11/05	In progress	ICAO/States	TF8 to review requirement
RVSM/ARTF/5 15- 16/11/04 Completed 16/11/04 ICAO/RVSM ITF/5 ICAO/RVSM	16	Regional RVSM implementation status reports	Ongoing	Ongoing	ICAO	Monthly
Go/Delay Meeting 17. Completed Meeting all Stakeholders 19/11/04 RVSM/ARTF/6 May 2005 In ARTF Progress RVSM/ARTF/7 August 2005 Progress RVSM/ARTF/8 October 05 Progress Go/Delay Meeting 2005 October 05 Progress Publish Trigger NOTAM October 05 Progress Publish Trigger NOTAM October 05 Progress Aircraft Operations and Airworthiness Regional OPS/Airworthiness RVSM Guidance Doc 21/11/03 Completed IATA Aircraft Operational approval process guidelines Aircraft RVSM Approval Survey May 2005 In progress May 2005 In progress IcAO/States ARMA/ICAO Air Traffic Management	17	State Readiness Assessment	May 2005		ICAO	TF/6
RVSM/ARTF/6 May 2005 RVSM/ARTF/7 August In Progress RVSM/ARTF/8 October 05 Progress Go/Delay Meeting 2005 Publish Trigger NOTAM October 05 Progress Publish Trigger NOTAM October 05 Progress Progress Publish Trigger NOTAM October 05 Progress Progress Progress Regional OPS/Airworthiness RVSM Guidance Doc 21/11/03 Develop regional Pilot Training RVSM Guidance Material Aircraft Operational approval process guidelines Aircraft RVSM Approval Survey May 2005 May 2005 In progress ARMA/ICAO ARMA/ICAO ARMA/ICAO ARMA/ICAO	18	RVSM/ARTF/5		Completed	ICAO/RVSM ITF/5	
RVSM/ARTF/7 August 2005 Progress RVSM/ARTF/8 October 05 Progress Go/Delay Meeting 2005 October 10 Progress Publish Trigger NOTAM October 05 Progress Progress Publish Trigger NOTAM October 05 Progress Aircraft Operations and Airworthiness Regional OPS/Airworthiness RVSM Guidance Doc 21/11/03 Develop regional Pilot Training RVSM Guidance Material 30/04/04 Aircraft Operational approval process guidelines 31/05/04 Aircraft RVSM Approval Survey May 2005 May 2005 In progress ARMA/ICAO ARRTF ARRTF ARRTF Meeting all Stakeholders Fr8 to confirm date ICAO Sent 05 Dec 2003 Sent 05 Dec 2003 Sent 05 Dec 2003 In progress ICAO/States May 2005 In progress ARMA/ICAO	19	Go/Delay Meeting		Completed	Meeting all Stakeholders	
RVSM/ARTF/8 October 05	20	RVSM/ARTF/6	May 2005		ARTF	
Go/Delay Meeting 2005 Go/Delay Meeting 2005 Progress Publish Trigger NOTAM October 05 Progress In States TF8 to confirm date Aircraft Operations and Airworthiness Regional OPS/Airworthiness RVSM Guidance Doc Develop regional Pilot Training RVSM Guidance Material Aircraft Operational approval process guidelines Aircraft RVSM Approval Survey May 2005 May 2005 Air Traffic Management Neeting all Stakeholders LAO States TF8 to confirm date	21	RVSM/ARTF/7			ARTF	
Publish Trigger NOTAM October 05 Progress Aircraft Operations and Airworthiness Regional OPS/Airworthiness RVSM Guidance Doc 21/11/03 Completed ICAO Sent 05 Dec 2003 Develop regional Pilot Training RVSM Guidance Material 30/04/04 Completed IATA Aircraft Operational approval process guidelines 31/05/04 Completed States, ICAO Aircraft RVSM Approval Survey May 2005 In progress ICAO/States Monitor aircraft/operator approval process Air Traffic Management Note the progress of the confirm date and the confirm date of	22	RVSM/ARTF/8			ARTF	
Aircraft Operations and Airworthiness Regional OPS/Airworthiness RVSM Guidance Doc 21/11/03 Completed ICAO Sent 05 Dec 2003 Develop regional Pilot Training RVSM Guidance Material 30/04/04 Completed IATA Aircraft Operational approval process guidelines 31/05/04 Completed States, ICAO Aircraft RVSM Approval Survey May 2005 In progress ICAO/States Monitor aircraft/operator approval process Air Traffic Management In progress ARMA/ICAO	23	Go/Delay Meeting 2005		In	Meeting all Stakeholders	
Regional OPS/Airworthiness RVSM Guidance Doc Develop regional Pilot Training RVSM Guidance Material Aircraft Operational approval process guidelines Aircraft RVSM Approval Survey Monitor aircraft/operator approval process Air Traffic Management Aircraft Management Completed ICAO IATA Sent 05 Dec 2003 Sent 05 Dec 2003 Sent 05 Dec 2003 IATA IATA ICAO ICAO ICAO ICAO ICAO ICAO ICAO IC	24	Publish Trigger NOTAM			States	TF8 to confirm date
Regional OPS/Airworthiness RVSM Guidance Doc Develop regional Pilot Training RVSM Guidance Material Aircraft Operational approval process guidelines Aircraft RVSM Approval Survey Monitor aircraft/operator approval process Air Traffic Management Aircraft Management Completed ICAO IATA Sent 05 Dec 2003 Sent 05 Dec 2003 Sent 05 Dec 2003 IATA IATA ICAO ICAO ICAO ICAO ICAO ICAO ICAO IC		Aircraft Operations and Airworthiness				
Aircraft Operational approval process guidelines Aircraft RVSM Approval Survey May 2005 May 2005 May 2005 Air Traffic Management States, ICAO States, ICAO In progress ICAO/States ARMA/ICAO	25		21/11/03	Completed	ICAO	Sent 05 Dec 2003
Aircraft RVSM Approval Survey May 2005 Monitor aircraft/operator approval process Air Traffic Management May 2005 In progress ARMA/ICAO ARMA/ICAO	26	•				
Aircraft RVSM Approval Survey May 2005 Monitor aircraft/operator approval process Air Traffic Management May 2005 In progress ARMA/ICAO ARMA/ICAO	27	Aircraft Operational approval process guidelines	31/05/04	Completed	States, ICAO	
Air Traffic Management	28	· · · · · · · · · · · · · · · · · · ·	May 2005	In progress	ICAO/States	
National RVSM plan Sent to States – 05/05/04	29		May 2005	In progress	ARMA/ <u>ICAO</u>	
	30	National RVSM plan	31/03/04	Completed	States, ICAO	Sent to States - 05/05/04

	AFIRVSM	IMPLEMENT	ATION ACTIO	ON PLAN	
ID	Description	Target Date	Status	Resources	Remarks
31	Regional ATC OPS Manual	31/03/04	Completed	ICAO	Sent to States - 05/05/04
32	Determine the limits of RVSM airspace	30/06/04	Completed	States/ICAO	TF4 to verify limits
33	Regional ATC Training Program & Guidance Material	31/03/04	Completed	South Africa/ ASECNA / Nigeria	
34	Simulations to assess ATC workload and possible need for airspace/air route Sector changes	31/05/05	In Progress	States	In National RVSM Plan
36	Identify issues to be addressed in Letters of Agreement	31/05/04	Completed	ICAO/States	
37	Military aviation preparation	31/05/05	In progress	States	In National RVSM Plan
38	National RVSM Regulatory Material	31/01/05	In progress	States, ICAO	To Identify requirements
39	States assess the impact of RVSM implementation on controller automation systems and plan for upgrades/ modifications	31/05/05	In progress	States	In National Plan
40	Collect weather and turbulence data for analysis	31 /05/05	In progress	ARMA ICAO/States	TF/6
41	States to conduct local ATC RVSM training	31/10/05	In progress	States	TF/6
	RVSM Safety Assurance				
42	Conduct preliminary data collection and readiness assessment	31/05/05	In progress	ARMA/ICAO	Ongoing
43	Develop AFI RVSM Safety Policy	30/06/04	Completed	RVSM/ARTF4	
44	Develop National RVSM Safety Plan	30/06/04	Completed	ICAO	
45	RVSM Functional Hazard Assessment	31/04/05	In progress	ARMA/ICAO	Subject data from States
46	Validate Functional Hazard Assessment	31/05/05	In progress	RVSM ARTF/6	TF/6
47	RVSM Collision Risk Assessment	30/06/05	In progress	ARMA/ICAO	
48	Validate Collision Risk Assessment	31/08/05	In progress	RVSM ARTF/7	TF/7
49	Develop AFI Pre-Implementation Safety Case	30/08/05	In Progress	ARPO	
50	AFI Pre-Implementation Safety Case: ANC Approval	31/09/05	In	ARPO/ANC	ANC Requirement

SAT/12

	AFI	RVSM IMPLEMENTA	TION ACTIO	N PLAN	
ID	D Description		Status	Resources	Remarks
			Progress		
	Monitoring Agency				
51	Evaluate options for setting up AFI RMA	21/11/03	Completed	RVSM/ITF2	Completed on time
52	Identify an AFI RMA	21/11/03	Completed	RVSM/ITF/2	Completed on time
53	Establish an AFI RMA.	31/03/04	Completed	South Africa/ICAO	Completed on time
54	Validate implementation readiness assessment	May 2005	In Progress	ICAO/ARMA	Ongoing

	DRAFT SCHEDULE FOR AFI RVSM PRE-IMPLEMENTATION SAFETY CASE													
					,		,							
	Nov.	Dec. 04	Jan 05	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
FHA				2 nd Meeting	3 rd Meeting	Final Report	Review By TF							
CRA	State Data collected by ICAO	State Data collected by ICAO	State Data Collected by ICAO	State Data Collected by ICAO	State Data Collected by ICAO	State Data Collecte d by ICAO	State Data Collected By ICAO	CRA Report						
Pre- Implemen- tation Safety Case (PISC)									Pre- Imple- menta- tion Safety Case	PISC Review by ARTF	PISC Review by ANC			
ARTF							ARTF/6			ARTF/ 7		ARTF/8		
GO/Delay												GO/ Delay		