

INTERNATIONAL CIVIL AVIATION ORGANIZATION



**RVSM/RNAV/RNP TASK FORCE 14 MEETING
REPORT**

(NAIROBI, 26 – 28 May 2008)

Prepared by the APIRG RVSM/RNAV/RNP TASK FORCE

The RVSM/RNAV/RNP Task Force is a Task Force of the AFI Planning and Implementation Regional Group (APIRG).

Its Reports are therefore submitted to APIRG through the ATS/AIS/SAR Sub-Group for review and action.

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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PART I - HISTORY OF THE MEETING

1. Introduction

1.1 The Fourteenth meeting of the RVSM Task Force (RVSM/TF/14) was convened at the ICAO ESAF Office Nairobi from 26 to 28 May 2008.

1.2 The Reduced Vertical Separation Minimum Task Force 14 meeting was opened by Mr. Geoffrey Moshabesha, Regional Director, ICAO ESAF Office, Nairobi. The Regional Director appreciated the Task Force's consistency in carrying out the work assigned to it by APIRG in taking crucial decisions in pursuance to the tasks in the Strategy/Action Plan. He highlighted some important elements of the Task Force's activities and urged the States to continue the appreciable commitment in the process of RVSM implementation in the AFI airspace. He thanked the RVSM Task Force Project Management Team (PMT), for the guidance to the Task Force in order to promote the AFI RVSM implementation programme. He urged the meeting to continue unabatedly in pursuing the activities in the strategy/action Plan in AFI RVSM programme and emphasized the need for PMT to diligently follow up the activities in the Switch-Over Plan (SWOP) in order to meet the target date for the implementation of RVSM in the Region on 25 September 2008. Furthermore he urged the participants to be frank in their discussions so that realistic conclusions can be reached.

2. Officers and Secretariat

2.1 Mr. Apolo Kharuga, Regional Officer, Air Traffic Management from the ICAO ESAF Office, Nairobi, was the Secretary/Moderator of the meeting. He was assisted by Mr. Konan Brou, Regional Officer, Air Traffic Management, ICAO ESAF; Mr. Drazen Gardilic Technical Officer, ATM HQ and Mr. Kevin Ewels, Manager of the AFI RVSM Monitoring Agency (ARMA).

3. Attendance

3.1 The meeting was attended by forty four (44) participants from twenty (20) States and five (5) international organizations namely; IFALPA, IFATCA, ASECNA, IATA and FAA. The list of participants is at **Appendix A** to this report.

4. Working Language

4.1 The meeting was conducted in the English language.

5. AGENDA

5.1 Agenda Item 1

Review and follow-up of the conclusions of the Thirteenth Meeting of APIRG RVSM/RNAV/RNP Task Force (RVSM TF/13) as well as the relevant conclusions of APIRG 16 meeting.

5.2 Agenda Item 2

Review of major activities of the RVSM Task Force

- a) ARMA Report
- b) AFI RVSM State Readiness Survey
- c) Status of ATS Letters of Agreement/Procedure (LoA/LoP)
- d) Review of the Switch-Over Plan
- e) Review of the ANC WP relating to RVSM implementation.

5.3 Agenda Item 3

Review and update the RVSM Strategy/Action Plan.

5.4 Agenda Item 4

Implementation of RVSM in the AFI Region by IFALPA

5.5 Agenda Item 5

Implementation of RVSM in the AFI Region by IATA

5.6 Agenda Item 6

Any Other Business

CONCLUSIONS AND DECISION

Number	Title
Conclusion 14/1:	<p>Safety assessment data and incident reporting</p> <p>That:</p> <ul style="list-style-type: none"> a) States continue stringent incident reporting measures and take appropriate remedial actions as required; and b) States intensify their efforts in reducing the incidents.
Conclusion 14/2:	<p>Reporting of data for monitoring and/or carrying out safety assessment</p> <p>That States continue to provide the required safety assessment data to ARMA on a monthly basis using Forms 1, 2, 3 and 4.</p>
Conclusion 14/3:	<p>Seminars/training of all personnel involved with the implementation of RVSM in the AFI Region</p> <p>That:</p> <ul style="list-style-type: none"> a) Seminars/training continue to be conducted in the Region as well as at national level for all personnel involved in the implementation of RVSM; and b) States having difficulties in implementing RVSM implementation training may either individually or in group explore the possibility of seeking outside expertise.
Conclusion 14/4:	<p>State RVSM Readiness Assessment</p> <p>That ICAO circulate the checklist for State Readiness Assessment (Appendix B) for confirmation as a quality assurance.</p>
Conclusion 14/5:	<p>Pre-Implementation Safety Case (PISC)</p> <p>That the PISC at Appendix C be submitted to the ANC for review and approval.</p> <p>Note: The PISC not attached but can be found at the ICAO Web site: www.icao.int/esaf/rvsm.</p>
Conclusion 14/6:	<p>RVSM Switch-Over Plan</p> <p>That ICAO circulate to States the Switch-Over Plan (SWOP) at Appendix D for their necessary action.</p>

Number	Title
Conclusion 14/7:	<p>ATS Letters of Procedure/Agreement</p> <p>That States update their Letter of Procedure/Agreement to incorporate RVSM procedures as soon as possible, in order to meet the targets indicated in the SWOP.</p>
Conclusion 14/8:	<p>AFI RVSM Strategy/Action Plan</p> <p>That the updated AFI RVSM Strategy/Action Plan at Appendix E be circulated to States for quality assurance.</p>
Conclusion 14/9:	<p>APIRG Conclusion 16/38</p> <p>That in relation to APIRG Conclusion 16/38, in light of reports of CNS improvements presented to the meeting, the Task Force agreed that APIRG Conclusion 16/38 should be considered closed.</p>
Conclusion 14/10:	<p>Communications problems in AFI</p> <p>That:</p> <ul style="list-style-type: none"> a) in relation to concerns expressed by IFALPA about poor communications performance in some States, the TF requested that IATA provide communication deficiency reports for these States for the past six months; and b) this information to be transmitted to ICAO by 6 June 2008 in order to incorporate these data to the ANC presentation on 19 June 2008.
Conclusion 14/11:	<p>IFALPA and IFATCA as full PMT members</p> <p>That in order to most effectively address post-implementation issues that may arise and obtain operational input, the group ensures that IFALPA and IFATCA participate as full members of the PMT and scrutiny group to monitor and ensure continuous improvements in the system after RVSM implementation.</p>
Conclusion 14/12:	<p>Switch-Over Plan</p> <p>That the PMT review the existing AFI switch-over plan with a view of updating it to incorporate elements from other regional plans that may have application in the AFI region.</p>

Number	Title
Conclusion 14/13:	<p data-bbox="506 235 911 264">Final Program Review Meeting</p> <p data-bbox="506 304 570 333">That:</p> <p data-bbox="506 373 1352 541">a) recognizing that a decision to proceed with implementation was made by APIRG/16 in Conclusion 16/39 last year, the task force concluded that a Final Program Review meeting is required to fully assess readiness to proceed as planned at least 8 weeks prior to 25 September 2008.</p> <p data-bbox="506 581 1352 674">b) if readiness is not adequately demonstrated, a contingency plan will be developed by the PMT for publication at the conclusion of that meeting.</p>
Conclusion 14/14:	<p data-bbox="506 718 834 747">Communications Surveys</p> <p data-bbox="506 787 570 816">That:</p> <p data-bbox="506 856 1352 1024">In order to validate and expand upon the communications performance in States to be identified, IATA, in cooperation with the appropriate authorities, organize a 2 week survey, whereby flight crews of each flight transiting any of the mentioned FIRs fills a communications performance report about the FIR.</p>
Decision 14/1:	<p data-bbox="506 1064 1078 1094">Implementation of RVSM in the AFI Region</p> <p data-bbox="506 1134 570 1163">That:</p> <p data-bbox="506 1203 1352 1329">a) the RVSM Task Force PMT ensure that all the activities indicated in the SWOP at Appendix D are completed for the safe implementation of RVSM in the AFI Region on 25th September 2008;</p> <p data-bbox="506 1369 1352 1474">b) the PMT upon completion of its activities is authorized by the TF to make a final recommendation for the Final Program Review meeting in July 2008; and</p> <p data-bbox="506 1514 1352 1604">c) the ARPO, the ARMA and PMT will continue carrying out their tasks after RVSM implementation in order to address any post-implementation issues that may arise.</p>

PART II: REPORT ON AGENDA ITEMS

Report on Agenda Item 1

Review and follow-up of the conclusions of the Thirteenth Meeting of APIRG RVSM/RNAV/RNP Task Force (RVSM TF13) Meeting and review of the actions taken by APIRG/16 Meeting

1.1 Under this Agenda Item the meeting reviewed and noted the action taken on the conclusions of the Thirteenth meeting of the RVSM Task Force. It reinstated conclusions which were still in force and proposed the action to be taken before the next Task Force meeting planned in the 3rd Quarter 2008. The revised conclusions appear in Part 1 of this report.

Report on Agenda Item 2

Review of major activities of the RVSM Task Force

2.1 The meeting was presented with several working papers relating to AFI RVSM covering the following:

- 2.1.1 Comprehensive ARMA Report on: CRA, NSP, FHA and the PISC
- 2.1.2 AFI RVSM State Readiness Survey
- 2.1.3 Status of ATS Letters of Agreement/Procedure (LoA/LoP)
- 2.1.4 Review of the Switch-over Plan
- 2.1.5 Review of the ANC WP relating to RVSM implementation.

AFI RVSM State Readiness Survey

2.2 The meeting reviewed the data on State Readiness to implement RVSM and decided that it was necessary that the document be sent back to the States to determine its accuracy. Other elements of concern were the publication of NOTAMs, AICs/AIP SUPPs, the revised Letters of Procedure/Agreement (LOPs/LOAs), refresher training, distribution of various RVSM documents, awareness campaign etc.

ARMA Safety and Consolidated Readiness Assessment Report

2.3 The meeting was apprised on the current status of various elements relating to safety assessment and readiness survey namely; Functional Hazard Assessment, Collision Risk Assessment, National Safety Plans, the Pre-Implementation Safety Case, consolidated readiness assessment, large height deviations, GMU Height monitoring program and monthly FIR Traffic and associated returns to ARMA. The meeting endorsed the ARMA assessment that:

- a) Sufficiently high proportion of operations, within the proposed RVSM band, will be conducted by approved operators and aircraft when RVSM is introduced.
- b) the continued timely and accurate submission of all ARMA data forms by all FIRs remains essential to the success of RVSM implementation in AFI.
- c) The PISC process and contributory documentation were complete. The Task Force directed the RVSM Project Management to finalise the ANC Working Paper on the PISC and that the working Paper be submitted to the ANC on the week of **19 June 2008**.
- d) The meeting noted that all the AFI States had completed and signed their National Safety Plans.
- e) The meeting reviewed and updated the Switch-Over Plan and its associated countdown schedule and the PMT to finalise for distribution to all States.

Communication

2.4 The meeting noted that in some States adequate and reliable communication was still below the desired standard for the implementation of RVSM. In this regard the Task Force directed the PMT to pursue this communication problem with the selected States through a survey. In view of serious lack of communication it was decided that weekly teleconferences would be organised to track the progress on communication and any other related issues. The PMT was directed to make the final decision to implement RVSM on **25 September 2008**. The decision would be made by the PMT at the end of July 2008. The meeting concluded it was necessary to include IFALPA and IFATCA in the weekly teleconferences (TELCONs).

Collection of Safety Assessment Data

2.5 The Task Force called for States to continue collection of ARMA traffic data by all FIRs with the timely and accurate submission thereof to the ARMA.

2.6 In view of the discussions on Agenda Item 2, the following conclusions 14/1,14/2,14/3,14/4, 14/5, 14/6,14/7,14/8,14/9,14/10,14/11,14/12,14/13, 14/14 and decision 14/1 were formulated and their contents are at Part 1 to this report.

Report on Agenda Item 3**Review and update the AFI RVSM Strategy/Action Plan**

3.1 The meeting deliberated all the outstanding actions on this item and agreed that the updated AFI RVSM strategy/action plan at **Appendix E** be circulated to States for action and quality assurance.

3.2 The meeting agreed that the implementation of RVSM in AFI should be pursued in a pragmatic manner and in detail following the steps in the updated strategy/action plan. The meeting agreed that the strategy/action plan will be reviewed at each of the Task Force meetings.

In light of the discussions, the following conclusion was formulated:-

Conclusion 14/8: AFI RVSM Strategy/Action Plan

That the updated AFI RVSM Strategy/Action Plan at Appendix E be circulated to States for quality assurance.

Report on Agenda Item 4 and 5 by IATA**Relating to the implementation of RVSM in the AFI Region**

4.1 The meeting noted the Working Papers of IATA and IFALPA and concern relating to Communication in the AFI Region and addressed these concerns under Agenda Item 2.

RVSM/RNAV/RNP TASK FORCE 14 MEETING LIST OF PARTICIPANTS

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STATES	National Programme Manager	AIC	LOA/ LOP	NSP	AFI Safety Policy	ATC OPS Manual	A/C RVSM Readiness	ATC Training	Pilot Training	State A/C Approval	Legis lation	ARMA traffic Forms	National Switch over Plan	Civil/ Military Coordination	Seminar
Malawi	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mauritania	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mauritius	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Morocco	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mozambique	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Namibia	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Niger	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Nigeria	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Réunion	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Rwanda	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sao Tome and Principe	Y	Y	Y	Y	Y	Y	N/A	Y	N/A	N/A	Y	Y	Y	N/A	Y
Senegal	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Seychelles	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N/A	Y
Sierra Leone	Y	Y	Y	Y	Y	Y	N/A	Y	N/A	N/A	Y	Y	Y	N/A	Y
Somalia (CACAS)	Y	Y	Y	Y	Y	Y	N/A	Y	N/A	N/A	N/A	Y	Y	N/A	Y
South Africa	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sudan	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Swaziland	Y	Y	Y	Y	Y	Y	N/A	Y	N/A	N/A	N/A	Y	Y	N/A	Y
Tanzania	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Tunisia	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Togo	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Uganda	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Zambia	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Zimbabwe	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Note: Y –YES (action completed)

N-No (Action not yet completed)

N/A Not Applicable

**PISC (not attached, available in
website:www.icao.int/esaf/rvsm_documents.html)**

AFI RVSM SWITCH - OVER PLAN T -24 ToS T+24

AFI RVSM SWITCHOVER PLAN

EXECUTIVE SUMMARY

The AFI RVSM Task Force has provided guidance material for the States Switchover Plans so that they can refer to and adapt to their own local requirements. The AFI Functional Hazard Assessment final version, as accepted by Task Force 6, was referred to as guidance material when compiling the AFI Switchover Plan.

The switchover document satisfies the identified major switchover hazards resulting from the Functional Hazard Assessment that will need to be considered in order to accomplish a safe and successful switchover from CVSM to RVSM at time of switchover.

The switchover plan only addresses the switchover period and does not address the timelines as reflected in the action plan required to implement RVSM. The actions to RVSM implementation should be considered as the RVSM Task Force timetable that is issued periodically by the Task Force and lodged with the ARPO.

RECOMMENDATIONS

It is recommended that States:

- Review the switchover plan, against their own detailed switchover plan and incorporate any amendments as required.
- Action any additional requirements as issued periodically by the ARPO appropriate to the States switchover plans.

ARPO
ICAO ESAF
NAIROBI KENYA

AFI RVSM SWITCHOVER PLAN

1. INTRODUCTION

- 1.1 The AFI RVSM Task Force has provided a Switchover Plan for States to adapt to their own local requirements. The principle concerns of the Aviation Community have been addressed in the AFI Switchover Plan. This document should be referred to by States/FIR's to produce a plan that will be relevant to their ACC. This will in effect mean that there will need to be greater detail for individual actions within each FIR.
- 1.2 The Safety Case, with special reference to the CRA and TLS, would have been presented, and assurances provided that the level of safety preparedness of the States as reflected in the NSP's is sufficient for the task.
- 1.3 The process will culminate in the switchover from CVSM to RVSM at Time of Switchover (ToS), which will require specific attention to ensure a safe and effective changeover with the minimum disruption to the flow of air traffic. At the ToS the whole of the RVSM airspace will be in a transition phase for controllers and aircrews until it is reported that all aircraft are at the required RVSM FLAS.
- 1.4 The ARMA and ASECNA (via WACAF) will serve as the focal points of contact during the switchover period. ASECNA will be required to report all significant operations/events relating to the switchover, in the ASECNA area of operations to the ARMA.

2. ACTIONS PRIOR TO ToS AFI RVSM SWITCHOVER T-24

- 2.1 AFI RVSM implementation readiness reporting will continue throughout the switchover period with the National Program Managers reporting to the ARMA.

2.2 Airspace

It is essential that there is a stable airspace configuration during the Switchover period from CVSM to RVSM. The stability of the airspace will also require the utmost co-operation from military organizations.

2.3 Flight Planning

Flight planning, will continuously be checked during the switchover period for irregularities including incorrect RVSM status in Flight Plan and the flight level in the filed ATC Flight Plan not being in accordance with FLAS.

Within the switchover period there will continue to be increased contact between Aircraft Operators and ATS and the overall awareness as to the necessary flight planning and approval requirements for entry into RVSM airspace will be reinforced. Warnings will be provided to non-RVSM approved aircraft that would incorrectly penetrate AFI RVSM airspace.

Aircraft Operators and ATS should note that the submission of RPLs will require specific and separate attention. Operators of RVSM approved aircraft shall indicate the approval status by inserting the letter W in Field 10 of the ICAO FPL, regardless of the Requested Flight Level (RFL). From **28 August 2008**, ATS may invalidate a flight plan that does not comply with the RVSM requirements at ToS.

2.4 Civil/Military Coordination

Military exercises during switch over period should be suspended as per the FHA. If they do need to take place they should be coordinated with the greatest of care.

2.5 Ground Communications

During the switchover period redundant ground communication facilities must be available and ready for immediate use and adequately supported by competent technical staff.

2.6 Letters of Agreement/Procedures LOAs/LOP's.

States/FIR'/ACC's will ensure that the current LOA/LOP is easily accessible for reference purposes during the Switchover period. The following points should be carefully and continuously reviewed with regard to:

- FLAS for consistency with RVSM
- RVSM status of aircraft on the flight plan and if in doubt verify information with ARMA

3. **AWARENESS CAMPAIGN**

- 3.1 During the switchover period operators should be reminded of the flight planning requirements as well as the requirement of RVSM operator/aircraft approvals in order to operate within the AFI RVSM airspace.

4. SWITCHOVER (25 September 2008) ToS

4.1 Switchover

A prime activity of the switchover period will be the switchover from CVSM to RVSM.

- Non RVSM approved flights airborne in the immediate period prior to the switchover may be adjusted to their new levels below FL290
- Operators must manage contingency fuel requirements as appropriate.
- At ToS, aircraft will be reassigned to their new levels.
- Operation above FL410 will not be permitted during the specified interval during the Switchover period by non RVSM approved aircraft.

4.2 Timing of Change.

The AFI RSVM Task Force has conducted a traffic analysis to determine a quiet and stable period, which confirmed the suitability for the switchover at 0001 HRS (UTC) 25th September 2008.

4.3 Aircraft in Flight at Time of Switchover.

The sequence of events at switchover will be:

- Warning of Switchover from CVSM to RVSM by all ground stations
- Implementation of Switchover from CVSM to RVSM by all RVSM approved aircraft and the exclusion of all non-RVSM approved aircraft. State aircraft will be managed accordingly.
- An on going verification of Operator/Aircraft approval status
- Heightened vigilance for any irregularities and reporting to ARMA

Inevitably, there will be a mixed population of air traffic being handled at the time of switchover however preparations to limit the amount of non RVSM aircraft should be increased prior to the switchover.

Repeated broadcasts of the pending switchover will be made to aircraft in flight commencing 45 minutes before switchover. Phraseology for broadcast as an example is:

“All stations, All stations, (ACC identification) Control Broadcast, RVSM operations commence at time 0001 HRS (UTC) 25th September 2008.”

4.4 Flow Management.

ACC's should apply flow management during the switchover period if required.

4.5 Staffing Levels at Time of Switchover.

- ACC staffing will be a major focus of attention with a need for back-up staff, engineering staff and in particular software support as reflected in the FHA.
- Comprehensive briefings will be provided by supervisors to all operational staff during ToS.
- ACC management shall suspend operational training during the switchover period.

4.6 Weather Phenomena during Switchover Period

Any adverse weather phenomena, sand storms or volcanic activity will be reported immediately to the ARMA during the Switchover period to assist with contingency planning.

4.7 Contingency Planning.

Contingency plans are already in place for the normal operation of ACCs. The RVSM ATC manual provides some guidance on contingency procedures for degradation of aircraft equipment associated with height keeping or the occurrence of weather phenomena, which directly affect the ability of aircraft to maintain their allocated flight level.

ACCs should therefore review their contingency arrangements prior to switchover and then have them readily available during the switchover period for any eventuality. Various failure conditions will have to be considered.

4.8 Hazard Identification and Mitigation.

National Safety Plans shall satisfy the requirements of the AFI FHA Appendix E.2 (AFI RVSM Switchover Period) and Appendix F.2 (allocated safety requirements for AFI RVSM Switch over period.)

5. **IMMEDIATE POST IMPLEMENTATION PHASE (SWITCHOVER – 25th September 2008 PLUS 24 HOURS**

Twenty four hours after the introduction of RVSM each FIR will be required to provide a report to ARMA. FIR's experiencing problems or envisaging problems will report as such so that remedial action can be suggested. The report shall also include any large height deviations, wake vortex encounters and any other reportable incident brought about by the implementation of RVSM.

6. CONCLUSION

- 6.1 The AFI RVSM Task Force has adopted this SWOP as guidance material for application/publication by all AFI States.
- 6.2 National Program Managers must act on any additional requirements as issued periodically by the ARPO appropriate to the States switchover plans.
- 6.3 The Switchover from CVSM to RVSM will require further activity within States with further guidance and direction provided to ACCs by their Civil Aviation Authorities. Aircraft Operators will also need to note the flight planning aspects and the operational aspects of the switchover.

THE AFI RVSM QUICK RESPONSE TEAM

The AFI RVSM Quick Response Team is described as follows:

ARMA

Location: South Africa, Johannesburg Air Traffic Control Centre; Central Airspace Management Unit; ARMA. On call at the above location will be;

ARPO, ARMA, ATNS; IATA

Tel No.: +27 11 928 6506

Fax: +27 11 928 6420

Email: Afirma@atns.co.za

SAT Phones: Contact details will be made available when NPM's are notified

Mobile No's: Contact details will be made available when NPM's are notified

FIR's Reporting to ARMA

Accra, Addis Ababa, Asmara, Beira, Cairo, Cape Town, Dar es Salaam, Entebbe, Gaborone, Harare, Johannesburg, Johannesburg Oceanic, Kano, Khartoum, Luanda, Lilongwe, Lusaka, Mogadishu, Mauritius, Nairobi, Roberts, Seychelles and Windhoek.

ASECNA HEAD OFFICE

Location – Senegal; ASECNA Head Office (Dakar, Yoff near Earth Station). On call at the above location will be;

ICAO WACAF ATM Officer, ASECNA, IATA

Tel No: +221 33820 7546 Fax: +221 33820 7546

Email: rvsm.switchover@asecna.org

SAT Phones: Contact details will be made available when NPM's are notified

Mobile No's: Contact details will be made available when NPM's are notified

FIRs Reporting to ASECNA

Algiers, Antananarivo, Brazzaville, Dakar, Kinshasa, Ndjamena, Niamey and Tripoli.

RVSM SWITCH OVER PLAN: (Countdown).

NO.	TASK IDENTIFICATION	DURATI ON	START	END
1.	Sign the text to nominate the persons in charge of FIR switch over activities.	1 day	Tue. 5/6/08	Tue. 5/6/08
2.	List key persons and display it in ACC.			
3.	Carry out the operation checks of the centre by Fax, email and AFTN messages exchange with the Quick Response Team Point of Contact (ARMA and ASECNA) at the appropriate centre and the adjacent ACCs and military.	14 days	Mon. 09/06/08	Sun. 22/06/08
4.	Prepare and publish an AIC requiring the mention of RVSM status on all flight plans with effect from 25 th August 2008. Publication to be issued at AIRAC date of 3 rd July 2008	11 days	Mon. 23/06/08	Thu. 03/07/08
5.	Carry out additional operation checks of the centre by Fax, email and AFTN messages exchange with the Quick Response Team Point of Contact (ARMA or ASECNA) at the appropriate centre and the adjacent ACCs and military if required.	3 days	Tue. 08/07/08	Thu.10/07/08

NO.	TASK IDENTIFICATION	DURATI ON	START	END
6.	Simulate switchover exercise. ACCs test software changes to accommodate RVSM are in place and functional.	3 days	Tue.15/07/08	Thu.17/07/08
7.	Prepare and publish AIP Supplement suspending operations above FL410 of non RVSM aircraft for two (2) hours before and after ToS. Publication be issued at the AIRAC date of 31 st July 2008	7 days	Thu. 24/07/08	Thu. 31/07/08
8.	Prepare and publish an AIP Supplement prohibiting the non RVSM aircraft within RVSM airspace (FL 290 and FL410) from 24 th September 2008 at 22h01 UTC. Publication be issued at the AIRAC date of 31 st July 2008			
9.	Prepare and publish an AIP Supplement Suspending use of East Bound RVSM FL 310, 350, and 390 on 25 th September 08 for two (2) hours after ToS. Include diagram of Flight Level Allocation System (FLAS) 2008 from the date of the implementation of RVSM. Publication of AIP supplements to be issued by at the AIRAC DATE OF 31 st July 2008.			
10.	Update and sign all letters of the agreement/ procedures by integrating the RVSM requirements with effective date on 25 th September, 2008	56 days	Thu. 31/07/08	Thu. 25/09/08
11.	Organize a particular awareness campaign to address the military	10 days	Tue. 26/08/08	Fri. 12/09/08
12.	Ensure that no major modification to the ATS equipment will be carried out during the month of September 2008	23 days	Mon. 08/09/08	Tue. 30/09/08
13.	Prepare and publish a Trigger NOTAM two (2) weeks before ToS notifying the implementation of RVSM and relevant procedures to be applied.	2 days	Tue. 09/09/2008	Wed. 10/09/08
14.	Ensure that official documents e.g. NSP, SWOP, FLAS etc are available in all the structures concerned	7 days	Mon. 22/09/08	Sun. 28/09/08
15.	Send a Fax /Email to ASECNA and ARMA with a copy to ICAO confirming that the ACC(s) is/are ready for switchover to RVSM (activity of NPM)	1 day	Mon. 22/09/08	Mon. 22/09/08

NO.	TASK IDENTIFICATION	DURATI ON	START	END
16.	Activate the ACC implementation Team in accordance with the plan developed for the Team.			
17.	Provide daily the situation of the operating condition of the equipment requirements;			
18.	Adjust the ACCs staffing in order to provide extra personnel;			
19.	Ensure Meteorological staff are available in case of emergency due to adverse meteorology	7days	Mon. 22/09/08	Sun. 28/09/08
20.	Refresh the operational staff on the duty in RVSM implementation	7 days	Mon. 22/09/08	Sun. 28/09/08
21.	Read back systematically all flight levels exchanged in conversations between controllers, or controller- pilot		Tue. 23/09/08	Continuous
22.	242201 -250201 UTC suspend operations above FL410 for non RVSM aircraft	1 day	Thu. 25/09/08	Thu. 25/09/08
23.	242201 UTC: Remove non-RVSM aircraft from RVSM airspace			
24.	242315 UTC: Controllers transmit to all aircraft: "Attention all aircraft x2, RVSM operations will begin at 0001 UTC" (Repeat this at 2330; 2345 & 2355)			
25.	At 0001 UTC Start allocating RVSM flight levels to aircraft except FL310, 350, and 390			
26.	0001-0200 UTC: Suspend use of East Bound RVSM FL 310, 350, and 390.			
27.	0001-0200 UTC: Allocate only RVSM FL 290, 330, 370, and 410 to East Bound flights.			
28.	At 0201 UTC: Start allocating without flight level exception RVSM flight levels in accordance with FLAS			
29.	Apply 2000ft separation in emergency case and keep using RVSM FLIGHT LEVELS			

AFI RVSM STRATEGY-ACTION-JUNE 2008					
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, Kenya, 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 technical tasks	21/11/03	Completed	RVSM/ITF2	Completed 21 Nov 2003
5	Investigate methods of funding any outside assistance required	31/03/04	On going	ICAO/IATA	To address future funding as/when required
6	Finalize the RVSM Implementation Strategy/Action Plan	31/12/03	Completed	ICAO	Sent 05 Dec 2003
7	Circulate RVSM Implementation Strategy/Action Plan for comments from States	5/01/04	Completed	ICAO	Sent 05 Dec 2003
8	<ul style="list-style-type: none"> a) Doc 7030 amendment Proposal b) Circulate proposal to States c) ANC Approval 	Submitted to ANC in March 2007	<ul style="list-style-type: none"> Completed Completed <u>Completed</u> 	ICAO ICAO ICAO	Approved in June 2007
9	States comments on RVSM implementation Strategy/Action Plan	31/-3/04	Completed		

10	Regional RVSM informational Website	31/03/04	Completed		www.icao.int/esaf/RVSM
11	RVSM Seminar/RVSM ITF3	19-22/04/04	Completed		
12	RVSM Seminar /RVSM/ITF/4	26-30/07/04	Completed		
13	Coordination and harmonization of procedures with adjacent Regions		completed	ICAO and AFI RMA	
14	States to send AIC to notify their intention to Implementation of RVSM	Oct 05	completed	ICAO/States	
15	Determine target AIRAC implementation date (AIP Supplement to be published)	October 2007	completed	ICAO/States	RVSM Implementation 25 September 2008
16	Regional RVSM implementation status reports	On-going	On -going	ICAO	Monthly Report to website
17	State Readiness Assessment,	October 2006	On-going	ICAO	Reviewed every TF meeting (Last review TF/14 May 2008)
18	RVSM/ARTF/5	15-16/11/04	Completed		
19	RVSM/ARTF/6	25-27/05/05	Completed		

20	RVSM/ARTF/7 ATS/AIS/SAR/SG/8	08-09/08/05 10-12/08/05	Completed Completed		
21	RVSM/ARTF/8 and RVSM Seminar	10 – 14 October 2005	Completed		
22	RVSM/ARTF/9 meeting	April 06	Completed		
23	RVSM TF/10 meeting and GO/Delay meeting	June 06	Completed		
24	Publish Trigger NOTAM	TBD	Pending	States	States to be advised of date
25	Develop/Publish National SWOP	October 06	completed Progress	States	SWOP and Countdown schedule sent to States on 6 June 2008
26	RVSM Task Force 11 Meeting	30/11-1/12/06	Completed	All	Nairobi
27	RVSM Task Force 12 meeting	23-24 April 2007	Completed	All	
28	RVSM Task Force 13	12-14 September 2007	Completed	All	
29	RVSM Task Force 14	May 2008	completed	States /ICAO	Nairobi
30	RVSM Task Force 15	August 2008		States /ICAO	

Aircraft Operations and Airworthiness					
31	Regional OPS/Airworthiness RVSM Guidance	21/11/03	Completed		
32	Develop regional Pilot Training RVSM Guidance Material	30/04/04	Completed	IATA	Sent to Operators for action
33	Provide pilot training RVSM guidance material to specific States	30 July 06	Completed		Sent to States
34	Aircraft Operational approval process guidelines	31/05/04	Completed		Sent to States
35	Aircraft RVSM Approval Survey	In progress	On -going	ICAO/States	Continuous and updated at every TF meeting (Reviewed at TF/14- May 2008)
36	Ensure aircraft/operator approval process	In progress	On-going	ICAO/ARMA	Updated at every TF meeting Reviewed at TF/14- May 2008
37	Ops/Airworthiness seminar	Nov 06	Completed	ICAO	

Air Traffic Management

38	National RVSM plan	31/03/04	On-going	States, ICAO	All States completed and signed March 2008
39	National Safety Plan Validation Panel	March 06	Completed	NSPVP	
40	APIRG/15 Consideration of TF Reports	25-30-9-05	Completed		
41	Regional ATC OPS Manual	Apr 06	Completed	States	States to incorporate in National documentation
42	Determine the limits of RVSM airspace	30/06/04	Completed	States/ICAO	
43	Regional ATC Training Program & Guidance Material	July 06	Completed	ASECNA/ATNS	
44	Letters of Agreement/Procedure (LOA/LOP)	3 months before Time of switch over	On-going	States	States to incorporate RVSM procedures.
45	Civil/Military coordination	Continuous	On-going	States	In National RVSM Plan
46	National RVSM Regulatory Material	October 06	On-going	States	Included in the National Safety Plan and are in the LOAs/LOPs and AIPs.

47	Collect weather and turbulence data for analysis	On Going	On-going progress	ARMA ICAO/States	Does not affect RVSM implementation
	RVSM Safety Assurance				
48	State review of implementation of CNS infrastructure to support provision of ATC Service in the AFI RVSM airspace	December 2007	On- going	All States	Reviewed at every TF meeting (reviewed at TF/14 May 2008). Requirement met.by all States except 3.Follow up by PMT on going final findings By Mid July 2008.
49	Review of the provision of ATC Service in the AFI RVSM Airspace	December 2007	On -going	All States/ICAO	Reviewed By TF/14 May 2008 - Requirement met
50	Conduct data collection and compile readiness assessment	In progress	On-going	ARMA/States	States to continue supplying data as required by ARMA to support Safety Assessments
51	Develop AFI RVSM Safety Policy	30/06/04	Completed	States	All states have met the requirement by Publication

52	a) Submit final NSP's after validation comments have been taken into account	October 06	Completed	States	All States completed March 2008.
	b) Conduct NSP workshops facilitated by ATC experts	July 05	Completed		
	c) Update State readiness document	October 06	On going	ICAO	TF/14 reviewed and another review in progress June 2008
53	RVSM Functional Hazard Assessment (FHA)	4-8/04/05	Completed		
54	Validate Functional Hazard Assessment	31/05/05	Completed		
55	RVSM Collision Risk Assessment II	Oct 06	completed	ARMA/ICAO//Consultants	
56	Validate Collision Risk Assessment	August 2007	completed	Approved by TF/13	Approved by APIRG
57	RVSM Collision Risk Assessment III	January 2008	completed	ARMA/ICAO/Consultant	
58	AFI Pre-Implementation Safety Case	September 2007	Completed	ARMA/ICAO/Consultants	To be submitted to ANC in June 2008
59	AFI Pre-Implementation Safety Case: ANC	February/March 2008	Completed April 2008		PISC to be sent to the ANC for approval in June 2008.

60	RVSM Implementation date	25 September 2008	25 September 2008	States/ICAO	25 September 2008
61	Improved incident reporting and investigation to reduce incident rates to support positive CRA results	October 2007	On-going	States	States to provide record of incidents and remedial action for Safety Assessments
Monitoring Agency					
62	Evaluate options for setting up AFI RMA	21/11/03	Completed		
63	Identify an AFI RMA	21/11/03	Completed		
64	Establish an AFI RMA.	31/03/04	Completed		
65	Validate State readiness template	15/11/04	Completed		
Post Implementation Safety Case (POSC)					
66	Data collection to continue for submission to ARMA	Monthly	On -going	States	Data Collection to Continue after implementation
67	Evaluate system safety after implementation	6, 12 and 24 months	TBA	ARMA/ICAO	Compliance with AFI policy
68	Monitor system safety in adjacent Regions	Continuous	On -going	ARMA/ICAO	
