



WORKING PAPER

**SPECIAL AFRICA-INDIAN OCEAN (AFI)
REGIONAL AIR NAVIGATION (RAN) MEETING**

Durban, South Africa, 24 to 29 November 2008

Agenda Item 6: Development of a set of comprehensive work programmes in the air navigation field, aimed at improving efficiency of the air navigation system (Efficiency Committee)

FOLLOW-UP ON COMMUNICATION SHORTCOMINGS

(Presented by the Secretariat)

SUMMARY

This paper discusses the implementation of reduced vertical separation minimum (RVSM) in the AFI Region and addresses the need to continually improve communication shortcomings.

Action by the meeting is in paragraph 5.

1. INTRODUCTION

1.1 The Reduced Vertical Separation Minimum (RVSM) Task Force through its Project Management Team (PMT) carried out detailed work for RVSM implementation under an extensive Pre-Implementation Safety Case (PISC) described in WP/7. In addition, the PMT also began tracking and promoting the investigative follow-up of errors and deviations brought to its attention, on a regular basis, as a result of its efforts to implement RVSM. The PMT has been working on these matters through weekly teleconferences organized by the Air Traffic Management (ATM) Section at ICAO, Montreal. This weekly focus on deficiencies, errors and deviations has resulted in a decline in reported incidents and communications deficiencies.

1.2 PMT is made up of representatives from Kenya, Nigeria, South Africa, ARMA, ARPO, Agence pour la Sécurité de la Navigation Aérienne en Afrique et à Madagascar (ASECNA), International Air Transport Association (IATA), International Federation of Air Line Pilots' Associations (IFALPA) and the International Federation of Air Traffic Controllers' Associations (IFATCA), with support from ICAO Headquarters as well the ATM Regional Officers in Dakar and Nairobi. In addition, PMT has been fortunate to have had participating in the weekly telcons, representatives from Angola and the air traffic service (ATS) service provider from Democratic Republic of Congo (DRC) and Regie Des Voies Aeriennes, (RVA). Angola as well as DRC have been cooperating in making improvements to the communications infrastructure in their airspaces as a result of PMT activities. In the opinion of PMT great strides have been taken toward enhancing the safety of operations; however, PMT also believes that with additional follow-up there can be further improvement.

1.3 In the post-RVSM implementation period, data will continue to be collected and analyzed in order to keep the highest safety levels operationally. This data will be provided to ARMA by operators, States, other regional monitoring authorities and stakeholders in general. ARMA, on a

yearly basis will report on the safety level of RVSM operations to the scrutiny group that will address any deficiency report and propose and implement mitigating actions. The actions proposed hereunder, are in addition and in direct support of ARMA regular activities in support of RVSM operations.

2. DISCUSSION

2.1 During the 14th meeting of the Task Force held in Nairobi 26 to 28 May 2008, PMT was given the authority to make the go/no-go decision on behalf of the task force, for RVSM implementation on 25 September 2008. The reason that the task force opted not to make a "go" decision at that meeting was originated by reservations expressed as follows:

- a) poor frequency coverage/lack of air-ground communications or non-response from controllers when pilots attempt to contact ground stations. This was alleged to be specially troublesome in airspace over DRC and Angola; and
- b) compliance with APIRG Conclusion 16/38 which reads:

Conclusion 16/38 — Implementation of the required CNS infrastructure to support the implementation of RVSM in the AFI Region

That in view of the implementation of RVSM and provision of ATC service, States are urged to the required supportive CNS infrastructure namely; ATS DS circuits AMS and appropriate NAVAIDS as soon as possible, but not later than 3 July 2008.

2.2 As a result of the concerns, RVSM TF/14 suggested that the PMT concentrate its work on solving these two issues by holding weekly telcon sessions to review the status of improvements to the communications services in the AFI Region but with particular emphasis on deficiencies in DRC and Angola. In order to achieve its goal of deciding if RVSM would be implemented on 25 September 2008, PMT felt that it would be necessary to specifically measure the status of communications quality in the two States. In order to carry this out, PMT opted to conduct a communications survey in each of those States. The communications surveys consisted of written reports filed by aircraft operators at the conclusion of flights in the AFI Region as well as through reports by controllers from the Kinshasa (DRC) and Luanda (Angola) FIRs.

2.3 The reports by operators were compiled over a period of three weeks and reviewed by PMT on a weekly basis. Although the reports continued to show some problem areas, PMT was gratified to note that an improving trend was seen in the communications reliability in the region. Even though the user reports were only compiled for three weeks, the communications quality reports by controllers in both States continued to be collected through August into September 2008.

2.4 In a similar fashion to the reports filed by operators, the feedback from controllers indicated that although there were still specific areas along some routes that had some problems, improvements were seen overall. It was noted that a relocation of transmitters and facilities which took place during the survey period contributed significantly to the improvement in communications quality. Additional improvements are being forecast for December 2008 when certain satellite relays for communications are expected to be in place.

2.5 In relation to 2.1 a) above, PMT concluded that although enough progress to adequately support implementation of RVSM in 25 September 2008 was seen, a future plan of formalized follow-up activities to RVSM implementation was necessary and should be set up by regional agreement.

2.6 In relation to 2.1 b) above, the group received a report from the Communications Navigation Surveillance (CNS) Regional Officer from the Nairobi office who informed PMT that APIRG Conclusion 16/38 had been satisfied and consequently it would no longer be an impediment to

the implementation of RVSM. Specifically, the regional officer informed the meeting that the intent of APIRG Conclusion 16/38 was the installation of certain satellite communications infrastructure in some States and that this task had been accomplished.

3. CONCLUSION

3.1 PMT agreed that it had seen significant improvements during its period of telcons. In this context, PMT agreed that it would be desirable to continue with this type of activity but in a more formalized manner in the future. Specifically, it was the opinion of PMT, that an endorsement of the formalization of future activities by SP AFI RAN meeting would be desirable.

3.2 PMT further felt that although the improvements seen so far would support implementation of RVSM on 25 September 2008 as proposed, a continuing improvement process would need to be maintained in order to keep a desirable level of safety during RVSM implementation as well as to cope with future growth. To this end, PMT through this paper is proposing that the RAN take note of the actions taken so far and endorse the following activities aimed at the establishment of a formal process of follow-up to the implementation of RVSM.

4. ACTIONS TAKEN AND PROPOSED RVSM FOLLOW-UP ACTIVITIES

4.1 At the direction of PMT and in order to ensure the continued safe operation of RVSM, the following actions have been or will be taken:

- a) ASECNA provided their ionospheric mitigation action plan for use by all other AFI States. Additionally, ASECNA will provide as needed telephonic advice or if necessary, training to those States that so require it;
- b) State letters were issued by the regional offices giving States guidance on the issuance of the appropriate NOTAMS or AIPs outlining the high frequency (HF) use and how ionospheric mitigation is being applied. In this context, a reminder was sent to crews to attempt to utilize HF frequencies below 5 MHz in the evening hours;
- c) regional offices sent another State letter requesting that States publish a NOTAM and/or AIP supplement giving aircraft appropriate ACC telephone numbers for use when needed by aircraft equipped with satellite telephones; and
- d) IATA and IFALPA circulated the ionospheric procedures documents among their membership to make them aware of the procedures in use in AFI airspace.

5. ACTION BY THE MEETING

5.1 In light of the above and considering the need to continue to make improvements to the air navigation system in the AFI Region following implementation of RVSM, the meeting is invited to adopt the following recommendation:

Recommendation 6/x — Follow-up on communication shortcomings

That a formalized process be established consisting of a task force or group to be named, under the guidance of APIRG, through the ATS subgroup and the project management team.