



**International Civil Aviation Organization**  
**First Meeting of the SAT/14 Task Force (SAT14/TF/1)**  
**[Sal, Cape Verde 10– 12 June 2009]**

**Agenda Item 4: Implementation of AORRA**

**Full implementation of AORRA Airspace**

*(Presented by the International Air Transport Association)*

<b>Summary</b>
This paper addresses the need for additional direct transitions to/from AORRA airspace following the implementation of AORRA Phase II in order to optimize the benefits to be derived from random routing in the South Atlantic. It also proposes to combine the remaining implementation phases into a single taking into consideration the experience gained by the FIRs concerned during the previous phases.
References:
<ul style="list-style-type: none"> <li>• SAT/14 Report</li> <li>• SP AFI RAN 2008 Report</li> </ul>

**1. Introduction**

1.1. After noting the outcome of SAT/14 Meeting, the ICAO SP AFI RAN (2008) had recommended that ICAO facilitate and coordinate implementation of all phases of AORRA and assist in determining a suitable date for AORRA Phase II implementation. AORRA Phase II was successfully implemented on 12 April 2009 by Angola, Brazil, Ghana and ASECNA.

**2. Discussion**

2.1. The meeting's attention is drawn to the following key issues related to on AORRA implementation.

***Issues related to AORRA Phase I implementation***

2.2. SAT/14 agreed to work with IATA to develop Entry/Exit waypoints to facilitate access to AORRA airspace.

- IATA would provide an updated list of entry/exit points.
- Uruguay and South Africa confirmed their willingness to incorporate these new waypoints immediately in order to enhance the flight tracks.
- New Entry/ Exit waypoints on the eastern area of AORRA (Angola, Senegal) would connect new RNAV routes (across Africa) currently under development.

- 2.3. There was also a need to enhance the existing airway structure and flexibility between the eastern AORRA boundary and continental Africa airway structure. Focus on flexible support for routing between AORRA boundary and high volume traffic areas, in particular provide published airway support for routing between Cape Town and waypoint ALDOV (on Johannesburg Oceanic / Cape Town FIR boundary). South Africa agreed to work with IATA and DL on this initiative.

***Issues related to AORRA Phase II implementation***

- 2.4. A first set of direct route transitions to/from AORRA airspace was coordinated and published by the concerned Air Navigation Service Providers (ANSPs). However, users need additional direct transitions to increase flexibility and efficiency of operations.
- 2.5. In coordination with users, IATA has identified additional direct route transitions that are required from Waypoints on the existing Airway structure to discrete Latitude/Longitude Waypoints on the new AORRA Northern and Eastern boundaries, in order to optimize random routing benefits. These are shown at Appendix A to this paper.

***Issues related to AORRA Phases III and IV implementation***

- 2.6. IATA proposed that AORRA Phases 2 to 4 should be combined and implemented by no later than March 2009 (See Appendix B). However, Senegal again objected to this proposal based on the need for their ATS to gain more insight and obtain lessons learned of AORRA.
- o As a result the meeting agreed to implement phase 2 on 18 December 2008 and phases 3 and 4 by no later than 18 December 2009.

***Issues related to all implementation phases***

- 2.7. All routes within the AORRA together would be suspended in order to allow full random routing operations and remove any misunderstanding of the application.

**3. Conclusion**

- 3.1. The meeting is invited to:

- 1) Review follow – up action taken on issues related to AORRA Phase I contained in Paragraphs 2.1 and 2.2 above;
- 2) Note the successful implementation of AORRA Phase II by Angola, Brazil, Ghana and ASECNA;
- 3) Request that, under the coordination of ICAO Regional Offices, States and Air Navigation Service Providers concerned (Angola, Ghana, Sao Tome and Principe, ASECNA and Roberts FIR) proceed with the implementation and publication of the above direct transitions to/from AORRA airspace by end of July 2009 (AIRAC date);
- 4) Agree to combine AORRA Phases III and IV into a single implementation phase to be completed by September 2009; and
- 5) Engage all States and ANSPs concerned to suspend all fixed routes within the AORRA airspace in order to allow full random routing operations and remove any misunderstanding of the application.

-END-

**Appendix A**

**Requirements for hook-up transitions from/to SAT AORRA Phase II**

**Abidjan FIS/Roberts/Dakar Oceanic FIRs**

ABJ - Direct - N00 00/W009 00  
ABJ - Direct - N00 00/W010 00  
ABJ - Direct - N00 00/W011 00  
ABJ - Direct - N00 00/W012 00  
ABJ - Direct - N00 00/W013 00

**Accra FIR/Abidjan FIS**

ACC - Direct - N00 00/W004 00  
ACC - Direct - N00 00/W005 00  
ACC - Direct - N00 00/W006 00  
ACC - Direct - N00 00/W007 00

**Accra FIR**

EBULI - Direct - N00 00/E005 00 (Need a Sao Tomo Exit WPT) EBULI - Direct - N00 00/E004 00  
EBULI - Direct - N00 00/E003 00 EBULI - Direct - N00 00/E002 00 EBULI - Direct - N00 00/E001 00  
EBULI - Direct - N00 00/E000 00

**Brazzaville/Accra FIRs**

DLA - Direct - GEBRO - Direct - EBULI  
DLA - Direct - RITIL - Direct - N00 00/E005 00 (Need a Sao Tome Exit WPT)

**Dakar Oceanic FIR**

TUROT - SIBAX - N00 00/W017 03 59.5284  
TUROT - Direct - N00 00/W018 04 44.5132 (Airway UL435) TUROT - Direct - N00 00/W019 00  
TUROT - Direct - N00 00/W020 00 TUROT - Direct - N00 00/W020 59 43.5284 (Airway UA572)

**Luanda FIR**

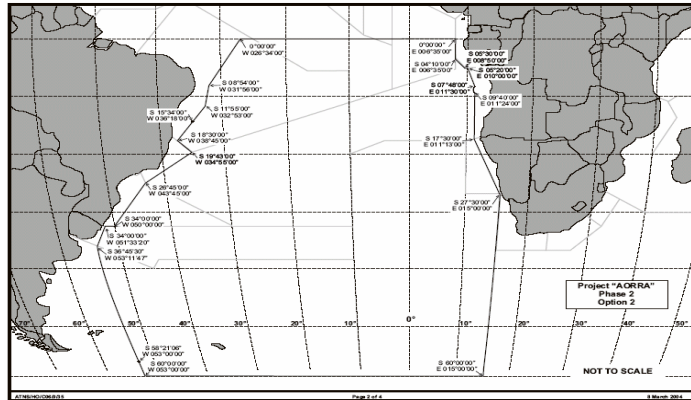
MUNDA - Direct - S06 00/E010 24  
MUNDA - Direct - S07 00/E011 00  
MTI - Direct - S07 00/E011 00  
MTI - Direct - NATAR - Direct - OPAPO  
BUDEL - Direct - IMLEX - Direct - S09 00/E011 13 VNA - Direct - S09 00/E011 13 VNA - Direct - S11  
00/E011 24

**Roberts/Dakar Oceanic FIRs**

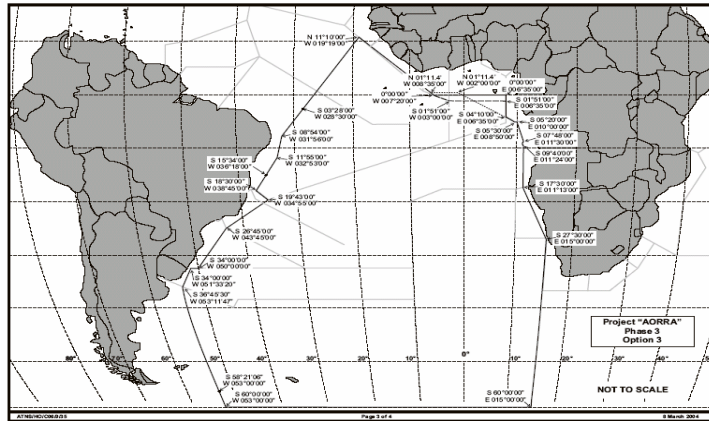
ROB - Direct - N00 00/W013 00  
ROB - Direct - N00 00/W014 00  
ROB - Direct - N00 00/W015 00  
ROB - Direct - N00 00/W016 00  
ROB - Direct - N00 00/W018 00  
ROB - Direct - N00 00/W019 00  
ROB - Direct - N00 00/W020 00

Appendix B

Phase II



Phase III



Phase IV

