

## APPENDIX N1

### TERMS OF REFERENCE, WORK PROGRAMME AND COMPOSITION OF THE SAT ATM WORKING GROUP (ATM/WG)

<p>1. Considering the evolutionary implementation of CNS/ATM systems in areas of routing AR1/HA1 and AR2/HA8 <i>as defined in the Global Air Navigation Plan (ICAO Doc 9750)</i>, the Task Force should explore ways and means to achieve further enhancements in ATM capacity and aeronautical telecommunications, and to implement CNS/ATM elements taking into consideration the timescales agreed for these areas of routing. It will be guided by the requirements identified in the AFI and CAR/SAM CNS/ATM Implementation Plans.</p> <p>2. <i>Note: The Task Force will adopt a pragmatic approach and may set up auxiliary bodies to carry out specific tasks, as necessary.</i></p>		
<b>WORK PROGRAMME</b>		
TASK No.	SUBJECT	TARGET DATE
1.	Analyze ATM deficiencies and make proposals for their elimination.	Continuous
2.	Monitor pre-implementation/post-implementation safety assessments (as applicable) for RVSM and RNP operations in the South Atlantic, including adjacent areas.	<i>Continuous</i>
3.	Study and evaluate RVSM, RNP/RNAV procedures applicable in the AFI/CAR/SAM and EUR/SAM Interface areas.	Continuous
4.	Monitor flight plan availability and propose appropriate corrective measures.	Continuous
5.	Oversee FANS 1/A system performance monitoring to ensure that the system continues to meet safety and interoperability requirements and that operations and procedures are working as specified.	Continuous
6.	Harmonize ADS/CPDLC programmes developed by SAT States/FIRs and analyze cost-benefit aspects related to their implementation.	Continuous
7.	Maintain ADS/CPDLC operational guidance material updated.	Continuous
8.	Conduct studies related to the implementation of the Global ATM Operational Concept and other enabling concepts within the SAT area.	Continuous
9.	Continue studies related to the extension of the AORRA airspace.	<b>SAT21</b>
10.	Analyze the operational requirements of AIDC implementation in South Atlantic	<b>SAT21</b>
11.	Analyze the feasibility of ITP application in the South Atlantic	<b>SAT21</b>
<ul style="list-style-type: none"> <li>• Note: The ATM/WG should take appropriate action on pressing issues and submit its proposal to the SAT Group meeting.</li> </ul>		
<b>COMPOSITION</b>		
<ul style="list-style-type: none"> <li>• <i>The Task Force of multi-disciplinary nature shall comprise of experts from States responsible of FIRs in AFI and SAM routing areas AR1/AH2 and AR2/AH8 as defined in the Global Air Navigation Plan (ICAO Doc 9750), and experts from adjacent FIRs and international organizations.</i></li> <li>• <b>Rapporteur: Spain</b></li> <li>• <i>Tasks Nos. 5 and 7 are assigned to the SAT established FANS-1/A Interoperability Team (FIT) with <b>South Africa</b> as Team Leader.</i></li> <li>• <b>Working arrangements:</b> <i>The ATM/WG should complete its work and submit its proposal to the SAT Group. The ATM/WG should work through electronic correspondence prior to meetings.</i></li> </ul>		

**APPENDIX N2**

**TERMS OF REFERENCE, WORKING PROGRAMME AND COMPOSITION OF THE SAT STUDY GROUP ON THE IMPROVEMENT OF THE AIRSPACE STRUCTURE IN THE EUR/SAM CORRIDOR (IAS/SG)**

<ul style="list-style-type: none"> <li>To develop a strategy for the short-term, mid-term and long term for the implementation of a new airspace structure in the EUR/SAM Corridor with the end to improve the capacity and efficiency of the operations and to meet users needs.</li> </ul>		
<b>WORK PROGRAMME</b>		
<b>TASK No.</b>	<b>SUBJECT</b>	<b>TARGET DATE</b>
1.—	Analyze the current operational situation within the EUR/SAM Corridor taking into account statistics and users needs.	Completed
2.—	Explore ways and means to restructure the EUR/SAM Corridor airspace	Completed
3.—	Develop a short term plan using the current separation standards based on RNP10, including the implementation of new ATS routes.	Completed
4.—	Analyze the advantages of introducing unidirectional ATS routes.	Completed
5.	Study the feasibility of implementing RNP4, using ADS/CPDLC functionalities.	SAT/21
6.	Continue studies to implement a random routing area, using ADS/CPDLC functionalities.	SAT/21
7.	Develop necessary cost benefit analysis for the different options.	SAT/21
8.	Establish means to develop the safety assessment for the different implementation options.	SAT/21
9.	Develop an action plan for the different implementation options.	SAT/21
10.	Analyze the Report of the Airspace Concept Task Force	SAT/21
<b>COMPOSITION</b>		
<ul style="list-style-type: none"> <li>Brazil, Cape Verde, France, Portugal, Senegal, Spain, Trinidad and Tobago, United States, ASECNA and IATA.</li> <li><b>Rapporteur: Portugal.</b></li> </ul>		
<ul style="list-style-type: none"> <li><b>Working arrangements:</b> <i>The IAS/SG should take the appropriate action to complete its work and submit its proposals to the next meeting of the SAT Group. The IAS/SG should work through electronic correspondence prior to meetings.</i></li> </ul>		

## APPENDIX N3

### TERMS OF REFERENCE, WORK PROGRAMME AND COMPOSITION OF THE SAT CNS WORKING GROUP (CNS/WG)

1. Considering the CAR/SAM and AFI Air Navigation Plans, the SAT CNS/WG should explore ways and means of achieving further enhancements in ATM efficiency within areas of routing AR1/HA1 AR-2/HA8 *as defined in the Global Air Navigation Plan (GANP ICAO Doc 9750)*, by resorting to emerging technologies and, in particular, by taking advantage of rationalization, integration and harmonization of systems where appropriate.
2. Implementation of new systems should be sufficiently flexible to accommodate existing and future services in an evolutionary and cost-effective manner.
3. The associated institutional arrangements shall not inhibit competition among service providers complying with relevant ICAO Standards, Recommended Practices and Procedures.

#### WORK PROGRAMME

TASK No.	SUBJECT	TARGET DATE
1.	Analyze CNS deficiencies and make proposals for their elimination.	Continuous
2.	Review the report of the CAFSAT Network Management Committee	Continuous
3.	Undertake investigations on the lack of flight plans, including individual cases, with emphasis on the aeronautical fixed telecommunication network (links, switching centres, routing directory and transit time statistics).	Continuous
4.	Carry studies and make proposals to achieve end-to-end interoperability of ATM applications, in accordance with the ATM global operational concept.	SAT/21
5.	In accordance with CNMC conclusions and decisions evaluate the feasibility of using existing or emerging digital VSAT networks to support ATS data link applications in an ATN environment.	Continuous
6.	Considering the implementation time-frames in the AFI and SAM CNS/ATM implementation plans, address cost-benefit aspects for the use of CNS/ATM applications (as required).	Continuous
7.	In coordination with SAT ATM/WG, share relevant technical aspects of different ADS/CPDLC Systems to be implemented by SAT States addressing issues regarding work methodology, procedures, data interchange, maintenance, etc.	SAT/21
8.	Analyze all aspects related to the implementation of ATS Voice switching and signaling protocols (ATS-N5, VoIP) in the SAT area in accordance with guidance material contained in ICAO Relevant documents	SAT/21

#### COMPOSITION

- The CNS/WG being of multi-disciplinary nature shall comprise experts from States responsible of FIRs in the area concerned, experts from adjacent FIRs and international organizations and the aeronautical industry.
- **Rapporteur: Senegal.**
- **Task Team leaders: ASECNA (Tasks. Nos.3 and 4), South Africa (Task No.7), Argentina (Task 8)**
- **Working arrangements: The CNS/WG should complete its work and submit its proposal to the SAT. The CNS/WG should work through electronic correspondence prior to meetings.**