

INTERNATIONAL CIVIL AVIATION ORGANIZATION



**REPORT OF THE SIXTH MEETING OF THE
SAT FANS 1/A INTEROPERABILITY TEAM**

(SAT FIT/6)

(Recife, Brazil, 03 May 2011)

ICAO Western and Central African (WACAF) Office

The designations employed and the presentation of the 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.

TABLE OF CONTENTS

	Page
Table of Contents	i
History of the meeting	ii
Agenda	ii
List of Conclusions and Decisions	iii
Report on Agenda Item 1	1
Report on Agenda Item 2	1
Report on Agenda Item 3	1
Report on Agenda Item 4	3
Report on Agenda Item 5	4
Report on Agenda Item 6	4
Appendices	
A. : List of participants	A-1
B. : Status of implementation of SATFIT5 Meeting Conclusions	B-1
C. : Terms of Reference and work Programme of the FIT	C-1

PART I - HISTORY OF THE MEETING

1. Introduction

1.1 The Sixth Meeting of the SAT FANS 1/A Interoperability Team (FIT) was held at the Park Hotel, Recife, Brazil, on the 3rd May 2011, at the kind invitation of the Agencia Nacional de Aviacion Civil (ANAC) and Departamento de Control del Espacio Aéreo (DECEA) of Brazil.

1.2 Mr. Onofrio Smarelli, CNS Regional Officer from the ICAO South American Office, welcomed the participants at the opening of the meeting. He also thanked the Brazilian authorities for their kind invitation and all their efforts to host the meeting in such conducive conditions. Then he expressed his best wishes for a productive and successful meeting.

2. Officers and Secretariat

2.1 The meeting nominated Mr. Johnny Smith, ATNS, South Africa, as moderator.

2.2 Mr. Sadou MARAFA, ATM Regional Officer from the ICAO WACAF Office of Dakar, was the Secretary of the meeting. He was assisted by Mr. François Salambanga, CNS Regional Officer from the ICAO WACAF Office of Dakar and Mr. Onofrio Smarelli, CNS Regional Officer from the ICAO South American Office of Lima.

3. Attendance

3.1 The meeting was attended by thirty-eight (38) participants from eleven (10) ICAO contracting States namely, Angola, Argentina, Brazil, Cape Verde, Cote d'Ivoire, Portugal, Senegal, South Africa, Spain and Uruguay, and five (5) Organizations (ARINC, ASECNA, IATA, INSA and SITA).

3.2 The list of participants and their contact addresses is at **Appendix A** to this report.

4. Working languages

4.1 The meeting was conducted in the English language and the relevant documentation was presented in this language.

5. Agenda of the meeting

5.1 The meeting adopted the following agenda:

- Agenda Item 1: Adoption of the Agenda
- Agenda Item 2: Review of SAT/FIT/5 Report
- Agenda Item 3: Review of ADS/CPLC programmes and implementation activities in SAT FIRs
- Agenda Item 4: System performance monitoring and maintenance
 - a. Interoperability requirements
 - b. Safety monitoring aspects
 - c. Problem identification, reporting and resolution procedures
- Agenda Item 5: Review of the terms of reference of the FANS 1/A Interoperability Team and Future work programme
- Agenda Item 6: Any other business

6. Conclusions and Decisions of the meeting

LIST OF CONCLUSIONS AND CONCLUSIONS

Number	Title
Decision SAT FIT 6/1	<p>ADS/CPDLC implementation status in the SAT Area</p> <p>That SAT/FIT members that have not done so, provide the Rapporteur with ADS-C/CPDLC implementation and interoperability status in order to complete a follow up table that will be distributed to all.</p>
Conclusion SAT FIT 6/1	<p>ADS-CPDLC operations by Airlines</p> <p>That IATA continues encouraging Airlines to increase their level of participation in ADS-C/CPDLC operations in order to enhance safety and efficiency of operations within the SAT area.</p>
Conclusion SAT FIT 6/2	<p>CPDLC message set</p> <p>That ATS Units and Aircraft operators draw the attention of the controllers and flight crew members to the use of the preformatted message elements when ever applicable and strictly limit the use of free text messages to specific reports.</p>
Conclusion SAT FIT6/3	<p>CFRA</p> <p>That</p> <ol style="list-style-type: none"> 1) The meeting calls for an ANSP to volunteer for the performing of the CFRA functions 2) The rapporteur consider the possibility for technical services providers to present their offers for the performing of CFRA functions, including a cost recovery system.
Decision SAT FIT 6/2	<p>System Performance Monitoring</p> <p>That</p> <ol style="list-style-type: none"> 1) SATMA will provide the SATFIT Rapporteur with the existing procedure developed for the identification, reporting and resolution of system performance shortcomings in aspects related to CFRA. 2) This procedure will be distributed by the SATFIT rapporteur to SAT members for CFRA data collection by 31 May 2011
Conclusion SAT FIT 6/4	<p>OPTIMI</p> <p>That SAT members support the OPTIMI initiative to integrate current technologies and procedures for the improvement of safety across the Atlantic.</p>
Decision SATFIT 6/3	<p>SAIRE</p> <p>That SAT members take note of the SAIRE initiative and other Regional ATM initiatives, to improve energy efficiency and lower aircraft noise through the development and implementation of environmentally friendly procedures for all phases of flight. This initiative will be referred to the SAT16 meeting for consideration.</p>

II - REPORT ON DISCUSSIONS

2.1 Agenda Item 1: Adoption of the Agenda

2.1.1 The meeting elected Mr. Johnny Smith, Manager ATS Johannesburg ATNS and member of the South African delegation as Chairman and Rapporteur of the meeting. Subsequently the provisional agenda was discussed and adopted by the meeting as shown above.

2.2 Agenda Item 2: Review of SAT/FIT/5 Report

2.2.1 The meeting reviewed the Conclusions and Decisions adopted by the SAT/FIT/5 Meeting which was held in Lisbon, Portugal, from 17 to 18 May 2010 and discussed the status of implementation of each of them. In so doing, it reformulated or complemented all the conclusions and decisions related to the SAT/FIT/5 Meeting which were ongoing or still valid. As a result, the general status on the implementation of SATFIT/5 conclusions and decisions is shown at **Appendix B** to this report.

2.3 Agenda Item 3: Review of ADS/CPLC programmes and implementation activities in SAT FIRs

2.3.1 With regard to the implementation of ADS-C/CPDLC in the SAT area (ref. Conclusion SAT FIT5/1 and Decision SAT FIT 5/2) the status is as shown in the following table:

STATE/ACC	Implementation status/Target date	Remark
Dakar/Senegal	Implemented/August 2009	Fully operational
Canarias/Spain	Implemented/August 2009	Fully operational
Brazil	Implemented July 2009	Fully operational
Abidjan	Implemented/August 2010	Fully operational
South Africa	Implemented Feb 2005	Fully operational
Argentina	First quarter 2012	Ezeiza pre-operational
Angola	December 2011	
Accra/Ghana	December 2011	
Cape Verde	September 2011	Pre-operational
Uruguay	possible date 2012	At the planning level

2.3.2 Having in mind the benefit expected from ADS-C/CPDLC operations and in order to ensure harmonization and interoperability between systems, the meeting was of the view that the information shown in the table above should be kept updated so as to enable all SAT members to have a common view of the status of implementation of ADS-C/CPDLC in the SAT area. To this effect, the meeting agreed to the following conclusion:

Decision SAT/FIT6/01: ADS/CPDLC implementation in the SAT Area

That SAT/FIT members that have not done so, provide the Rapporteur with ADS-C/CPDLC implementation and interoperability status in order to complete a follow up table that will be distributed to all.

2.3.3 It is to be understood that this implementation status table should be updated with inputs from SATFIT members as soon as applicable and at least once yearly before the holding of the next SATFIT meeting.

2.3.4 The meeting recalled also that although ADS-C/CPDLC is fully operational in many SAT FIRs and most aircraft flying therein are ADS-C/CPDLC equipped, not all flights take advantage of the existence of this facility in that area.

2.3.5 The meeting therefore reformulated the following SAT/FIT/5 conclusion:

Conclusion SAT/FIT/6-01: ADS-CPDLC operations by Airlines

That IATA continues encouraging Airlines to increase their level of participation in ADS-C/CPDLC operations in order to enhance safety and efficiency of operations within the SAT area.

2.3.6 The attention of the meeting was drawn once more to the incorrect use of free text message "reports" in the operational CPDLC exchanges between flight crews and controllers. The meeting therefore recalled that the strict adherence to the use of preformatted messages when ever applicable is a safety requirement and agreed to the following conclusion:

Conclusion SAT/FIT6-02: CPDLC message set

That ATS Units and Aircraft operators draw the attention of the controllers and flight crew members to the use of the preformatted message elements when ever applicable and strictly limit the use of free text messages to specific reports.

Central FANS Reporting Agency (CFRA)

2.3.7 SATMA presented the report on CFRA activities of the EUR/SAM Corridor during 2010 in accordance with the mandate given to it by the SAT/FIT.

2.3.8 Due to the limited availability of data, the report was based on records from the ADS/CPDLC System of the Canarias FIR (SACCAN). Valuable information provided by ASECNA was not included in the study, owing to the fact that it corresponded to data not confined only to the EUR/SAM Corridor area. Likewise, the Sal Oceanic ADS/CPDLC System was not operative in 2010.

2.3.9 The CPRA study outlined:

- The analysis of the traffic
- The communications network performance
- The automatic dependence surveillance operations
- The controller - pilot data communications
- The potential problems identified

2.3.10 The CFRA report for 2010 can be found on the SATMA website at: <http://www.satmasat.com>.

2.3.11 In summary, it is noted that approximately 60% out of the total flights within the EUR/SAM Corridor are FANS equipped flights, having connected nearly all of them (96-99%). Also, the vast majority of logged-on flights (94 to 96%) connect to CPDLC application. Finally, the number of aircraft (i.e. number of different aircraft registrations) flying over the EUR/SAM Corridor and making use of FANS services is about 200-230 on a monthly basis

2.3.12 It was recalled that SATMA had accepted to discharge the CFRA function only for one year (ref. SATFIT4); and that therefore, a final solution should be adopted with regard to the funding of the CFRA.

2.3.13 In this regard, the meeting was informed that, as per conclusion SAT FIT 5/5 the issue of CFRA within the SAT region and its funding has been referred to APIRG for advice. While APIRG provided no guidance on the issue, the meeting was informed that the situation in this regard varies from one region to another: CFRA is performed in some cases by a single entity (State, Organization, Service Provider etc...) on behalf of the region and jointly by a group in some other cases.

2.3.14 As a result, the meeting formulated the following conclusion:

Conclusion SAT/FIT6-03: CFRA

That

- 1) **The meeting calls for an ANSP to volunteer for the performing of the CFRA functions;**
- 2) **The rapporteur considers the possibility for technical services providers to present their offers for the performing of CFRA functions, including a cost recovery system.**

2.3.15 However, it is to be noted that, whilst various solutions are being considered and until a final decision is made, South Africa has kindly offered to take over the responsibilities of performing CFRA functions. SAT members are therefore kindly requested to forward the relevant data to Mr. Johnny Smith, at the following address: johnnys@atns.co.za

2.4 Agenda Item 4: System performance monitoring and maintenance

2.4.1 In the absence of a formal CFRA (please refer to report on agenda item 3 above), South Africa, as team leader of the FIT accepted to perform the monitoring of the performances of the FANS system in place in the area, based on operational data provided by all stakeholders.

2.4.2 The meeting therefore agreed to the following decision:

Decision SAT FIT6/02: System Performance Monitoring

That

- 1) **SATMA will provide the SAT/FIT Rapporteur with the existing procedure developed for the identification, reporting and resolution of system performance shortcomings in aspects related to CFRA.**
- 2) **This procedure will be distributed by the SAT/FIT Rapporteur to SAT members for CFRA data collection by 31 May 2011.**

2.4.3 With a view to optimizing the benefit expected from ADS-C/CPDLC operations in terms of safety and efficiency, the meeting recalled that it is essential to ensure harmonization and interoperability with neighboring units when implementing ADS-C/CPDLC. Likewise it recalled the imperative need for harmonization in the applicable ADS-C/CPDLC procedures and parameters, used by the ACCs, to ensure safe operations of ADS-C/CPDLC in the SAT area.

2.5 Agenda Item 5: Review of the terms of reference and Future Work Programme of the FANS 1/A Interoperability Team

2.5.1 The meeting reviewed and updated the Terms of reference and future work programme of the FANS 1/A Interoperability Team (FIT) as shown at **Appendix C** to this report.

2.6 Agenda Item 6: Any other business

OPTIMI

2.6.1 The meeting was presented with the European SESAR Joint Undertaking proposal to expand the Oceanic Position Tracking Improvement and Monitoring (OPTIMI) functionalities to the CAR, SAM and AFI Atlantic airspace.

2.6.2 The OPTIMI initiative is aimed at integrating new technologies and procedures for the improvement of safety across the Atlantic. The SAT/FIT/6 meeting was invited to discuss the practical aspects of the implementation of the OPTIMI recommended short term solution, which consists of the following:

1. Use of FANS 1/A based ADS-C periodic position reports with a 15 minutes period.
2. Use of FANS 1/A based ADS-C deviation alert on the following events:
 - a. Lateral deviation of 5NM from the nominal route.
 - b. Vertical deviation of 300ft above or below the nominal altitude.
 - c. Altitude change descent rate of 5000ft/min.
 - d. Deviation from nominal waypoint.

2.6.3 Besides the above, the meeting was invited to discuss the practical aspects of jointly working on the following topics:

- a. Joint review, by OACCs and SAR facilities, of the protocols of notification and intervention in case of emergency to align them with the provisions of ICAO Annex 12 Search and Rescue and ICAO Doc. 9731 International Aeronautical and Maritime Search and Rescue Manual.
- b. Exploring the use of any suitable incentive mechanism to encourage the installation of FANS1/A equipment and the use of ADS-C and CPDLC by Airlines and ANSPs.
- c. With a view to download FDR safety critical data when triggered by events, performing studies and eventually flight demonstrations regarding the volume of data downloaded the speed of data transmission, the triggering parameters of the downloading, and the most relevant parameters to be downloaded.
- d. Performing studies, and eventually flight demonstrations, on the use of a data repository for downloaded data storage and management either based on a central repository configuration or on a configuration of sequential repositories, together with the regulatory impact of these solutions.

- e. Performing studies, and eventually flight demonstrations, on other practical aspects of the operation such as the activation of ADS-C emergency mode, or the further standardization of phraseology for CPDLC messages.

2.6.4 The meeting unanimously agreed to support the OPTIMI initiative, and all stakeholders to join an OPTIMI-like multi-lateral partnership that will be hosting the implementation of improving procedures and standards in the area in this field. Hence the following conclusion:

Conclusion SAT FIT6-04: OPTIMI

That SAT members support the OPTIMI initiative to integrate current technologies and procedures for the improvement of safety across the Atlantic.

SAIRE INITIATIVE

2.6.5 The meeting was presented with the South-Atlantic Interoperability Initiative to Reduce Emissions (SAIRE) initiative, which will aim, similar to the EU/US initiative AIRE (Atlantic Interoperability Initiative to Reduce Emissions), to improve energy efficiency and lower aircraft noise through the development and implementation of environmentally friendly procedures for all phases of flight.

2.6.6 The SAT/FIT/6 meeting was invited to discuss the practical aspects of SAIRE establishment in the Region and prepare the ground for national commitment. The following improvement areas/solutions were given as examples:

- a) Oceanic trajectory optimization (horizontal, vertical, longitudinal);
- b) Reduced separations for RNP 4 equipped aircrafts (lateral, longitudinal);
- c) Optimized Oceanic Entry/Exit transition;
- d) Better use of Meteorological information;
- e) Continuous Descent Operations (CDO) procedures;
- f) Continuous Climb procedures;
- g) Optimized departure routings;
- h) Collaborative decision support systems that increase aircraft taxi time predictability allowing airlines to capitalize on use of fuel saving procedures such as reduced engine taxi out

2.6.7 However, the meeting was of the view that requirements for SAIRE are mostly operational procedures and thus the issue should be considered by the SAT/16 meeting itself, under ATM matters; it therefore decided as follows:

Decision SATFIT 6/3: SAIRE

That SAT members take note of the SAIRE initiative and other Regional ATM initiatives, to improve energy efficiency and lower aircraft noise through the development and implementation of environmentally friendly procedures for all phases of flight. This initiative will be referred to the SAT16 meeting for consideration.

Next SATFIT meeting

2.6.8 The organization of the next SAT FIT meeting will be coordinated with FIT group members. It will be held back to back with the next SAT17 meeting to be convened in the second quarter of 2012. FIT members will be informed on time of the finally agreed date and venue for the next FIT meeting.

**Sixth Meeting of the FANS I/A Interoperability Team (SAT/FIT/6)
(Recife, Brazil, 03 May)**

**LIST OF PARTICIPANTS / LISTA DE PARTICIPANTES
GENERAL INFORMATION / INFORMACIÓN GENERAL**

Name / Title Nombre / Cargo	Address/Telephone / Fax / E-mail Dirección / Teléfono / Fax / E-mail
Angola	
Bernarda de Paiva Henrique Chief of ATM Department	Airport International 4 de Fevereiro 841, Luanda, Angola Tel.: + 244 222 651005 E-mail: bhenrique@enana-ao.com
Argentina	
Héctor Luis Sánchez Chief of Department ATM	AZOPARDO 104 – Ciudad Autónoma Buenos Aires – Argentina Tel. + 5411 4317 6502 E-mail hsanchez@anac.gov.ar
Jorge Boskovic Asesor Experto	AZOPARDO 104 – Ciudad Autónoma Buenos Aires – Argentina Tel. + 5411 4317 6502 E-mail: jboskovic@anac.gov.br
Justo Roque Picón Chief of ACC (SAVC)	Airport K9 – Comodoro Rivadavia Cambut, CP 900 – Argentina Tel. + 5429 7454 8375 E-mail roquepicon@msn.com
Guillermo Cocchi Chief of Programming Division, Management and Control	Building Condor Ave Pedro Zanni 250, Buenos Aires – Argentina Tel. + 54 11 4317 6502 E-mail gcocchiar@yahoo.com.ar
Brazil	
Luiz Ricardo S. Nascimento Chief of Navigation Division	DECEA – General Justo Ave, 160 cep. 20021-130 Castelo Rio de Janeiro – Brasil Tel.: + 5521 9499 8856 E-mail: dgna@decea.gov.br
Gustavo Erivan Bezerra Lima Telecommunications Planning	CINDACTA 3 - Av. Centenário Alberto Santos Dumont, Cep 51290-020, Jordão Baixo, Recife PE - Brasil Tel.: + 5581 2129 8140 E-mail: tpct-adj@cindacta3.aer.mil.br
Mauruzan R. Batista ATM	CINDACTA 3 - Av. Centenário Alberto Santos Dumont, Cep 51290-020, Jordão Baixo, Recife PE - Brasil Tel.: + 81 9631 7032 E-mail: mauruzan@hotmail.com

Name / Title Nombre / Cargo	Address/Telephone / Fax / E-mail Dirección / Teléfono / Fax / E-mail
Paulo Fernando Santa Clara Ramos Júnior Chief of Telicomunications	CINDACTA 3 - Av. Centenário Alberto Santos Dumont, Cep 51290-020, Jordão Baixo, Recife PE - Brasil Tel.: + 5581 2129 8180 E-mail: tel@cindacta3.aer.mil.br
Darlan Sobreira Guedes ATC / Atlântico ACC	CINDACTA 3 - Av. Centenário Alberto Santos Dumont, Cep 51290-020, Jordão Baixo, Recife PE - Brasil Tel.: + 81 2129 8330 E-mail: darlan_guedes@yahoo.com.br
Cape Verde	
Alberto Silva Air Navigation Inspector	C. P. 372 – Praia, <i>Cape Verde</i> Tel. + 238 26 03 430 E-mail albertos@acivil.gov.cv
Aniceto Barbosa Director of Navigation Services	Airport Amílcar Cabral, Sal – <i>Cape Verde</i> Tel.: +238 – 241 9200 E-mail: abarbosa@asa.cv
Sabino Baptista Air Navigation Inspector	C. P. 371 – Ave. Cidade Lisboa, 34 Praia - <i>Cape Verde</i> Tel.: +238 – 260 3430 E-mail: sabinogb@gmail.com
Jose Carlos Bernardes Head of Department Aeronautical Communications	Airport Amílcar Cabral, Sal – <i>Cape Verde</i> Tel.: + 238 – 991 2831 E-mail: jcarlos@asa.cv
Côte d'Ivoire	
Kone Sidi Acting Operations Manager Abidjan ACC	BP 918 Abidjan 15 - <i>Côte d'Ivoire</i> Tel.: + 225 212 15880/81 E-mail: konesid@asecna.org
Portugal	
Carlos Alves Director Technical Studies and Project	Airport of Lisboa Rua C Ed 118 – 1700-008, Lisboa - Portugal Tel.: + 351 21 855 3533 E-mail: carlos.alves@nav.pt
Cirilo Araújo Head of Atlantic Air Traffic Services (Santa Maria FIR)	Airport Santa Maria, 9580-540, Vila do Porto - Portugal Tel.: + 351 9187 82 240 E-mail: cirilo.araujo@nav.pt
Senegal	
Aichetou Sow Chief of Air Navigation Department	ANACS Airport Leopold Sedar Senghor, Dakar - Senegal Tel.: + 221 774 5004-15 E-mail: shatousow@yahoo.fr

Name / Title Nombre / Cargo	Address/Telephone / Fax / E-mail Dirección / Teléfono / Fax / E-mail
Ismaila Diaw Air Traffic Controller & Instructor	Airport Leopold Sedar Senghor, Dakar - Senegal Telefax: + 221 7764 09927 E-mail: ismailadiaw1962@yahoo.fr
Papa Atoumane Fall Director of Aeronautical Industries and Services	BP8184 Airport Leopold Sedar Senghor, Dakar - Senegal Telefax: + 221 7763 94807 E-mail: atoumane.fall@anacs.sn
South Africa	
Harry Roberts ATM Specialist	Primate Bag X15, Kenpton Park, Rsa 1627, South Africa Tel.: +27 11 961 0123 E-mail: harryr@atns.co.za
Johnny Smit Manager Air Traffic Services	Primate Bag X1, Bonaeso Park 1622, South Africa Tel.: + 27 11 928 6526 E-mail: johnnys@atns.co.za
Simon J. Zwane P.M. ACC	33 Broadhurst Barliuka Ave Pomona Kempton Park RSA, South Africa Tel: + 29 500 8871 E-mail simonz@ atns.co.za
Susanna Betis Manager Business Development	Private Bag X15, Kenpton Park, 1620, South Africa Tel: + 27 961 0324 E-mail susannab@atns.co.za
Rush Lehutso Exetive Manager: Comercial Service	Private Bag X15, Kenpton Park, 1620, South Africa Tel: + 27 011 961 0329 E-mail rushjl@atns.co.za
Spain	
Ruben Garcia Pardo Head of International Inst. Relations	Juan Ignacio Luca de Tena, 14 28043, Madri - Spain Tel.: +34 628 71 4614 E-mail: rgapardo@agna.es
Antonio Arias Flebes Satma Coordinator	Air Traffic Control Center, Ojos de Garza S/N, Telde Las Palmas - Spain Tel.: +34 928 57 7177 E-mail: ariasf@aena.es
Angel Crespo Perez Project Manager	Josefa Valcárcel, E-280 27, Madri - Spain Tel.: +34 913 21 3254 E-mail: acrespo@aena.es
Uruguay	
Rosanna Baru Inspector Air Navigation Services Inspector DINACIA	Airport International of Carrasco, Canelones 14002 - Uruguay Tel.: + 598 2604 0408 E-mail: rocbb17@gmail.com

Name / Title Nombre / Cargo	Address/Telephone / Fax / E-mail Dirección / Teléfono / Fax / E-mail
Adriana Sam German ATM Especialist DINACIA	Airport International of Carrasco, Canelones 14002 - Uruguay Tel.: + 598 2604 5201 E-mail: acngerman@gmail.com
ARINC	
Angelo Lopes Lucas Director Regional Marketng	5200 Blue Lagoon Drive, Miami Florida 33126 – EUA Tel.: + 1 305 2635 772 E-mail: alucas@arinc.com
ASECNA	
Sidy Gueye Dakar ACC Manager	BP 8132 Dakar Yaff Tel.: + 221 33 869 2305 E-mail: sgueye@yahoo.fr
Jean Patrick Randrianasolo Responsible of Operational CNS	ASECNA BP 3144, Jean Jaures, Dakar – Senagal Tel.: + 221 33 820 7538 E-mail: randrianasolopat@asecna.org
IATA	
Manuel Gongora Assistant Director SAFETY, Operation Caribbean	703 Waterford Way Suite 600 Miami, FL 33124 Tel.: + 305 266 7552 E-mail: gongoram@iata.org
INSA / Spain	
Ana B. Torres Deputy Engineering Director	Quintana, 2 Madri - Spain Tel.: + 34 91 7582 077 E-mail: abtorres@insa.org
Domingo Soltero Project Manager	Paseo Pintor Rosales, 34 28008 – Madri - Spain Tel.: + 91 7582 059 E-mail: dsoltero@insa.org
SITA	
Adriana Mattos Business Development Manager	Ave Rio Branco, 53 – 9º floor, Cep 20090-004 - Centro Rio de Janeiro-RJ - Brasil Tel.: +21 8237 9953 E-mail: adriana.mattos@sita.aero
Nioson Barbosa AIRCOM Especialist	Ave Rio Branco, 53 – 7º floor, Cep 20090-004 - Centro Rio de Janeiro-RJ - Brasil Tel.: +21 8276 2291 E-mail: nilson.barbosa@sita.aero

Name / Title Nombre / Cargo	Address/Telephone / Fax / E-mail Dirección / Teléfono / Fax / E-mail
ICAO	
Onofrio Smarrelli <i>Secretario del Subgrupo CNS/ATM</i> Communications, Navigation and Surveillance Regional Officer /Especialista Regional en Comunicaciones, Navegación y Vigilancia	South American Office / Oficina Sudamericana (SAM) Víctor Andrés Belaúnde 147, Centro Empresarial Real Vía Principal No. 102, Edificio Real 4, Piso 4 Lima 27, Perú Tel. +51 1 611-8686 Fax +51 1 611-8689 E-mail osmarrelli@lima.icao.int; mail@lima.icao.int
Salambanga François Xavier Regional Expert CNS	ICAO WACAF 15 BD of the Republic, Dakar - Senegal Tel.: +221 33 839 9386 E-mail: fsalambanga@dakar.icao.int
Sadou Marafa Regional Officer Air Traffic Management	ICAO WACAF 15 BD of the Republic, Dakar - Senegal Tel.: +221 33 839 9390 E-mail: smarafa@dakar.icao.int

APPENDIX B

Status of Conclusions related to SAT/FIT/5 Meeting

Number	Title	Implementation Status	Remarks
Conclusion SAT FIT 5/1	<p>ADS/CPDLC implementation in the SAT Area</p> <p>That SAT/FIT members provide the Secretariat with ADS-C/CPDLC implementation and interoperability status in order to complete a table by the end of July 2010.</p>	Still valid	Discussed under agenda item 3 by SATFIT6 Superseded by decision SATFIT6/01
Conclusion SAT FIT 5/2	<p>Participation at SAT FIT meetings</p> <p>That IFATCA and NAT FANS Team be invited to SAT/FIT meetings</p>	implemented	Invitation sent to IFATCA and NAT FANS Team
Conclusion SAT FIT 5/3	<p>ADS-CPDLC operations</p> <p>That IATA and ACC units encourage Airlines to increase their level of participation in ADS-C/CPDLC operations in order to enhance safety and efficiency of operations within the SAT and specially the EUR/SAM corridor</p>	Ongoing	Superseded by conclusion SATFIT6-01
Conclusion SAT FIT5/4	<p>FANS1/A CFRA monthly report:</p> <p>That SAT members forward to SATMA the necessary FANS1/A CFRA report on a monthly basis in order to perform the monitoring process as required.</p>	ongoing	Superseded by decision SATFIT6/02
Conclusion SAT FIT 5/5	<p>CFRA</p> <p>That</p> <ol style="list-style-type: none"> 1) The requirement for CFRA within the SAT be referred to APIRG for advise; 2) ICAO provides SAT members with guidance to support the cost recovery funding process in terms of global harmonization of the ATM system and improvement of operating efficiency. 	<p>Done</p> <p>Still valid</p>	Superseded by conclusion SATFIT6-03

Number	Title	Implementation Status	Remarks
Conclusion SAT FIT 5/6	CPDLC message set That <ol style="list-style-type: none"> a) In order to minimize the use of free text messages ATS Units ensure that controllers use the preformatted uplink message elements when a specific report is required and; b) Aircraft operators should ensure that flight crew procedures and training includes information concerning the arming and transmission of CPDLC reports 	Still valid	Superseded by conclusion SATFIT6-02
Conclusion SAT FIT 5/7	GOLD That <ol style="list-style-type: none"> 1. SAT/FIT members support the introduction of GOLD; 2. PIRGs approve the GOLD. 	implemented	
Decision SAT FIT 5/1	Missing Flight Plans That SAT/15 takes actions to ensure that the issue regarding the missing Flight Plans within the SAT is addressed appropriately	Implemented	refer to conclusion SAT15/13
Decision SAT FIT 5/2	CPDLC Harmonization/Standardization Action plan That the rapporteur forwards to SAT members a draft action plan to be completed by the end of July 2010.	ongoing	A questionnaire was disseminated by the rapporteur; considered under agenda item 3 by SATFIT/6 meeting. Superseded by decision SATFIT6/01

APPENDIX C

TERMS OF REFERENCE, WORK PROGRAMME AND COMPOSITION OF THE SAT FANS 1/A INTEROPERABILITY TEAM (SAT/FIT)

1. The SAT FANS 1/A Interoperability Team (SAT/FIT) has been established to 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.
2. The FIT main objectives are to:
 - a) Monitor and harmonize ADS/CPDLC trials being carried out by SAT States and adjacent States;
 - b) Review identified problem reports and determines appropriate resolution;
 - c) Develop interim operational procedures to mitigate the effects of problems until such time as they are resolved;
 - d) Monitor the progress of problem resolution;
 - e) Prepare summaries of problems encountered and their operational implications;
 - f) Assess system performance based on information in Central FANS Reporting Agency (CFRA) periodic reports;
 - g) Co-ordinate system testing; and
 - h) Ensure harmonization of ADS/CPDLC procedures (**operations and maintenance**)

.....

WORK PROGRAMME OF THE SAT FANS 1/A INTEROPERABILITY TEAM

WORK PROGRAMME		
Task No.	Subject	Target Date
1.	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
2.	Carry out studies on the establishment of a sustainable central reporting agency (CRA) and related institutional issues	Completed
3.	Harmonize ADS/CPDLC programmes developed by SAT States/FIRs.	Continuous
4.	Assist member States with cost-benefit aspects related to their implementation of ADS/CPDLC programmes.	Continuous
5.	Maintain ADS/CPDLC operational guidance material updated.	Continuous
6.	Conduct studies related to the implementation of the Global ATM Operational Concept and other enabling concepts within the SAT area in the fields of Communication and Surveillance.	Continuous
<p><i>Note: The SAT FIT should submit its meeting reports and proposals to the SAT Working Group.</i></p>		
COMPOSITION		
<ul style="list-style-type: none"> • <i>The SAT FANS-1/A Interoperability Team (FIT) 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> • Team Leader: South Africa 		
<ul style="list-style-type: none"> • WORKING ARRANGEMENTS: THE SAT FIT SHOULD COMPLETE ITS WORK AND SUBMIT ITS PROPOSALS TO THE SAT ATM WORKING GROUP. THE SAT FIT SHOULD WORK THROUGH ELECTRONIC CORRESPONDENCE PRIOR TO MEETINGS. 		