



International
Civil Aviation
Organization

Organisation
de l'aviation civile
internationale

Organización
de Aviación Civil
Internacional

Международная
организация
гражданской
авиации

منظمة الطيران
المدني الدولي

国际民用
航空组织

LT 3/1.4.22 - SA295

Lima, 22 de junio de 2016

Para: Ing. Juan Pedro Irigoin, Administrador Nacional, ANAC, Argentina
Dr. Hernán Gómez, Director Nacional de Transporte Aéreo, ANAC, Argentina
Sr. José Ricardo Pataro Botelho, Director-Presidente, ANAC, Brasil
Ten. Brig. do Ar Carlos Vuyk de Aquino, Director General, DECEA y Presidente,
CERNAI, Brasil
MBrig. R1 Normando Araujo de Medeiros, Asesor, DECEA, Brasil
Brig. Gral. (Av.) Antonio Alarcón, Director Nacional, DINACIA, Uruguay

**Asunto: Invitación al Taller Operacional de Enlace de Datos
(Acra, Ghana, 8-12 de agosto de 2016)**

Distinguido señor:

Tengo el honor de dirigirme a usted con referencia a la Conclusión 10/01 de la Décima Reunión del Grupo de Interoperabilidad FANS I/A (SAT/FIT/10), llevada a cabo en Abijan, Costa de Marfil, de 1 al 5 de junio de 2015, que solicitaba a la Oficina WACAF de la OACI colaborar con la FAA de Estados Unidos en la organización de un Taller sobre el Manual de Operación Global de Enlace de Datos (GOLD) y Comunicación de Vigilancia Basada en el Funcionamiento (PBCS) para los Estados/ANSPs SAT y los arreglos sobre el lugar adecuado para su desarrollo.

En este sentido me complace informarle que habiéndose recibido la gentil invitación de la Autoridad de Aviación Civil de Ghana, las Oficinas Regional OACI de Dakar, Lima y Paris en coordinación con la FAA de los Estados Unidos han organizado un taller a desarrollarse en Acra, Ghana, del 8 al 12 de agosto de 2016, al que su Administración está invitado a participar.

Los principales objetivos de este evento son explorar las mejores formas de optimizar la prestación de servicios de tránsito aéreo en la región del Atlántico sur a través de una implantación coordinada, interoperabilidad y operación de sistemas de enlace de datos.

En este taller los participantes tendrán la oportunidad de conocer toda la gama de servicios operativos y funcionalidades disponibles a través de los sistemas integrados ADS-C/CPDLC, la implantación de enlaces de datos aire tierra en el área SAT y prepararse para la introducción de Comunicación de Vigilancia Basada en el Funcionamiento (PBCS).

Se invita a los Estados/ANSPs e industria a enviar expertos y funcionarios involucrados en la toma de decisiones de planificación, implementación, operaciones y aprobación de normas para la utilización de enlaces de datos en los servicios de tránsito aéreo. El evento y la documentación *serán conducidos/preparados únicamente en Inglés*.

Se invita a su Administración a:

- a) Confirmar por vía electrónica a través de los e-mail (icaowacaf@icao.int y icaosam@icao.int) su intención de participar enviando por cada uno de sus delegados o representantes el Formulario de Registro que se presenta como **Apéndice A** debidamente completado en lo posible **no más tarde del 31 de julio de 2016**; y
- b) Preparar y enviar a esta Oficina Regional en versión electrónica (Word) las notas de estudio o de información que su Administración estime presentar con relación a los temas de la agenda provisional adjunta. Los documentos deberán ser enviados lo antes posible y en todo caso no más tarde del **31 de julio de 2016**.
- c) La agenda provisional del evento se presenta como **Apéndice B** y la información General como **Apéndice C** respectivamente, disponibles únicamente en *Inglés*.

Acepte, distinguido señor, los sentimientos de mi mayor consideración y estima.



Franklin Hoyer
Director Regional
Oficina Regional Sudamericana de la OACI
Lima

cc: Brig. José Alberto Palermo, Director General de Control de Tránsito Aéreo, Argentina
Dr. Hernán Gómez, Director Nacional de Transporte Aéreo, ANAC, Argentina
Sr. Oscar Villabona, Director Nacional de Inspección de Navegación Aérea, ANAC, Argentina
Sr. Daniel Longo, Superintendente de Relaciones Internacionales, ANAC, Brasil
Sr. Daniel Vieira Soares, Gerente Técnico de Coordinación con Organizaciones Int., GCOI, ANAC, Brasil
Cel. R1 Roberto Tavares Figueiredo, Secretario Ejecutivo, CERNAL, Brasil
Cel. R1 Ronaldo Ney Telles Belchior Oliveira, Enlace, DECEA, Brasil
Oficina WACAF OACI

Adjuntos:

- A- Formulario de Registro
- B- Agenda Tentativa
- C- Información General



APPENDIX A

International Civil Aviation Organization Western and Central African Office

Operational Data Link Workshop

(Accra, Ghana, 8-12 August 2016)

Registration Form

(Kindly fill and return to amane@icao.int or ataylor@icao.int)

First Name (in full) _____

Family Name (in full) _____

Title _____

Administration/Organization _____

Address _____

City and Country _____

Telephone/Fax _____

E-mail _____

Hotel _____

Signature _____ **Date:** _____

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
AFRICA AND LATIN AMERICA REGIONAL OFFICES**

OPERATIONAL DATA LINK SEMINAR

8 – 11 Aug 2016, Accra, Ghana

Provisional Programme

Day 1

Updated 24 May 2016

Time	Subject	Speaker(s)
Day One – 8 Aug 2016		
08:30 - 09:00	Registration	
09:00 – 09:30	Opening Welcome remarks by ICAO Dakar Regional Director or representative Introduction of speakers, panel members, and participants Introduction to the Seminar – Review of Agenda	ICAO
09:30 – 10:00	Session 1 - Understanding data link planning and implementation status 01 - Regional planning and implementation status	ICAO
10:00 – 10:30	Session 2 – Air-ground data link implementation 02 - Overview of DLIC, ADS-C and CPDLC in the African and Latin American Oceanic Areas 03 - ICAO provisions on data link implementation (GANP, ASBU, SARPs and PANS)	ICAO
10:30 – 11:00	Group Photo/Coffee Break	
11:00 – 12:30	Session 2 - Air-ground data link implementation 04 - Preparation for implementation - ANSP and its State 05 - Preparation for implementation - Operator and its State	TBD
12:30 – 13:30	Lunch	
13:30 – 15:00	Session 3 - Performance-based Communication and Surveillance (PBCS) 06 - Introduction to PBCS 07 - Application of PBCS in the provision of advanced ATM operations	TBD
15:00 – 15:30	Coffee Break	
15:30 – 16:30	Session 3 - Performance-based Communication and Surveillance (PBCS) 08 - Prepare for PBCS – ANSP and Operator	TBD
16:30 – 17:00	Q&A/Summary Day 1	Moderators

Day 2

Time	Subject	Speaker(s)
Day Two – 9 Aug 2016		
09:00 – 10:30	Session 3 - Performance-based Communication and Surveillance (PBCS) 09 - Flight Plan RCP/RSP Codes	TBD
10:30 – 11:00	Coffee Break	
11:00 – 12:30	Session 3 - Performance-based Communication and Surveillance (PBCS) 10 - Post implementation monitoring (ANSP)	TBD
12:30 – 13:30	Lunch	
13:30 – 15:00	Session 3 - Performance-based Communication and Surveillance (PBCS) 11 - PBCS analysis data in NAT or APAC (speaker dependent) 12 - PBCS online analysis tool	TBD
15:00 – 15:30	Coffee Break	
15:30 – 16:30	Session 3 - Performance-based Communication and Surveillance (PBCS)	TBD
16:30 – 17:00	Q&A/Summary Day 2	Moderators

Day 3

Time	Subject	Speaker(s)
Day 3 – 10 Aug 2016		
09:00 – 10:30	Session 4 - Implementation issues, challenges, lessons learned for Data Link Monitoring 14 - Airspace user datalink perspective 15 - ATS data link deployment-aircraft manufacturer's perspective	IATA TBD USA TBD
10:30 – 11:00	Coffee Break	
11:00 – 12:30	Session 4 - Implementation issues, challenges, lessons learned for Data Link Monitoring 16 - PBCS transition strategy 17 - ANSP's experience	TBD
12:30 – 13:30	Lunch	
13:30 – 15:00	Session 4 - Implementation issues, challenges, lessons learned for Data Link Monitoring 18 - Modifying ATS system for RCP/RSP indicators	TBD
15:00 – 15:30	Coffee Break	

15:30 – 16:30	Q&A/Summary Recommendations and Conclusions to South Atlantic Oceanic Region	Moderators and ICAO
---------------	--	---------------------

Day 4

Time	Subject	Speaker(s)
Day 4 – 11 Aug 2016		
09:00 – 10:30	Session 5 - Development of a Plan for the South Atlantic Oceanic Region 19 – Determining make-up and goals for South Atlantic Oceanic Region Task Force	ICAO Dakar/Lima
10:30 – 11:00	Coffee Break	
11:00 – 12:30	Session 5 - Development of a Plan for the South Atlantic Oceanic Region 20 – Develop listing of challenges, issues to be resolved throughout for establishing the South Atlantic Oceanic Region.	TBD
12:30 – 13:30	Lunch	
13:30 – 15:00	Session 5 - Development of a Plan for the South Atlantic Oceanic Region 21 –Development of a timeline for resolution of challenges/issues for establishing Data Link Monitoring and a Central Monitoring Agency	TBD
15:00 – 15:30	Coffee Break	
15:30 – 16:30	Q&A/Summary Summation of Day 4 activities	Moderators and ICAO

Time	Subject	Speaker(s)
Day 5 – 12 Aug 2016		
09:00 – 10:30	Session 6 - Development of a Plan for the South Atlantic Oceanic Region 22 – Develop papers for APIRG, AFI-SC, and ICAO Montreal	ICAO Dakar/Lima
10:30 – 11:00	Coffee Break	
11:00 – 12:30	Session 6 - Development of a Plan for the South Atlantic Oceanic Region Recommendations, conclusions to APIRG, AFI-SC, and ICAO Montreal	Moderators and ICAO

.....

ATTACHMENT B1

OPERATIONAL DATA LINK WORKSHOP

PROVISIONAL PROGRAMME

(Accra, Ghana, 8-12 August 2016)

Session 1: Introduction to air-ground data link

The ICAO regional officers will provide an overview of the data link implementation addressing benefits and ICAO provisions (GANP, ASBU, SARPs and PANS). The participants will then be briefed on the current status of regional data link planning and implementation.

Session 2: Preparation for and use of CPDLC and ADS-C

The presentations will be made by the members of the ICAO Operational Data Link Working Group of the Communications Panel (CP-OPDLWG) on guidance and best practices for successful preparation for and implementation of CPDLC and ADS-C. The presentations will highlight the content of the Global Operational Data Link (GOLD) Manual (Doc 10037) that will be of interest for States, air navigation service providers (ANSPs) and operators. The topics to be addressed in this session are as follows:

- **For ANSP and its State:** development of concept of operations, System safety assessment, ground system automation, aeronautical information notification, inter-facility agreements, procedure development and training, trial operation and validation, data link performance monitoring
- **For operator and its State:** operations policy and approval, training for flight crew and flight operations officers
- **For flight crew and controller:** procedures on use of CPDLC and ADS-C

Session 4: Performance-based communication and surveillance (PBCS)

The presentations will be made by the members of the CP-OPDLWG on guidance and best practices for PBCS implementation. The presentations will highlight the PBCS provisions in Annexes 6, 11 and 15 and PANS-ATM (Doc 4444) as well as performance-based separation standards in the PANS-ATM (Doc 4444). The participants will also be briefed on the content of the Performance-based Communication and Surveillance Manual (Doc 9869). The topics to be addressed are as follows:

- Introduction to PBCS;
- Application of PBCS in the advanced ATM operations;
- PBCS approval and compliance – State, ANSP and Operator;
- Flight plan filing – RCP and RSP specifications; and
- Post implementation monitoring.

Session 5: Implementation issues, challenges, lessons learned and solutions

Workshop participants are invited to present any issues/challenges regarding CPDLC, ADS-C and PBCS implementation as well as lessons learned. Members of the OPDLWG will present lessons learned from their experiences in the North Atlantic (NAT) and Asia and the Pacific (APAC) Regions.

Session 6: Development of a data link implementation plan for the South Atlantic Airspace

Workshop participants will work in small groups to develop a data link implementation plan for South Atlantic Airspace. The plan may include the operational improvement to achieve from the implementation of CPDLC, ADS-C and PBCS, required technologies and systems, list of tasks by stakeholders and implementation roadmap, etc. The main outcome of this session will serve as a basis for the development of recommendations for consideration by the relevant Planning and Implementation Groups (PIRGs).

— END—

OPERATIONAL DATA LINK SEMINAR
GHANA CIVIL AVIATION TRAINING ACADEMY
8 - 11 Aug 2016, Accra, Ghana

COUNTRY INFORMATION

&

HOTEL LIST



GENERAL INFORMATION

Site of the workshop

The workshop will be hosted by Ghana Civil Aviation Authority (GCAA) will be held from the 8th to 12th of August 2016 at the premises of the GCAA Aviation Training Academy located at the Kotoka International Airport, Accra, Ghana.

Contact Persons

Mr. Eric Amaning

Telephone number: +233 50 473 1201 / +233 244 731 1201

Fax number: +233 302 773 293

Email: Eric Amaning: eamaning@gcaa.com.gh

Mr. Raymond Bayor

Telephone number: +233 544235555

Fax number: +233302773293

Email: rbayor@gcaa.com.gh

Languages

The training courses will be carried in English

Hotel Information

A list of recommended hotels is attached herewith. Participants may make booking directly at the hotels or send the registration with the preferred hotel to the organizers to make booking.

Visas

Participants should ensure that their travel documents are valid prior to departure from country of origin. If requested, participants can obtain visa upon arrival at the International Airport of Accra against the payment of 150USD)

National of the following countries are exempted visa: West African Nationals

Health

Participants must ensure they take out travel insurance (including health) from their home country for the duration of their stay in Accra.

Presentation of yellow fever certificate at the point of entry is mandatory for all countries. If the certificate cannot be made available, vaccination will take place on point of entry for a fee.

Weather and local time information

The month of August is a **warm** month in Accra with lowest temperature being **24** °C and highest temperature being 32°C.

Accra local time is GMT, which is also known as the Coordinated Universal Time (UTC). It is fixed across the country.

Local Currency and Foreign Exchanges Rates

The official currency is Ghanaian cedi (GHS). The current exchange parity has currently set at the fixed rate of US\$1 = **3.85GHS** and €1 = **5.6GHS**

American dollars and EURO are accepted in many places. Exchange is easily available in the banks and exchange agencies. [**Credit cards and traveller's cheques are accepted in most establishments. Most shops and hotels accept Visa Cards.**] **YES**

Language

The Official Language of the Country is English.

Hours of business

The working week in Ghana runs from Monday to Friday (**0800-1700hrs**) with Saturday and Sunday being the holydays.

Local Transportation

Transport will be provided from the airport to the hotel (at arrival and departure) and from hotels to the seminar venue. **YES**

Electrical Supply

Local voltage is 220/240 V 50 Hz **YES**

Telephones

World wide direct connections are available, using the international code or telephone operator if necessary.

From abroad dial 233 (YES) followed by required number. There are – **FIVE (5)** mobile operators, (**Vodafone-GT, GLO, MTN, Tigo, Airtel**) respectively.

LIST OF HOTELS

Country Code: +233

HOTEL	TELEPHONE	AMOUNT \$ (SINGLE)	AMOUNT \$ (DOUBLE)	FAX	E-MAIL
La-Palm	0302 771700	\$275-300	315	0302 771654	www.gbghana.com lapalm@gbghana.com
Labadi Beach	0302 772501	\$270-300	310	0302 772520	
Novotel	0302 667546	\$250-212	272-234	0302 667533	reservations@accrahotel.com
Golden Tulip	0302 775360	\$ 280	320	0302 667563	info@goldentulipaccra.com www.goldentulipaccra.com
'M' Plaza	0302 775922	\$210	250	0302 763416	mplaza@ghmail.com
Fiesta Royal Hotel	0302-7410810	200	250		info@fiestahospitality.com
Miklin	0302 500708	\$150	200	0302 500558	miklin@africanonline.com.gh miklin@ghana.com www.miklin-gh.com
Crown Appartemento	0302 762941	\$207	230	0302 762942	crown@apartmento.com www.crownapartmento.com
Alisa	0302 910730/ 0302 255493/ 0302 768295	\$161	184	0302 768300	info@alisahotels.com www.alisahotels.com
Airport View	0302 769594	\$120	220	0302 780342	Airporthotel@africaonline.com.gh
Airside	0302 760480	\$150	200	0302 785768	airside@africaonline.com.gh
Holiday Inn	0302 780494	\$250	350	0302 -780212	www.holiday-inn.com
African Regent Hotel	0302-765180-2	\$200	300		res@african-regent-hotel.com