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航空组织

LT 3/1.4.21 - SA295

Lima, 22 June 2016

To: **Mr. Philippe Guivarch, Regional Director of Civil Aviation, West Indies and French Guiana**

Subject: **Invitation to Operational Data Link Workshop (Accra, Ghana, 8-12 August 2016)**

Sir:

I have the honour to refer to Conclusion 10/01 of the Tenth Meeting on the improvement of Air Traffic Services over the South Atlantic FANS 1/A Interoperability Team (SAT/ FIT/10), held in Abidjan from 1 to 5 June 2015, that requested the ICAO WACAF Office to collaborate with the USA Federal Aviation Administration to organize a workshop on the Global Operational Data Link (GOLD) Manual and Performance Based Communication Surveillance (PBCS) for SAT States/ANSPs and also arrange for a suitable venue for the workshop.

I have the honor to inform you that upon the kind invitation of Ghana Civil Aviation Authority, the ICAO Regional Offices in Dakar, Lima and Paris and the US- FAA will jointly organize a workshop in Accra, Ghana, from 8 to 12 August 2016 to which your Administration/Organization is invited to participate.

The main objectives of the meetings are to explore ways and means of further enhancing the provision of air traffic services in the South Atlantic region through coordinated implementation, interoperability and operation of data link systems.

In this workshop the participants will have the opportunity to learn about the full range of operational services and functionalities available through integrated ADS-C/CPDLC systems, the Air Ground datalink implementation within SAT area and prepare for the introduction of Performance based Communication and Surveillance (PBCS).

States/ANSPs and industry are encouraged to send experts and decision makers who are involved in the planning, implementation, operations and regulatory approvals for the application of datalink in the provision of air traffic services. The workshop and documentation would be conducted in English.

Your Administration is invited to:

- a) Confirm by electronic mail ([icaowacaf@icao.int](mailto:icaowacaf@icao.int) and [icaosam@icao.int](mailto:icaosam@icao.int)) its intention to participate and accordingly provide the names and functions of its representatives by filling the Registration Form presented as **Appendix A** as soon as possible, but in any case **not later than 31st July 2016**; and
- b) Prepare and send to any of the Regional Office electronic copies (in Word) of working and/or information papers (if any) to be presented on the basis of the attached Provisional Agenda. The working and/or information papers should be sent at your earliest convenience, but **not later than 31 July 2016**.
- c) The provisional Programme for the workshop is attached herewith as **Appendix B**, Programme Objectives attached as Appendix B and the general Information Bulletin is presented as **Appendix C**.

Accept, Sir, the assurances of my highest consideration.



Franklin Hoyer  
Regional Director  
ICAO South American Office  
Lima

cc: Mr. Claude Miquel, Deputy Director of Civil Aviation, West Indies and French Guiana  
Mr. Olivier Jouans, Regional Director of ATM services, West Indies and French Guiana  
Mr. Marcus Doller, Air Safety Support Intl. (ASSI), United Kingdom  
Mr. Bruce D'Ancey, Policy Specialist, Flight Ops, Air Safety Support International (ASSI), United Kingdom  
ICAO WACAF Office

*Attachments:*

- A- Registration form
- B- Draft Programme
- C- Information Bulletin



## APPENDIX A

### International Civil Aviation Organization Western and Central African Office

#### Operational Data Link Workshop

(Accra, Ghana, 8-12 August 2016)

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#### Registration Form

(Kindly fill and return to [amane@icao.int](mailto:amane@icao.int) or [ataylor@icao.int](mailto: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*

<b>Time</b>	<b>Subject</b>	<b>Speaker(s)</b>
<b>Day One – 8 Aug 2016</b>		
08:30 - 09:00	Registration	
09:00 – 09:30	<b>Opening</b> 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	<b>Session 1 - Understanding data link planning and implementation status</b> 01 - Regional planning and implementation status	ICAO
10:00 – 10:30	<b>Session 2 – Air-ground data link implementation</b> 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	<b>Session 2 - Air-ground data link implementation</b> 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	<b>Session 3 - Performance-based Communication and Surveillance (PBCS)</b> 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	<b>Session 3 - Performance-based Communication and Surveillance (PBCS)</b> 08 - Prepare for PBCS – ANSP and Operator	TBD
16:30 – 17:00	<b>Q&amp;A/Summary Day 1</b>	Moderators

Day 2

Time	Subject	Speaker(s)
<b>Day Two – 9 Aug 2016</b>		
09:00 – 10:30	<b>Session 3 - Performance-based Communication and Surveillance (PBCS)</b> 09 - Flight Plan RCP/RSP Codes	TBD
10:30 – 11:00	Coffee Break	
11:00 – 12:30	<b>Session 3 - Performance-based Communication and Surveillance (PBCS)</b> 10 - Post implementation monitoring (ANSP)	TBD
12:30 – 13:30	Lunch	
13:30 – 15:00	<b>Session 3 - Performance-based Communication and Surveillance (PBCS)</b> 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	<b>Session 3 - Performance-based Communication and Surveillance (PBCS)</b>	TBD
16:30 – 17:00	<b>Q&amp;A/Summary Day 2</b>	Moderators

### Day 3

Time	Subject	Speaker(s)
<b>Day 3 – 10 Aug 2016</b>		
09:00 – 10:30	<b>Session 4 - Implementation issues, challenges, lessons learned for Data Link Monitoring</b> 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	<b>Session 4 - Implementation issues, challenges, lessons learned for Data Link Monitoring</b> 16 - PBCS transition strategy 17 - ANSP's experience	TBD
12:30 – 13:30	Lunch	
13:30 – 15:00	<b>Session 4 - Implementation issues, challenges, lessons learned for Data Link Monitoring</b> 18 - Modifying ATS system for RCP/RSP indicators	TBD
15:00 – 15:30	Coffee Break	

15:30 – 16:30	<b>Q&amp;A/Summary</b> Recommendations and Conclusions to South Atlantic Oceanic Region	Moderators and ICAO
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#### Day 4

Time	Subject	Speaker(s)
<b>Day 4 – 11 Aug 2016</b>		
09:00 – 10:30	<b>Session 5 - Development of a Plan for the South Atlantic Oceanic Region</b> 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	<b>Session 5 - Development of a Plan for the South Atlantic Oceanic Region</b> 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	<b>Session 5 - Development of a Plan for the South Atlantic Oceanic Region</b> 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	<b>Q&amp;A/Summary</b> Summation of Day 4 activities	Moderators and ICAO

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

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## **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).

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**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

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