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国际民用  
航空组织

ES AN1/6.2 - 0428

23 May 2011

**Subject: Fourth Meeting of the APIRG Communications, Navigation and Surveillance Sub-group (CNS/SG/4) (Dakar, Senegal, 25-29 July 2011)**

**Action required:** Kindly reply to paragraph 6 by **30 June 2011**

Sir/Madam,

1. I have the honour to inform you that the AFI Planning and Implementation Regional Group (APIRG) Communications, Navigation and Surveillance Sub-group (CNS/SG) will hold its fourth meeting (CNS/SG/4) in Dakar, Senegal, from 25 to 29 July 2011. I therefore extend an invitation to your Administration/Organization to attend.
2. The tentative Agenda and Explanatory Notes (WP/1), CNS Sub-group work programme and composition, and Information Bulletin (IP/1), Registration Form for the meeting are attached hereto as Appendices A, B, C, D and E respectively. The meeting will be conducted in the English and French languages and documentation will be issued in these languages.
3. Administrations/Organizations intending to present working papers should ensure that the papers reach the Secretariat not later than **30 June 2011** and should be, where possible, in both English and French languages. Papers received after that date will be distributed in the language in which they are received.
4. The CNS/SG/4 meeting will, *inter alia*, review:
  - a) the status of implementation of AFI Air Navigation Plan requirements for aeronautical telecommunications and the performance of the telecommunications infrastructure;
  - b) the ways and means of eliminating the identified deficiencies, and update the list of deficiencies affecting aeronautical telecommunications in view of follow up action to be taken by the States and organizations concerned;
  - c) the regional implementation strategies for communications, navigation and surveillance systems based on operational requirements and available technologies, and accordingly develop guidance material for consideration by States and air navigation service providers when planning and implementing their air navigation system components;

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d) the outcome of the 37<sup>th</sup> Session of ICAO Assembly and follow-up action to be taken, as well as CNS issues included in the Agenda of the Twelfth Air Navigation Conference (AN/Conf/12 ) scheduled for 2012.

5. You will recall that the APIRG, the Air Navigation Commission and the Council have emphasized the importance of members playing an active role by attending all meetings as well as contributing by way of working papers.

6. Please note that, in order to enhance coordination between the CNS/SG and the ATS/AIS/SAR SG, the latter will also be convened in the same week and at an adjacent venue. This is intended to permit ongoing coordination during the sessions of the two meetings, for which are to hold at least one joint session. Details regarding this arrangement will be communicated on the day of the meeting.

7. Kindly advise this Office of your participation in the CNS/SG/4 meeting as soon as possible but in any case not later than **30 June 2011**, giving the names and titles of participants.

Accept, Sir/Madam, the assurances of my highest consideration.



**Meshesha Belayneh**  
**ICAO Regional Director**  
**Eastern and Central African Office**

**Attachments:** Appendix A: Draft Agenda  
Appendix B: Draft Agenda Explanatory Notes  
Appendix C: CNS/SG - Terms of Reference  
Appendix D: Information Bulletin  
Appendix E: Registration Form

**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP (APIRG)  
COMMUNICATIONS, NAVIGATION AND SURVEILLANCE SUB-GROUP  
THIRD MEETING (CNS/SG/4)**

(Dakar, Senegal, 25-29 July 2011)

**DRAFT AGENDA**

- Agenda Item 1:** Election of Chairman and Vice-Chairman of the Sub-Group
- Agenda Item 2:** Terms of reference, work programme and composition of the Communications, Navigation and Surveillance Sub-group as defined by APIRG/17
- Agenda Item 3:** Follow up of APIRG/17 and CNS/SG/3 Conclusions and Decisions
- Agenda Item 4:** **Aeronautical Fixed Service (AFS)**
- Review of the implementation and performance of the Aeronautical Fixed Telecommunication Network (AFTN) and the Air Traffic Services Direct Speech (ATS/DS) Network in the AFI Region, identification of deficiencies and remedial action for their elimination
  - Review of the report of the first meeting of AFI VSAT managers
  - Review of the report of the first meeting of the AFI AMHS Implementation Task Force
  - Planning and implementation guidelines
- Agenda Item 5:** **Aeronautical Mobile Service (AMS)**
- Review of the implementation and performance of the Aeronautical Mobile Service in the AFI Region, identification of deficiencies and remedial action for their elimination
  - Extension of VHF Radio coverage in the AFI Region - Related issues
  - Planning and implementation guidelines
- Agenda Item 6:** **Aeronautical radio navigation service (ARNS)**
- Review of the implementation and performance of the Aeronautical radio navigation service in the AFI Region, identification of deficiencies and remedial action for their elimination
  - GNSS implementation: Results of AFI SBAS Cost-Benefit Analysis
  - Planning and implementation guidelines

**Agenda Item 7: Aeronautical Surveillance**

- Review of the status of implementation of the current aeronautical surveillance plan
- Review of the report of the second meeting of the AFI Surveillance Implementation Task Force
- Planning and implementation guidelines

**Agenda Item 8: Aeronautical Radio Frequency Spectrum issues**

**Agenda Item 9: ICAO 37<sup>th</sup> Assembly (2010) and Twelfth Air Navigation Conference (AN/Conf/12, 2012) – CNS related issues**

- Follow up on Assembly 37<sup>th</sup> Session in the field of CNS
- Development of a CNS Technology Roadmap

**Agenda Item 10: Future work programme and composition of the CNS/SG**

**Agenda Item 11: Any other business**

**Draft Agenda Explanatory Notes**

**Agenda Item 1: Election of Chairman and Vice-Chairman of the Sub-Group**

Under this agenda item, the meeting will elect its chairperson and vice person.

**Agenda Item 2: Review of the terms of reference, work programme and composition of the Communications Sub-group**

Under this Agenda Item, the CNS/SG will review its mandate and work programme assigned to it by APIRG/17.

**Agenda Item 3: Follow up of APIRG/17 and CNS/SG/3 Conclusions and Decisions**

Under this Agenda Item, the meeting will analyze implementation of APIRG/17 and CNS/SG/3 Conclusions and Decisions and report to APIRG/18.

**Agenda Item 4: Aeronautical Fixed Service**

Under this Agenda Item, the meeting will review the implementation status and the performance of the AFI AFTN and ATS/DS networks in the AFI Region, and propose remedial actions for the elimination of deficiencies in these fields.

The meeting will also review the report of the first meeting of AFI VSAT networks managers, and the report of the first meeting of the AFI AMHS Implementation Task Force.

**Agenda Item 5: Aeronautical Mobile Service**

Under this Agenda Item, the meeting will review the implementation status and the performance of the aeronautical mobile service in the AFI Region, and propose remedial actions for the elimination of deficiencies in this field.

Planning and implementation guidelines will also be discussed.

**Agenda Item 6: Aeronautical Radio Navigation Service**

Under this Agenda Item, the meeting will review the implementation status and the performance of the aeronautical radio navigation service in the AFI Region, and propose remedial actions for the elimination of deficiencies in this field.

The meeting will review the regional strategy for the implementation of GNSS in the AFI Region, and the results of the cost-benefit analysis (CBA) conducted by AFCAC in accordance with APIRG/17 Conclusions 17/28 and 17/29.

Planning and implementation guidelines will also be discussed.

**Agenda Item 7:           Aeronautical Surveillance**

Under this Agenda Item, the meeting will review the status of implementation of the current AFI Air Navigation Plan (ANP) requirements for aeronautical surveillance.

It will review the report of the second meeting of the AFI Surveillance Implementation Task Force.

Planning and implementation guidelines will also be discussed.

**Agenda Item 8:           Aeronautical Radio Frequency Spectrum issues**

Under this Agenda Item, the meeting will review the report of the second meeting of the AFI frequency Management Group.

It will also review the ICAO position for the ITU WRC-2012, and related regional preparatory activities.

**Agenda Item 9:           ICAO Twelfth Air Navigation Conference (AN/Conf/12)**

Under this Agenda Item, the meeting will review the outcome of the ICAO Assembly 37<sup>th</sup> Session and the AN/Conf/12 Agenda on items of relevance to its mandate.

**Agenda Item 10:         Future work programme and composition of the CNS Sub-group**

Under this Agenda Item, the work programme and composition of the CNS Sub-group will be updated by the meeting.

**Agenda Item 11:         Any other business**

Under this Agenda Item, the Sub-group will discuss other issues of interest (if any) not included in the above agenda items.

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## APPENDIX C

### DRAFT TERMS OF REFERENCE, FUTURE WORK PROGRAMME AND COMPOSITION OF THE COMMUNICATIONS, NAVIGATION AND SURVEILLANCE SUB-GROUP (CNS/SG)

#### 1. TERMS OF REFERENCE

- a) Ensure the continuing and coherent development of the AFI Regional Air Navigation Plan in the fields of aeronautical communications, navigation and surveillance (CNS), including the development of CNS elements of the AFI CNS/ATM Implementation Plan in the light of new developments, in harmony with the ICAO Global Air Navigation Plan (Doc 9750) and the plans for adjacent regions;
- b) Identify, review and monitor deficiencies that impede or affect the provision of efficient aeronautical telecommunications and recommend appropriate corrective action;
- c) Prepare, as necessary, CNS/ATM cost/benefit analyses for the implementation options of C, N and S elements; and
- d) Study, as necessary, institutional arrangements for the implementation of C, N and S systems in the AFI Region.

#### 2. WORK PROGRAMME

Item	Global Plan Initiatives	Task description	Priority	Target date
<b>Communications</b>				
1.	GPI-22	Follow up and monitor the implementation of VHF coverage in the AFI region in accordance with AFI/7 Rec. 5/12.	A	APIRG/18
2.	GPI-22	Update the AFI AFTN routing directory	A	APIRG/18
3.	GPI-22	In coordination with the ATS/AIS/SAR Sub-group, participate in the development of a communication infrastructure to support an AFI Central AIS Database (AFI CAD)	A	Continuing
4.	GPI-17 GPI-22	Follow-up the implementation of suitable communication bit-oriented protocols to improve AFTN performance and to facilitate the introduction of ATN applications.	A	APIRG/18
5.	GPI-17	Monitor the development, and coordinate the implementation of guidance material for service level agreements between air navigations service providers and ATN service providers	A	APIRG/18
6.	GPI-17	Review and update, if needed, the ICAO Register of AMHS managing domains and addressing information pertaining to AFI.	A	Continuing
<b>Navigation</b>				
7.	GPI-21	Analyze and review the Report of the AFI GNSS Implementation Task Force.	A	Continuing
8.	GPI-21	Follow up and monitor the implementation of Phase 1 of the AFI GNSS Strategy.	A	Continuing
<b>Surveillance</b>				
9.	GPI -9	Analyze and review CNS aspects of the report of the Aeronautical Surveillance Implementation Task Force.	A	APIRG/18

Item	Global Plan Initiatives	Task description	Priority	Target date
		<b>Communications, Navigation and Surveillance – General matters</b>		
10.	GPI -9 GPI-17 GPI-21 GPI-22	Analyze, review and monitor the implementation and operation of aeronautical communications, navigation and surveillance (CNS) systems, identify CNS deficiencies and propose measures for their elimination, as required	A	Continuing
11.	GPI -9 GPI-17 GPI-21 GPI-22	Give further consideration, as necessary, to the concept of multinational ICAO AFI air navigation facility/service addressed in the AFI/7 Report under Agenda Item 14 (AFI/7, Conclusion 10/6c).	C	Continuing
12.	GPI -9 GPI-17 GPI-21 GPI-22	In co-ordination with the ATS/AIS/SAR Sub-group, continue the evolutionary and harmonized development of the AFI CNS/ATM Systems Implementation Plan (AFI/7 Concl. 13/1).	A	Continuing
15.	GPI -9 GPI-17 GPI-21 GPI-22	In co-ordination with the ATS/AIS/SAR Sub-group, develop, as necessary, comprehensive business cases for competing CNS/ATM elements implementation options for the routing areas.	B	Continuing
16.	GPI -9 GPI-17 GPI-21 GPI-22	Co-ordinate plans developed by States, international organizations, airlines and industry for the implementation of the regional CNS/ATM systems implementation plan; and monitor CNS/ATM systems research and development, trials and demonstrations within the AFI Region and information from other regions.	B	Continuing
17.	GPI -9 GPI-17 GPI-21 GPI-22	Maintain current the database on CNS elements of CNS/ATM planning and implementation in the AFI Region.	B	Continuing
18.	GPI -9 GPI-17 GPI-21 GPI-22	Coordinate the implementation of ICAO Global Plan Initiatives pertaining to CNS and develop associated regional performance objectives.	A	Continuous
		<b>Aeronautical Spectrum</b>		
19.	GPI-23	Coordinate regional activities aimed at promoting ICAO position for ITU-WRC meetings, and improving aeronautical spectrum management and control in the Region.	A	Continuing

**Priority:**

A: High priority tasks on which work should be speeded up;

B: Medium priority tasks, on which work should be undertaken as soon as possible, but without detriment to priority A tasks; and

C: Lesser priority tasks, on which work should be undertaken as time and resources permit, but without detriment to priority A and B tasks.

**3. COMPOSITION:**

Algeria, Angola, Cameroon, Congo, Côte d'Ivoire, D.R. of Congo, Egypt, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Kenya, Malawi, Mali, Mauritius, Morocco, Niger, Nigeria, Senegal, South Africa, Spain, Sudan, Tanzania, Tunisia, Zambia, ACAC, ASECNA, IATA, and IFALPA.

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**International Civil Aviation Organization**

**Attachment D**

**Fourth Meeting of the APIRG Communications, Navigation  
and Surveillance Sub-group (CNS/SG/4)  
(Dakar, Senegal, 25 – 29 July 2011)**

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**INFORMATION BULLETIN**

**1. Venue of the Meeting**

The Meeting will take place in the conference room of ASECNA, at 32-38 Avenue Jean Jaurès, Dakar, Senegal. The contacts of the WACAF Office are:

Tel.: (+221) 33 839 9393  
Fax : (+221) 33 823 6926  
Email: [icaowacaf@dakar.icao.int](mailto:icaowacaf@dakar.icao.int)

**2. Languages**

The Meeting will be conducted in English and French languages.

**3. Opening Session**

The Opening Session of the Meeting will take place on Monday 25 July 2011 at 08:00 hours in the ASECNA conference room, where subsequent sessions will also be held.

**4. Registration**

The registration of participants will take place at the site of the meeting on Monday, 25 July 2011 from 0800 to 0830 hours.

**5. Instruction and Documentation**

The Meeting will be serviced by Mr. François-Xavier Salambanga, Regional Officer CNS of the ICAO Dakar Office assisted by Mr. Proper Zo'o-Minto'o, Regional Officer CNS of the ICAO Nairobi Office, Secretary of the CNS Sub-group. The documentation for the Meeting will be on line and participants are informed to bring laptops for access.

**6. Weather and Clothing**

Average temperature in Dakar in July is 25°C.

**7. Passport and visa requirements**

Entry visa for temporary visitors to Senegal may be obtained from the Senegalese Embassy or Consulate in their country. Visas are not required for Nationals from ECOWAS States.

**8. Banks**

Banks are located not far away from ASECNA and are opened from 0740 to 1215 hours and 1340 to 1545 hours from Monday to Friday.

**9. Hotels**

A list of recommended hotels is attached hereto.

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**HOTEL LIST / LISTE DES HOTELS /  
Rate in FCFA Prix**

* Al Afifa ***	46 Rue Jules FERRY B.P. 3474 ☎ 33 89.90.90	33 823 88 39 gmbafifa@orange.sn Petit déjeuner 3 600	37 950	41 250
Al Baraka ***	35, Rue El Hadj A. K. Bourgi, B.P. 578 ☎ 33 822 55 32	33 821 75 41 <b><u>Petit-déjeuner: 3 500 F</u></b>	25.600	31.200
Atlantic/Ocean ***	Yoff Route de l'Aéroport (à 1 km) ☎ 33 820 00 77 33 820 00 47	Climatisé +TV☎ <b><u>Petit-déjeuner: 3 000 CFA</u></b> Climatisé ☎	28.000 25.000	35.000 30.000
Faidherbe	Avenue Faidherbe x Raffenel B.P. 3197 Dakar ☎ 33 889 17 50 -	33889174 Climatisé+TV☎ faidherbe@orange.sn <b><u>PD: 4.400</u></b>	38 400	45.400
Farid ***	51, Rue VINCENS B.P. 1514 ☎ 33 821 61 27	338210894 PD : 4 000	38.100	42.200
* Ganale	38, Rue Amadou A. NDOYE ☎ 33 889 44 44	33 822 34 30 ganale@sentoo .sn <b><u>Petit-déjeuner: 4 200 FCA</u></b>	35.600	42.200
* Independence ***	Place de l'Indépendance X Av.Pompidou ☎ 33 823 10 19 33 823 10 50	33 821 11 17 hotelhi@sentoo.sn	29.600	34.200
Lagon 2 ***	Route de la Corniche-Est ☎ 33 889 25 25 - 33 82360 31	33 823.77.27 <b><u>Petit-déjeuner inclus</u></b> lagon1@sentoo.sn	72.100	81.200
Le Méridien Président**	Pointe des Almadies - BP8181 Dakar Yoff ☎ (221)33 869.69.49 - 33 869.69.29	(221)33 869.69.99 <b><u>Petit-déjeuner compris</u></b>	86 000 102 000	100 000 116 000

***				resa.meridien@sentoos.sn		
* Miramar	25-27, Rue Félix FAURE ☎ 33 823 20 97 (near/près UNESCO)		33 823 35 05 <b>Petit déjeuner: 2 500 CFA</b>		28 000	35.000
Nina ***	Rue du Dr. Theze X Rue A.a. Ndoye ☎ 33 889 01 20		33 889 01 81 <b>Petit déjeuner : 4000</b> hotelnina@sentoos.sn		30.000	36.000
ONOMO HOTEL	Route de l'Aéroport BP 38 233-Dakar/Yoff – Tél. 221 33 869 06 10		33 820 33 01 <b>Petit-déjeuner : 4 500 CFA</b> SALES.DAKAR@HONOMOHOT EL.COM		42 400	
* Miramar	25-27, Rue Félix FAURE ☎ 33 823 20 97 (near/près UNESCO)		33 823 35 05 <b>Petit déjeuner: 2 500 CFA</b>		28 000	35.000
Nina ***	Rue du Dr. Theze X Rue A.a. Ndoye ☎ 33 889 01 20		33 889 01 81 <b>Petit déjeuner : 4000</b> hotelnina@sentoos.sn		30.000	36.000
ONOMO HOTEL	Route de l'Aéroport BP 38 233-Dakar/Yoff – Tél. 221 33 869 06 10		33 820 33 01 <b>Petit-déjeuner : 4 500 CFA</b> SALES.DAKAR@HONOMOHOT EL.COM		42 400	
Océanic	Rue de Thann (Marché Kermel) ☎ 33 822 20 44 - 33 822 17 18		33 821 52 28 <b>Petit-déjeuner: 2 500 CFA</b>		21.600	25.800
* Plateau	62, Rue Jules FERRY B.P. 2906 ☎ 33 823 44 20 33 823 15 26 33 823 47 80		33 822 50 24 <b>Petit-déjeuner: 3 000 CRA</b>		26.000	30.000
Saint Louis Sun ***	68, Rue Félix FAURE ☎ 33 822 25 70		33 822 46 51 <b>Petit-déjeuner: 2 500 CFA</b>		21 210	26.670
Savanna**** ***	Pointe Bernard Petite Corniche BP 6096 Dakar ☎ 33 849 42 42		33 849 42 43/ 33 823 85 86 hotel@savanna.sn <b>Petit-déjeuner: 8 000 CFA</b>		60.800	65.100

Sohkamon	Boulevard Roosevelt x Nelson Mandela Dakar ☎ 33 889 71 00	33 823 59 89 <a href="mailto:hotelsokhamon@sentoo.sn">hotelsokhamon@sentoo.sn</a> <b><u>Petit-déjeuner : 5 500 CFA</u></b>	43 200 63 000	47 700 67 500
Airport hotel	route de l'Aéroport +221 33 869 78 78	<a href="mailto:saccvhotel@orange.sn">saccvhotel@orange.sn</a> <b><u>Petit-déjeuner : 4 500 CFA</u></b>	49 600	57 200
Teranga** ***	Place de l'Indépendance (Rue Carnot x Colbert) B.P. 3380 ☎ 33 889 22 00 - 33 823 10 44 - 33 823 55 02	33 823 50 01 Vue/ville <a href="mailto:teranga@ns.arc.sn">teranga@ns.arc.sn</a> Vue/mer	76 500 93.000	76.500 93.000
La Croix du Sud ***	20, Avenue du Roi Hassane II (Ex Avenue Albert Sarraut) Tél. 33 889 78 78	33 823 26 55 <a href="mailto:croisud@orange.sn">croisud@orange.sn</a> <b><u>Petit-déjeuner inclus</u></b>	50 600	61 200
TERROUBI****	Bd Martin Luther King Corniche-Ouest – Tél. 33 839 90 39	Fax: 33 839 90 45 <a href="mailto:reservation@terroubi.com">reservation@terroubi.com</a>	Vue jardin Vue de mer	95 000 112 000
Café de Rome	30, Bd de la République Tél. 33 849 02 00	Fax: 33 823 63 84 <a href="mailto:Hotel.resa@anfa-group.com">Hotel.resa@anfa-group.com</a> <b><u>Petit déjeuner : à la carte</u></b>	54 200 59 800	68 200 74 200

**Special rates for ICAO. (Delegates should specify that they are attending an ICAO meeting).  
Tarifs spéciaux pour l'OACI. (Les délégués doivent préciser qu'ils participent à une réunion OACI).**

**\*\* Reservation may be requested by fax or e-mail and may indicate ICAO rates**  
Les réservations doivent être faites par fax ou par e.mai en indiquant le tarif OACI

**\*\*\* Hotel can provide transport from and to the airport at their own expense (Delegates should specify if they need transport)**  
Hôtel pouvant transporter les délégués à partir de l'aéroport et à leur départ de l'hôtel à leur propre charge (Les délégués doivent le préciser en faisant leur réservation)

**Updated on 30 March 2011**



**International Civil Aviation Organization**

**Attachment E**

**Fourth Meeting of the APIRG Communications, Navigation  
and Surveillance Sub-group (CNS/SG/4)  
(Dakar, Senegal, 25-29 July 2011)**

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**First Name (in capital)**

\_\_\_\_\_

**Surname (in capital)**

\_\_\_\_\_

**Title**

\_\_\_\_\_

**Administration/Organization**

\_\_\_\_\_

**Address**

\_\_\_\_\_

**City and Country**

\_\_\_\_\_

**Telephone/Fax**

\_\_\_\_\_

**E-mail (type)**

\_\_\_\_\_

**Hotel**

\_\_\_\_\_