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国际民用  
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File Ref.: AN 7/30.21-17/227

22 August 2017

**Subject: Joint ACAC/ICAO MID Workshop on GNSS  
(Rabat, Morocco, 7 - 8 November 2017)**

**Action Required Reply not later than 15 October 2017**

Sir,

I have the honour to inform you that ACAC and ICAO MID Regional Office are jointly organizing a Workshop on GNSS in Rabat, Morocco, on 7-8 November 2017. Your Administration/Organization is kindly invited to participate in this Workshop.

The Workshop will be conducted in the English language only. The provisional Agenda for the Workshop is at **Attachment A**. The Bulletin containing further details about the Workshop including the Hotel List in Rabat (with ACAC corporate rates) will be provided by ACAC at a later stage.

The Workshop, among other subjects, will cover the following:

- information on the European Geostationary Navigation Overlay Service (EGNOS) status, development and its roadmap;
- the African experience related to the GNSS initiatives in aeronautical domain;
- possible extension of the Indian system GAGAN (SBAS) to the Gulf area; and
- GNSS Vulnerabilities and mitigation measures.

The Workshop will provide an opportunity for detailed discussions on the implementation of different GNSS elements/options and associated challenges, including GNSS vulnerabilities (unintentional interference, intentional interference, effects of the ionosphere and solar activity (space weather) and others). The Workshop will address also a number of measures that could be taken to reduce the likelihood of GNSS signal disruption, including the availability of dual GNSS frequencies and effective spectrum management.

Representatives from States and relevant stakeholders, including airlines and industry, will participate in the Workshop and share their views and perspectives.

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The success of this Workshop bears much on the contribution of the stakeholders and participants, which we highly encourage. Your active participation with Power Point Presentations covering some of the subjects which will be addressed during the Workshop will be highly appreciated.

I would appreciate it if you could, as soon as possible, preferably **not later than 15 October 2017**, confirm the participation of your Administration/Organization to the Workshop by exchange of correspondence with the ICAO MID Regional Office and ACAC at the following e-mail addresses: [icaomid@icao.int](mailto:icaomid@icao.int), and [mohamed.rejeb65@gmail.com](mailto:mohamed.rejeb65@gmail.com) giving the name(s) of your delegate(s) using the nomination Form at **Attachment B** to this letter.

Accept, Sir, the assurances of my highest consideration.



*For/* Mohamed Khalifa Rahma  
Middle East Regional Director

**Attachments:**

*Attachment A: Provisional Agenda*

*Attachment B: Nomination Form*

**JOINT ACAC/ICAO MID WORKSHOP ON GNSS**

*(Rabat, Morocco, 7-8 November 2017)*

**PROVISIONAL AGENDA**

**1. Introduction**

- Welcome and opening remarks (ACAC/ ICAO)
- Introduction of participants (All)
- Group Photo (All)
- Introduction/Overview and Objectives (ACAC)
- ICAO Global and Regional Developments related to GNSS

**2. SBAS implementation**

- EGNOS status and roadmap (EC)
- EGNOS extension to Euromed region (EC)
- Benefit analysis for a SBAS Eastern Africa Module (DLC)
- GAGAN extension to the Gulf region
- Initiative SBAS for GCC, Iraq and Yemen
  - o SBAS system (TAS)
  - o Costs and benefits evaluation (TPZ/VVA)

**3. GBAS implementation**

- Global and Regional Developments related to GBAS implementation

**4. GNSS vulnerabilities and mitigation measures**

- GNSS Regulations and Legal issues
- The effects of solar radio bursts on GNSS operations: (Prof. Sandro Radicella, Institute International de Physique Théorique de Trieste)
- GNSS vulnerabilities, challenges for the implementation of SBAS in Africa (Mr. Moustapha BOUKARY MALAM, EGNOS in AFRICA JPO)
- Statistical and digital signal processing for electronic navigation and weak signal detection
- GNSS frequencies and spectrum management

**5. Conclusions and Closing Session**

- Recommendations and Conclusions
- Closing session

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INTERNATIONAL CIVIL AVIATION ORGANIZATION  
MID REGIONAL OFFICE

Joint ACAC/ICAO MID Workshop on GNSS

(Rabat, Morocco, 7 - 8 November 2017)

NOMINATION FORM

PLEASE PRINT OR TYPE CLEARLY

1. Mr. / Mrs. / Ms. \_\_\_\_\_  
First Name Middle Name Last Name

2. Title or Official Position: \_\_\_\_\_

3. State/Organization: \_\_\_\_\_

4. Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

5. Fax Number: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Mobile Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

6. Hotel \_\_\_\_\_

Date: ..... Signature: .....

After completing, please send to: ICAO MID Office at the following e-mail addresses: [icaomid@icao.int](mailto:icaomid@icao.int) and [mohamed.rejeb65@gmail.com](mailto:mohamed.rejeb65@gmail.com) or Fax number +20 2 22674843

*Note 1: Participants are expected to make their own hotel/visa arrangements*