INTERNATIONAL CIVIL AVIATION ORGANIZATION

**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP (APIRG)
COMMUNICATIONS, NAVIGATION AND SURVEILLANCE SUB-GROUP SECOND
MEETING
(CNS/SG/2)**

DRAFT CONCLUSIONS AND DECISIONS

Agenda Item 4: Communication Systems

Draft Conclusion 02/01:　　　　**AFTN implementation specifications**

That:

   a) **AFI AFTN specifications shown at Appendix…to this report be amended to reflect emerging technologies and new communication bit-oriented protocols; and**

   b) **the further use of X.25 protocol should be discouraged in the AFI Region.**

Draft Conclusion 02/02:　　　　**Implementation of ATN/IPS (TCP/IP)**

That AFI States implement ATN/IPS* (TCP/IP) Standards in order to avoid, to the maximum extent possible, interoperability difficulties with an ATN/OSI system.

(*) Note: ATN/IPS (TCP/IP) is in the process of being standardized by ICAO.

Draft Conclusion 02/03:　　　　**Implementation/Interconnection of SADC/2, NAFISAT and AFISNET VSAT Networks**

That States and Organizations concerned facilitate the implementation and interconnection of SADC/2, NAFISAT and AFISNET VSAT networks by September 2007, in compliance with the project plan in order to:

   a) **increase AFS (AFTN and ATS/DS) connectivity and efficiency, thus improving flight coordination and management in the AFI Region; and**

   b) **facilitate the timely implementation of AFI RVSM Programme.**

Draft Conclusion 02/04:　　　　**Survey on missing flight plans**

That the ICAO Regional Offices (Dakar and Nairobi) carry out the necessary coordination to ensure that AFTN technical and operational aspects are included in the survey relating to missing flight plans to be conducted in the AFI Region in furtherance to ATS/SAR/AIS/SG/9 Conclusion 9/10.

Note:　The survey on missing flight plans should be conducted no later than 1 August 2007.

Draft Conclusion 02/05:　　　　**Guidelines for VSAT networks**

That States make use of the guidelines for the performance of VSAT networks provided in Appendix….

Draft Conclusion 02/06:　　　　**Implementation of ATS/DS link Accra/Luanda**

That Angola, Ghana and South Africa (ATNS) take the necessary steps to implement Accra/Luanda ATS/DS circuit through interconnection between AFISNET and SADC/2 networks.

Draft Conclusion 02/07:　　　　**Implementation of Las Palmas/Nouadhibou and Las Palmas/Nouakchott ATS/DS links**

That Spain (AENA) and Mauritania (ASECNA) expedite the implementation of ATS/DS links between Las Palmas and Noukchott and between Las Palmas and Nouadhibou by 30 June 2007 in compliance with the project plan.

Draft Conclusion 02/08:   **Implementation of ATS/DS link Bangui/Gbadolite**

That Central African Republic (ASECNA) and Democratic Republic of The Congo explore the possibility of implementing a VSAT link between Bangui and Gbadolite, by interconnecting the existing facilities.

Draft Conclusion 02/09:   **Implementation of ATS/DS links Banjul/Conakry and Bissau/Conakry**

That The Gambia, Guinea (Roberts FIR) and Bissau Guinea (ASECNA) expedite the implementation of the ATS/DS links Banjul/Conakry and Bissau/Conakry.

Draft Conclusion 02/10:   **Need for cooperation between neighbouring States in implementing VHF radio coverage extension**

That AFI States and Air Navigation Service Providers cooperate in addressing all aspects related to the implementation of VHF coverage facilities at FIR/airspace boundaries, including regulatory, environmental and maintenance aspects, in compliance with AFI/7 Recommendation 5/12c and APIRG Conclusion 12/16.

Draft Conclusion 02/11:   **Survey on AMS VHF coverage**

That the ICAO Regional Offices (Dakar and Nairobi) coordinate the conduct of a regional survey on AMS/VHF coverage by States and Organizations in order to ascertain that VHF frequencies are free of harmful interference and to initiate remedial action with States concerned as necessary. The form shown at Appendix…should be used in this connection.

Draft Conclusion 02/12:   **States participation in IATA VHF coverage surveys**

That States cooperate and provide their support to VHF coverage surveys to be carried out by IATA in the AFI Region, initially in every 18 months.

Note: The first IATA VHF survey has been scheduled from 3 to 23 September 2007.

Agenda Item 5: Aeronautical Radio Navigation service (ARNS)

Draft Conclusion 02/13: **Implementation of GNSS En-Route and Non-Precision Approach Operations**

That AFI States continue their efforts to implement GNSS applications for en-route and non-precision approach operations as part of Phase 1 of AFI GNSS Strategy. In so doing, particular attention should be accorded to meeting all GNSS implementation requirements, including establishment of GNSS legislation, regulatory framework, and approval and monitoring procedures.

Draft Conclusion 02/14:   **Recording of GNSS Parameters**

That AFI States that approve GNSS-based operations should ensure that GNSS data relevant to those operations are recorded as recommended in ICAO Annex 10, Volume I, Chapter 2, § 2.4.3. Particularly, for GNSS core systems, the following monitored items should be recorded for all satellites in view:

    a)   observed satellite carrier-to-noise density (C/N0);
    b)   observed satellite raw pseudo-range code and carrier phase measurements;
    c)   broadcast satellite navigation messages, for all satellites in view; and
    d)   relevant recording receiver status information.

Draft Decision 02/15:   **AFI GNSS Implementation Strategy**

That the action taken by the Air Navigation Commission on APIRG Conclusions 15/18, 15/19 and 15/20 be referred to the AFI GNSS Implementation Task Force for the updating the AFI GNSS Strategy accordingly.

Draft Decision 02/16:   NAVISAT Project

That :
   a) the progress report on NAVISAT Project submitted to CNS/SG/2 be referred to the AFI GNSS Implementation Task Force for consideration in addressing its work programme as required; and
   b) while monitoring the work being done by MIDANPIRG on the NAVISAT Project, the APIRG Secretariat coordinate assistance to project studies requiring inputs from the AFI Region, should the need arise.

Agenda Item 6:   Aeronautical Surveillance

Draft Decision 02/17:   Status of implementation of AFI surveillance plan for en-route ACCs

That the status of implementation of the AFI surveillance plan for en-route be included in the review of CNS system performance.

Draft Decision 02/18:   Development of a surveillance plan for TMAs and aerodromes

That a comprehensive surveillance plan be developed for TMAs and aerodromes.

Draft Decision 02/19:   Establishment of an AFI ADS-B Implementation Task Force

That an AFI ADS-B Implementation Task Force be established with the following terms of reference:

   1) Identify and quantify near term and long term benefits of ADS-B in meeting surveillance requirements in the AFI Region; and

   2) Develop a recommended implementation plan including a recommended target date of implementation taking into account availability of SARPs and readiness of airspace users and ATS providers for a coordinated implementation of service and expected benefits.

Note:

   1. The Task Force, while undertaking the task, should take into account of the work being undertaken by relevant ICAO Panels with a view to avoid any duplication.
   2. The Task Force should complete its work and present the result to the next meetings of APIRG and its ATS/AIS/SAR and CNS Sub-groups.
   3. In assessing the readiness of airspace users, take into account business aviation usage.

Agenda Item 7:   Review of Communications, Navigation and Surveillance Systems Implementation Strategies

Draft Conclusion 02/20:   Elimination of CNS Deficiencies

That States continue to accord high priority to solving the deficiencies that still affect the current communications, navigation and surveillance (CNS) systems, in accordance with APIRG Conclusion 15/99.

Draft Decision 02/21:   Updating of the List of CNS Deficiencies

That the Secretariat coordinate with States and Organizations concerned the necessary updates to the list of deficiencies affecting CNS systems in the AFI Region, to be submitted to APIRG/16 Meeting.

Draft Conclusion 02/22:   Amendments to AFI CNS Systems Implementation Strategies

That the CNS systems implementation strategies developed in the AFI CNS/ATM Implementation Plan (Doc 003) be updated taking due account of the revised ICAO Global Air Navigation Plan (Doc 9750) and AFI ATM operational objectives.

Draft Conclusion 02/23: Need for Collective Approach to CNS/ATM system management

That air navigation service providers (ANSPs) be encouraged to adopt a collective approach and speak in a single voice on issues of common interest related to the implementation of CNS elements of the CNS/ATM systems (such as service level agreements with ATN service providers, system availability, system reliability, etc.).

Agenda Item 8:   **Review of ICAO position and preparations for the ITU WRC - 2007**

Draft Decision 02/24:   **ICAO Position and preparations for ITU WRCs**

That :

    a)   **a Working Group composed of ITU WRC focal points of contact designated by AFI States and Organizations be established under the coordination of the Secretariat in order to implement APIRG Conclusion 15/26 in an efficient manner ;**

    b)   **States and Organizations which have not yet done so be reminded to provide the Secretariat with the names, official designation and contact details (telephone, fax and email addresses) of their designated focal points for ITU matters; and**

    c)   **the Secretariat monitor and keep States and Organizations abreast of ITU and ATU preparatory activities related to WRCs for the timely planning and coordination of their participation.**

Agenda Item 9:   **Future work programme and composition of the CNS/SG**

Draft Decision 02/25:   **Future terms of reference, work programme and composition of the CNS Sub-group**

That the terms of reference of the CNS Sub-group be as defined in Appendix…

Agenda Item 10: Any other business

Draft Decision 02/26:   **Harmonization of target dates of implementation of AFI operational systems**

That:

    a)   **the CNS Sub-group Secretariat should harmonize target dates with ATM/SG Secretariat regarding operational system implementation in the AFI programme; and**

    b)   **reference CNS and ATM implementation documents reflecting disparity in dates should be amended accordingly.**