



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
THIRTEENTH MEETING (APIRG/13)**
(Sal, Cape Verde, 25-29 June 2001)**Agenda Item 7: Inter-regional coordination****REVIEW OF THE MAIN ACTIVITIES OF PANELS OF THE AIR NAVIGATION
COMMISSION AND STUDY GROUPS DURING 1999 - 2000**

(Presented by the Secretariat)

SUMMARY

The attachment to this working paper provides information on the status of the programmes of the panels of the Air Navigation Commission involved in CNS/ATM related activities during 1999 and 2000 in tabular format.

Action by the APIRG is contained in paragraph 2.

1. INTRODUCTION

1.1 Panels of the Air Navigation Commission are technical groups of qualified experts formed by the Air Navigation Commission to advance the solution of specialized problems which cannot be solved adequately or expeditiously by the established facilities of the Commission and the Secretariat. The use of panels has evolved from the need to bring together the best available experts to examine specialized problems and to find technically feasible solutions which would be acceptable to Contracting States.

1.2 Panels work under the direct control of the Air Navigation Commission and conduct their business by correspondence and meetings. Panels may conduct their activities between meetings by means of working groups. It is important to note that members are participating in their personal expert capacity.

1.3 The attachment to this working paper provides information on the status of the programmes of the panels of the Air Navigation Commission involved in CNS/ATM related activities during 1999 and 2000 in tabular format.

2. ACTION BY THE MEETING

2.1 APIRG is invited to note the information contained in the attachment.

PANELS AND STUDY GROUPS INVOLVED IN CNS/ATM RELATED ACTIVITIES

PANEL/STUDY GROUP	WORK PROGRAMME			
	TASKS	TITLE	TARGET COMPLETION DATE	STATUS (PROGRESS IN 2000)
OPLINKP	ATM-9102	ATS applications for air-ground data links	2001 and beyond	Work continued on draft SARPs, procedures and guidance material relating to the use of ADS, CPDLC and other data link applications.
	ATM-9502	ATM requirements for communication	2001 and beyond	The development of the concept of required communication performance was progressed.
	ATM-9506	Automatic dependent surveillance (ADS) systems and procedures	2001 and beyond	
	ATM-9103	Data interchange between automated ATS systems	2001	Provisions applicable to AIDC are being developed.
	ATM-0002	ADS-B, Traffic situational awareness and airborne separation assurance	Ongoing	Ground work was prepared for an operational concept and operational requirements for the use of a system to increase aircraft situational awareness and airborne separation assurance are being developed.
AMCP	CNS-7002	Aeronautical electromagnetic spectrum	Ongoing	AMCP continued work on spectrum protection tasks inherited from the disbanded FMSG.
	CNS-8702	Aeronautical mobile satellite air-ground data link (AMSS subnetwork)	Completed	Work on upgrades to the AMSS SARPs was completed.
	CNS-9902	Next-generation AMSS systems	Ongoing	Work on the development of acceptability criteria and SARPs for next-generation satellite systems was completed.
	CNS-9102	VHF air-ground digital link (VDL subnetwork)	Ongoing	Validation of the detailed technical specification for VDL Modes 3 and 4 ongoing.
	CNS-9603	Air-ground data link to support navigation and surveillance applications	Ongoing	Validation of the VDL Modes 3 and 4 SARPs completed.
	CNS-9602	High frequency data link (HFDL)	Ongoing	Validation of detailed technical specifications ongoing.
ATMCP	ATM-9501	Required total system performance	2002	The ATMCP Working Group has held 5 meetings. Progress is being made on operational concept document.
	ATM-9202	Global air traffic management	2002 and beyond	
	ATM-9510	Interoperability and functional integration of flight operations, ATS, ATFM and tactical ASM	2002	

PANEL/STUDY GROUP	WORK PROGRAMME			
	TASKS	TITLE	TARGET COMPLETION DATE	STATUS (PROGRESS IN 2000)
ATNP	CNS-7001	AFS systems planning studies	Completed	SARPs and technical specifications for ATN systems management, security and directory services were completed in 2000. Future work involves the incorporation of new and revised operational requirements and subnetworks into the ATN and enhancements to existing functions.
	CNS-8101	AFTN procedures and message format	Completed	
	CNS-9403	Aeronautical telecommunication network (ATN)	Completed	
	CNS-9901	AFS procedures	Completed	
GNSSP	CNS-9401	Global navigation satellite system (GNSS)	Completed	First set of SARPs recommended at GNSSP/3 Meeting, 12 to 23 April 1999.
	CNS-7002	Aeronautical electromagnetic spectrum	Ongoing task	
	OPS-8502	Flight procedures and obstacle clearance criteria based on GNSS & RNP systems	2001	
SASP	ATM-8505	Required navigation performance and area navigation for en-route operations	2001	Route spacings based on RNAV and RNP 1, a global target level of safety and the effects of GNSS on aircraft separation continued to be studied. Guidance material was developed for inclusion in the <i>Manual on Airspace Methodology for the Determination of Separation Minima</i> (Doc 9689).
	ATM-6301	Separation between aircraft	2001 and beyond	Developments of proposals were advanced for the amendment of SARPs and PANS concerning reduced separation minima including: lateral distance-based intersecting track separation; 30 NM lateral and longitudinal was presented to ANC for review in 1999. The reduction of longitudinal separation to below 10 minutes is under development. The implementation of RVSM is continuing to be under review and the revision to the <i>Manual on Implementation of a 300 m (1 000 ft) Vertical Separation Minimum Between FL 290 and FL 410 Inclusive</i> (Doc 9574) is completed.
	ATM-9505	Airspace infrastructure planning	Completed	
SCRSP	CNS-7901	Conflict resolution and collision avoidance systems	2004	Work is concentrating on surveillance enhancements and ADS-B while monitoring ACAS and Mode S implementation in the States. Activities on ASAS are progressing with the preparation of technical requirements for ASAS to be presented at SCRSP/1.
	CNS-9601	Surveillance enhancements (emerging surveillance systems)	2004	

PANEL/STUDY GROUP	WORK PROGRAMME			
	TASKS	TITLE	TARGET COMPLETION DATE	STATUS (PROGRESS IN 2000)
	CNS-9701	Airborne separation assurance system (ASAS)	2004	
ADMSG	AIS-9401	Aeronautical data bases	2005	Evaluation and validation of the SICIM and FAA/EUROCONTROL AICM/AIXM were initiated at the first meeting in November 1999; further work in 2001-05.
AISMAPSG	AIS-9801	Electronic aeronautical charts for cockpit display	2003	Amendment 29 to Annex 15 introduced aeronautical data base requirements including the quality system, data integrity and protection and publication resolutions. At the 3rd meeting (December 1999) work continued on tasks AIS-9801 and AIS-9802. The group will continue work in 2001-05.
	AIS-9802	Electronic terrain data	2003	
	AIS-9806	Electronic exchange of aeronautical information	2005	
AVSSSG	CNS-7001	AFS systems planning studies	2001	The third meeting of AVSSSG was held in Montreal in October 2000. SARPs on ATS voice networks were adopted in 2001. Guidance material is being completed.
HFSG	PEL-9001	Flight safety and human factors	2001	Review of SARPs on CNS/ATM, to ensure that Human Factors are properly taken into consideration. SARPs submitted to the Council during the periodic cycles of revision of the relevant Annexes. Further, HF-related requirements are to be included in PANS-RA have been developed.
HRPTSG	PEL-9601	Regional human resource planning and training needs	2002	The first draft of the Human Resource Development Manual is under development. An initial version of a computer programme designed to indicate how CNS/ATM technologies affect job profiles and the consequential human resource planning and training requirements was developed.
METLINKSG	MET-9101	Amendment to Annex 3 concerning automated air-reporting	2001	Amendment 72 to Annex 3 being developed including the details of the turbulence index to be reported.
	MET-9301	Future requirements for the uplink of OPMET information to aircraft in flight	2001	Amendment 72 to Annex 3 being developed including the meteorological specifications (templates) for D-ATIS and D-VOLMET.

PANEL/STUDY GROUP	WORK PROGRAMME			
	TASKS	TITLE	TARGET COMPLETION DATE	STATUS (PROGRESS IN 2000)
	MET-9602	SIGMET information in graphical format	2004	Amendment 72 being developed including the specification of the numerical code to be used for the dissemination and uplink of graphical SIGMETs.
TRNSG	CNS-9402	Testing of radio navigation aids	Completed	First and second meetings of the study group produced a revised version of Doc 8071, Volume I, <i>Manual on testing of ground-based radio navigation systems</i> (replacing former Volumes I and II). TRNSG/3 produced Volume II (GNSS)
	CNS-9401	Global navigation satellite system (GNSS)	Completed	
WAFSSG	MET-8802	WAFS planning and implementation	2001	Amendment 72 to Annex 3 being developed to include global WAFS SIGWX forecasts in binary format (BUFR) code for direct transmission to airline and ATM computers.

LEGEND

ANC Panels

- AMCP — Aeronautical Mobile Communications Panel
- ATMCP — Air Traffic Management Operational Concept Panel
- ATNP — Aeronautical Telecommunication Network Panel
- GNSSP — Global Navigation Satellite System Panel
- OCP — Obstacle Clearance Panel
- OPLINKP — Operational Data Link Panel
- SASP — Separation and Airspace Safety Panel (Former RGCSP)
- SCRSP — Surveillance and Conflict Resolution Systems Panel (Former SICASP)

Study Groups

- ADMSG — Aeronautical Data Modelling Study Group
- AISMAPSG — Aeronautical Information and Charts Study Group
- AVSSSG — ATS Voice Switching/Signalling Systems Study Group
- HFSG — Flight Safety and Human Factors Study Group
- HRPTSG — Human Resource Planning and Training Study Group
- METLINKSG — Meteorological Information Data Link Study Group
- TRNSG — Testing of Radio Nav aids Study Group
- WAFSSG — World Area Forecast System Study Group

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