

KEY PRIORITIES FOR CNS/ATM IMPLEMENTATION IN THE ASIA/PACIFIC REGION

(Last Update 29 July 2005)

KEY PRIORITIES - CNS/MET Sub-Group						
#	KEY PRIORITIES	DESCRIPTION	MILESTONES	SUB-GROUP	STATUS	Discussion/Action
1	ATN Implementation	Implementation of Ground to Ground element of ATN is required.	2005	CNS/MET ATN Transition Task Force.	Implementation plan to be completed and implementation to commence in 2005	Implementation plan completed and proposal for the ATN TTF to be dissolved. TF to be replaced by ATN Implementation Coordination Group. ACTION: Remove item from KP List.
2	GNSS Implementation • ABAS • SBAS • GBAS	To implement GNSS in accordance with the Asia Pacific Regional Strategy. Develop regional GNSS augmentation requirements Ensure region wide awareness of developing GNSS systems integrate into Regional Plan. Facilitate market available GBAS ground system certified to Annex 10 SARPs	On Going. Report to APANPIRG 2008	All CNS/MET	SBAS - WAAS IOC announced on 10 July 2003 SBAS receivers (TSO C145/6) now available GBAS - FAA LAAS contract for delivery in 2009 Lead aircraft with certified GBAS avionics now in service.	To be read in conjunction with Key Priority 6 of the Combined CNS/MET and ATM/AIS/SAR List. Strategy for Approach, Landing and Departure identified GBAS as a preferred CAT I option. No ground equipment is available that is certified to Annex 10 SARPs.

KEY PRIORITIES – Combined CNS/MET Sub-Group and ATM/AIS/SAR Sub-Group						
#	KEY PRIORITIES	DESCRIPTION	MILESTONES	SUB-GROUP	STATUS	Discussion/Action
1	Technical Co-operation in Regional CNS/ATM Planning & Implementation <u>& Training</u>	The continuation and enhancement of ICAO's co-ordinating role of technical co-operation in CNS/ATM planning and implementation, in close co-operation with all partners and taking into account the regional approach, is required.	Report to APANPIRG	CNS/MET & ATM/AIS/SAR	Sub-Groups to identify requirements.	Emphasis needs to be on sharing information and training. Title 'Technical Co-operation' is confusing with assistance programs. Need to inform States of opportunities for training well in advance of scheduled date. Training opportunities should include ICAO programs as well as associated organizations programs. ACTION: Re-title to ' Technical Co-operation in Regional CNS/ATM Planning & Implementation <u>& Training</u> ',
2	Preparation for WRC-2007	The co-operative participation of States is required with their respective telecommunications regulatory authorities, regional groups, at the APT forums and at the WRC regional preparatory meetings for WRC-2007 to ensure that aviation spectrum requirements are fulfilled and protected.	WRC-2007 <u>APT Feb 06</u>	CNS/MET & ATM/AIS/SAR	States are designating contact points responsible for preparation for WRC 2007 and are providing contact details for posting on the website to facilitate coordination.	High importance task. Spectrum must be available to enable CNS/ATM implementation. ACTION: Retain as KP, Add regional (eg APT) preparatory meetings as milestones.

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3	MET support for New CNS/ATM System	<p>To identify the ATM requirements for new MET products supporting CNS/ATM systems and update the plan accordingly.</p> <p>Implementation of WAFS – transition to GRIB and BUFR coded products</p>	<p>2006</p> <p>2006</p>	<p>CNS/MET with assistance of the MET/ATM TF and WAFS Implementation Task Force</p> <p>ATM/AIS/SAR</p>	<p>Completed</p> <p>Completed</p> <p>METATM TF preparing an update for the MET chapter of the ASIA/PAC Regional Plan for the New CNS/ATM Systems.</p> <p>MET/ATM coordination seminar planned for early 2006</p> <p>GRIB coded products have been implemented.</p>	<p>Key priority 3 encompasses activities related to the MET component of the CNS/ATM systems including the implementation of WAFS (former Key Priority 11)</p>

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4	Data-link Communications	<p>Implementation of CPDLC.</p> <p>AIDC to be introduced where ATM automated systems are implemented.</p>	<p>On-going</p> <p>February 2004 – CPDLC operational trial in the Bay of Bengal area.</p> <p>2006/2007 CPDLC operational trial expected in the South China Sea area</p> <p>2005</p>	<p>ATM/AIS/SAR & CNS/MET</p> <p>All</p>	<p>Sub-Groups to review progress of implementation.</p> <p>Implementation focus and time-table need to be developed.</p>	<p>Data link communications is part of normal implementation program. There is no inhibitor preventing the implementation of CNS/ATM</p> <p>Retain Key Priority in respect of ADS-C implementation; ADS-C includes CPDLC implementation.</p>
5	ADS-B	<p>Data Link Selection for ADS-B recommended by ADS-B Task Force</p> <p>ADS-B Task Force to develop implementation plan and sub-groups foster implementation.</p> <p>States, where appropriate, implement ADS-B Air-Ground surveillance service on a sub-regional basis.</p> <p>Operational Standards to</p>	<p>2003</p> <p>2005</p> <p>2006</p>	<p>CNS/MET & ATM/AIS/SAR</p> <p>ADS-B Task Force</p> <p>All</p>	<p>APANPIRG/14 adopted 1090 MHz ES as the data link for ADS-B in ASIA/PAC region.</p> <p>On-going</p> <p>On-going</p> <p>Australia actively progressing wide implementation of ADS-B.</p>	<p>Focus on activities to enable successful ADS-B implementation.</p> <p>Roll-out of ADS-B considered an on-going activity.</p>

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		support proposed separation standards	2006	ADS-B Task Force		
		Airline aircraft certificated to participate in ADS-B operations	2006	ADS-B Task Force		
		Avionic packages available to meet GA and low capacity operations.	2008	ADS-B Task Force		
6	Implementation of APV and RNP RNAV (GNSS) Approaches	Review applicability of APV and RNP RNAV (GNSS) Approach Design Standards, aircraft certification and augmentation system availability for Asia Pacific. Develop implementation strategy.	On Going. Report to APANPIRG 2006 2007	ATM/AIS/SAR CNS/MET	APV and RNP RNAV (GNSS) Design standards now in PANS OPS. Aircraft certified for RNP RNAV (GNSS) and APV approaches.	Navigation function. ATM/AIS/SAR/SG to consider operational issues including charting.

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7	Data Link Flight Information Services (DFIS) applications	<p>To implement the following applications via request/response mode of data link in the Asia and Pacific Regions:</p> <p>a) Data link –automatic terminal information services (D-ATIS);</p> <p>b) VOLMET data link service (D-VOLMET);</p> <p>c) Pre-Departure Clearance (PDC) delivery via data-link;</p> <p>d) DCL</p>	2008	AT ATM/AIS/SAR CNS/MET	Trials and demonstrations are conducted and some operational services are provided by States.	ACTION: Add DCL and Reassign to ATM/AIS/SAR and CNS/MET

KEY PRIORITIES – ATM/AIS/SAR Sub-Group						
#	KEY PRIORITIES	DESCRIPTION	MILESTONES	SUB-GROUP	STATUS	Discussion/Action
1	Incorporation of CNS/ATM Material into Regional ANP & FASID	Incorporation of CNS/ATM Material into Regional ANP & FASID	Report to APANPIRG	ATM/AIS/SAR	On-going	Regional ANP and FASID extensively reviewed and are now essentially up-to-date. No action required by CNS/MET SG. ACTION: Remove from KP List.
2	WGS-84 Implementation	To achieve uniformity in aeronautical data publication across the Region in order to ensure a standard reference system for CNS/ATM.	Immediate (Effective Date was 1 Jan 1998)	ATM/AIS/SAR	Implementation is monitored at each meeting using the uniform format for the reporting of WGS-84 implementation.	Majority of States have implemented WGS-84. Non-compliant states are identified in the deficiency list. Deficiency processes provide sufficient attention to have matter resolved. ACTION: Remove from KP List.
3	RVSM Implementation	To provide more efficient flight profiles and to increase airspace capacity in conjunction with the implementation of CNS/ATM.	Bay of Bengal — 27 November 2003 Domestic airspace of Tokyo and Naha FIRs and Incheon FIR — June 2005.	ATM/AIS/SAR	Completed On-going	The implementation of RVSM that will occur on 29 September is the last implementation in international oceanic airspace in Asia/Pacific Region. ACTION: Remove from KP List.
4	RNP/RNAV Implementation En-route RNP 10 & 4 Terminal RNP 4 & 1 Approach RNP 0.3	Implement RNP performance based navigation, operation and procedures to improve the efficiency and flexible use of airspace.	Report to APANPIRG	ATM/AIS/SAR	On-going Phased implementation.	Change title to RNP/RNAV Implementation, reflect performance based navigation, not just RNP.

KEY PRIORITIES – ATM/AIS/SAR Sub-Group						
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5	ADS-C	The implementation of ADS-C in oceanic or remote areas in accordance with the Regional CNS/ATM Plan is required for the enhancement of safety and ATM.	<p>Report to APANPIRG</p> <p>FIT-BOB reconvened September 2003. Bay of Bengal operational trial of ADS/CPDLC commenced February 2004, trial ongoing</p> <p>FIT-SEA inaugural meeting May 2004, second meeting April 2005. South China Sea operational trial of ADS/CPDLC expected 2006/2007</p>	ATM/AIS/SAR	<p>Phased implementation. Revised Regional CNS/ATM Guidance Material developed containing ADS section.</p> <p>Implementation focus and timetable need to be developed.</p> <p>States are gaining experience in the use of ADS and CPDLC.</p>	
7	Safety Management Systems	<p>States to establish national safety management systems and effective application of safety programmes which are required for the provision of air traffic services.</p> <p>Required monitoring services available to support operational enhancements</p>	<p>APANPIRG/14 established the Regional Airspace Safety Monitoring Advisory Group (RASMAG).</p> <p>First RASMAG meeting held 26-30 April 2004</p>	ATM/AIS/SAR & RASMAG	<p>Annex 11 provisions effective 27 November 2003.</p> <p>On-going RASMAG activities</p> <p>Operational enhancements (including reduced separation) to be considered for suspension where effective monitoring is not available</p>	States without compliant SMS to be listed on deficiency list.

KEY PRIORITIES – ATM/AIS/SAR Sub-Group						
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8	Air Traffic Flow Management	<p>States to consider and implement aspects of air traffic flow management (ATFM) including:</p> <ul style="list-style-type: none"> a) centralized ATFM b) inter-regional cooperative ATFM; c) establishment of ATFM databases; d) application of strategic ATFM planning; and e) application of tactical ATFM planning. 	2006	ATM/AIS/SAR	Ongoing	