



International Civil Aviation Organization

APANPIRG/22-IP/5

ICAO Air Navigation Panels/Study Groups – Work Programme –

22ND MEETING OF THE ASIA/PACIFIC AIR
NAVIGATION PLANNING AND IMPLEMENTATION
REGIONAL GROUP (APANPIRG/22)

(Bangkok, 5 to 9 September 2011)

PANELS/STUDY GROUPS/TASK FORCESS



How the Work Gets Done – 600 Volunteers



Operational Safety Panels

Aeronautical Communication Panel (ACP)

Air Traffic Management Requirements and Performance Panel (ATMRPP)

Navigation Systems Panel (NSP)

Instrument Flight Procedures Panel (IFPP)

Operational Data link Panel (OPLINKP)

Operations Panel (OPSP)

Separation and Airspace Safety Panel (SASP)

Aeronautical Surveillance Panel (ASP)

Aerodromes Panel (AP)

Study Groups & Task Forces

- Aircraft Type Designators Study Group
- Aeronautical Information Service–Aeronautical Information Management Study Group (AIS-AIMSG)
- Aerodrome Meteorological Observation and Forecast Study Group (AMOFSG)
- International Airways Volcano Watch Operations Group (IAVWOPSG)
- Meteorological Warnings Study Group (METWSG)
- PANS Aerodromes Study Group (PASG)
- Performance-based navigation study group (PBNSG)
- Satellite Distribution System Operations Group (SADISOPSG)
- Unmanned Aircraft Systems Study Group (UASSG)
- World Area Forecast System Operations Group (WAFSOPSG)
- Global PBN Task Force (GPBN TF)

PANELS



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- Increase efficiency/cost effectiveness of existing data link implementations
- Develop Standards for new communications media in different environments in support of the future communication requirements, as identified by the NextGen/SESAR programmes; i.e. airport surface, en-route, oceanic
- Develop, maintain and defend aeronautical frequency spectrum allocations at ITU WRC-2012

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- Develop new ICAO Flight Plan in line with the Global ATM Operational Concept including 4D Trajectory Management (4D-TRAD) and the NextGen /SESAR developments for 2025 and beyond.
- Use of the information necessary to provide the optimum service (SDM)
- Optimization of operations through the use of CDM

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- SBAS-based CAT 1 operations
- Define ILS critical & sensitive areas (CS) for large aircraft
- Improve GNSS availability & performance
- Reduce conventional NAVAID infrastructure

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- **Flight procedures requirements to address PBN fixed wing operations (RF turns, RNP AR etc)**
- **Flight procedure requirements for SBAS and GBAS**
- **Flight procedure requirements for helicopter PBN**
- **Continuous descent approach operations and Continuous climb operations**
- **Requirements for safety assessment of flight procedures including new collision risk model**
- **Quality Assurance guidance on the flight procedure development process**
- **Charting and database requirements for instrument flight procedures**

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- Increasingly harmonized data link procedures allowing for seamless operations
- New set of data link messages for ADS-C, DLIC, CPDLC & DFIS that support ATS. Includes D-OTIS, Departure clearance, D-TAXI, Conformance Management/Flight Plan Intent (FLIPINT) and 4D Trajectory Management (4D-TRAD)
- Utilization of SATCOM Voice for routine ATS communications (OCA)

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- Provide guidance for the operational use of electronic flight bags (EFBs)
- RFF criteria for airline operations on selection of alternatives
- Increased efficiency through more flexible operational requirements for RFFS capabilities in the selection of alternate aerodromes
- Relaxation of approach restrictions currently in force for commencement of a final approach in instrument meteorological conditions (commonly known as "Approach Ban")
- Guidance on all-weather operations
- Introduction of procedures to overlay the conventional route structure with GPS routing

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- Harmonized use & exchange of RVSM monitoring data among RMAs
- 2.5 NM in-trail separation on final up to 20 miles from runway end
- MLAT & ADS-B for 3NM separation minima in use
- More stringent speed controls in oceanic airspace
- Enhanced terminal separation minima for PBN aircraft.
- GNSS (DME 10) separation in oceanic airspace
- Micro offsets (100 meter increments) as a next step of SLOP
- In-trail climb using ADS-B & CPDLC
- Surveillance capability extended to wide area multilateration systems
- **Monitoring 5 minute longitudinal separation minima trials**

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- MLAT & ADS-B for 3NM separation minima in use
- In-trail climb using ADS-B & CPDLC
- Reduced oceanic separation using ADS-B (airborne surveillance application)
- Merging & Sequencing (an airborne surveillance application)
- Surface sequencing using ADS-B
- Self-separation mixed mode
- Reduction of runway incursions
- Improvements to SSR for the provision of ATS Surveillance Service
- Reduce conventional NAVAID infrastructure
- UAS OPS in non-segregated airspace & aeronautical operations

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- Reduction of runway excursion through harmonized provisions for assessing and reporting of runway surface conditions, including friction measurement.
- Strengthening the existing provisions for certification of aerodromes
- Updating provisions on aerodrome rescue and firefighting
- Reduction of runway incursions
- Reduce accidents/damage to aircraft due to bird strikes
- Effective implementation of LED technology in visual aids for navigation
- Increase operational safety of heliports
- Reduce CFI by standardizing markings & lighting of obstacles outside obstacle limitation surfaces

STUDY GROUPS/TASK FORCESS



Aircraft Type Designators Study Group

Aeronautical Information Service–Aeronautical Information Management Study Group (AIS-AIMSG)

Aerodrome Meteorological Observation and Forecast Study Group (AMOFSG)

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Wake Turbulence Study Group (WTSG)

PANS-Aerodromes Study Group (PASG)

Global PBN Task Force (GPBN TF)



- maintain the currency of aircraft type designators published in Doc 8643
- Maintain a database of aircraft type designators
- Review the criteria on allocations of designators for variants of an aircraft type, based on configuration, performance or design differences

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- Transition to AIM to support global ATM (including NextGen/SESAR) by increasing the cost effectiveness, timeliness and quality of aeronautical information/data, including MET

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- Optimum use of available airport capacity by enhanced accuracy and timeliness of MET information (AMOFSG, METWSG) (To provide data in support of NextGen/SESAR)

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- Optimization of flight trajectory by avoiding volcanic ash and hazardous MET conditions whilst preventing unnecessary closure of airspace (To provide data in support of NextGen/SESAR)

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Global PBN Task Force (GPBN TF)

- 
- PBN for helicopters
 - New PBN approaches with radius-to-fix turns
 - Advanced RNP (SID & STAR & APCH)
 - New concept for approach classification
 - Improved enroute operations in non-oceanic airspace (RNP 2)

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- UAS OPS in non-segregated airspace & at aerodromes

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- 
- New provisions for wake turbulence separation minima and aircraft categories
 - Guidance material to support PANS-ATM provisions
 - Assessment of future work in wake turbulence related matters

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- Improved aerodrome safety through the development of a PANS-Aerodromes document for the management of aerodrome operational issues.

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- New PBN approaches with radius-to-fix turn
- Advanced RNP (SID & STAR & APCH)
- New concept for approach classification
- Improved enroute operations in non-oceanic airspace (RNP)2

ICAO

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Safety | Security | Environment

Thank you

