



ICAO BANGKOK

UNITING AVIATION

Progress of ICAO Actions as of 02 March 2016

PBNICG/3, F. Lecat





Action 1/3

- **Action 1/3 To coordinate with APAC FPP Steering committee about the need for procedure design course for helicopters.**
- Helicopter Point in Space Training is planned on 5-9 December 2016 (tentatively). This training course will be conducted by FPP after FPP instructors are trained by the ENAC instructor in 2016.
- Proposed status: Action completed.



Action 1/7

- **Action 1/7 With regard to action 1/5, to coordinate with Brunei Darussalam for the PBN implementation including the submission of State PBN Implementation Plan.**
- ICAO letter sent Ref.: T 8/5.15:AP-CNS0101/15 10 Dec. 15
 - To reply and submit Brunei's PBN implementation plan, PBN point of contact and implementation report to apac@icao.int before 29 January 2016
 - No response received as of 1 March 2016
- Proposed status: Action completed, follow-up needed



Action 1/12

- **Action 1/12 To review the targets and metrics which are related to PBN in the APAC Seamless ATM Plan and provide inputs, if any to the APAC Regional Office before the next review cycle of the APAC Seamless ATM Plan.**
- Done, in particular phase II (RNP2) proposed in the draft Seamless ATM plan being circulated to be pushed by 1 year (Nov. 2019)
- Proposed status: Action completed



Action 1/19

- **Action 1/19 RSO to coordinate with Australia regarding RNP10 for A461.**
- Australia has no operational need to apply a RNP specification to A461.
 - 5NM surveillance-based separation is applied.
- Australia has agreed to change the ATS route designator south of BUTPA to avoid duplication with the section of A461 north of NOMAN.
 - Non-RNAV designator A209 reserved by RO
- Proposed status: Action completed



Action 1/21

- **Action 1/21** APAC RSO to draft a **Statement Of Work (SOW)** for sub-regional groups to engage in sub-regional review of **ATS routes**, propose draft material and associated work plan to the relevant informal and formal (ICAO) bodies as needed, in order to ensure extensive review and consistency.
- Proposed status: In progress
- See WP08



Action 2/1

- **Action 2/1. ICAO to coordinate with EASA on their PBN roadmap, with a particular focus on RF**
- Work on RF legs utilization is continuing in the PBNSG, with two separate items currently ongoing.
 - In one the possibility of relaxing the requirement for AP/FD is being considered, but only for light aircraft (probably Cat A, B).
 - In the other, guidance is being developed for the use of RF legs which will help to determine when they are suitable, and when a better option might be available. With regards to A-RNP, there is no appetite within the SG to look at making these optional. If anything the talk now is on whether they should become a required feature of AR operations (which will eventually include departures as well as arrivals).
- The response received from EASA was as follows:
 - Technically, all current production air transport category aircraft have the capability to perform RF legs on STARs (SIDs are a bit tricky). That includes all Airbus aircraft except the A300/310, all 737NGs, 777s, 787s, 767-400s, 747-8s, Embraer 170/190s and the recent Bombardier Dash-8s and RJs. Yet very few have the function formally certified, except in the context of RNP-AR, which few operators have bought. When states would implement A-RNP with RF legs, the operators would ask the manufacturers for the functionality and they would come to us to have it certified. But then states do not implement the function because the vast majority of the fleet doesn't have the RF capability declared
 - The standard that will be required by (E)TSO C-115d, CS-ACNS (with AMC) and the update to AC 20-238D (for aircraft certification purposes) will be for RNP-1 capability, RNP scalability (Optional in the manual), Higher continuity (Optional in the manual) and RF. FRT will be optional, TOAC won't be addressed because we believe that it is immature and Baro-VNAV is already covered elsewhere. The new regulatory standards will make matters more straightforward and enable easier certification of the function. Hopefully that will help.
- The aim is to make certification clearer and drive the number of certified aircraft up.
- Proposed status: Action completed



Action 2/5

- **Action 2/5 ICAAO to provide PBN-in-a-page to the relevant panels and study groups for the review and provide relevant guidance on route spacing.**
- The first draft of this reference document is almost done, and hopefully following PBNSG/15 in March we will be in a position to share with other panels for feedback. At present it is intended to be a flyer, as evidenced by the report of the ATM WG within the PBNSG
 - PBN-in-a-Page – draft is nearing completion. Consideration was given to an appropriate form of dissemination; inclusion to Doc 9613 appendix (supplementing App B), to Doc 9992, or as a Circular, or as a Flyer. A standalone flyer is preferred – providing for ease of management, with prompt dissemination and updates. The flyer could become part of a series under the PBN banner.
- Proposed status: In progress



Action 2/8

- **Action 2/8 ICAO to provide chart specimens for A-RNP in TMA and approach**
- A job card is being created for the IFPP to look at filling the gaps in specimen charts.
- Currently no PBN arrival/departure exists and no charts based on the A-RNP have been produced.
- Some questions remain to be answered regarding the specific details for these charts and the IWG within IFPP will need to agree on these elements before producing the charts, however this work will shortly be underway.
- Proposed status: In progress



Action 2/10

- **Action 2/10 ICAO HQ to share the key points of the Seminar to appropriate SGs and Panels.**
- Has been done by ICAO PBN Programme Manager, in co-ordination with the Secretariat supporting the other groups.
- Proposed status: Action completed



Action 2/11

- **Action 2/11 ICAO to deliver PBN Operational Approval training material for new PBN navigation specifications RNP 2 and Advanced RNP, by September 2015 and training delivery by Dec 2015**
- In progress – the Ops Approval manual was updated last year to include RNP 2 and A-RNP,
- the online CBT is being updated to reflect the change (limited resource for CBT work and ICAO is developing both Pilot and ATCO CBT's for PBN. Now that the Pilot CBT is finished there is resource available for updating the other courses).
- Proposed status: In Progress



Action 2/14

- **Action 2/14 Noppadol and Erwin to inform the FPP SC so that they include this into future procedure design training provisions.**
- Was referring to: need for more PBN trainings, including Procedure Design and Ops Approval trainings for RNP AR and Procedure Design trainings for SBAS and GLS.
- ICAO PBN Programme Manager has been doing in his regular meetings with the FPP's
- Proposed status: Action completed



Action 2/15

- **Action 2/15: ICAO to distribute training material (including CBT) to IFALPA for its members, IATA and Regulators.**
- Training material is available, for example the CBT's
- Proposed status: Action completed



Action 2/18

- Action 2/18 ICAO to consider providing information on current progress of panel works regarding guided visual procedures.
- Prior to the last PBNSG meeting in Nov 2015 the FLTOPSP issued a draft concept of operations for Visual Guided Approaches (VGA's). This has been sent to all interested panels and study groups for feedback. The PBNSG reviewed the conops and is working on a high level response which addresses the following main concerns:
 - Visual Approach: The roles and responsibilities of pilots and ATC and how the VGA alters this
 - PBN Concept rules: Use of Area Navigation principles without the definition of a nav spec, lack of clarity on how to certify aircraft to do this type of operation
 - Avionics: to be checked that some of the things proposed can be flown with today's aircraft
 - Benefits: Not clear what problem this is trying to solve apart from just letting operators do 'AR' type approaches without approval
 - Timelines: Large amount of work to do as evidenced above.
- The SG will review their response to the FLTOPSP and provide this feedback within the March 2016 deadline proposed.
- Proposed status: Action completed



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THANK YOU