



International Civil Aviation Organization

**Third Meeting of the ICAO Asia/Pacific Seamless ATM Planning Group
(APSAPG/3)**

Chennai, India, 21-25 January 2013

Agenda Item 4: Asia/Pacific Seamless ATM Status and Strategies

PROPOSALS AND COMMENTS FOR THE SEAMLESS ATM DRAFT PLAN

(Presented by Japan)

SUMMARY

This paper presents major points of the perspective in reviewing Seamless ATM Draft Plan in WP10, and proposals and comments made for its review.

1. INTRODUCTION

1.1 The proposals and comments attached to this WP are made from the standpoint of the objectives of Seamless ATM, prioritized Block 0 ASBU modules, and some regional reality and characteristics.

1.2 It should be bear in mind that the Seamless ATM Plan is:

- a plan at ICAO regional level under the umbrella of ICAO global level plans such as ATM Operational Concept (Doc 9854) and Global Air Navigation Plan (Doc 9750);
- one of the plans which provides information for the development of the Regional Air Navigation Plan.

1.3 Thanks for the great efforts on developing the draft plan (WP10) which includes extensive information, the proposals and comments in this WP are mostly requesting deletion of some paragraphs in order to be simpler and clearer by taking into account performance based approach, focusing on Air Navigation issues, and respecting diversities of the APAC states.

2. DISCUSSION

Major points of the perspective in reviewing Seamless ATM Draft Plan (WP10)

2.1 It is doubtful about the effectiveness and would not be the best way to request an endorsement of the Plan by APAC which is just a social community forum. Coordination and acknowledgement between ICAO Regional Groups must be more effective and appropriate. TOR just says APSAPG shall coordinate through the Secretariat with other Regional Groups, including ASEAN and future modernization of ATM systems in other regions to ensure trans-regional issues are managed. Nothing more.

2.2 The plan should be focused on seamless ATM objectives derived from existing and expecting Air Navigation, taking fully into account the outcomes of AN-Conf12.

2.3 It should not describe of future concept at this time even it describes as a possibility because many of the ICAO global initiatives are left for future work. Also, the description of the future concept in WP10 is included the information which jumps into an extraordinary idea as well as pre-matured. Regional level should have a practical approach based on global initiatives.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) keep in mind the information contained in this paper when considering the attachment of this WP;
- b) review and discuss the proposals and comments in **Attachment A** and develop the draft plan as appropriate; and
- c) discuss any relevant matters as appropriate.

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Attachment A – Proposals and Comments for Seamless ATM Draft Plan (WP10)

- 1.1 : change of the annotation of Seamless Air Traffic Management¹ (ATM)
(wording proposal)
Seamless ATM is the term used in this Plan mainly focusing on interoperability between multilateral FIRs which needs regional coordination.
- 1.11 : delete of the paragraph due to duplication with 1.9
- 1.23 : change of the sentence
This Plan should be well-referenced in conjunction with other regional Plans and Strategies (e.g. PBN Plan, AIS-AIM Plan, Strategy for ATN, etc.) in the process of updates of the Asia/Pacific Regional Air Navigation Plan (Doc 9673). (delete the rest of the sentence)

(reason) The last two sentences are not appropriate to be described in the Plan itself. Do we think APANPIRG's endorsement is useless or not enough? If political buy-in is needed, ICAO should ask APANPIRG by submitting other WP. Furthermore, it is doubtful of the effectiveness of informing to APAC.
- all Recommendations should be on hold and will be developed after discussing what standpoints should be suitable in developing recommendations.
- 2.3 : change the last sentence
The 37 Principles agreed by APSAPG and endorsed by APANPIRG are included as Appendix 4.
(reason) Recommendation issues should be on hold. Don't think necessary for designating principles to recommendations. What for?
- 3.6 : change of wording
The following ASBU Block 0 elements were considered as critical upgrades for Seamless ATM, and thus should be accorded the highest priority in terms of the interoperability between multilateral FIRs which needs regional coordination.
- from 3.7 to 3.27 : borrowing the sentences from ASBU document for the description
(reason) The length and contents are not balanced.
- 3.28 and 3.29 : delete the paragraphs
(reason) not directly related from the objectives of Seamless ATM (paragraph 2.2 refers). Should be a matter outside of APSAPG for discussion, then incorporate into the Plan in the future if appropriate.
- 3.30 : delete the last sentence
(reason) It is already known. It is already done so.

- 3.33 : delete the first sentence
(reason) it's not yet correct based on an outcome of AN-Conf12. Incentives issues to be developed by ICAO in the future.
- 3.34 : add some words in the last sentence
Thus FLAS should only be imposed where there are necessities for safety or systemic operational limitations, such as the ability to deliver ATS surveillance-based separation.
- 3.48 : delete the paragraph
(reason) the paragraph is in the Civil/Military Cooperation. Therefore, the contents will be for describing the importance of Civil/Military Cooperation. In this sense, it is not appropriate this paragraph.
- from 3.54 to 3.64 : delete or revise the contents
(reason) understandable the importance of the Civil/Military cooperation. However, it's very sensitive, so, it's not matured to pay too much emphasis on this issue without any further clearer guidance or policy from ICAO global activities.
- line 1 of page 19 : add a sentence between line 1 (Preferred Airspace and Route Specifications (PARS)) and line 2 (PARS Phase I (effective 12 November 2015))
“Prior to the implementation, the appropriateness of PARS realization should be verified by analyses of safety, current and forecast traffic demand, efficiency, predictability, cost effectiveness and environment to meet user expectations.”
- line 2 of page 19 : what is the meaning of “effective 12 November 2015”?
- 3.65 and 3.66 : delete the paragraphs
(reason) Aerodrome operations don't relate to Airspace and Route Specifications. It is not suitable for inclusion from the perspective of Seamless ATM (2.2 refers). Is there any definition about 100,000 or more IFR movements is regarded as high density aerodromes? Furthermore, selection and implementation of ASBU modules should be up to states based on the analysis of capacity enhancement by each state. Regional prioritization of the modules was made from the perspective of the importance of coordination between FIRs.
- 3.67 : rephrase the sentence
Where practicable, States should consider implementation of CCO and CDO (ASBU Priority 2) at high density international aerodromes in their selection and prioritization of the ASBU modules after total analysis based on performance based approach.
- 3.68 : delete the sentence
(reason) it's not appropriate for uniform implementation without considering or knowing helicopter's needs.
- 3.73 : cannot understand the meaning clearly, but it would not be appropriate to designate uniform mandate of the airspace. APANPIRG conclusion 23/5 does not request so. Should wait for ICAO's future work.

(c.f. Conclusion 23/5 : That, States intending to implement PBN and Safety Nets may, after appropriate consultation with airspace users, designate portions of airspace within their area of responsibility:

- a) as providing priority for access to such airspace for aircraft with prescribed PBN specifications and supporting data-link equipage (ADS-C/CPDLC); and/or
- b) mandating the carriage and use of an operable ADS-C/CPDLC system, and mode A/C and/or mode S transponder.

- 3.74 : propose for change
Category S airspace – RNAV5 (other acceptable navigation specifications – RNP 2 or RNAV 2)
- 3.76 b) : delete “at least every five years”
(reason) establishment of the regular review framework is important and a great achievement. It’s not necessarily mention 5 or other number of years without any global policy.
- 3.76 c) : delete the sentence
(reason) It’s not appropriate in terms of Civil/Military Cooperation.
- line 1 of page 22 : if Phase I is “effective 12 November 2015”, Phase II should be later 2020
- from 3.77 to 3.80 : delete the paragraphs
(reason) Aerodrome operations don’t relate to Airspace and Route Specifications. It is not suitable for inclusion from the perspective of Seamless ATM (2.2 refers). Selection and implementation of ASBU modules should be up to states based on the analysis of capacity enhancement by each state. Regional prioritization of the modules was made from the perspective of the importance of coordination between FIRs.
- 3.81 : delete the sentence
(reason) it’s not appropriate for uniform implementation without considering or knowing helicopter’s needs. It is not able to understand meaning or objective of applying IFR specification RNP0.3 for VFR fixed wing and effectiveness of RNP0.3 for rotary wing operations in high density aerodromes from a technical point of view.
- 3.89 : change the sentences
Category R airspace – RNP 2, RNP4 oceanic (other acceptable navigation specifications – RNP 10 (RNAV 10))
Category S airspace – RNP 2 or RNAV 2 (other acceptable navigation specifications – RNAV 5).
(reason) doubtful as the reasonable targets from both ANSP and operators perspective.
- 3.91 : delete the sentence
(reason) should wait for ICAO’s global clearer guidance and principles for PARS inclusion
- line 1 of page 25 : add a sentence between line 1 (Preferred ATM Service Levels (PASL)) and line 2 (PASL Phase I (effective 12 November 2015))

“Prior to the implementation, the appropriateness of PASL realization should be verified by analyses of safety, current and forecast traffic demand, efficiency, predictability, cost effectiveness and environment to meet user expectations.”

- 3.92 and 3.93: delete the paragraphs
(reason) not related from the perspective of seamless ATM objectives (2.2 refers)

Or, 3.92: change some words

3.92 : “At all international high density aerodromes, the aerodrome control service should...”
(reason) Does this require to any aerodrome no matter how low density? Doubtful from cost effectiveness, not based on performance based approach.
- 3.95 : delete “including transfer of control points”
(reason) unreasonable approach (targets) without considering safety, airspace and runway capacity, and routes complexity which leads excessive vectors and holdings, serious adverse affects on safety and efficiency.
- 3.98 : delete “including transfer of control points”
(reason) unreasonable approach (targets) without considering safety, airspace and runway capacity, and routes complexity which leads excessive vectors and holdings, serious adverse affects on safety and efficiency.
- 3.99 : delete the paragraph
(reason) not related from the perspective of seamless ATM objectives (2.2 refers)
- 3.100 : add words
“The following high density FIRs , using bi-lateral and multi-lateral agreements as appropriate (ASBU Priority 1):
“ c) East Asia: Beijing, Incheon, Fukuoka, Guangshou, ...
- 3.101 : delete the paragraph
(reason) unreasonable approach (targets) without no convinced data based on performance based approach. States have the responsibility of designating airspace category based on traffic complex and characteristics within their area of responsibility in accordance with Annex. This is against equity.
- 3.103 : delete the paragraph
(reason) It’s pre-matured. Is there any convinced or concrete A-RNP data for operators demand which necessitates the system upgrade? Cost-effectiveness is unclear.
- 3.108 : add a sentence
b) Category S airspace with ...
 - where crossing track conflictions...
 - ATS surveillance coverage...
 - where it is deemed for safety operations.

- 3.115 : propose changes
 - a) a national civil/military body should be formed to coordinate strategic civil-military activities;
(reason) Too specific example without any clear convinced ICAO policy or guidance. It varies from states.
 - c) and d) delete the paragraphs
(reason) These are not necessarily the preferred solution. It varies a lot between States from national security and cost effectiveness.
- 3.120 : add words “Where practicable”
“Where practicable, all ATC Sectors and adjacent ATC Sectors....”
- 3.122 : add words “airspace capacity”
“All enroute ATC Sectors should have a declared aircraft capacity or airspace capacity based on a capacity and efficiency analysis,”
(reason) There are different means of capacity calculation.
- 4.2, 4.3 and 4.4 : delete the paragraphs
(reason) not directly related from the objectives of Seamless ATM (paragraph 2.2 refers). Should be a matter outside of APSAPG for discussion, then incorporate into the Plan in the future if appropriate.
- 4.6 a), b), 2nd, 5th, 6th and 7th bullets of c), 3rd bullet of d), e), f), g): delete sentences
(reason) these descriptions one-sided without showing actual survey or convinced data based on performance based analysis. Or, Also, it was stressed through a series of seamless ATM discussions that APAC seamless ATM respects diversity and existing FIRs. A issue of the size of FIRs is against this.
- from 7.1 to 7.12 : delete the paragraphs
(reason) premature for inclusion. Very different topics which is not in align with GANP or other documents. If it should be mentioned, it should be limited to the context derived from the outcomes of AN-Conf12.
- from 8.1 to 8.8 : all Recommendations should be on hold and will be developed after discussing what standpoints should be suitable in developing recommendations.
- Appendix 5 : propose changes
 - delete “TOC separation” from the tables
 - add “ADS-B Data sharing” to the tables
 - later issue for States updates of the information in the tables
- 1.2 and 1.3 of Appendix 8 : question and comments
(comments) What documents are the resources of these data? Calculation methodology should not be easily created. If 1.2 and 1.3 are newly created data, they should be deleted. If they are extracted from certain documents, resources should be described.

- 2.1 : Japan also would be happy to provides data after APSAPG/3
- 3.1 : delete average
(reason) Capacity should not be easily averaged. Methodology and factors affecting runway/airspace are different in each airport or airspace. Listing the data by each airport, not by States, will satisfy as a reference.