58th CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION ASIA AND PACIFIC REGIONS

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AGENDA ITEM 9: UPDATES

ASIA AND PACIFIC AIR NAVIGATION SERVICES PROVIDER COMMITTEE (APAC ANSP COMMITTEE) PROGRESS REPORT

(Presented by Chair, Vice Chairs and Secretariat of the APAC ANSP Committee)

$\textcolor{red}{\textbf{SUMMARY}}$

This paper reports the progress of the work of the Asia and Pacific Air Navigation Services Provider (APAC ANSP) Committee. Four priorities have been identified with a work stream set up for each priority, namely (1) stepping up investments in ANS capacity and capabilities; (2) accelerating the implementation of seamless ANS and enhancing ANS sustainability; (3) collaborating on business continuity and contingency planning; and (4) supporting the operations of oceanic ANSPs. Tasks definition is complete, and work is being carried out to achieve the deliverables. States/Administrations are urged to support their ANSPs to actively participate in the work of the APAC ANSP Committee.

ASIA AND PACIFIC AIR NAVIGATION SERVICES PROVIDER COMMITTEE (APAC ANSP COMMITTEE) PROGRESS REPORT

1. INTRODUCTION

- 1.1 The 57th DGCA Conference held in Incheon, Republic of Korea in July 2022, agreed in its action item 21 to form a committee of air navigation services providers (ANSPs), involving Civil Air Navigation Services Organisation (CANSO) and International Air Transport Association (IATA), to cooperate in the implementation of regional air navigation services (ANS) initiatives including the ICAO Asia/Pacific Seamless ANS Plan; and to coordinate with ICAO for the purposes of aligning the activities of the committee with the Asia/Pacific Seamless ANS Plan and informing APANPIRG and DGCA Conference of its activities and progress.
- 1.2 The APAC ANSP Committee held its inaugural meeting on 17 18 April 2023 in Bangkok, Thailand and was attended by 20 APAC ANSPs, CANSO and IATA. At the meeting, Mr. Han Kok Juan, Director General, Civil Aviation Authority of Singapore was elected as the Chair; Dr. Nopasit Chakpitak, President, AEROTHAI, Mr. Miao Xuan, Deputy Director General, Air Traffic Management Bureau of Civil Aviation Administration of China, Mr. Marc Houalla, Director, French Polynesia Civil Aviation Services, and Mr. Soh Poh Theen, Director Asia Pacific Affairs, CANSO, were elected as the Vice Chairs; and Mr. Raphael Guillet, Chief of ICAO Asia Pacific Regional Sub-Office (APAC RSO) served as the Secretariat.
- 1.3 The key Terms of Reference (TORs) adopted by the APAC ANSP Committee are as follows:
 - a) Initiate collaboration between ANSPs of States and other stakeholders to develop and implement regional ANS initiatives including the ICAO APAC Seamless ANS Plan;
 - b) Identify opportunities for collaboration between ANSPs of States, CAAs and other stakeholders for regional ANS;
 - c) Deliberate and recommend optimal solutions that constitute building blocks for the Seamless ANS Plan, priorities and timelines of their implementation;
 - d) Update ICAO and APAC States on the Committee's activities through forums such as APANPIRG and the DGCA Conference, with a view to synchronising implementation efforts across the APAC region; and
 - e) Information sharing and capacity building.
- 1.4 The areas of priority were agreed and work streams set up to define the tasks (see Annex A for members of the work streams).
- 1.5 Subsequently, the Chair, Vice Chairs, Leads of the work streams and Secretariat held 2 virtual meetings on 15 June 2023 and 6 September 2023 to consolidate and coordinate the progress.

2. WORK UNDERTAKEN BY APAC ANSP COMMITTEE

2.1 The inaugural APAC ANSP Committee meeting adopted a framework to organize the work of the Committee into four work streams, each focusing on an area of priority.

- 2.2 The first area of priority is "Step up investments in ANS capacity and capabilities and share requirements and best practices in the procurement of ANS systems". Led by China and Thailand, the planned tasks of Work Stream 1 are as follows:
 - a) Formulate a scheme of collaboration on capacity building and technical assistance among ANSPs;
 - b) Handle capacity building and technical assistance among ANSPs;
 - c) Explore new technology in facilitating regional ANS modernization, with the involvement of ATM technology industry;
 - d) Create collaborative platforms in new technology for cross-border trials, to facilitate regional ANS modernization, with the involvement of ATM technology industry;
 - e) Gather ANSPs needs and plans for ANS systems digitalization/modernization and explore the feasibility and requirements;
 - f) Collaborate to organize an APAC Region Innovation and Capacity Building Symposium to build capacity and promulgate innovative technologies for ANS digitalization;
 - g) Encourage ANSPs to share experiences and best practices in ANS systems planning, procurement, implementation, maintenance and whole-life management;
 - h) Draft a common ANS system procurement checklist for ANSP consideration in APAC region; and
 - i) Take stock of the guidance materials available from ICAO APAC and CANSO related to ANS systems, and consolidate a library of guidance materials with classification, that could facilitate ANSPs to make reference in their planning, procurement and implementation of ANS systems.
- 2.3 Work Stream 1 has prioritized the first two tasks (i.e. 2.2a and 2.2b) as high priority and the deliverable, a collaboration plan to work with ICAO APAC Regional Office to provide training and technical assistance through programmes involving ANSPs and their experts, will be proposed for consideration at the next in-person APAC ANSP Committee meeting in October 2023.
- 2.4 The second area of priority is "Accelerate the development and implementation of Seamless ANS and collaborate on green initiatives to enhance ANS sustainability". Led by Hong Kong China, Singapore and Thailand, the planned tasks of Work Stream 2 are as follows:
 - a) Review current situations including existing processes and seek ways to make ANS implementation easier;
 - b) Collaborate on establishing the key Trajectory Based Operations (TBO) building blocks, including SWIM and FF-ICE, to support the development and realisation of TBO in APAC;
 - c) Collaborate on the implementation of initiatives such as remote towers, user-preferred routes and free route airspace; and
 - d) Assist APAC ANSPs to enhance their ATFM capabilities so that all APAC ANSPs could achieve higher levels of participation in APAC Cross-Border Multi-Nodal ATFM Collaboration (AMNAC) in aligning with the ICAO No Country Left Behind Principle.

- 2.5 In addition, Work Stream 2 is planning the launch of an APAC TBO Pathfinder Project in 2023 to facilitate regional dialogues on the realization of the ICAO global TBO concept in APAC.
- 2.6 The third area of priority is "Collaborate on business continuity and contingency planning". Led by Japan, Malaysia and USA, the planned tasks of Work Stream 3 are as follows:
 - a) Review and provide recommended edits regional guidance material (APAC Regional ATM Contingency Plan) on baseline operational contingency procedures as necessary;
 - b) Develop a regional 'how to' document for coordination procedures that can be used as an easy reference document by ANSPs;
 - c) Develop and/or review/edit Operational Contingency Plans (OCPs) for individual APAC ANSPs through collaboration with neighboring ANSPs, with support from the international organizations with a focus on how they can assist airspace partners when there is a contingency event, i.e. Continuity of Service (COS);
 - d) Exercise regional OCPs via table-top exercises;
 - e) Utilize an easily accessible electronic platform for sharing of OCPs as well as information / documents developed by other WSs; and
 - f) Collaborate with Work Stream 4 on development of business continuity and contingency plans.
- 2.7 Work Stream 3 agreed that having comprehensive and well-coordinated plans between ANSPs and airspace users can mitigate the impact to a safe and reliable ANS to the flying public during disruptions. Therefore, the work stream has committed towards identifying the critical roles of all stakeholders, further developing comprehensive procedures, and providing guidance for maintaining a proactive approach to contingency planning and business continuity.
- 2.8 The fourth area of priority is "Support the operations of oceanic ANSPs". Led by France (French Polynesia), Philippines and IATA, the planned task of Work Stream 4 are as follows:
 - a) Implement Free Route Trajectory Operations (FRTO) and/or performance-based navigation (PBN) trajectories;
 - b) Implement Continuous Climb and Descent Operations (CCO and CDO);
 - c) Develop ATM system interoperability with the objective of establishing a common core oceanic ATM systems' specification for interoperability purposes; and
 - d) Develop contingency plans amongst ANSPs with the objective of providing the committee with a clear picture of the development of contingency plans throughout APAC oceanic airspaces and defining scheduled contingency plans test dates.
- 2.9 Work Stream 4 is planning the launch of a FRTO project in 2023 to initiate and facilitate work on city pairs route optimization. The work stream agreed that the implementation of FRTO, CCO, CDO and development of oceanic ATM systems interoperability and contingency plans underline the aviation industry's ongoing commitment to efficiency, safety, and environmental sustainability. As technology continues to advance, it is crucial for the industry to embrace these developments to streamline operations and work towards a more sustainable and efficient future.
- 2.10 As part of the deliverables in 2023, the APAC ANSP Committee has initiated a survey, targeted at APAC ANSPs to gather updated capacity building plans and modernization needs, as well as challenges faced in the implementation of seamless ANS. The survey is spearheaded jointly by Work Stream 1 and Work Stream 2. Insights from the survey will guide the Committee's work on designing

a collaboration plan on capacity building and ANS digitalization, and developing strategies to accelerate the implementation of seamless ANS.

2.11 The next in-person meeting of the APAC ANSP Committee meeting will be held on 22-23 October 2023 in Singapore to further the progress of its work.

3. ACTION BY THE CONFERENCE

- 3.1 The Conference is invited to:
 - a) Note the progress of the work of the APAC ANSP Committee;
 - b) Encourage States/Administrations to support their ANSPs in contributing towards the work of the APAC ANSP Committee towards the realization of the planned deliverables;
 - c) Urge States/Administrations to encourage their ANSPs to actively participate in the APAC ANSP Committee.

Annex A: Members of Work Streams of APAC ANSP Committee

Work Steam 1	Work Steam 2	Work Steam 3	Work Steam 4
China	Hong Kong China	Japan	France (French Polynesia)
(Lead)	(Lead)	(Lead)	(Lead)
Thailand	Singapore	Malaysia	Philippines
(Lead)	(Lead)	(Lead)	(Lead)
Hong Kong China	Thailand	USA	IATA
	(Lead)	(Lead)	(Lead)
New Zealand	Cambodia	China	China
Singapore	China	Hong Kong China	Indonesia
CANSO	Indonesia	Indonesia	Japan
	Malaysia	Maldives	New Zealand
	Mongolia	Mongolia	Papua New Guinea
	New Zealand	New Zealand	Singapore
	ACI	Republic of Korea	Thailand
	CANSO	Singapore	USA
	IATA	Thailand	CANSO
		CANSO	
		IFATCA	