

MEDIA RELEASE

23 October 2023

To: The News Editor

FOR IMMEDIATE RELEASE

ASIA-PACIFIC REGION PUSHES NEW WAYS TO MANAGE FLIGHTS BETTER

New methods will enhance the safety, efficiency, and sustainability of aviation

The Asia-Pacific region advances two new air traffic management (ATM) concepts with the signings of two Letters of Intent on the sideline of the International Civil Aviation Organization (ICAO) Air Navigation World – ATM Procedures for Today event held in Singapore from 23 to 27 October 2023. These new ATM concepts will allow aircraft to take more direct and quicker routes, and enhance the safety, efficiency, and sustainability of aviation.

2 On 23 October 2023, ten signatories comprising the air navigation service providers (ANSPs) from China, Indonesia, Japan, New Zealand, the Philippines, Singapore, Thailand, and the United States, the Civil Air Navigation Services Organisation (CANSO), and the International Air Transport Association (IATA) signed an agreement on the Asia-Pacific Trajectory-Based Operation (TBO) Pathfinder Project, to jointly define, develop, and demonstrate TBO for the Asia-Pacific region within four years.

3 On the same day, five signatories comprising the ANSPs from Indonesia, New Zealand, and Singapore, CANSO, and IATA signed an agreement on the South-East Asia – Oceania Implementation of Free Route Operations (FRTO) Project, to identify applicable city pairs and flights, and validate the use of FRTO between defined cities within a year.

4 The two initiatives are early products of the Asia-Pacific ANSP Committee (AAC) which was set up in April 2023 to enhance collaboration between ANSPs and drive regional ATM collaboration, including in seamless ATM operations and technologies. The AAC is chaired by Mr. Han Kok Juan, Director-General, Civil Aviation Authority of Singapore (CAAS).

Asia-Pacific TBO Project

5 Today, international flights are separately and independently managed by the respective ANSP as they traverse Flight Information Regions (FIRs). TBO will fundamentally change the way air traffic is managed. Under TBO, ANSPs work together to plan and optimise an aircraft's entire flight trajectory across FIRs, from take-off to touchdown, and share information, such as on weather, airspace closures, and other traffic constraints. This will allow ANSPs to manage air traffic strategically ahead of time, rather than make reactive course corrections as and when information becomes available. This will yield significant benefits to airlines, passengers, and the environment, through improved safety and efficiency, reduced delays and disruptions, and lower fuel burn and emissions.

6 The Asia-Pacific TBO Pathfinder Project will a) define the concept of operations and requirements for TBO in the Asia-Pacific region; b) develop rules and procedures; and c) demonstrate processes and technical capabilities developed through laboratory simulations and live flight trials, which will help build confidence and encourage adoption.

7 The Asia-Pacific TBO Pathfinder project builds on learnings from the first-ever multi-regional TBO programme conducted by the ANSPs of Canada, Japan, Singapore, Thailand, and the United States, which culminated in a Boeing demonstration flight in June 2023.

South-East Asia – Oceania Implementation of FRTO Project

8 While TBO is a long-term endeavour, ANSPs and airlines can take immediate steps towards seamless ATM through operational collaborations. The ANSPs from Indonesia, New Zealand, and Singapore, IATA, and CANSO will work together to promote the use of FRTO between various city pairs amongst the three countries. FRTO – also known as direct routes or user preferred routes – can facilitate more efficient flight trajectories, taking into consideration factors such as weather and airspace closures.

9 In a traditionally structured ATM system, aircraft follow a network of predefined routes akin to highways in the sky. Under FRTO, the skies can be treated as an open canvas, where aircraft are allowed the freedom to choose the most efficient and effective path to their destination, reducing the distance travelled, flight time, fuel burn, and emissions. This enables more efficient use of airspace and enhances air traffic flow management.

10 The FRTO project will define and identify applicable city pairs and flights, and involve trial flights to demonstrate the effectiveness of FRTO measures. The trial programme of the FRTO project is set to run from the first to third quarter of 2024, with the objective of validating the use of FRTO in day-to-day operations between defined cities from the fourth quarter of 2024.

11 Mr. Han Kok Juan, Director-General of CAAS and Chairman of the AAC said, "We are heartened by the strong support for these two initiatives. It demonstrates the shared commitment of the ANSPs and our partners to build capacity and capabilities to support aviation growth. As air traffic continues its strong recovery from the pandemic, we must strengthen collaboration efforts to make flying for the public safer, more efficient and sustainable. We hope that these two initiatives will demonstrate what is achievable, build confidence and attract more ANSPs to come on board."

About the Civil Aviation Authority of Singapore

The mission of the Civil Aviation Authority of Singapore (CAAS) is to grow a safe, vibrant air hub and civil aviation system, making a key contribution to Singapore's success. CAAS' roles are to oversee and promote safety in the aviation industry, develop the air hub and aviation industry, provide air navigation services, provide aviation training for human resource development, and contribute to the development of international civil aviation. For more information, visit <u>www.caas.gov.sg</u>.

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