



SAFE SKIES.  
**SUSTAINABLE  
FUTURE.**



# ICAO APAC/MID ATFM-FF-ICE Seminar 2025

Dubai, UAE, 23 – 26 February 2025

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## Setting the scene

**Elie El Khoury**

Technical Officer, Air Traffic Management

Air Navigation Bureau Regional Coordinator

International Civil Aviation Organization (ICAO)

# Outline

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**01** Seminar Objectives

**02** Daily Programme

**03** AN-Conf/14  
General Overview

**04** Conference Outcomes

**05** Recommendations

**06** Post AN-Conf/14

## The objectives of the Seminar:

- ✓ To **share** knowledge and facilitate regional implementation of **ATFM** and **FF-ICE** based on the latest ICAO provisions and the outcome of the Fourteenth Air Navigation Commission (AN-Conf/14).
- ✓ The ICAO APAC and MID Regions are expected to **develop** regional FF-ICE transition plans to implement the Recommendation of AN-Conf/14 concerning the cessation of the 2012 flight plan by 2034.
- ✓ The ICAO APAC and MID Regions are expected to **update** their ATFM-related regional documentation taking into consideration the upcoming new ICAO ATFM Provisions



# Daily Work programme

Day 1 – Sunday 23 February 2025		
<i>08:00 - 09:00 Registration</i>		
Time	Session Title/Presentation(s)	Speakers
09:00 09:25	<b>Session 1.1: Opening Ceremony</b>	
	Welcoming and opening remarks	<i>Mr. Ahmad. Al Jallaf</i> (UAE) <i>Ms. Crystal. Kim</i> (ICAO)
09:25 10:00	<b>Session 1.2: Setting the scene</b>	<i>Mr. Elie El Khoury</i> (ICAO)
<b>Coffee Break &amp; Group Photo – 30 minutes</b>		
10:30 12:30	<b>Session 1.3: Why FF-ICE</b>	
	<ul style="list-style-type: none"> <li>• Vision and evolution of ICAO policy</li> <li>• How FF-ICE is related to other ICAO initiatives such as TBO, SWIM, ATFM</li> <li>• Limitations and challenges concerning flight planning and current flight plan format</li> </ul>	<i>Mr. Henk Hof</i> (EUROCONTROL)  <i>Mr. John Moore</i> (IATA)
	<b>Session 1.4: What is FF-ICE (Part I)</b>	
	<ul style="list-style-type: none"> <li>• FF-ICE concept</li> <li>• Global provisions and guidance on FF-ICE                             <ul style="list-style-type: none"> <li>- Annex 2, Annex 10 Volume II and PANS-ATM</li> <li>- Doc 9965 Part I and Part II</li> </ul> </li> </ul>	<i>Ms. Crystal Kim</i> (ICAO)
	<b>Session 1.4: What is FF-ICE (Part II)</b>	
<ul style="list-style-type: none"> <li>• Application of ICAO concept and provisions                             <ul style="list-style-type: none"> <li>- APAC Experience</li> <li>- European Experience</li> </ul> </li> </ul>	<i>Dr. Amornrat Jirattigalachote</i> (Amo) (Aerothai) <i>Mr. Augustin Gheorghe</i> (EUROCONTROL)	

# Daily Work programme

<b>Lunch Break – 60 minutes</b>		
<b>13:30 15:30</b>	<b>Session 1.4: What is FF-ICE (Part III)</b>	
	<ul style="list-style-type: none"><li>• <b>Understanding FF-ICE through scenarios</b><ul style="list-style-type: none"><li>- Scenario two (from APAC perspective)</li><li>- Scenario one (from NM perspective)</li></ul></li></ul>	<i><b>Dr. Amornrat Jirattigalachote (Amo)</b> (Aerothai) <b>Mr. Augustin Gheorghe</b> (EUROCONTROL)</i>
	Q & A	<i><b>All Speakers</b></i>
<b>End of day One</b>		

# Daily Work programme

<b>Day 2 – Monday 24 February 2025</b>		
<b>Time</b>	<b>Session Title/Presentation(s)</b>	<b>Speaker/Moderator/Panellist</b>
<b>09:00 10:30</b>	<b>Recap of Day 1</b>	
	<b>Session 2.1: Transition to FF-ICE</b>	
	<ul style="list-style-type: none"> <li>FF-ICE implementation strategy</li> <li>Status of FF-ICE regional transition planning</li> </ul>	<i>Ms. Crystal Kim</i> (ICAO HQ)
	Q & A	
<b>Coffee Break – 30 minutes</b>		
<b>11:00 12:30</b>	<b>Session 2.2: How to start planning and lessons learned (Cont'd)</b>	
	<ul style="list-style-type: none"> <li>Experience from Thailand and APAC</li> <li>Experience from EUROCONTROL</li> <li>Considerations for regional planning</li> </ul>	<i>Dr. Amornrat Jirattigalachote</i> (Amo) <i>(Aerothai)</i> <i>Mr. Augustin Gheorghe</i> (EUROCONTROL) <i>Mr. John Moore</i> (IATA)
	Q & A	<i>All Speakers</i>
<b>Lunch Break – 60 minutes</b>		
<b>13:30 15:30</b>	<b>Session 2.3: Quiz and Group Exercises</b> <b>Moderator: all speakers</b>	
<b>End of day Two</b>		
<b>Gala Dinner</b>		

# Daily Work programme

Day 3 – Tuesday 25 February 2025		
Time	Session Title/Presentation(s)	Speakers
09:00 10:30	<b>Session 3.1: The need for ATFM - States' experience and challenges in implementing ATFM</b> <u>Moderator: Mr. Ahamd Amireh</u>	
	<ul style="list-style-type: none"> <li>• ANSP perspective – Saudi Arabia's experience implementing ATFM</li> <li>• Progress and Current Status of JCAB's ATFM Operations and Sharing Insights from Japan's Experience with ATFM</li> <li>• ANSP perspective – Thailand's experience implementing ATFM</li> <li>• VATM's Journey and Challenges in Implementing ATFM</li> <li>• ANSP perspective – UAE's experience implementing ATFM</li> <li>• ANSP perspective – Indonesia's experience with ATFM</li> </ul>	<p><i>Mr. Ahmad Abu Ghallab (Saudi Arabia)</i>  <i>Mr. Takahiro Shibutani and Mr. Takayuki Harada (JCAB)</i>  <i>Mr. Sagoon Fucharoen (Kin) (Aerothai)</i>  <i>Mr. Pham Xuan Thanh (VATM)</i>  <i>Mr. Saqr Al Marashda (UAE)</i>  <i>Mr. Rachmat Widiyana (Indonesia)</i></p>
<b>Coffee Break – 30 minutes</b>		
11:00 11:30	<b>Session 3.1: Continued</b>	
	Q & A and Panel Discussions	<i>All Speakers</i>
11:30 12:30	<b>Session 3.2: The need for ATFM – Airspace user's perspective and cross-border ATFM solutions</b> <u>Moderator: Mr. Mior Sallehuddin</u>	
	<ul style="list-style-type: none"> <li>• Airspace user perspective</li> <li>• Europe Experience</li> <li>• CANSO support to cross-border ATFM</li> </ul>	<p><i>Mr. John Moore (IATA)</i>  <i>Mr. Thomas Zenner (EUROCONTROL)</i>  <i>Mr. Stuart Ratcliffe (CANSO)</i></p>
	<ul style="list-style-type: none"> <li>• Q &amp; A and Panel Discussions</li> </ul>	<i>All Speakers</i>
<b>Lunch Break – 60 minutes</b>		



# Daily Work programme

<p><b>13:30</b> <b>14:15</b></p>	<p><b>Session 3.3: APAC and MID Regions ATFM implementation progress</b> Moderator: <i>Mr. Ahamd Kaveh</i></p>	
	<ul style="list-style-type: none"> <li>• Update on regional ATFM Implementation in the APAC Region</li> <li>• Update on regional ATFM Implementation in the MID Region</li> </ul>	<p><i>Mr. Piyawut Tantimekabut (Toon)</i> (Chairperson APAC ATFM/SG) <i>Mr. Hamad Al Belushi</i> (Chairperson MID ATFM TF)</p>
	<p>Q &amp; A and Panel Discussions</p>	<p><i>All Speakers</i></p>
<p><b>14:15</b> <b>15:30</b></p>	<p><b>Session 3.4: Capacity Determination</b> Moderator: <i>Mr. Tak Chuen Chui</i></p>	
	<ul style="list-style-type: none"> <li>• <u>EUROCONTROL</u></li> <li>• <u>CANSO</u></li> </ul>	<p><i>Mr. Thomas Zenner</i> (<u>EUROCONTROL</u>) <i>Ms. Nicki Harricharan</i> (<u>CANSO</u>)</p>
	<p><u>Q &amp; A</u></p>	<p><i>All Speakers</i></p>
<p><b><u>End of day Three</u></b></p>		

# Daily Work programme

<b><u>Day 4 – Wednesday 26 February 2025</u></b>		
<b><u>9:00</u></b> <b><u>9:45</u></b>	<b><u>Session 4.1: Overview of the upcoming ICAO provisions concerning ATFM</u></b>	
	Speaker <i>Mr. Elie El Houry (ICAO)</i>	
	Q & A	
<b><u>9:45</u></b> <b><u>10:30</u></b>	<b><u>Session 4.2: Breakout Sessions -Group exercise</u></b>	
	Moderator <i>Mr. Elie El Houry (ICAO)</i>	
	Participants will be divided into groups to work on scenarios supported by the ICAO Team. <i>Each group will manage its time to complete the tasks.</i>	
<b><u>Coffee Break – 30 minutes</u></b>		
<b><u>11:00</u></b> <b><u>12:30</u></b>	<b><u>Session 4.3: Breakout Sessions -Group exercise (continue)</u></b>	
<b><u>Lunch Break – 60 minutes</u></b>		
<b><u>13:30</u></b> <b><u>14:45</u></b>	<b><u>Session 4.4: Breakout Sessions -Group exercise (continue)</u></b>	
	Moderator: <i>Mr. Elie El Houry</i>	
	<ul style="list-style-type: none"> <li>• Presentations by Groups and Conclusions</li> </ul>	<b><u>All</u></b>
<b><u>14:45</u></b> <b><u>15:30</u></b>	Recommendations, Wrap-up, and Closing	
	<i>Mr. Amireh and Mr. Sallehuddin (ICAO)</i> <i>Mr. Ahmad Al Jallaf (UAE)</i>	
<b><u>End of day Four</u></b>		

# AN-CONF/14

14<sup>th</sup> Air Navigation Conference

26 August to 6 September 2024 | Montréal, Canada

Theme:

Performance Improvement  
Driving Sustainability

ICAO



# AN-Conf/14 Overview

Attendance, Working  
Arrangements,  
Officers and  
Secretariat

- Held in Montréal, 26 August - 6 September 2024
- 871 representatives from
  - 110 Member States and
  - 28 International Organizations
- Four agenda items under one Committee
- 205 papers were submitted to AN-Conf/14
- 22 recommendations were approved
  - 104 actions >> 45 to States & 59 to ICAO
  - Council & ANC to review >> decisions still pending

# — Conference Officers and Secretariat Members

## Conference:

- **Chairperson:** Ms. P. Assoumou Koki (Cameroon)
- **Vice-Chairperson:** Mr. N. Bin Mahmud (Malaysia)
- **Secretary:** Ms. M. Merkle, Director, Air Navigation Bureau

## Committee:

- **Chairperson:** Mr. P. Kelleher (United Kingdom)
- **Vice-Chairperson:** Mr. L. R. de Souza Nascimento (Brazil)
- **Secretary:** Mr. P. Luciani, Deputy Director, Air Navigation and Aviation Safety

The logo for AN-CONF/14 features the text 'AN-CONF/14' in a bold, sans-serif font. The 'O' in 'CONF' is replaced by a yellow circular icon containing a white target symbol with a yellow arrow pointing towards the center. The background of the slide is dark blue with two stylized globe graphics on either side, one showing flight paths and another showing a network of nodes and lines.

# AN-CONF/14

14<sup>th</sup> Air Navigation Conference

26 August to 6 September 2024 | Montréal, Canada

## Objectives

- **Reach a global consensus on performance improvement initiatives** that will best allow ICAO, Member States and industry to address, in the context of constrained resources, aviation's global environmental challenges and the rapid evolution in aviation operations and technologies.
- **Call for an intentional refocusing of effort** so priority can be given to existing or new technical activities.

# — Approved Agenda and Outcomes

## Agenda Item 1

ICAO 2023-2025 Business Plan  
and long-term strategic  
planning

## Agenda Item 2

Timely and safe use of new  
technologies

## Agenda Item 3

Air navigation system  
performance improvement

## Agenda Item 4

Hyper-connectivity of air  
navigation system

- *Informed the aviation community* of the work that is already prioritized and underway in the ICAO 2023-2025 Business Plan
- *Held detailed technical discussions* on new initiatives, leading to agreement on a set of high-level recommendations in the field of air navigation and safety
- *Obtained timely direction* for preparation for the 42nd Session of the ICAO Assembly in 2025

## — New Approach for AN-Conf/14

To allow enough time for discussion on interrelated subjects of world-wide scope falling within several air navigation fields



- Single committee
- Limited agenda items
- Focusing on the subjects not yet addressed by:
  - ICAO expert groups
  - Existing work programme
  - AN-Conf/HLSC/HLCC Recommendations
  - Assembly resolutions and decisions



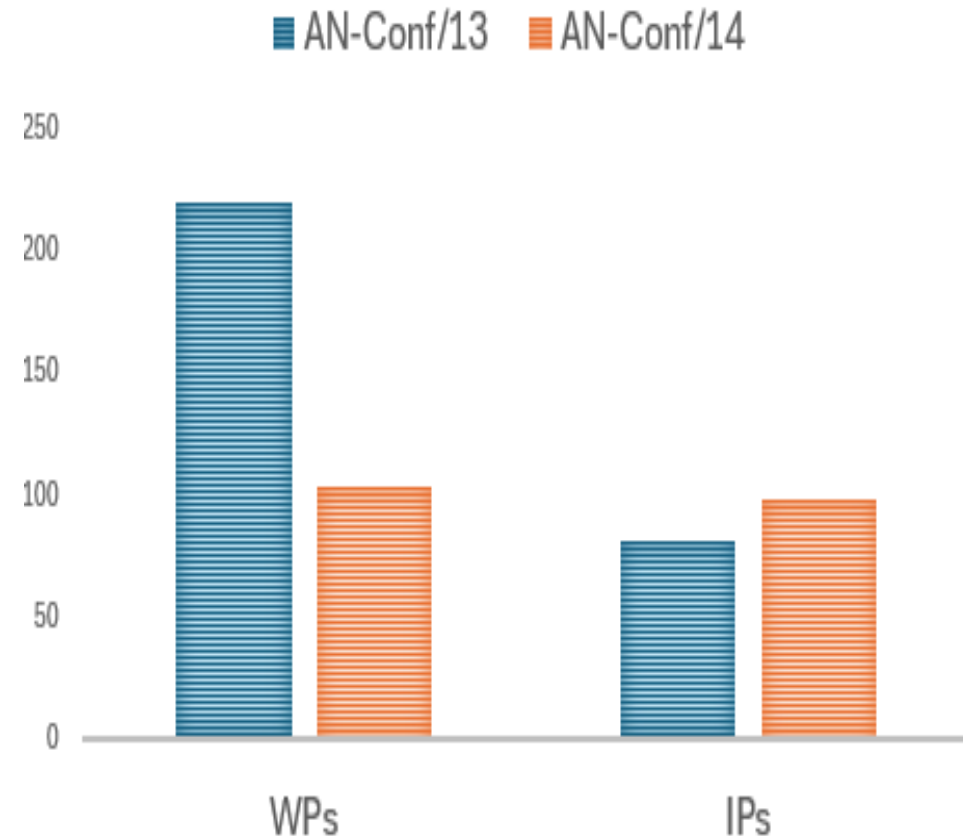
## — Information Session

- **Why:**
  - To provide additional information on subjects tabled for discussion
  - To address requests from Member States and international organizations
- **How:**
  - Secretariat PPT (English-only)
  - Followed by Questions and Answers



## Conference Papers

- A total of 205 papers
  - 104 working papers
  - 98 information papers
  - 3 working papers were withdrawn
- 31 working papers
  - originally submitted as working papers converted to information papers
  - acknowledged in the Conference report
  - being forwarded to the appropriate expert group(s)



# AN-Conf/14

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### Recommendations



## — Agenda Item 1: Update on the ICAO 2023-2025 Business Plan and long-term strategic planning

**Recommendation 1.1/1** – Support to ICAO’s programmatic business planning approach initiated by the Business Plan 2023-2025 priority focus areas. ·

**Recommendation 1.1/2** – Resilience of the air navigation system

**Recommendation 1.2/1** – Work towards enhanced alignment of the Global Aviation Safety Plan and the Global Air Navigation Plan Under the sub-item

**Recommendation 1.3/1** – Evolution of the ICAO Assembly Technical Commission

## — Agenda Item 2: Timely and safe use of new technologies

**Recommendation 2.1/1** – Evolving aircraft technologies contributing to the long-term aspirational goal

**Recommendation 2.2/1** – Addressing safety risks related to new and evolving aviation technologies and concepts

**Recommendation 2.2/2** – Addressing global navigation satellite system interference and contingency planning

**Recommendation 2.3/1** – Draft 2026-2028 edition of the Global Aviation Safety Plan (GASP, Doc 10004)

**Recommendation 2.3/2** – Turbulence encounters as a global operational safety risk

## — Agenda Item 3: Air navigation system performance improvement

**Recommendation 3.1/1** – Project 30/10 - Optimized implementation of longitudinal separation minima

**Recommendation 3.1/2** – Study into the feasibility of establishing an ICAO air navigation efficiency programme

**Recommendation 3.1/3** – Enabling successful deployment of trajectory-based operations

**Recommendation 3.1/4** – Free route airspace

**Recommendation 3.1/5** – Delegation of responsibility for provision of air traffic services

**Recommendation 3.1/6** – Addressing the safe integration of space transport operations into the airspace system

**Recommendation 3.1/7** – Higher airspace operations

## — Agenda Item 3: Air navigation system performance improvement (Cont'd)

**Recommendation 3.2/1** – Phasing out and/or optimizing the use of legacy systems

**Recommendation 3.2/2** – Transition to flight and flow – information for a collaborative environment services and cessation of ICAO 2012 flight plan by 2034

**Recommendation 3.3/1** — Update to the global strategic level of the seventh edition of the Global Air Navigation Plan (GANP, Doc 9750)

**Recommendation 3.3/2** — Update to the global technical level of the seventh edition of the Global Air Navigation Plan and its regional and national levels

## — Agenda Item 4: Hyper-connectivity of air navigation system

**Recommendation 4.1/1** – Validation, standardization and implementation of the connected aircraft concept and air-ground connectivity strategy

**Recommendation 4.2/1** – Aviation cybersecurity



**Recommendation 1.1/1 – Support to ICAO’s programmatic business planning approach initiated by the Business Plan 2023 - 2025 priority focus areas**

that ICAO:

d) through the planning and implementation regional groups and the regional aviation safety groups, in accordance with the Global Air Navigation Plan and the Global Aviation Safety Plan and their respective regional plans, incorporate into their work programmes and projects, initiatives taking into account alignment with the ICAO priority focus areas.

**Recommendation 1.1/2 – Resilience of the air navigation system**

that ICAO:

c) together with States and industry, develop global guidance on air traffic management contingency management, including the recovery phase, as well as regional frameworks, to support the implementation of Annex 11 — Air Traffic Services.

**Recommendation 2.2/1 – Addressing safety risks related to new and evolving aviation technologies and concepts**

that States:

d) develop, through appropriate regional mechanisms, harmonized regional regulatory frameworks and interoperable systems to ensure effective integration of unmanned aircraft systems, where appropriate;

**Recommendation 2.2/2 – Addressing global navigation satellite system interference and contingency planning**

that States:

b) through the mechanism of the planning and implementation regional groups, develop regional global navigation satellite system reporting mechanisms, to the extent feasible, to raise operational awareness of affected geographical areas as described in the Global Navigation Satellite System (GNSS) Manual (Doc 9849);

**Recommendation 3.1/1– Optimized implementation of longitudinal separation minima**

that States:

a) within the processes of the planning and implementation regional groups, actively collaborate with neighbouring States to implement Project 30/10 – implementation of longitudinal separations of 55.5 km (30 NM) or less in oceanic and remote airspace, and 19 km (10 NM) or less elsewhere.;

that ICAO:

b) through the planning and implementation regional groups, develop regional action plans for the implementation of Project 30/10;

The following are Actions specifically assigned to PIRGs (Cont'd)

**Recommendation 3.2/2 – Transition to flight and flow – information for a collaborative environment services and cessation of ICAO 2012 flight plan by 2034**

that States:

d) planning and implementation regional groups, consider establishing **regional focus groups** for coordinating the planning and implementation of flight and flow – information for a collaborative environment service and providing necessary support throughout the transition period; and

e) support and contribute to the work of their respective planning and implementation regional group and their sub-groups **to develop a regional plan to transition** to flight and flow – information for a collaborative environment services on the basis of the **2034 global cessation of the ICAO 2012** flight plan;

that **ICAO**:

g) through planning and implementation regional groups, **provide guidance and support** for the development of regional plans to transition to flight and flow – information for a collaborative environment to enable the 2034 global cessation of the ICAO 2012 flight plan;

## Post AN-Conf/14

The Council, during the sixth meeting of its 233<sup>rd</sup> Session, reviewed the outcome of AN-Conf/14 (through ANC) and:

- a) **approved** the follow-up actions proposed with respect to those recommendations requiring Council action, as contained in Appendix A to C-WP/15616;
- b) **took note** of the follow-up actions to be undertaken by the Air Navigation Commission, under delegated authority, on the remaining recommendations as contained in Appendix A to C-WP/15616;
- c) **agreed** that further consideration should be given to the resource implications of implementing all the recommendations arising from AN-Conf/14 in the context of the ongoing deliberations concerning the development of the 2026-2028 Business Plan and Budget, and on that basis, requested that the Secretariat take into consideration the recommendations of the ANC on the prioritization of the anticipated work arising from AN-Conf/14, as contained in Appendix B of C-WP/15616; and
- d) **took note** of the comments expressed highlighting the need for ICAO to work in a collaborative manner with other UN entities, including the UN Office of Outer Space Affairs, in addressing, AN-Conf/14 recommendations on the safe integration of space transport operations into the airspace system and higher airspace operations, and the importance of also pursuing work already underway on GNSS interference, airspace optimization and global plans.

## Post AN-Conf/14

- Report published
- Preparation of business plan and the regular budget proposal(s) for 2026-2027-2028, taking into account the Conference results and their prioritization, subject to Council decision on the recommendations
- Preparation of proposals for amendment to the contents of the 5<sup>th</sup> Edition of the GASP and 8<sup>th</sup> edition of the GANP.
- Promote the results of the Conference through various event opportunities
- Report the Conference outcome to the 42<sup>nd</sup> Assembly

### Implementation of AN-Conf/14 Recommendations

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# Thank You

