



ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY

ICAO SURVEY ON MOVING FROM A MAGNETIC TO A TRUE NORTH

PBN SG/8 (DOHA, QATAR, 12 - 13 DECEMBER 2023)

ICAO Survey on Moving from a Magnetic to a True North Reference System for Heading and Tracking in Aviation Operations

Introduction

Background, objectives and methodology of the survey

Background

- Canada presented a WP at AN-Conf/12 (Nov 2012) and AN-Conf/13 (Oct 2018) and an IP at the HLCC (Oct 2021), to discuss the topic of moving to a true north reference system in air operations.
- At IFPP/15 (March 2022), Canada presented a WP to the Panel to consider a global switch to true north. The Panel supported the initiative but requested ICAO carry out a survey to investigate the level of support of States and industry for such a proposal.

Survey Objectives

- Determine the level of support of States and their aviation industry for ICAO to work on moving to true north.
- Identify any concerns or challenges that may need to be addressed for a transition to true north.
- The findings of the survey may be used to aid ICAO in developing any plans and strategies for true north.

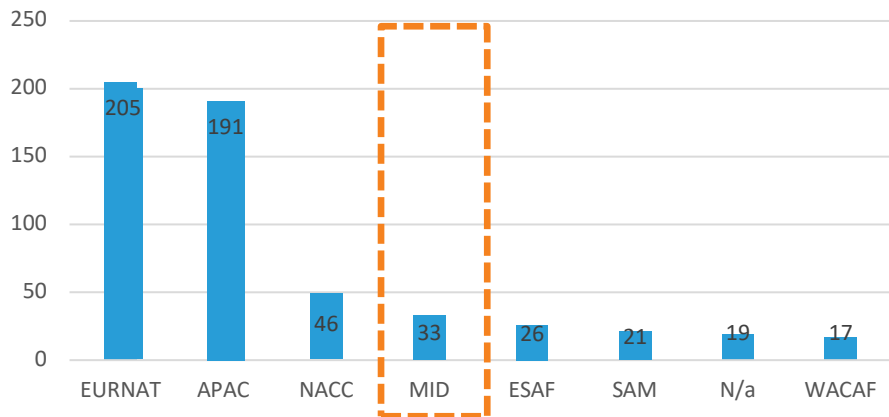
Methodology

- The survey was conducted online using Microsoft Forms.
- 65 survey questions divided by stakeholders.
- The survey link was sent by State Letter (SL AN11/57-22/87) on 21/9/2022.
- A link was provided in the SL to an ICAO website with supporting information related to the topic of true north.
- Two ICAO webinars were conducted to further inform States and industry of all considerations.

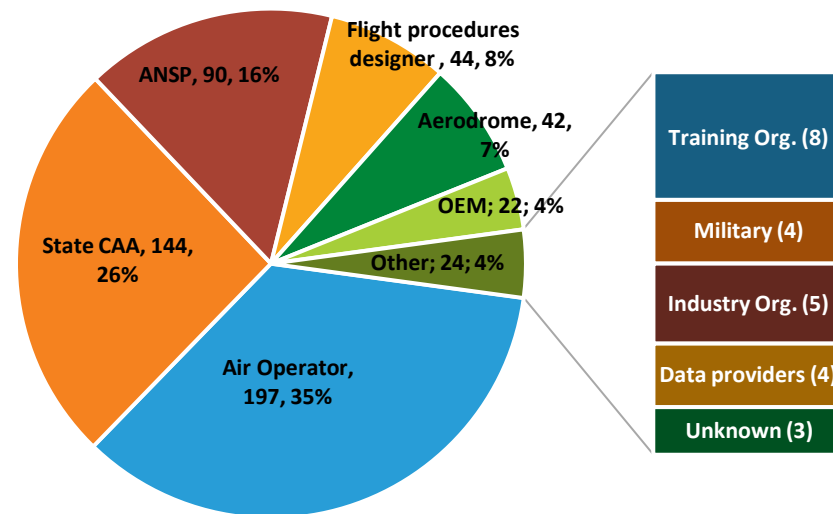
Respondents

- 564 responses from 103 States during survey period (21/09/2022 – 31/12/2022)
- 37% of responses from EURNAT and 34% from APAC

ICAO region of respondents



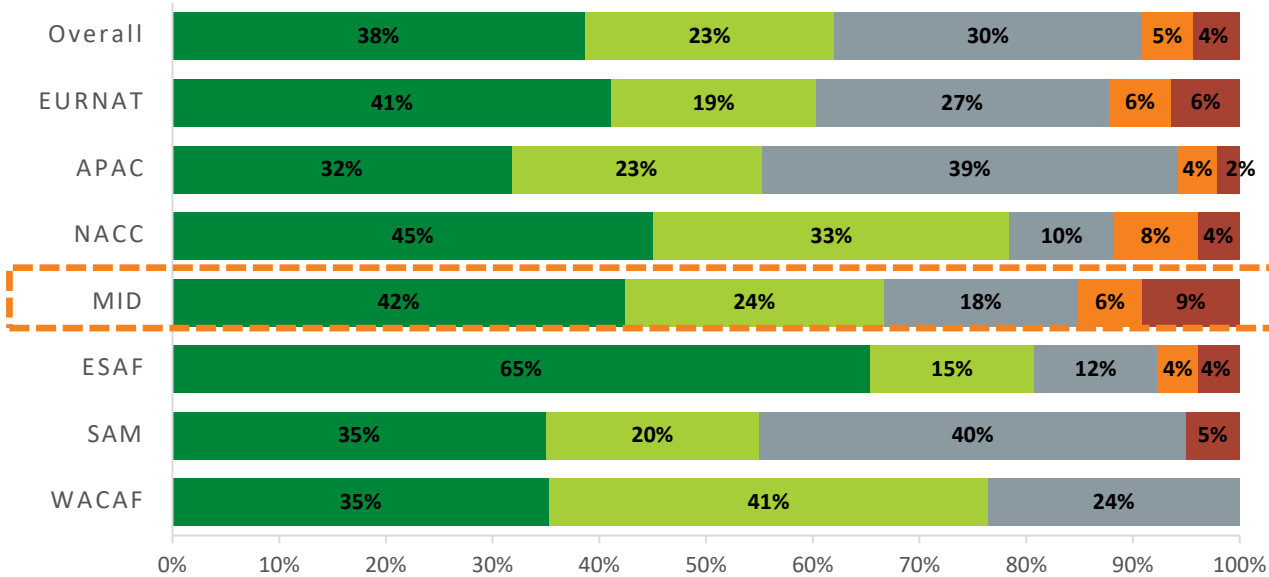
Distribution of responses by stakeholders



- Air operators, State CAAs and ANSPs accounted for 77% of respondents

Level of support

Overall and by ICAO regions



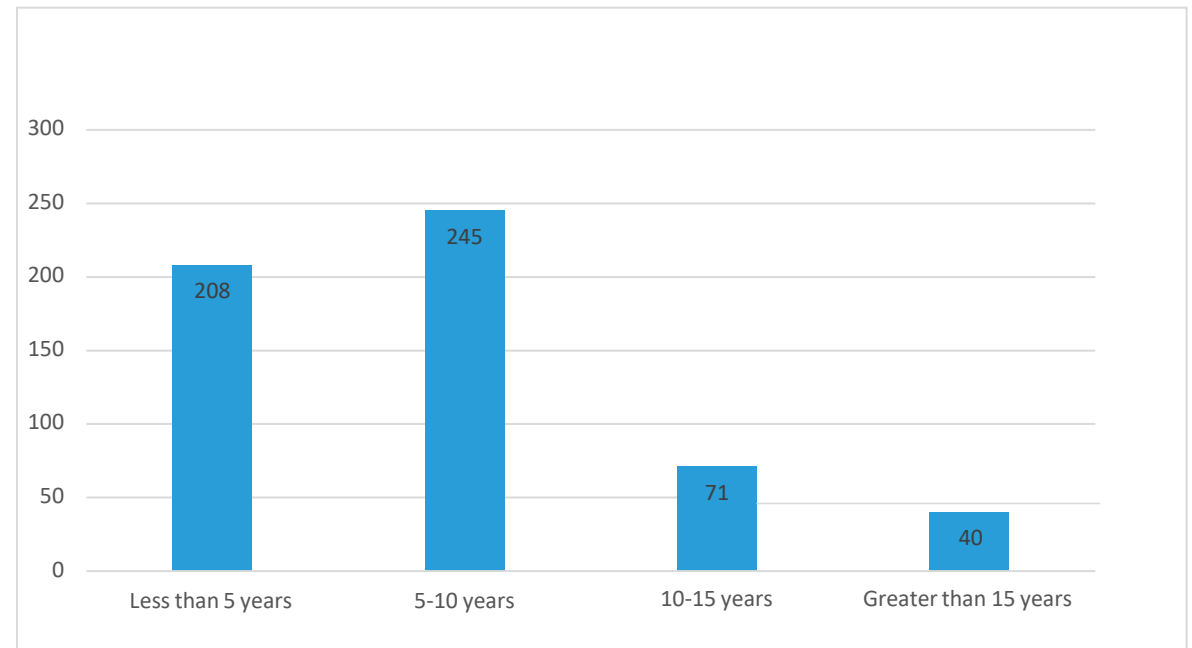
■ Strongly support
 ■ Somewhat support
 ■ Neutral
■ Somewhat not support
 ■ Strongly not support

- Overall, 61% of respondents either strongly or somewhat support moving to true north, 30% are neutral and 9% not in support
- Regions with strongest level of support – ESAF (80%), NACC (78%) and WACAF (76%)
- EURNAT with 60% of support, 27% neutral and 12% not in support
- APAC and SAM regions indicated higher neutral responses with 39% and 40% respectively
- **MID with 66% of support, 18% neutral and 15% not in support**

Estimated timeframe to implement true north

- Majority of respondents indicated 10 years or less to implement true north in their organization (81%)

Overall responses



Benefits and Challenges Identified by the Survey

- Top identified benefits include:
 - Long term cost savings for many stakeholders, including ANSPs, air operators and aerodromes
 - Improvements to aviation safety, particularly during precision approaches
 - Reduced maintenance of instrument flight procedures, charts, runway signage etc.
 - Elimination of two systems for reporting weather in MAG and True
- Key identified implementation related challenges:
 - The need for a global transition plan and CONOPs supported by SARPs and guidance
 - Harmonized transition and coordination with all relevant stakeholders
 - Resistance to change and awareness promotion
 - Cost benefit may need more analysis



Next steps

- Full survey report will be released
- ICAO to meet with key organizations to better understand the issues
- ICAO will propose next steps on True North to the ANC , which may include forming of a study group to further study the topic and develop a CONOPs and Transition Plan



Action by the meeting

The meeting is invited to :

- a) take note of the information contained in this presentation; and
- b) discuss any relevant matters as appropriate.



Thank You!