

**60th CONFERENCE OF
DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS**

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**AGENDA ITEM 8: CAPACITY DEVELOPMENT AND
IMPLEMENTATION**

**STRENGTHENING APAC AVIATION WORKFORCE
THROUGH NGAP AND GAAST INITIATIVES**

(Presented by Japan, United Arab Emirates, United Kingdom, International Air Cargo Association, and International Coordinating Council of Aerospace Industries Associations)

SUMMARY

This paper addresses critical workforce shortages and training capacity constraints in the aviation sector within the Asia-Pacific region. It highlights ICAO's Next Generation of Aviation Professionals (NGAP) Programme and the Global Aviation and Aerospace Skills Taskforce (GAAST) as strategic tools to address these challenges. The paper proposes concrete regional actions to enhance workforce preparedness and equitable access to aviation careers, urging coordinated APAC support ahead of the forthcoming ICAO Assembly.

STRENGTHENING APAC AVIATION WORKFORCE THROUGH NGAP AND GAAST INITIATIVES

1. INTRODUCTION

1.1 The Asia-Pacific region faces significant growth in aviation demand, with a projected need for approximately 999,000 new aviation professionals by 2043. This unprecedented demand includes around 268,000 new pilots, 298,000 maintenance technicians, and 433,000 cabin crew members, representing nearly 45% of global requirements without counting the other aviation-related fields such as airport operations and ground handling.

1.2 ICAO's Next Generation of Aviation Professionals (NGAP) Programme, formally recognized by ICAO Assembly Resolution A39-29, provides a strategic framework to ensure the availability of qualified aviation professionals. Complementing NGAP, the Global Aviation and Aerospace Skills Taskforce (GAAST) was created to coordinate efforts across industry and states to address workforce challenges through sharing best practices and case studies to a global community.

2. DISCUSSION

2.1 POLICY-LEVEL CHALLENGES AND OPPORTUNITIES

2.1.1 Regulatory Preparedness: ICAO safety audit data (USOAP) demonstrates significant disparities in safety oversight capacities within APAC States. Effective Implementation (EI) scores range from as low as 5% to over 90%, averaging below the global mean. Many developing States are under-resourced, underscoring the urgent need to ensure workforce challenges are addressed to mitigate the risks posed to the safety, security and resilience of the system.

2.1.2 Training Capacity and Infrastructure: Substantial gaps exist in technical vocational education and training (TVET) infrastructure across the APAC region. There is a noted shortage of qualified instructors, limited local training facilities in developing States, and substantial financial barriers to accessing training.

2.1.3 Equitable Access to Aviation Careers:

Ensuring a sustainable pipeline of aviation talent requires adopting inclusive policies that provide equitable access to training, irrespective of demographic, socioeconomic background, or geographic location. Currently, significant barriers limit participation in aviation professions, exemplified by global underrepresentation in critical roles such as pilots and maintenance technicians. Additionally, financial constraints and geographic isolation disproportionately restrict opportunities for talented individuals from lower-income or remote communities.

As of 2025, the birth rate in the APAC region has steadily declined to approximately 14–15 births per 1,000 people, down from 15.99 in 2020, underscoring the imperative to optimize human capital effectively. However, disparities in infrastructure, economic development, digital literacy, and governmental policies continue to result in uneven access to technology and artificial intelligence solutions throughout the region.

2.2 LEVERAGING GAAST AND NGAP FOR APAC

2.2.1 Global Aviation and Aerospace Skills Taskforce (GAAST) unites States, civil aviation authorities and industry to address workforce challenges. Its objectives include: demonstrating the value proposition of the sector; showcasing attraction and outreach programmes; improving retention

and development; highlighting the importance of workplace culture and environment; and ensuring a future ready workforce to support the evolution of work in the industry.

2.2.2 ICAO NGAP Programme: The ICAO Next Generation of Aviation Professionals (NGAP) strategy offers States strategic guidance to accurately forecast aviation workforce needs, enhance access to quality training, and cultivate inclusive and diverse professional environments. Aligned with the UN Sustainable Development Goals, the NGAP strategy supports sustainable, equitable, and scalable human resource development in aviation.

2.3 REGIONAL STRATEGIC ADVANTAGES

2.3.1 Demographic Dividend: The youthful demographic in APAC represents significant untapped potential to address regional and global aviation workforce demands, provided the value proposition is clear and targeted attraction and outreach initiatives are effectively implemented. The younger generation, particularly university and vocational school students, plays a crucial role as future changemakers by using their voices and creativity to advocate for NGAP through social media and digital platforms. Young students can showcase their views, ideas, and chosen aviation career pathways, as well as their future aspirations for all.

2.3.2 Regional and International Cooperation: Existing frameworks such as ASEAN, PASO, ICAO's APAC Regional Training Cooperation Framework offer platforms for enhanced collaboration, standardization, and resource-sharing among APAC States/Administrations.

2.3.3 Multilateral Support Potential: Given the clear linkages to Sustainable Development Goals (SDGs), APAC's aviation workforce development initiatives are strategically positioned to attract international donor support and funding through multilateral development agencies.

3. ACTION BY THE CONFERENCE

3.1 The Conference is invited to:

- a) Support the ICAO APAC Office to take a more active role in NGAP-related activities;
- b) Encourage APAC States, particularly developing ones, to create or enhance their National Aviation Workforce Development Plans aligned with ICAO NGAP objectives;
- c) Request ICAO to prioritize APAC-specific capacity-building initiatives, and enhance cooperation with APAC States/Administrations;
- d) Recommend ICAO APAC organize a dedicated NGAP-GAAST Regional Workshop in 2026 to foster cross-border collaboration and strategy refinement;
- e) Encourage States/ Administrations and industry partners to strengthen collaboration with universities, technical/vocational schools, and student associations through aviation-focused career guidance programs, mentoring programs, and supporting youth-led innovation and sustainability ideas for aviation; and
- f) Urge APAC States/ Administrations to collectively support NGAP and GAAST initiatives during the forthcoming ICAO Assembly, emphasizing the importance of addressing workforce challenges to ensure the safety, security and resilience of the system.