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EXECUTIVE COMMITTEE

Agenda Item 21: Next Generation of Aviation Professionals (NGAP) initiative

THE IMPORTANCE OF COLLABORATION TO ENSURE A RESILIENT AND FUTURE-READY WORKFORCE

(Presented by the United Kingdom, the African Civil Aviation Commission (AFCAC¹), Brazil, France, Japan, South Africa, the United Arab Emirates, Airports Council International (ACI), Aviation Services Association (ASA World), International Air Transport Association (IATA), the International Coordinating Council of Aerospace Industries Associations (ICCAIA), JAA Training Organisation (JAA TO), the Royal Aeronautical Society (RAeS), and The International Air Cargo Association (TIACA))

REVISION NO. 1

EXECUTIVE SUMMARY

This paper supports the ICAO Next Generation of Aviation Professionals (NGAP) Programme and the proposed update to Assembly Resolution A39-29. It emphasizes the need to expand the NGAP's scope beyond youth and licensed professionals to encompass all aviation workers, including mid-career professionals and unlicensed roles.

The paper also underscores the risk that workforce shortages pose to the safety, security, and resilience of the global aviation system and calls for strengthened collaboration between States, educational institutions, and industry. It also supports ICAO's partnership with the Global Aviation and Aerospace Skills Taskforce (GAAST) as a mechanism to facilitate practical workforce solutions.

Action: The Assembly is invited to:

- a) Urge all Member States to support the NGAP resolution, including broadening the programme beyond young people and licensed professionals;
- b) Call upon States, educational institutions, and industry to strengthen collaboration to address workforce challenges;

¹ Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cabo Verde, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, United Republic of Tanzania, Togo, Tunisia, Uganda, Zambia and Zimbabwe

c) Encourage ICAO to collaborate with industry and state-led programmes to share resources and information; d) Call upon Members States to recognize the risks workforce challenges pose to safety, security, and system resilience; and e) Encourage States, educational institutions, and industry to support ICAO’s efforts through technical expertise, voluntary financial or in-kind contributions, and data sharing.	
<i>Strategic Goals:</i>	This working paper relates to all Strategic Goals and to Priority Enabler “ <i>Gender Equality and Attracting New Talent to Aviation</i> ”
<i>Financial implications:</i>	Activities proposed can be undertaken within existing resources; additional voluntary contributions welcomed.
<i>References:</i>	ICAO Strategic Plan 2026-2050 NGAP Strategy ICAO Business Plan for 2026-2027-2028 Doc 10184, <i>Assembly Resolutions in Force (as of 7 October 2022)</i> A39-WP/33, <i>The ICAO Next Generation of Aviation Professionals (NGAP) Programme</i> A39-WP/62, <i>ICAO Civil Aviation Training Programme and Capacity-Building in Aviation</i>

1. INTRODUCTION

1.1 The global aviation system is facing unprecedented growth and complexity. ICAO forecasts indicate a sharp increase in demand for skilled aviation professionals, with over 2.5 million new personnel required by 2043 to maintain safe and efficient operations.

1.2 This increase in demand is occurring at a time when the sector is already experiencing workforce shortages and capacity constraints. These pressures are compounded by digital transformation, sustainability goals, aging populations and changing workforce expectations – particularly in the post-COVID-19 era.

1.3 ICAO’s Strategic Plan 2026-2050 recognises that “ensuring the availability of talented professionals for aviation, promoting diversity and gender equality throughout the industry, integrated and adapted to new modes of operation and technological changes” is a key enabler for the future of aviation. The ICAO Business Plan also recognises “attracting new talent” as a high priority enabler.

1.4 To address this issue, ICAO has revitalized its NGAP initiative to support the sustainable attraction and development of qualified aviation professionals. ICAO’s NGAP Programme provides a strategic platform to coordinate international efforts to attract, educate, and retain aviation professionals.

1.5 However, the programme should be broadened in scope and implementation to address the full range of current and future workforce needs.

2. BROADENING THE NGAP APPROACH

2.1 While engaging youth remains one of the key pillars of strengthening workforce, ICAO and its Member States must also recognize and respond to the broader spectrum of workforce challenges. This includes the recruitment, retention and mobility of all aviation personnel including unlicensed professionals, technical, operations and support staff, and experienced workers seeking career transitions.

2.2 Skills shortages are predicted across a wide range of occupations within aerospace and aviation, including but not limited to maintenance personnel, airport operations, airline crew and ground staff, ground handlers and cargo personnel, security staff and in government. All of these areas must be addressed to ensure continuity of operations, license to grow and maintenance of safety and security.

2.3 This is coupled with a need to address the growing need for IT, digital transformation and cybersecurity skills in a highly competitive global employment market.

2.4 An age-inclusive, profession-diverse approach is essential. Encouraging mid-career recruitment, fostering re-skilling programmes, and reducing systemic entry barriers can help address workforce gaps and improve resilience.

2.5 For these reasons, it makes sense to expand the scope of ICAO's Next Generation Aviation Professionals (NGAP) Programme to attract, develop, and retain aviation talent from all generations, backgrounds, and across all categories of aviation personnel. These amendments are proposed in A42 - WP/21, 'ICAO's Next Generation of Aviation Professionals (NGAP) Programme' presented by the Council of ICAO.

3. WORKFORCE CHALLENGES AS A SYSTEMIC RISK

3.1 Current and projected workforce shortages directly affect the aviation sector's ability to maintain operational safety, oversight capacity, and service quality.

3.2 Staff shortages in air traffic management, maintenance, oversight, and safety compliance could pose systemic risks that may adversely affect States' ability to comply with ICAO Standards and Recommended Practices (SARPs).

3.3 Workforce development and insertion on labour market should therefore be considered a core pillar of aviation system resilience and safety planning, not solely a human resources matter.

4. STRENGTHENING COLLABORATION THROUGH ICAO AND GAAST

4.1 Addressing these complex challenges requires coordinated efforts between governments, industry, training institutions, aviation and aerospace professionals, and international organizations.

4.2 The new NGAP Strategy, in particular Key Focus Area 4: Outreach & Knowledge Sharing – Securing Political Commitment, Sharing Best Practices, and Promoting Aviation Careers, will play an important role in addressing challenges.

4.3 ICAO's collaboration with the Global Aviation and Aerospace Skills Taskforce (GAAST) is an example of effective multi-stakeholder engagement. GAAST's forthcoming repository of best practices will support Member States in developing practical workforce strategies. Information paper WP/278 - EX/119 provides further detail on the work of the GAAST.

4.4 The sharing of data, lessons learned, and effective policies through platforms like GAAST will accelerate global capacity building, support mutual recognition of qualifications, and contribute to a more harmonized and sustainable aviation workforce.

5. CONCLUSION

5.1 A sustainable, competent aviation workforce is essential to supporting ICAO's strategic objectives, including safety, security, environmental responsibility, and global connectivity.

5.2 As the aviation ecosystem evolves, so must ICAO's approach to workforce planning. A broadened, inclusive NGAP Programme—supported by strong State- educational institution–industry collaboration and international coordination—is key to achieving a resilient and future-ready workforce.

5.3 The new NGAP Strategy addresses many of the issues concerning workforce, and States are encouraged to support its programmes and capacity building efforts.

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