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SEVENTH WORLDWIDE AIR TRANSPORT CONFERENCE (ATCONF/7)

Montréal, HQ, 16 to 20 November 2026

Agenda Item 1: Overview of developments in the field of air transport
1.2: Air transport in ICAO's long term strategic plan: Accelerating aviation towards 2050

DRAFT REPORT

(11 pages)

Agenda Item 1: Overview of developments in the field of air transport

Agenda sub-item 1.2: Air transport in ICAO's long-term strategic plan: Accelerating aviation towards 2050

Note: The Conference considered this Agenda Item in two parts: ***A) Aviation workforce; and B) Capacity building.***

Part A: Aviation workforce

1.2.1 DOCUMENTATION

1.2.1.1 In WP/62, presented by the Dominican Republic, the Airport Services Association (ASA World), the International Federation of Air Line Pilots' Associations (IFALPA), the International Federation of Air Traffic Controllers' Associations (IFATCA) and the International Transport Workers' Federation (ITF), and co-sponsored by Oman and the International Labour Organization (ILO), it was emphasized that social sustainability is an integral component of aviation sustainability and a key contributor to global connectivity, economic development and industry resilience. The paper highlighted the importance of a skilled and supported aviation workforce, including in the context of emerging technologies, and advocated for the institutionalization of social sustainability within ICAO's work through enhanced cooperation with the ILO. The Conference was invited to support the renewal and, as necessary, amendment of the ICAO-ILO Agreement, promote continued consultation between the Secretariats of the two organizations, ensure that the renewed Agreement advances agreed priorities and areas of common interest, and request ICAO to develop guidance for States on social sustainability consistent with the No Country Left Behind (NCLB) Strategic Goal.

1.2.1.2 WP/69, presented by Italy on behalf of the European Union (EU), its Member States and other Member States of the European Civil Aviation Conference (ECAC), examined how automation, artificial intelligence, digitalization, robotics, remote towers and uncrewed aircraft systems are transforming aviation jobs and skills requirements. The paper highlighted the shift towards monitoring automated systems and data-driven decision-making, as well as risks of skills shortages and overreliance on automation. It emphasized the need for continuous training, reskilling and upskilling, alongside decent working conditions, effective social dialogue and a safe working environment to attract and retain aviation professionals. The Conference was invited to encourage ICAO to identify future skills and training needs through the Next Generation of Aviation Professionals (NGAP) programme and strengthen cooperation with ILO to promote decent and sustainable work in aviation.

1.2.1.3 In WP/113, Oman, ITF, IFALPA, the International Federation of Air Traffic Controllers' Associations (IFATCA) and ILO emphasized that advancing women's participation and empowerment across the aviation workforce is an important enabler of workforce sustainability, inclusive growth and the achievement of ICAO's Strategic Plan 2026–2050 and the United Nations Sustainable Development Goals. The paper highlighted persistent barriers affecting the attraction, retention and advancement of women in aviation and emphasized the complementary role of attraction, retention and development in supporting women's participation. The Conference was invited to reaffirm the importance of gender equality and women's participation in aviation, encourage Member States and industry to address barriers affecting women throughout the employment cycle, support the ICAO Landmark Study on Women in Global Aviation and the translation of its findings into practical guidance, measurable actions and indicators, and

ensure the meaningful involvement of women aviation workers and their representative organizations in the implementation of initiatives arising from the Study and related gender-equality work.

1.2.1.4 WP/41, presented by Thailand, highlighted the need to better link the development of emerging aviation technologies with workforce planning and training, including by aligning the ICAO Policy on Innovation with the Next Generation of Aviation Professionals (NGAP) Strategy. Drawing on Thailand's experience with its unmanned aircraft systems (UAS) Regulatory Sandbox, the paper emphasized practical training and cross-sectoral coordination to strengthen regulatory oversight. It invited the Conference to urge States to develop workforce strategies and training curricula alongside regulations for emerging technologies, and to request ICAO to develop specialized training, competency guidance and knowledge-sharing tools while linking the ICAO Innovation Policy and NGAP at a strategic level.

1.2.1.5 WP/114, presented by ILO, the International Air Transport Association (IATA), ITF, IFATCA, IFALPA and ASA World, called for enhanced collaboration between ICAO and the ILO to promote workforce sustainability and policy coherence in support of the sustainable development of international air transport. Building on the labour and social principles adopted by previous Worldwide Air Transport Conferences and the 2023 ILO Conclusions and Recommendations for the civil aviation sector, the paper advocated the renewal of the ICAO-ILO Agreement and strengthened cooperation between the two organizations. The Conference was invited to request Member States to reaffirm and build upon existing labour and social principles and recommendations, request ICAO to give high priority to the renewal of the ICAO-ILO Agreement, including the development of a joint work plan, and authorize ICAO to work with the ILO on workforce sustainability issues, including workforce attraction and retention, just transition planning, and occupational safety and health matters.

1.2.2 DISCUSSION

1.2.2.1 In considering WP/62, WP/69, WP/113, WP/41 and WP/114, the Conference discussed workforce sustainability as an important enabler of a safe, secure, resilient and sustainable aviation sector. Delegations highlighted the importance of workforce attraction and retention, gender equality, social inclusion and adaptation to technological change in supporting a strong and resilient aviation workforce.

1.2.2.2 The Conference discussed the implications of automation, artificial intelligence, digitalization and emerging aviation technologies for workforce requirements and future skills needs across the sector. Support was expressed for strengthening linkages between workforce planning, education, training and competency development and technological innovation, including in support of the safe and effective deployment of emerging aviation technologies. Delegations emphasized that workforce planning, education, training and competency development should evolve in parallel with technological innovation and the deployment of emerging aviation technologies.

1.2.2.3 The Conference discussed cooperation among ICAO, ILO, States, industry, labour organizations and other stakeholders in strengthening workforce sustainability, human capital development and future workforce readiness. While support was expressed by several delegations for continued and strengthened cooperation between ICAO and ILO, some delegations underscored the importance of maintaining a clear distinction between the respective mandates and responsibilities of the organizations concerned.

1.2.2.4 The Conference further discussed the need to put in place appropriate measures to attract, retain and develop women in aviation and to address barriers affecting their participation and advancement

across the sector. Delegations recognized the growing representation of women in aviation as an important element in sustaining the sector's future workforce and expressed support for promoting equal opportunities for women in aviation.

1.2.2.5 The Conference noted information papers WP/146 presented by Kazakhstan and WP/189 presented by ITF.

1.2.3 CONCLUSION

1.2.3.1 As a result of the documentation considered and ensuing discussion under Agenda Item 1.2, the Conference concluded that:

a) workforce sustainability, including workforce attraction and retention, gender equality, social inclusion, the fundamental principles and rights at work, and adaptation to technological change, is an important enabler of a safe, secure, resilient and sustainable aviation sector;

b) workforce planning, education, training and competency development should evolve in parallel with technological innovation and the deployment of emerging aviation technologies in order to strengthen workforce sustainability and future workforce readiness;

c) continued and strengthened cooperation among States, ICAO, ILO, industry and other stakeholders, while respecting their distinct mandates and responsibilities, remains important in strengthening workforce sustainability, human capital development and future workforce readiness across the aviation sector;

d) the growing representation of women in aviation is an important element of sustaining the sector’s future workforce, and efforts should be intensified to put in place adequate policies and mechanisms to attract, retain and develop women in aviation; and

e) ICAO should consider renewing the existing ICAO-ILO Memorandum of Understanding to continue the ongoing cooperation and collaboration between the two United Nations sister organizations.

1.2.4 RECOMMENDATION

Recommendation 1.2/1 — Air transport in ICAO’s long-term strategic plan: Accelerating aviation towards 2050 – Aviation workforce

The Conference recommends that:

a) States and aviation stakeholders should align aviation workforce planning, training and competency development evolve in parallel with technological innovation and the deployment of automation, artificial intelligence and emerging aviation technologies,

including through continuous reskilling and upskilling and the preservation of critical human competencies and meaningful human oversight;

b) the growing representation of women in aviation is an important element of sustaining the sector's future workforce, and efforts should be intensified to put in place adequate policies and mechanisms to attract, retain and develop women in aviation.

c) States and aviation stakeholders should strengthen cooperation to attract, retain and develop a skilled, diverse, inclusive and resilient aviation workforce, through measures that promote social inclusion, taking into account national legal, institutional and regulatory frameworks; and

d) ICAO should strengthen the global workforce development framework for readiness towards 2050 and by enhancing cooperation with States, ILO and relevant aviation stakeholders, consistent with their respective mandates and responsibilities.

Part B: Capacity building

1.2.5 DOCUMENTATION

1.2.5.1 WP/39, presented by China, highlighted global shortages of qualified civil aviation regulatory personnel and gaps in States' training needs assessment, particularly in developing countries. The paper shared China's experience in providing specialized aviation training to more than 2,000 participants from over 30 countries during a period of three years, complementing ICAO's global training system. It emphasized the need to strengthen the assessment and sharing of national training needs to better align training programmes with demand and support capacity-building among civil aviation regulators worldwide. The Conference was invited to request ICAO to establish a global mechanism for assessing and sharing training needs and disseminating good practices under NCLB Strategic Goal and NGAP programme, and to encourage States, regional organizations and training institutions to strengthen partnerships and capacity-building to support the implementation of ICAO Standards and Recommended Practices (SARPs).

1.2.5.2 WP/63, presented by the Dominican Republic, ASA World, IFALPA, IFATCA and ITF, and co-sponsored by Oman, highlighted systemic challenges in attracting and retaining aviation professionals, including skills gaps, fragmented training-to-employment pathways, limited career progression, and barriers to inclusion. The paper emphasized the need to integrate workforce planning, skills development and inclusive career pathways into national aviation and economic development strategies, supported by structured social dialogue among governments, industry, education providers and personnel representative organizations. The Conference was invited to recognize workforce development as a key enabler of sustainable aviation growth, encourage States to incorporate social dialogue into national aviation and investment strategies in line with ICAO's NGAP objectives, and strengthen cooperation among ICAO, ILO and other stakeholders to coordinate and enhance workforce pathways and conditions.

1.2.5.3 WP/57, presented by Indonesia, highlighted the importance of developing aviation human capital alongside physical and digital infrastructure to address workforce shortages, evolving skills requirements and uneven training capacity. Drawing on the experience of Garuda Indonesia Training Center, the paper proposed an integrated approach combining competency-based and evidence-based training, leadership development, maintenance training, human factors, safety management and sustainability education, supported by partnerships among regulators, airlines, training organizations, academia and technology providers. The Conference was invited to encourage States to integrate workforce development into aviation investment planning, promote industry partnerships and adaptable training systems, and invite ICAO to facilitate international knowledge-sharing, disseminate good practices and provide guidance and capacity-building to strengthen aviation workforce competencies and resilience.

1.2.5.4 WP/66, presented by Italy on behalf of the European Union (EU), its Member States and other Member States of ECAC, highlighted the aviation sector's growing workforce shortages and declining attractiveness as a career choice, partly due to concerns about its environmental impact and sustainability. Drawing on Portugal's "Your Wings Start Here" campaign, which engages aviation stakeholders and educational institutions to promote aviation careers, the paper proposed a coordinated initiative framework to attract and develop the next generation of aviation professionals through early outreach, education, career awareness and inclusive opportunities. The Conference was invited to request ICAO to advance its NGAP strategy, establish a public platform to share successful national initiatives, and encourage States to introduce incentive measures to attract talent and strengthen the long-term resilience of the aviation workforce.

1.2.5.5 Through WP/44, Japan emphasized the importance of capacity development support in addressing capability gaps among States and advancing ICAO's NCLB Strategic Goal. It highlighted the need to strengthen the visibility, information-sharing and coordination of aviation capacity-development activities to improve transparency, foster partnerships, identify unmet needs and support more effective implementation assistance. The paper also shared Japan's experience in promoting a voluntary inventory of capacity-development activities and suggested that such arrangements could serve as a practical means of enhancing coordination and visibility of implementation support activities. The Conference was invited to recognize the importance of capacity development support, encourage States, international organizations and development partners to strengthen and expand such support while enhancing its visibility and coordination, and request ICAO to continue examining practical approaches to improve the coordination and visibility of capacity-development activities.

1.2.5.6 WP/13, presented by Oman on behalf of the Arab Civil Aviation Organization (ACAO), proposed establishing an International Air Transport Training Track (IATTT) under ICAO to address gaps in specialized training and disparities in expertise among Member States' air transport officials. The proposed programme would provide standardized, progressive training in international air law, air transport economics, air services agreement negotiations, competition, flight permits, and passenger and air cargo protection, supported by internationally recognized qualifications and accredited instructors. The Conference was invited to support the proposed training programme, request a detailed study on its implementation, including curricula, training levels, accreditation and partnerships, and encourage ICAO to explore an international framework for accrediting air transport instructors to ensure the quality and sustainability of training programmes.

1.2.5.7 WP/112, presented by Oman, ITF, IFALPA and IFATCA, highlighted the need to preserve human capability and judgement as AI and automation are increasingly used in aviation. It noted that some artificial intelligence (AI)-enabled systems may produce less predictable or explainable outputs than conventional automation, and emphasized that meaningful human oversight requires the skills, information and authority to understand, question and - where necessary for safety - override AI-supported decisions. The paper invited the Conference to promote human-factors and workforce-impact assessments and the participation of aviation workers in technological change, and to request ICAO to consider developing guidance on meaningful human oversight in AI-enabled and highly automated aviation systems.

1.2.5.8 WP/97, presented by Sudan, addressed the future of global air transport and emphasized the need to strengthen its resilience, environmental sustainability and capacity for innovation. It highlighted the financial and technological challenges faced by developing States and invited the Conference to support crisis preparedness, digital transformation and the transition to sustainable aviation, alongside international cooperation, capacity-building, financing and technology transfer.

1.2.5.9 WP/53, presented by Uganda on behalf of 54 Member States of the African Civil Aviation Commission (AFCAC), highlighted the challenges in developing a skilled aviation workforce in Africa, including shortages of qualified personnel, high training costs, limited training capacity, and the underrepresentation of women and youth. The paper proposed an African Aviation Skills and Inclusion Acceleration Package to strengthen workforce planning, expand training and technology transfer, promote inclusive career development through the African Women and Youth in Aviation (AWAYA) programme, and facilitate the recognition of equivalent qualifications across States. The Conference was invited to support the proposed package, encourage States to develop aviation workforce plans and measurable pathways to increase the participation of women and youth, and request ICAO to develop guidance on the recognition and conversion of foreign personnel licences while maintaining safety standards.

1.2.5.10 WP/164, presented by Venezuela and endorsed by 18 Latin American Civil Aviation Commission (LACAC) Member States, proposed establishing Regional NGAP Cooperation Frameworks to address aviation workforce shortages, particularly in developing States. The proposal called for regional assessments of current and future personnel needs, inventories of training capabilities, and cooperation. It also emphasized collaboration among civil aviation authorities, training centres, universities, industry and international organizations, building on existing regional structures rather than creating new permanent bodies. The Conference was invited to encourage regional NGAP cooperation, recommend that ICAO Regional Offices facilitate tailored frameworks, and request ICAO to develop guidance and common indicators to assess workforce needs and the results of national and regional initiatives.

1.2.5.11 WP/92, presented by ICCAIA, Brazil, the United Arab Emirates, ASA World, Civil Air Navigation Services Organisation (CANSO), IATA, International Business Aviation Council (IBAC), IFALPA, IFATCA, and the International Air Cargo Association (TIACA), highlighted global workforce shortages as a growing risk to aviation safety, security, operational resilience and economic development. The paper emphasized the need to attract new talent, retain experienced professionals, expand training opportunities and facilitate the recognition and mobility of qualified personnel, particularly as the industry faces technological change and an ageing workforce. It called for stronger collaboration among States, industry, educational institutions and ICAO, building on initiatives such as the NGAP programme and the Global Aviation & Aerospace Skills Taskforce (GAAST). The Conference was invited to strengthen these partnerships, develop global workforce-demand forecasts and skills-gap indicators, and incorporate workforce availability into ICAO's economic analyses of States' and regions' capacity to realize aviation's connectivity and economic benefits.

1.2.6 DISCUSSION

1.2.6.1 In considering WP/39, WP/63, WP/57, WP/66, WP/44, WP/13, WP/112, WP/97, WP/53, WP/164 and WP/92, the Conference expressed significant support for addressing labour shortages, which may have far-reaching impacts throughout the industry. Delegations emphasized the need for practical measures to make aviation careers more attractive, bring new talent into the sector and retain experienced personnel. Capacity-building and human capital development were recognized as essential to the long-term growth, resilience and sustainability of international civil aviation.

1.2.6.2 In this regard, delegations emphasized the importance of strengthening workforce planning, education and training, competency development, qualification recognition and cooperation among States, industry, educational institutions and international organizations. Support was expressed for continued implementation of the Next Generation of Aviation Professionals (NGAP) programme, enhanced regional cooperation and improved mechanisms for assessing workforce needs and sharing good practices. While discussing proposals relating to specialized training programmes, instructor accreditation and improved visibility and coordination of capacity-development activities, the Conference noted that these would need to be in line with existing accreditation mechanisms and other frameworks. The Secretariat informed that ICAO offers a comprehensive portfolio of training and implementation support, including the Global Aviation Training Programme, the TRAINAIR PLUS Programme and the ICAO Aviation Training and Capacity-Building for States initiative (Doc 10184). The Secretariat encouraged States wishing to offer training to do so within those frameworks to ensure standardized content, quality, and avoid duplication.

1.2.6.3 The Conference further highlighted the need for workforce development to keep pace with technological innovation, automation and the introduction of artificial intelligence. Interventions pointed to

skills needs in areas such as digitalization and cybersecurity. Delegations also emphasized the importance of consulting affected personnel, preserving critical human competencies and keeping humans central to decision-making, supported by appropriate ICAO guidance.

1.2.6.4 Broad support was equally expressed on the need to strengthen implementation support and capacity-building for developing countries, least developed countries (LDCs), landlocked developing countries (LLDCs) and small island developing States (SIDS) in line with the *No Country Left Behind (NCLB)* Strategic Goal. While support was expressed for enhanced guidance, cooperation and capacity-building in these areas, it was emphasized that new initiatives should build upon existing ICAO programmes and mechanisms, avoid duplication and take account of available resources.

1.2.6.5 The Conference took note of WP/120 presented by Brazil and Colombia and supported by 18 LACAC Member States and WP/203 presented by Japan.

1.2.7 CONCLUSION

1.2.7.1 As a result of the documentation considered and ensuing discussion under Agenda Item 1.2, the Conference concluded that:

a) capacity development and implementation support remain essential to strengthening States' capabilities and advancing the *No Country Left Behind* (NCLB) Strategic Goal, particularly in developing and capacity-constrained States;

b) education, training and human capital development are critical to bridging labour shortage, building and retaining a skilled, diverse and future-ready aviation workforce, and supporting the safe, secure, resilient and sustainable growth of international civil aviation. States should therefore continue to support the ICAO NGAP programme;

c) cooperation among States, ICAO, ILO and relevant stakeholders should be further strengthened to promote knowledge-sharing, technical cooperation, workforce mobility and the exchange of best practices in support of workforce development, talent retention and capacity-building objectives;

d) workforce development strategies should continue to evolve in response to technological innovation and emerging aviation technologies, while ensuring that human-centered approaches remain an integral part of decision-making and operational oversight; and

e) capacity-building and training initiatives should, wherever appropriate, build upon existing ICAO programmes and frameworks to promote standardization, quality, coordination and the efficient use of resources, while avoiding duplication of efforts.

1.2.8 RECOMMENDATION

Recommendation 1.2/2 — Air transport in ICAO's long-term strategic plan: Accelerating aviation towards 2050 – Capacity building

The Conference recommends that:

a) States should strengthen workforce planning, education and training to address labour shortages, recruit and retain a skilled and diverse aviation workforce capable of adapting to technological innovation and emerging aviation technologies, while ensuring that human-centered approaches remain an integral part of decision-making and operational oversight;

b) States should strengthen cooperation with relevant regional and industry stakeholders for enhanced knowledge-sharing, technical cooperation, workforce mobility and the exchange of best practices in support of workforce development, talent retention and capacity-building objectives;

c) ICAO should continue implementing NGAP and strengthen cooperation with States, the ILO and other stakeholders to share good practices and provide guidance and technical support on recruitment, retention, workforce mobility and human oversight as aviation technologies evolve; and

d) ICAO should leverage existing frameworks such as the TRAINAIR PLUS Programme to enhance collaboration of stakeholders in the identification of needs and the development of progressive competency-based training pathways. In the same vein, ICAO and partners should continue to explore opportunities to enhance coordination of implementation support projects, in support of the NCLB Strategic Goal, with particular attention to LDCs, LLDCs, SIDS and other States with limited capacity.

— END —