



WORKING PAPER

**SEVENTH WORLDWIDE AIR TRANSPORT CONFERENCE
(ATCONF/7)**

Montréal, HQ, 16 to 20 November 2026

Agenda Item 3: Strengthening regulatory and institutional frameworks

3.1: Strengthening regulatory oversight and evolving institutional frameworks

**IMPLEMENTATION OF THE NO COUNTRY LEFT BEHIND GOAL:
CHINA CIVIL AVIATION AUTHORITY'S (CAAC) ACHIEVEMENTS
AND RECOMMENDATIONS FOR CAPACITY-BUILDING IN
EXTERNAL TRAINING**

(Presented by China)

EXECUTIVE SUMMARY

This working document presents practical outcomes of China's civil aviation cooperation mechanisms for external training. Over the past three years, China has delivered specialized training to more than 2000 participants from over 30 countries, providing a useful complement to the global training system of the International Civil Aviation Organization (ICAO). Through such training cooperation, China has observed that information on national training needs is often fragmented. To further improve the accuracy of matching training supply with demands and better support capacity-building for global civil aviation regulators, it is necessary to strengthen training needs assessment and information-sharing.

Action:

- a) the Conference requests the ICAO Secretariat to coordinate global training-needs assessment and information-sharing under the frameworks of NCLB and NGAP; and
- b) the Conference calls upon Member States and relevant stakeholders to strengthen cooperation on training for regulatory personnel and enhance the voluntary implementation of SARPs.

<i>Strategic Goals:</i>	This working paper relates to Strategic Goals: <i>The Economic Development of Air Transport Assures the Delivery of Economic Prosperity and Societal Well-Being for All; and No Country Left Behind.</i>
<i>Financial implications:</i>	No additional resources required.
<i>References:</i>	Resolution A39-23, <i>No Country Left Behind (NCLB) Initiative</i> Resolution A42-24, <i>Next Generation of Aviation Professionals — Global Aviation Talent Development</i> Resolution A42-23, <i>Consolidated statement of ICAO policies on technical cooperation and technical assistance</i> ICAO Strategic Plan 2026–2050

¹ English and Chinese versions provided by China.

1. INTRODUCTION

1.1 Effective regulatory oversight depends on a sufficient number of adequately qualified regulatory personnel. Nevertheless, shortages of regulatory personnel have become a common challenge for civil aviation authorities worldwide. Shortfalls in qualified aviation professionals have been identified by the International Civil Aviation Organization (ICAO) safety and security-related audits as a frequent deficiency and one of the root causes for low levels of effective implementation. According to the Universal Safety Oversight Audit Programme-Continuous Monitoring Approach (USOAP-CMA) three-year report for 2022-2024, in terms of civil aviation organization, 45 per cent of Member States failed to ensure that their civil aviation authorities attract, recruit and retain a sufficient number of qualified technical personnel. In terms of personnel licensing and training, roughly half of the States lack sound training approval mechanisms, largely due to an insufficient number of qualified inspectors. In terms of aircraft operations, more than 55 per cent of States do not fully carry out initial, recurrent, specialized and on-the-job training programmes for their technical staff.

1.2 Launched by ICAO in 2014, the No Country Left Behind (NCLB) initiative has evolved into one of the six strategic goals in the *ICAO Strategic Plan for 2026–2050*. NCLB aims to support States in effectively implementing ICAO Standards and Recommended Practices (SARPs). It focuses on Least Developed Countries (LDCs), Landlocked Developing Countries (LLDCs), Small Island Developing States (SIDS) and other developing countries, assisting States in overcoming resource constraints in infrastructure, finance, training and supply chains, as well as insufficient coordination.

1.3 The Civil Aviation Administration of China's (CAAC) practices in training and capacity-building for regulatory personnel are aligned with the global strategic directions of the ICAO NCLB initiative and the Next Generation of Aviation Professionals (NGAP). Guided by demand-driven principles, the External Training Committee under the CAAC "Belt and Road" Cooperation Platform conducts specialized training in such areas as safety management, airworthiness certification, air traffic management, airport control, flight standards, maintenance and aviation meteorology, through collaboration among governments, industry, academia and training institutions, and aligns such activities with the NCLB framework.

2. DISCUSSION

2.1 Global Personnel Training and Capacity-Building

2.1.1 Structural impacts of regulatory-personnel shortages on effective global implementation. Working Document A42-WP/149 notes that the global shortage of qualified regulatory personnel poses a structural threat to aviation safety, security and regulatory resilience. Resolution A42-24 also observes that labour shortages may compromise safety, security and the capacity to achieve ICAO strategic goals. Driven by strong global-market demand for skilled aviation professionals, Member States — especially LDCs, LLDCs, SIDS and other countries in need of assistance — face the challenge of aviation professional turnover outpacing talent replenishment, which constrains progress in improving effective implementation levels.

2.1.2 ICAO training and implementation-support toolkit. Under the framework provided by the NCLB strategic goal and Resolution A42-23 on capacity development and implementation support policies, ICAO's Capacity Development and Implementation (CDI) Bureau has established a relatively complete toolkit for training and implementation support, laying an important foundation for capacity building for regulatory personnel in Member States. Through mechanisms including Global Aviation Training

(GAT / ICAO Training), the TRAINAIR PLUS Programme (TPP) and implementation support packages (iPacks), ICAO provides standardized training and solutions for States to implement SARPs and build the capacity of aviation professionals, creating a relatively unified global training framework and curriculum resources.

2.1.3 Advancing training capacity-building. Building upon the above-mentioned toolkit, Member States, ICAO and stakeholders continuously advance capacity-building to mitigate shortages of regulatory personnel. Paragraph 5 of Resolution A42-24 urges Member States, academia, and industry to collaborate in developing and implementing well-defined initiatives—such as knowledge exchange programmes, joint training projects, capacity-building seminars, and technical advisory support—specifically aimed at strengthening national training capacities, alleviating retention challenges for skilled aviation professionals, and fostering the sustainable development and resilience of regional aviation workforces. Paragraph 9 of the Resolution directs the Council to ensure that ICAO continues to play a leading role in facilitating communication and collaboration with States and industry, and in supporting the development of forecasts and strategies, the sharing of good practices and planning tools, and the provision of guidance for nurturing the NGAP. Such initiatives provide important support for expanding pools and enhancing competencies of global regulatory personnel.

2.1.4 Notwithstanding improved training toolkits and ongoing capacity-building, there remains room for improvement in collaborative planning and resource integration at the global-level. Appendix A to A42-WP/21 Revision No. 1, containing calls from the 2025 NGAP Global Summit (Durban), indicates that collective actions are required at global, regional and national levels to meet global demands for building a resilient, inclusive, non-discriminatory and future-oriented aviation workforce. Item 7 “Strengthen regional and global talent development partnerships” explicitly calls for enhanced cooperation among governments, civil aviation authorities, industry, academia and training institutions: to align human resource strategies and share good practices; to support the joint development of planning tools, financing models, mutual recognition frameworks and resource-sharing mechanisms; and to strengthen regional cooperation platforms through ICAO and regional organizations, so as to share forecasting outcomes, exchange good practices and collaboratively plan human resource capacities. Strengthening talent development partnerships helps bring together the efforts of multiple parties and respond more effectively to real-world capacity-building needs for regulatory personnel in Member States.

2.1.5 Strengthen training needs assessment and information sharing. The effectiveness of training toolkits and capacity-building initiatives ultimately hinges on whether training programmes can precisely address the actual competency gaps of regulatory personnel in Member States. However, the 2025 NGAP implementation assessment noted that only 27 per cent of States had in place a formal national aviation talent development strategies covering civil aviation authorities, and that the majority of States had yet to establish systematic mechanisms for identifying training needs. Therefore, while continuing to strengthen talent development partnerships, it is necessary to enhance training needs assessment and information sharing, so that training arrangements are better tailored to actual needs, the relevance and overall effectiveness of training is improved, and more targeted support is provided for the implementation of the NCLB initiative and the NGAP global strategy.

2.2 Practices by China’s Civil Aviation Sector in Training Cooperation

2.2.1 In August 2020, the CAAC officially launched the CAAC "Belt and Road" Cooperation Platform to coordinate external cooperation and exchanges. To better coordinate resources in the civil aviation sector available for training regulatory personnel, a Training Committee was established under the platform in early 2026, with a view to coordinating training resources, building a training system and developing flagship programmes under the platform.

2.2.2 In terms of training delivery, the External Training Committee, drawing on self-developed training programmes and taking into account the actual needs of civil aviation authorities and other relevant institutions in various States, organizes short-term external training programmes and academic education programmes for international students. In the area of short-term training, in 2025, a total of 17 short-term external training sessions were conducted, reaching 330 participants from 17 countries, including Côte d'Ivoire, Nepal, Pakistan, Cambodia and Laos People's Democratic Republic. The training covered such fields as aviation safety management, civil aviation inspection, flight technical training, airport operations and civil aviation innovation. In the area of academic education for international students, CAAC-affiliated institutions, including the Civil Aviation University of China, the Civil Aviation Flight University of China and the Guangzhou Civil Aviation College, offer 10 academic programmes in such fields as business administration, communications engineering, transport engineering and safety science, and have trained a cumulative total of 278 international students from 34 countries. Over the past three years, China's civil aviation sector has provided professional training and academic education to more than 2000 participants from over 30 countries, effectively strengthening the pool of regulatory personnel in key areas in developing countries and enhancing the relevance and practical value of training.

2.2.3 Workplan for next steps. Now fully operational, the Training Committee under the CAAC "Belt and Road" Cooperation Platform operates in a standardized, systematic and professional manner. Going forward, it will prioritize the development of ICAO government safety inspector training, green aviation training, and flight crew technical training. It will also continue to develop new curricula in emerging fields, with a view to further enriching the trainings resources available to regulatory personnel worldwide.

2.3 **Complementing ICAO's Training System**

2.3.1 China's training practices complement and support the ICAO training system. The ICAO mechanism focuses on global standardized training framework, course accreditation, and implementation support. The External Training Committee under CAAC "Belt and Road" Cooperation Platform can serve as a useful reference for ICAO in enhancing its global training system, diversifying training offerings and improving training outcomes. This will help to better address the diverse capacity-building needs for regulatory personnel in LDCs, LLDCs, SIDS and other countries requiring assistance.

2.3.2 Challenges in the accurate identification of training needs. Effective capacity-building relies on the accurate identification of and timely response to training needs. In the course of conducting external-training cooperation, China has observed that training needs for regulatory personnel are often fragmented across bilateral and multilateral cooperation channels, covering a wide range of specialized fields and subject to frequent updates. It is difficult for a single training provider to comprehensively and timely capture the global picture of training needs. The lack of systematic aggregation and sharing of training needs information can easily lead to mismatches between training arrangement and actual capacity gaps in Member States, thereby undermining the efficiency of training resource allocation and the effectiveness of training outcomes.

2.3.3 Significance of ICAO's action in coordinating and sharing information on State's training needs. As a specialized agency of the United Nations, ICAO has a unique advantage in coordinating global civil aviation training resources and facilitating exchange of good practices. Establishing an ICAO-coordinated information sharing mechanism on training needs would help build a holistic understanding of capacity gaps among regulatory personnel worldwide, enable ICAO and Member States, to develop more forward-looking training plans, and provide a basis for training providers to optimize curriculum development and resource allocation.

2.3.4 Strengthening the coordinated collection and sharing of training needs information can yield positive outcomes in the following areas: improving the alignment between training supply and demand to avoid duplication of resources and misalignment with actual needs; facilitating experience-sharing among Member States, regional organizations, and training institutions to promote the global dissemination and application of good practices in training; enhancing the efficiency of training delivery by better aligning programme design, participant selection, and course development with the actual capacity gaps of national civil aviation authorities; and improving training effectiveness by ensuring that training content is closely aligned with real-world regulatory scenarios and SARPs implementation requirements, thereby providing more targeted support for the NCLB initiative and the NGAP global strategy. China is ready to, through existing ICAO training mechanisms, share relevant information on training programmes, course offerings and experience in needs alignment. It supports ICAO in strengthening global training needs assessment and information sharing, with a view to helping Member States enhance the efficiency of their training delivery and the effectiveness of training outcomes, and to facilitating the voluntary implementation of SARPs and related requirements.

3. **RECOMMENDATIONS**

- a) The ICAO Secretariat is invited to establish and improve, under the framework of the No Country Left Behind (NCLB) strategic goal and the NGAP programme, a global mechanism for training needs assessment and information sharing, and to compile and disseminate good practices of Member States and regional organizations in regulatory personnel training and capacity-building;
- b) Member States, regional organizations and training institutions are called upon to strengthen partnerships for talent development, to cooperate with ICAO in training needs assessment and information sharing, to actively participate in capacity-building training activities under the ICAO framework, and to enhance the voluntary implementation of SARPs and related requirements; and
- c) China stands ready to share, through ICAO's existing training mechanisms, its training programmes, course information, and experience in aligning training resources with identified needs, in support of the fulfilment of capacity-building objectives of the NCLB initiative.

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