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

**THE ROLE OF AVIATION TRAINING IN SHAPING A
SUSTAINABLE, RESILIENT, AND INCLUSIVE AVIATION
INDUSTRY**

(Presented by Bangladesh)

DISCUSSION PAPER

SUMMARY

The role of training for technical personnel in civil aviation is crucial in building a sustainable, resilient, and inclusive aviation sector. Critical Element 4- Technical Personnel Qualifications and Training is a key element for any safety oversight organization. Training principles of aviation personnel should integrate suitability to train personnel with adaptable skills through competency-based training using modern training aids through a continuous training program to handle crises and technological changes. This discussion paper encourages States/Administration to enhance collaboration and cooperation for adaptation of comprehensive training programs that ensure development of skilled aviation personnel to meet future challenges. The paper also draws attention to nominate participants of required qualification well in advance to avoid any difficulties arising from withdrawal of nomination in final moment.

THE ROLE OF AVIATION TRAINING IN SHAPING A SUSTAINABLE, RESILIENT, AND INCLUSIVE AVIATION INDUSTRY

1. INTRODUCTION

1.1 Aviation is a vital enabler of global connectivity and economic development. However, to ensure that it continues to drive growth sustainably and resiliently, it is essential to prioritize the training of qualified aviation personnel. This paper focuses on the critical role of aviation training in shaping a sustainable, resilient, and inclusive aviation sector. In particular, it highlights training, to address Critical Element 4: Technical Personnel Qualifications and Training, is key to achieving long-term objectives. It is to be mentioned that every improvement in CE-4 influences significant improvement to all other Critical Elements. Actually, CE-4 is the foundational because without qualified personnel, the other critical elements cannot function effectively. Properly trained and experienced personnel ensure establishment of the regulatory framework, safety guidance, and safety oversight systems and are capable of implementing high standards in aviation safety.

1.2 Critical Element 4, part of ICAO's USOAP framework, emphasizes the need for States to establish and implement policies, guidelines, and requirements for the certification and ongoing training of aviation personnel. The element highlights several key components: Establishment of Training Standards, Training Institutions, Continued Competency, and Evaluation Mechanisms.

1.3 This paper aims to underscore the importance of adopting innovative training methods and inclusive strategies to cultivate a workforce that is capable of meeting the emerging challenges in aviation. Furthermore, it addresses how comprehensive training can enhance sustainability and resilience, ensuring that aviation personnel are prepared for current and future demands.

2. DISCUSSION

2.1 The role of training in sustainable growth of aviation sector is pivotal. In this context, sustainable growth refers to the long-term development and expansion of the aviation industry in a way that ensures consistent, reliable operations, innovation, and inclusivity. Here's how training can contribute to sustainable growth, focusing on Enhancing Safety and Compliance that aviation professionals, including pilots, engineers, and air traffic controllers, are up to date with safety standards and international regulations. This helps maintain a high level of operational safety, which is critical for the sustainable growth of the sector. As aviation regulations change, training allows personnel to stay compliant, preventing legal or regulatory setbacks that could hinder growth.

2.2 In building a skilled workforce, training addresses the labor shortage. The aviation sector often faces a shortage of skilled professionals in areas such as piloting, engineering, and air traffic control. Comprehensive and consistent training programs help build a larger, highly skilled workforce, which is essential for meeting the growing demands of the industry. Continuous training ensures that aviation professionals stay up-to-date with technological advancements. For example, as the industry adopts automation and artificial intelligence (AI) tools, employees will need to learn new skills to work alongside these innovations, ensuring that human capital remains relevant and capable.

2.3 As we look forward to promoting innovation and technological advancement, training becomes a crucial factor to cope up with those technological advancements. Training programs equip employees to operate and maintain advanced systems like smart airports, AI in air traffic control, and predictive maintenance. Besides, in adopting to new technologies, Training prepares personnel for the implementation of cutting-edge technologies like autonomous aircraft, next-generation air traffic management systems, and data-driven decision-making tools. This not only boosts efficiency but also supports sustainable growth by improving service delivery and reducing costs.

2.4 To strengthen customer service and handle increasing passenger demand, training ground staff, cabin crew, and customer service teams to handle higher volumes without sacrificing service quality ensures operational continuity and scalability, both of which are essential for sustainable growth.

2.5 In the face of global challenges like pandemics, geopolitical tensions, and economic fluctuations, training aviation personnel in crisis management ensures that the industry can adapt to disruptions and maintain operational continuity. This capability is vital for long-term stability and growth. Besides, Training employees in business continuity planning ensures that aviation organizations can recover quickly from setbacks (e.g., disruptions in supply chains or shifts in demand) and maintain sustainable growth despite external challenges.

2.6 Training can also foster collaboration between airlines, airports, academia, universities, governments, and regulatory bodies. By working together, stakeholders can address common challenges such as air traffic congestion, infrastructure development, and technological adoption, paving the way for sustainable growth.

2.7 CAA Bangladesh collaborated with ICAO, FAA and ACI to deliver several courses like **ICAO Training Instructional Development (TIC, TDC & TMC), ICAO endorsed Government Safety Inspectors (GSI) Courses in the areas of Airworthiness (AIR), Operations & AOC (Ops-AOC) and Personnel Licensing (PEL), Safety Management System and Aerodromes.** In these training programs, 235 participants from CAA Bangladesh and 37 CAA professionals from Bhutan, Nepal, India, Pakistan, Maldives, Thailand, Sri Lanka, Uganda, Mongolia, Laos, Fiji, Nigeria and Qatar took part. Through these courses, the CAA professionals have attained desired competency to perform their respective inspectorate duties effectively. The States/Administrations should utilize these skilled personnel in their respective inspectorate duties and train them for TIC and subsequent OJT to develop them for own pool of instructors for delivering such training packages at home and abroad.

2.8 While conducting the courses mentioned in 2.7, it was noted with concern that many of the States/Administration canceled or withdrew their nominations at the final moment resulting in a major challenge to host training institute to manage group to smoothly deliver the course in time. The States/Administrations should consider nomination of participants meeting required criteria carefully well in advance to avoid such last-minute hassles.

2.9 As a **Silver Member** of ICAO's **TRAINAIR PLUS** program, the Civil Aviation Academy, Bangladesh provides good opportunity to collaborate with other States/Administrations and their aviation training institutes to enhance the quality of training, share resources, and contribute to regional aviation safety and capacity building.

3. ACTION BY THE CONFERENCE

- 3.1 The Conference is invited to
- a) Recognize the importance of aligning aviation training programs with sustainability, resilience, and inclusivity goals.
 - b) Support initiatives aimed at creating more diverse and inclusive aviation training programs in this region.
 - c) Encourage States/Administrations to consider nomination of participants with required qualification well in advance to avoid any difficulties arising from withdrawal of nomination in the final moment.