



WORKING PAPER

COUNCIL — SPECIAL MODEL SESSION

**Subject No. XX: Challenges relating to the projected shortages of skilled aviation personnel
(The possible contribution of ICAO towards training of aviation professionals)**

(Presented by United Kingdom)

EXECUTIVE SUMMARY

In order to overcome the pressing need for professionals in the aviation sector, ICAO should play a more active role in training the forthcoming generation of aviation professionals. Therefore, this working paper aims at discussing the possibility for ICAO to increase its level of involvement in the development of harmonized trainings as well as the attraction of global talents in order to meet the future needs of the aviation industry.

Action: The Council is invited to:

- a) Convene a Study Group which mandate will be to establish a framework in order to determine the feasibility for ICAO to accelerate the endorsement of program in compliance with its *Civil Aviation Training Policy*;
- b) Task ICAO Bureau of Administration and Services (ADB), following consultation with Member States, to launch a web platform that would represent the central reference on the various career paths available in aviation; and
- c) Request the Secretariat to prepare an action plan in order to increase the representation of women within the aviation industry.

<i>Financial implications:</i>	Actions will be funded by resources available in the Regular Programme Budget and/or through voluntary contributions.
<i>References:</i>	A37-WP/64, <i>Report on outcomes of initiatives regarding next generation of aviation professionals</i> A37-WP/86, <i>Addressing the future of competent aviation professionals</i> EB 2010/40 – Attachment, <i>Electronic Bulletin ICAO Civil Aviation Training Policy</i>

1. INTRODUCTION

1.1 With the projected growth in air traffic and in order to replace industry professionals retiring over the next decade, there will be a need to recruit and train thousands of new staff for jobs across the sector that require skill sets specific to aviation. Many roles in the air transport sector require a highly qualified workforce and significant amount of training. According to the Air Transport Action Group (ATAG), air transport employees (direct employees, excluding non-airside activity at airports) generate 3.6 times as much value added per employee than the economy as a whole – indicating a more productive workforce.

1.1 Statistics demonstrate that for the next two decades, there will be requirements for 498,000 pilots as well as 556,000 technicians. To this end, the latest projection published by Boeing states that during such period demand will be particularly important in the regions of Asia Pacific, Europe and North-America.

1.2 In order to overcome the pressing need for professionals in the aviation sector, ICAO should play a more active role in training the forthcoming generation of aviation professionals. Therefore, this working paper aims at discussing the possibility for ICAO to increase its level of involvement in order to meet the future needs of the aviation industry.

2. BACKGROUND

2.1 In 2010, at the 37th Session of the Assembly, the Council of ICAO presented, under Agenda Item 45: Next Generation of Aviation Professionals, a working paper entitled “Report on outcomes of initiatives regarding next generation of aviation professionals” (A37-WP/64). It was recalled that the ICAO Next Generation of Aviation Professionals (NGAP) Task Force held its second meeting in March 2010 and established a work programme addressing the enhancement of training for flight crew, air traffic management and aircraft maintenance personnel to meet the demands of new procedures and increasingly complex technologies.

2.2 It was also stated that the Task Force would explore how ICAO can recognize university degree-granting aviation programmes through accreditation. The possibility of ICAO supporting the implementation of an ICAO endorsement mechanism of programme delivered by training providers was also discussed.

2.3 In addition, the United States presented for consideration by the Technical Commission, a working paper entitled “Addressing the future of competent aviation professionals” (A37-WP/86). In the said working paper, they presented, *inter alia*, the various possibilities examined by the United States to meet the substantial demand for trained, qualified, and professional pilots.

2.4 Furthermore, it was suggested that the NGAP Task Force could review established worldwide programs that develop aviation professionals and create a global foundation and utilize harmonized standards to train and license pilots.

2.5 The Report of the Technical Commission stated that the Commission expressed its support for the work of the NGAP Task Force and endorsed the need to develop materials for inclusion in the ICAO Standard and Recommended Practices and in guidance material for harmonizing and standardizing training requirements of aviation professionals.

2.6 Finally, it should be mentioned that the Secretary General published on 28 September 2010 (EB 2010/40 - Attachment) the *ICAO Civil Aviation Training Policy*. Such policy states that “ICAO should not participate in the operation of training facilities but should encourage and advise operators of such facilities”. Also the policy states that “training delivery is considered as a support function and not as a core function of ICAO”.

3. CONSIDERATION OF ISSUES

3.1 It is a known fact that in the coming years, there will be a shortage of skilled professionals in the aviation sector. However, in order to meet the growing demand for labour, different steps could be taken by ICAO, in collaboration with Member States, to address this issue.

International standards for an international industry

3.2 As a first step, we propose that more robust international standards be introduced through ICAO to certify training programs and specific educational programs. These standards would promote safety considerations at the very beginning of the aviation cycle.

3.3 In collaboration with national governments, airlines, manufacturers and other stakeholders, ICAO would validate the different available programs in the field of aviation through an accreditation process. The actual operation of training activities and facilities would remain at the responsibility of the Member States and the private sector, in respect with the *ICAO Civil Aviation Training Policy*.

3.4 The scope of the accreditation could be expanded over the years to cover the widest range of professions within the aviation industry. Nevertheless, to address the urging need of pilots in the aviation industry, this particular sector should be the first one to be subject to harmonization.

3.5 Therefore, international certification standards would help create a more comprehensive and cohesive workforce, while encouraging mobility and career advancement for young aviation professionals.

Attracting global talents

3.6 However, certification alone will only address one aspect of the issue and will not be enough to attract global talent. Careers in the aviation industry must become more readily available for young professionals. Indeed, potential future aviation professionals often lack access to relevant information regarding training programmes, career opportunities and qualifications.

3.7 The NGAP Task Force already plans to complete a development of competencies for Air Traffic Controllers and Air Traffic Safety Electronics Personnel. This represents a step forward in facilitating access to the aviation industry for young workers. However, through its central position, ICAO could go a step further. ICAO should help develop and host a web platform that would represent the central reference on the various career paths available in aviation.

3.8 Information could be communicated by geographic regions and would be provided by the different Member States on an annual basis. All certified programs would appear on this platform, therefore facilitating attraction of new talent and the development of existing workforce.

Closing the gap

3.9 Often forgotten in discussions related to shortages of qualified workforce in the aviation industry and in promoting the next generation of aviation professional is the low level of female representation in this sector. Women are significantly under-represented in the aviation sector and this issue will be an important one to take into account in order to address workforce shortages in the future.

3.10 Therefore, supported by ICAO, Member States should promote programs and initiatives addressing this issue, which will inevitably have an impact on shortages of skilled aviation personnel. ICAO should collaborate with associations and organizations (e.g. International Aviation Women Association) fostering women in aerospace in order to promote available programs and ensure proactivity in this area.

4. FINANCIAL IMPLICATIONS

4.1 We cannot determine the official cost of the proposed implementations at the moment. An analysis will be conducted in order to evaluate both the cost of the certification program and the web platform. However, all cost from the proposed measures could be covered by the Regular Programme Budget of ICAO. Also, we propose that the cost related to the implementation of the web platform be funded through donations and sponsorships from key-partners within the aviation industry (e.g. international organizations, manufacturers, training providers).

5. ACTION

5.1 Convene a Study Group which mandate will be to establish a framework to determine the feasibility for ICAO to accelerate the endorsement of program in compliance with its *Civil Aviation Training Policy*.

5.2 Task ICAO Bureau of Administration and Services (ADB), following consultation with Member States, to launch a web platform that would represent the central reference on the various career paths available in aviation.

5.3 Request the Secretariat to prepare an action plan to increase the representation of women within the aviation industry.

6. CONCLUSION

6.1 ICAO should take advantage of its central role in the aviation industry to promote harmonization of training standards and educational programs related to aviation. This will enable better mobility of skilled workforce, as well as career development and retention. The promotion of available programs through a central web platform will also enable the next generation of aviation professionals better understand possibilities and career paths available to them. Finally, the shortages of skilled professionals in the aviation industry must be linked to the shortages of women in this industry. Such actions will harmonize training around the world, as well as increase the possibilities of mobility of skilled aviation professionals and retention of the workforce in the future.