



ASSEMBLY — 37TH SESSION

TECHNICAL COMMISSION

Agenda Item 45: Next Generation of Aviation Professionals

REPORT ON OUTCOMES OF INITIATIVES REGARDING NEXT GENERATION OF AVIATION PROFESSIONALS

(Presented by the Council of ICAO)

EXECUTIVE SUMMARY

The next generation of aviation professionals (NGAP) initiatives were launched to ensure that enough qualified and competent aviation professionals are available to operate, manage and maintain the future international air transport system. In May 2009, the NGAP Task Force was created and was instrumental in supporting the preparatory work for the NGAP Symposium conducted at ICAO from 1 to 4 March 2010. The NGAP Task Force held its second meeting on 5 March 2010 after the symposium and established a work programme that will address 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. The High-level Safety Conference (HLSC), held in Montréal in March 2010, recommended that States and international organizations should support the work of the NGAP Task Force.

Action: The Assembly is invited to:

- a) support the work of the Next Generation of Aviation Professionals Task Force;
- b) invite States to support the NGAP Task Force by providing seconded expertise which is not otherwise available under the current operational budget constraints; and
- c) endorse the recommendations of the NGAP Task Force to develop materials for inclusion in ICAO Standards and Recommended Practices (SARPs) as well as guidance materials.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective A.
<i>Financial implications:</i>	Funding for some of these activities will need to come from a combination of potential savings related to productivity or efficiency gains within the Secretariat and voluntary contributions to the SAFE Fund.
<i>References:</i>	Annex 1 Doc 9868, <i>Procedures for Air Navigation Services — Training</i>

1. INTRODUCTION

1.1 The NGAP initiatives were launched to ensure that enough qualified and competent aviation professionals are available to operate, manage and maintain the future international air transport system. This is critical as a large contingent of the current generation of aviation professionals will retire, access to affordable training and education is increasingly problematic, and aviation competes with other industry sectors for highly skilled professionals. The lack of harmonized competencies in some aviation disciplines and a lack of awareness by the “next generation” of the types of aviation jobs available further compounds the problem.

1.2 ICAO has been supporting the work of the IATA Training and Qualifications Initiative (ITQI) that focuses on flight crew and aircraft maintenance personnel training and assessment. The NGAP Task Force was established to address aviation functions not covered through ITQI and was instrumental in supporting the preparatory work for the symposium conducted at ICAO from 1 to 4 March 2010.

1.3 The High-level Safety Conference (HLSC), held in Montréal in March 2010, recommended that States and international organizations should support the work of the NGAP Task Force including work on the enhancement of pilot training to meet the demands of new procedures and increasingly complex technologies.

2. OUTCOMES OF THE NEXT GENERATION OF AVIATION PROFESSIONALS SYMPOSIUM (NGAP)

2.1 The theme of the symposium was "Looking beyond the economic crisis: mobilizing the aviation community to recruit, educate, train and retain the next generation of aviation professionals". The event brought together 403 participants, including over 80 students who actively participated and presented the concerns of the next generation. Participants came from seventy-one States and fourteen international organizations. Fifty-eight presentations were delivered and can be accessed through www.icao.int/ngap.

2.2 The following outcomes were drawn from the presentations and discussions carried out during the symposium.

- a) the orderly and safe development of the international air transportation system depends on the availability of the required human resources and the international aviation community should recognize this as a strategic issue;
- b) the international community has a collective responsibility to attract and retain the “best and brightest” students who will become contributing members of the next generation of aviation professionals and to ensure they have access to quality and affordable aviation education and training;
- c) there is a need to have reliable human resource data in terms of training needs and capacity in the short, medium and longterm;

- d) regulatory frameworks should enable and support the use of modern training and learning technologies (competency-based training, evidence-based training, and increased use of simulation) and should not be an obstacle to industry best practices;
- e) administrative constraints such as multiple certification processes of training organizations, training devices, and training programmes, should be limited as much as possible. In that respect, the cost of data provided by airframe manufacturers to support the qualification of training devices was noted as an obstacle for access to affordable training;
- f) industry-established standards should be supported as a way to demonstrate compliance with regulatory requirements (SARPs and national regulations);
- g) free-flow of professionals should not be inhibited by unnecessary administrative procedures and should be facilitated through internationally agreed upon standards and assessment practices. To this end, there is a need to define competencies for all aviation activities affecting safety;
- h) in order to support the successful implementation of the Global Aviation Safety Plan (GASP), it is essential that transfer of knowledge and procedures be facilitated in all parts of the world as seamlessly as possible; and
- i) there is a need in the global aviation training and education community for a permanent coordinating mechanism to address aviation training and education issues and concerns, and to collaborate with other global stakeholders to further the safe, efficient, and orderly development of aviation, in all of its manifestations.

3. **NEXT GENERATION OF AVIATION PROFESSIONALS (NGAP) TASK FORCE WORK PROGRAMME**

3.1 During its second meeting, the NGAP Task Force recognized that several aviation professions deserved attention and that competencies should be developed for them. For some aviation professions, the task force should explore the benefits of establishing licensing requirements or the certification of internationally agreed upon competencies. To develop materials in a timely and effective manner, however, it was decided to follow a phased approach. During a first phase, work would be carried out on aviation professions related to Annex 1 — *Personnel Licensing*. In following phases, work would be carried out on other aviation professions related, for example, to meteorology, aerodromes, airport management, etc. Participants of the task force volunteered to contribute to sub-groups which have been created for the following deliverables.

a) **ICAO Recognition**

The task force will explore how ICAO can recognize university degree-granting aviation programmes through accreditation. It will also support the implementation of an ICAO endorsement mechanism of programmes delivered by training providers.

Deliverable: Support the development of a policy and criteria for institutions that are approved to deliver Annex 1 related training and education, as well as Government

Safety Inspector training by October 2010. It is envisaged that the voluntary ICAO endorsement of aviation training institutions will commence by the end of 2010.

b) Flight crew licences

Deliverable: Develop competencies for pilot-in-command, check airmen and instructors for large aeroplanes (greater than 5 700 kg) powered by turbine engines by December 2011.

c) Air traffic management professionals

Deliverable: Develop competencies for air traffic controllers and air traffic safety electronics personnel (ATSEP) by December 2011.

d) Second NGAP symposium and outreach

Deliverable: Lead the Organization in planning the next global symposium and/or alternative event scheduled provisionally in late 2011.

Deliverable: Develop and implement a communication strategy to reach out to the next generation of aviation professionals.

4. CONCLUSION

4.1 ICAO has initiated work to develop policies to ensure that enough competent personnel are available to manage, operate and maintain the global air transportation system of the future. As the aviation industry emerges from a difficult economic context, changing demographics and new technologies with far-reaching potential will intensify human resource challenges. In this context and in partnership with all stakeholders of the industry, it becomes urgent to consider the availability of competent human resources as a key strategic issue to implement the Global Aviation Safety Plan (GASP), to federate resources to attract and retain the next generation, to establish a permanent coordinating mechanism to address training and education issues, and to review existing regulations and propose a new regulatory environment that will facilitate the recruitment, education, training and retention of the next generation of aviation professionals.

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