



ICAO

**Opening remarks by the Secretary General  
of the International Civil Aviation Organization (ICAO)  
Dr. Fang Liu,  
To the Second ICAO Next Generation of Aviation Professionals  
Global Summit**

*(Shenzhen, China, 12 December 2018)*

1. It is my great pleasure to welcome you today to this second annual ICAO Next Generation of Aviation Professionals, or ‘NGAP’ Global Summit.
2. 首先，我要感谢深圳市人民政府对本次会议的慷慨支持、精心组织和周到安排。我还要感谢中国航空协会和北京航空航天大学对举办本次会议所做的贡献。
3. 深圳是中国科技创新的领军城市，并正在发展成为世界级的技术创新枢纽。中国政府在2016年民航“十三五发展规划”中，明确提出要逐步提升深圳作为国际航空港的国际枢纽功能。我也得知，近几年深圳机场的旅客吞吐量一直保持着两位数的增长速度，并很可能在2025年实现航空旅客吞吐量增长至现在的五倍。
4. 航空产业的高速发展必然催生对航空专业人才的巨大需求。如何吸引航空专业人才，实现航空运输的可持续发展，是深圳面临的命题，是全球航空业面临的命题，也正是本次峰会要探讨的重要问题。
5. The inaugural ICAO NGAP Summit, held last year in Montreal, sought to begin generating momentum among industry, governments and academia on this topic.
6. Our collective goal there was to ensure that the future air transport network will be able to attract and retain the best and the brightest that our coming generations have to offer.
7. This is a very critical priority in aviation today, and in every corner of the world, because consistent with historic trends the aviation network is continuing to grow and to serve more and more communities and businesses today.

8. It is growing so steadily, in fact, that we presently forecast current flight and passenger volumes to double by just the mid-2030s.
9. Here in China the pace will be even faster, with air operations tripling during the same period.
10. This means globally that each and every day commercial aviation will be moving 20 million passengers on more than 200,000 daily flights in less than two decades' time.
11. This is truly a *monumental* challenge for air transport leaders and planners today, and one which is presently engaging our entire global community in every aspect of aviation's strategic, technological and operational development.
12. This is because air transport's contributions to the peace and prosperity of nations, and to their sustainable socio-economic development, has never been more important or pervasive from the global standpoint than it is today.
13. Even as I speak to you here today, the global civil aviation sector is supporting the successful employment and rewarding careers of more than 65 million people all over the world.
14. And at the same time, it is generating no less than 2.7 trillion USD in global GDP.
15. Much of this economic impact is due to the uniquely rapid and reliable aspects of air transport, the very same qualities which has seen it become so relied upon for 90 percent of the e-Commerce activity in the world today.
16. Air transport connections bring suppliers together with producers, carry producers' products to markets they couldn't otherwise access, and of course it's a critical enabler of the travel and tourism which more and more countries rely on now for their economic health and vitality.
17. Some 55 percent of the world's 1.3 billion international tourists arrive at their destinations in aircraft today, and this is especially relevant for the world's many Small Island economies, for whom tourism and aviation connectivity more generally represent a veritable lifeline of economic growth and development.

18. Taken together, ICAO has demonstrated that international aviation connections deliver systemic and foundational economic benefits to the countries of the world.
19. Indeed of the 17 United Nations Sustainable Development Goals now being pursued by governments as part of *UN Agenda 2030*, focused on poverty reduction, environmental stewardship, gender parity, educational access, and many other noble socio-economic aims, fully 15 are directly and positively impacted by these States' dependable access to ICAO-compliant international aviation.
20. The scope and level of these contributions clearly underscore for us why current and future air transport growth must be supported by aeronautically proficient aircraft designers, systems engineers, pilots, and navigators, and by just as adept managers and leaders.
21. Several key challenges will need to be addressed as we work toward these objectives.
22. For instance at the same time as our sector is growing, its workforce is also shrinking due to the inevitable demographics of aging populations, lowering birth rates, and other attrition factors.
23. This means fewer air transport professionals being available to pilot future aircraft and to effectively maintain and manage our ever-expanding fleet.
24. These challenges to air transport workforce planning are further aggravated by the increasing number of high-tech careers in other industry sectors which compete with aviation for up and coming technical talent.
25. These and similar dynamics have forced us to recognize that aviation has to do a much better job of both attracting and retaining the skilled workers and managers it requires.
26. ICAO has recently updated its forecasts for pilots, air traffic controllers, and aircraft technicians.
27. Our numbers have revealed that no less than 620,000 pilots will be needed by 2036 to fly the world's 100-seat-and-larger aircraft.
28. But even more important than this figure is the fact that 80 percent of these future aviators will be new entrants to this profession who are not yet flying today.

29. A similar story is playing out with respect to the future air traffic controllers, maintenance personnel and other technicians needed, but we should recall that these are just some of the literally hundreds of direct and indirect aviation-related career categories which will potentially be impacted.
30. Another important priority to be addressed is how to guide the balanced movement of aviation personnel between countries and employers.
31. This is important in order to ensure that all States and regions have dependable aviation workforces at their disposal.
32. It was for all of these reasons and more that ICAO launched the Next Generation of Aviation Professionals (NGAP) initiative, mainly to bring the aviation, education and labour sectors together and assess the scale of the challenge before us.
33. Today we are organizing and attenuating our NGAP programme activities to the more specific needs of ICAO's various Strategic Objectives for Aviation Safety; Security and Facilitation; Air Navigation Capacity and Efficiency; Economic Development; and Environmental Sustainability.
34. Later in this Summit we will be hearing a little more about the specific developments from each of these areas.
35. We have also lately welcomed some new strategic partners into the NGAP fold so that we can broaden our focus to a wider range of aviation professions, and develop stronger links with the related UN global goals.
36. As you will have seen from your programmes, there are also a number of NGAP-associated events during the next three days, two of which are specific to ICAO.
37. In the spirit of inspiring future aviation professionals, parallel to the NGAP Global Summit, we are running a Model ICAO Forum.
38. This is designed to allow local and international university students to explore today's key global aviation priorities and challenges through a Case Study Competition assisted by ICAO technical experts.

39. The Model ICAO Forum commenced this morning, and the 180 participating students have joined us now for the opening of the Summit.
40. I propose that we give a special round of applause to warmly welcome the students. (Pause and applaud)
41. I look forward to hearing of the outcomes of the Model ICAO Forum and announcing the winning team to you at the closing session of this Summit.
42. I would also like to invite you to explore ICAO's Virtual Reality Experience located in a booth just outside this hall.
43. We truly are entering a bold new era of aviation innovation, and this Virtual Reality display will provide an introduction to some of the amazing aircraft and operations which will be traveling our skies in the years to come.
44. Ladies and gentlemen,
45. Let me please remark again on how this is such a very exciting time in the history of aviation, and a just-as-exciting moment for those of us involved in finding new ways to assure a dedicated and qualified Next Generation of Aviation Professionals (NGAP).
46. One such example was the many international universities who met here earlier this morning to discuss the benefits of a new association of higher-education institutions, known as 'Alicanto', which will be focused on our shared NGAP priorities.
47. I greatly commend this initiative, and look forward to joining you and learning more about this development on day two of our Summit programme.
48. This and the rest of our work here in Shenzhen will be making an important impact on the future mobility and prosperity of many developed and developing societies all over the world, and we should not lose sight of that as we embark on this journey.
49. As you consider and appreciate these quite challenging objectives, may I please wish you all a very productive and engaging Summit, and thank once again our very generous Chinese partners who have made it all possible.

Thank you.