International Civil Aviation Organization

WORKING PAPER

A40-WP/113[1]
EX/47
26/7/19

ASSEMBLY — 40TH SESSION

EXECUTIVE COMMITTEE

Agenda Item 26: Other high-level policy issues to be considered by the Executive Committee

ENABLING A NEW DEAL BETWEEN ICAO AND THE AERONAUTICS INDUSTRY

(Presented by France, Italy and Sweden)

EXECUTIVE SUMMARY

The aviation sector is undergoing increasingly rapid changes in terms of technology, threats and public expectations. States and the Organization are finding it increasingly difficult to keep pace with the acceleration of these developments. Closer association with the aeronautics industry, not only at the expert level but also at the executive management level, could enable them to react more quickly.

Action: The Assembly is invited to:
a) consider the proposal detailed in parts 4 and 5 of this WP to strengthen the aeronautics industry's involvement in ICAO's work in order to help ICAO respond more quickly to new challenges in the sector; and
b) adopt the resolution on establishing an Innovation Consultative Board (ICB) chaired by the industry as set out in the Appendix to this paper.

Strategic Objectives:	This working paper relates to all Strategic Objectives.
Financial implications:	The activities referred to in this paper will be subject to the resources available in the 2020-2022 Regular Programme Budget and/or from extra budgetary contributions.
References:	C-DEC 215/7 Doc 10115, *Report of the Thirteenth Air Navigation Conference*, Corrigenda Nos. 1 and 2, and Supplement No. 1 Doc 10075, *Assembly Resolutions in Force* (as of 6 October 2016) A40-WP/14, EX/7

[1] English and French versions provided by France.

1. INTRODUCTION: CIVIL AVIATION IS EVOLVING AT AN ACCELERATING PACE

1.1 Since its beginning, aviation has experienced many technological disruptions that have always affected the entire airline industry. Since the creation of ICAO, to mention only the most important: jet engines that have increased the aircraft range, turbofans with high dilution rate, wide-body aircraft and composite material that have reduced costs and opened up air transportation to a wider share of the population, satellite navigation capabilities that have contributed to increased safety and airspace capacity, progressive development of electric flight control systems and the automation of flight management systems, with increasing safety. ICAO has managed to integrate these developments into its work and adapt its standards and recommendations without too much delay in relation to technical developments.

1.2 Today, the rapid evolution of technology, particularly information and communication technology, is leading to accelerated developments in a large number of activities, including aeronautics. All fields are concerned, from design and industrialisation to flight operations and commercial models, without forgetting the human aspects associated with the evolution of qualifications and training. Many examples can be given, including: 3D printing (or additive manufacturing), hybrid propulsion, new flying objects (UAV and RPAS, urban mobility, suborbital flights, etc.), increased automation of pilotage and control functions impacting the pilots' and air traffic controllers' work and crew composition, flight trajectories management and new air navigation concepts, etc.

1.3 Technological innovation, which is everywhere, must also face the strong and rapid societal changes the world is experiencing today, those with the most far-reaching consequences for aviation being environmental protection, including the fight against climate change, and protection against cyber risks, including cybercrime and the risks of technical failures in highly automated systems. Other external risks include health risks and certain natural hazards (e.g., volcanic eruptions). The public is demanding faster and faster responses and is increasingly urging State governments to act.

2. CURRENT SITUATION: POLICIES AND REGULATIONS ARE NOT KEEPING PACE

2.1 The acceleration of these developments does not hinder the need to harmonize international policies and standards without which air transport could not function and develop properly. That is the responsibility of States and multilateral organizations such as ICAO. While in the past ICAO has always been able to perform this role without too much time lag, we are now seeing increasing difficulties in this regard.

2.2 With regards to climate change for example, global aviation and maritime policies to reduce CO_2 emissions were not covered by the Kyoto Protocol adopted in 1996, but the global aspirational goals and policies for aviation and climate change were only adopted by the ICAO Assembly in 2010, and it was not until 2016 that ICAO decided to implement an emissions offsetting system (CORSIA) for international air transport.

2.3 In 2013, the Secretary General of ICAO and the leaders of the four main professional organizations, understanding the major risks posed by cybercrime on air transport, declared cyber security to be ICAO's top priority. Six years later, the organisation is still asking itself many questions about how to deal with this issue (including in terms of internal organisation).

2.4 On 12 April 2005, the Air Navigation Commission, at the first meeting of its 169th session, asked the Secretary General to consult with certain States and international organizations on current and planned international activities of Unmanned Air Vehicles (UAVs) in civilian airspace. In 2019, without ignoring the different local situations and the diversity of these vehicles, we are still far from solving the problem of the compatibility of these activities and commercial traffic in controlled airspace.

2.5 The cases mentioned above show that, in technically complex and politically sensitive areas, ICAO's reaction time is slower. Difficulties in understanding the technical aspects in depth delay the resolution of the political aspects. The causes are certainly multiple. Some of them are due to the malfunctioning of the interface between the technical experts and the political level of the organisation. Others are due to the cumbersome internal procedures designed at a time when longer reaction times could be afforded.

2.6 Present and future technological disruptions, including all topics related to the evolution of information technologies such as cyber security as well as the development of automation and simulation tools (for example for certification), introduce new concepts which the organisation must take into consideration at all levels of its decision-making processes.

3. INTEREST IN ESTABLISHING MORE EFFECTIVE COOPERATION BETWEEN THE AERONAUTICS INDUSTRY AND ICAO

3.1 The aeronautics industry provides many experts within the core structures of the ICAO system. As far as the aeronautics industry is concerned, ICCAIA is technically represented in some 40 different panels or working groups. That is not the problem. One of the main weaknesses is the ineffectiveness of the feedback processes from top (Council, Commission, Council Committees and even Secretariat) to bottom (panel, technical committees, working groups). Experts often ask for so-called "political" directions that they do not get, simply because the people who should be giving them have trouble formulating them. This slows the Organization's responsiveness and its ability to anticipate the future.

3.2 The following proposal aims to ensure that the aeronautics industry provides more effective support to ICAO to help the Organization meet the challenges of accelerated technological innovation and the transformation of technical, operational, economic and commercial models. Obviously, the actors must retain their respective institutional roles. It would simply be a matter of changing the working methods and certain procedures in the framework of the Chicago Convention.

3.3 These are not completely new ideas. ICAO has been trying to improve, if not intensify, its relations with the industry for a number of years now, unfortunately without any tangible progress even though the intentions are there. It is no longer possible to limit oneself to an informal briefing of the Council once or twice a year, or to participation in symposia, where in neither case are reports or conclusions produced. The time has come to take concrete action.

3.4 Aware of this need, the aeronautics industry itself is seeking to strengthen its institutional representation at ICAO through ICCAIA, but is struggling to do so. Given the importance of the time factor and the strategic nature of the decisions to be taken, it is essential that the industry be represented at the highest levels, that is to say the CEOs of the main innovation players, or in their absence the directors of engineering, research or strategy. For its part, ICAO should ensure that its policies or regulatory proposals are consistent with the strategies of industrial players.

4. CONCLUSION: PROPOSAL TO CREATE AN INNOVATION CONSULTATIVE BOARD

4.1 As is the case in other multilateral organizations, ICAO needs to be able to hold formal industry consultations on policies in its various areas. At the speed at which aviation is evolving, the three-year pace of the Assemblies is not sufficient. The work of experts in working groups and committees is essentially technical. Therefore there are consultation processes to be created at the highest levels.

4.2 Whether at the level of the Council or the Secretary General, a body comprising the most senior aeronautics industry representatives should be able to be consulted regularly on the policy to be followed and the evolution of innovation strategies in the broadest sense of the word (including technology, operations and training). In order to implement such a system, ICAO could take inspiration from certain initiatives such as the challenge teams set up on certain occasions (volcanic ash, for example), by ensuring that representation is at a sufficiently high level.

5. KEY PRINCIPLES FOR GOVERNANCE ARRANGEMENTS

5.1 The Assembly should adopt the resolution on establishing an Innovation Consultative Board (ICB) operating according to the following principles:

a) Presidency: ICB would be chaired by the aeronautics industry;

b) Members: it would have less than 20 members beyond its Chairperson. The President of the Council would represent ICAO. The President of the Air Navigation Commission, the Secretary General and the directors of the Air Navigation and Air Transport Bureaus would also be invited;

c) Meetings: it would not meet on a permanent basis but only periodically at ICAO premises (e. g. twice a year) and possibly in exceptional circumstances. Between ICB meetings, a group of sherpas could be responsible for organizing the follow-up of meetings and the preparation of agendas;

d) Costs: its secretariat could be jointly organized between the industry and ICAO, so as not to incur marginal costs for ICAO; and

e) Outcomes: ICB meetings would produce reports and recommendations to be submitted to the ICAO Council.

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APPENDIX
RESOLUTION RECOMMENDED FOR ADOPTION BY THE ASSEMBLY

A40-xx: Creation of an Innovation Consultative Board

Considering that the aviation sector is undergoing increasingly rapid changes in terms of technology, threats and public expectations,

Considering that States and the Organization are finding it increasingly difficult to keep pace with the acceleration of these developments,

Considering that a closer association with the aeronautics industry, not only at the expert level but also at the executive management level, could enable them to react more quickly,

The Assembly:

Establishes a high-level Innovation Consultative Board (ICB) chaired by the aeronautics industry.

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