

INCAS – National Institute for Aerospace Research “Elie Carafoli”

AERODAYS 2019 – TandemAERODays19.20 – Press Release

SETTING COMMON GROUND FOR FUTURE DEVELOPMENTS IN AERONAUTICS

**Bucharest welcomed between May 27<sup>th</sup> – 30<sup>th</sup> over 800 participants from more than 40 countries at the 8<sup>th</sup> edition of the European Aeronautics Days (Aerodays), the prominent continental event in aviation research and innovation. With high-profile speakers and insightful plenary and parallel sessions covering a wide range of topics, Bucharest Aerodays 2019 featured a synergic concept that brought together resources from Romania and Germany in order to frame the trends and developments that shape the future of aeronautics and air transport.**

Organized by the National Institute for Aerospace Research “Elie Carafoli” (INCAS) and by the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI) together with the German Aerospace Center (DLR) and German Aerospace Industries Association (BDLI), the 8<sup>th</sup> edition of Aerodays is energized by the innovative concept **TandemAERODays19.20** that joins two integrated events hosted by Romania, this year, and Germany, in 2020, enabling a distinct and comprehensive approach to all the relevant aspects related to aviation and air transport.

As the first of these joint events, Bucharest Aerodays 2019 mobilized under the headline “Europe’s Technological Achievements for a Sustainable Future of Aviation” leading academic, research and industrial representatives from the European and international aeronautic community for three days of specialized plenary and technical sessions hosted by the Romanian Palace of Parliament. They were joined by prominent governmental leaders who provided the appropriate political and administrative perspective for the developments showcased within this event. While the Romanian Minister of Energy, Anton Anton, and the Minister of Research and Innovation, Nicolae Hurduc, supported the need for radical innovation and highlighted Romania’s commitment to become a regional educational hub with high impact not only in the aviation sector, but also in other emerging areas, the current Director for Transport in the European Commission’s Directorate-General for Research and Innovation, Clara de la Torre, who was recently appointed Deputy Director-General in the department for Climate Action of the European Commission, emphasized Europe’s role as a responsible global leader and acknowledged aviation as a game changer for humanity, asking for disruptive solutions brought faster to the market,

supported by ambitious goals and backed by the European Union's future research and innovation programme, Horizon Europe.

The topics introduced within the opening session of Bucharest Aerodays 2019 were further detailed in the plenary and parallel sessions of the event, covering vital issues for the recent developments in aeronautics and their potential effect in the future. With keynote speakers representing major global players in the world of aeronautics, from United States' National Aeronautics and Space Administration (NASA) to Russia's Central Aerohydrodynamic Institute (TsAGI), from large multinational companies like Airbus (celebrating this year its 50<sup>th</sup> anniversary) to entities that fuel the European research effort like the Clean Sky 2 Joint Undertaking, the plenary sessions focused on distinct and challenging subjects: Meeting European Citizens' mobility needs: the air transport system for the 21st century; Industrial competitiveness; Education, work force and research infrastructures; Addressing aviation's environmental and climate impact; Fostering international cooperation; Ensuring safety and security; Disruptive "game changers".

Equally insightful, but centered on specific achievements, projects and developments, the parallel sessions of Bucharest Aerodays 2019 targeted aspects related to innovation (in aerodynamic and propulsion technologies, manufacturing, integrated aircraft design, air traffic services and airport operations), emphasized various opportunities (in digitalization, big data-driven applications, electrification, sustainable alternative fuels and energy carriers), and revealed new approaches in operational safety and security, solutions that address the certification challenges for integrated products, and growing trends in cyber-security and urban air mobility.

While the issues approached during the Bucharest Aerodays 2019 sessions spanned over an extensive range of specialized topics, several major ideas emerged as driving forces for the future of aeronautics. According to the industry's estimates, the recent and steep increase in the number of passengers travelling by air is expected to continue at a steady pace, almost doubling in volume over the next 15 years. This trend raises both opportunities and challenges for all the sectors involved, from air traffic management to airport operations, from propulsion technologies to safety and security standards, therefore most speakers stressed the need to encourage, test and develop disruptive solutions, to foster international cooperation, to attract young talents, to assume a bold vision in order for aeronautics to remain a competitive, responsible, effective and valuable partner within the global economic

framework. The CEO of Lelystad airport (the Netherlands), Hanne Buis made this point quite succinctly: “If we do not change, we will be changed!”

Innovative propulsion options – be it hybrid, full electric, using conventional or alternative fuels, from hydrogen to sustainable bio-fuels –, redesigned aircraft architectures, improved certification procedures, upscaled and optimized airports, urban air transport developments, updated educational formats, investments in effective research infrastructures, technical and operational solutions to tackle the aviation’s environmental and climate impact, these were all addressed in a very comprehensive manner during the high-profile presentations and Q&A sessions at Bucharest Aerodays 2019.

Complementing the conference sessions, the event featured generous exhibition space for major international corporations and organizations, but also for several Romanian companies and research entities to showcase their achievements and on-going projects. In addition to numerous side events enabled by the conference – bilateral and group meetings, workshops, preparatory talks for future research and development programmes –, Bucharest Aerodays 2019 offered an open stage for the official ceremony of the Clean Sky PhD. Award celebrating some of the most outstanding achievements in applied sciences and engineering for aeronautics, and welcomed the children who were challenged to share their vision about things to come with imaginative works submitted within the Future of Aviation Award. Enriching the experience provided by the Romanian Palace of Parliament, other prominent historical locations in Bucharest became the appropriate networking venues for all the participants who attended the social event hosted by the Romanian Atheneum and the reception organized at the Elisabeta Royal Palace. On the final day of Bucharest Aerodays 2019, a selected group of participants were invited to travel to Braşov to visit the manufacturing facilities of the Romanian company IAR Braşov and the local production sites of Airbus, the leading European aerospace corporation.

The closing session of Bucharest Aerodays 2019 updated the recent achievements in aeronautics with the topics covered during the conference, but also highlighted the road ahead for the industry and for the Aerodays event scheduled in Berlin, in 2020, between May 12<sup>th</sup> – 17<sup>th</sup>. As the host of Bucharest Aerodays 2019, but also in his dual-role as President and CEO of INCAS and as the current Chairman of the Association of European Research Establishments in Aeronautics (EREA), Dr. Eng Cătălin Nae summed up the entire event, emphasizing the opportunity for all stakeholders to come together, from national governmental representatives and the European Commission’s decision-makers to major industrial players and innovative SMEs (Small and Medium-sized Enterprises). He also reinforced the

need to push the boundaries of aviation, while drafting the essential plan for all the relevant actors in the sector of aeronautics: “We need to deliver on our promises, we should make plans that will enable us to achieve our vision, and we should not forget to dream!”

Bucharest Aerodays 2019 concluded with a symbolic moment, passing the torch to the German partners who will host the joint Aerodays event in Berlin, next year, represented by Dr. Uwe Möller, Head of DLR’s Brussels office, who expressed the desire to achieve in Germany the same success as the event organized in Romania, while adopting a different approach, with a broad public access to ILA Future Lab and a high-profile political event that will build on the foundation for cooperation set in Bucharest.

## ABOUT

**AERODAYS** is the leading European event in aviation research and innovation, a solid platform to share and review that latest developments in aeronautics and air transport across the European Union. Launched in 1991, Aerodays celebrates its 8th edition with an innovative concept, TandemAEROdAYS19.20, based on two integrated events organized in Romania, in 2019, and Germany, in 2020, while Bucharest is the first Aerodays host in Central and Eastern Europe.

**INCAS** is a unique research establishment in Romania with a historical background spanning over 70 years, operating a large experimental infrastructure, including facilities of national strategic importance, and acting as system integrator and design authority for all the major Romanian aeronautical civil and military programs.

**UEFISCDI** is a public institution acting within the Romanian Ministry of National Education that provides counselling and technical assistance for the development and management of projects and international programs of research, technological development and innovation, assists in developing proposals for methodologies and documentation related to funding of these projects and programs, develops and implements institutional development projects and systems related to higher education, research, development and innovation, with national and international funding.

**DLR** is the national aeronautics and space research centre of the Federal Republic of Germany with an extensive research and development work in aeronautics, space, energy, transport, digitalisation and security. It is integrated into national and international cooperative ventures, and as Germany’s

space agency, DLR has been given responsibility by the federal government for the planning and implementation of the German space programme.

**BDLI** is the primary industry representative for the aerospace sector in Germany, bringing together more than 230 companies, and engages in dialogue with political institutions, authorities, trade associations and governments at home and abroad. BDLI is the trademark owner and co-organizer of the ILA Berlin Air Show.