EUROPEAN INTEGRATION OF ENVIRONMENTAL STANDARDS FOR CIVIL AVIATION IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

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The work is devoted to the identification of environmental impacts of the airports on environment. The necessity of prevention of negative impacts of airports under the European integration of environmental standards for civil aviation in the context of sustainable development was substantiated.

Aviation must be environmentally sustainable, operating harmoniously within the constraints imposed by the need for clean air and water, limited noise impacts, and a climate change (FAA, 2015). Air transport is committed to meeting its responsibilities for sustainable development, maximizing its support for economic development, reducing its impact on the environment and consolidating its social benefits. The participation of Ukraine at EU association supposes harmonization of existing and implementation of new normative for environmental regulation in Civil Aviation sector [1-2]. Thus, it is very important to get in-depth understanding of the on-going environmental initiatives implemented by Europe and ICAO to make Civil Aviation more environmentally sustainable and close to the ACARE goals (Flightpath 2050). This work addresses the key aspects of EU environmental policies, practices for sustainable development and focuses on the transformation approaches of European experience into Ukrainian environmental standards in civil aviation by harmonization way. The main objective of our work is to create an ecological outlook and culture for students and other stakeholders, for the sustainable development of the aviation technosphere based on European values and experience. Achieving this goal is possible through the implementation of a number of measures: 1) Dissemination knowledge and experience among a wide range of students, to consolidate students' knowledge of sustainable development, drawing on the experience and values of European countries and to apply the knowledge acquired in the course of qualification work;

2) Conducting research on the implementation of the concept of sustainable development in the countries of the European Union, will allow identifying the best European practices for their further implementation on the territory of Ukraine.

Additionally, the research is conducted concerning the development of roadmap and best practices for harmonization of EU and Ukrainian environmental standards in Civil Aviation. The training promotes the main outputs of the research on the Identifying gaps and establishing a dialogue in cooperation between airports, airlines and the Civil Aviation Administration, aimed at harmonizing national legislation with EU standards on methods, approaches, measures and recommendations for controlling the environmental impact of aviation zone (air pollution by emissions from aircraft engines and other stationary / mobile sources) and third risk part zone. Additionally, development of

Sustainable Aviation HUB (both virtual and real spaces) is under consideration for support and consulting of concerned parties in the area of implementation of ICAO Documents and EU regulations into Ukrainian legislation and reality. In our teaching lectures and practical work, a comprehensive systematic approach is used, which included both theoretical and experimental methods. Among the theoretical methods are: interpretation of the results; statistical and mathematical for processing of experimental data and generalization of the obtained results, mathematical modelling, and mathematical forecasting. New Innovative Learning Strategies For Modern Pedagogy will be used for achieving of our target. Such as Learning Through Argumentation, Context-Based Learning, Computational Thinking, Learning By Doing Science (with remote practical tasks) and Adaptive Teaching. In our opinion, introducing European Standards component into the content of academic courses and all forms of extra-curricular activities will facilitate increase in quality of theoretical knowledge, skills of presenting materials and results of their research to academic community, participation in professional discussions during trainings.

The course provides the formation of students' interdisciplinary competence of a European standard that includes a system of knowledge on the actual processes in ecology, ecological safety, and sustainable development of civil aviation. Also the course is focused on the ability to perform a comparative analysis of the European environmental standards and Ukrainian, which will help to improve the quality of students qualification and their further professional activity. Thus, we expect to facilitate the formation of a new generation of European intellectual engineers, who are prepared to actively engage in processes of ecological safety system integration of European Civil Aviation Area.

Conclusions. The results of this work will have an impact on the Aviation universities through educational research, which is aimed at introducing European standards for sustainable development component in the professional training of their personnel as well as bringing European standards in Ukrainian educational research, thus raising the quality of Ukrainian engineering education, research, and continuous professional development for teachers, researchers and policy-makers; electronic resources, developed in the framework will be available and accessible for all researchers in Ukraine.

Training program for aviation community has been developed to provides practical recommendations based on an analysis of EU legislation and regulations to address critical aspects of land use planning around the airports, taking into account the developed maps of restriction zones (due to impact aviation noise and electromagnetic field), the sanitary - hygienic protection

References

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