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CONCEPT OF USING INNOVATIVE-EDUCATIONAL UNIVERSITY CENTERS OF SPACE SERVICES AS AN INNOVATION FOR SPACE EDUCATION

Abstract

Lately the world demand for remote sensing data has increased significantly. Open circulation of such data is supported by consolidation of experience and scientific competences at internationally-acclaimed centers of expertise. Creation of Centers of Space Services (CSS) and Space Monitoring at national research universities is one of the aspects of development of innovative education within the scopes of national projects. CSS – is an integrating center providing comprehensive services which would support management decisions using the results of activities in space on the basis of remote sensing data technologies and web-services. Centers of Space Services at universities will allow to teach technologies which will allow to make decisions in real time. Currently there is a severe shortage of such experts. Therefore, the demand for experts who receive at CSS their initial experience of processing space data will increase every year, both from federal and regional governments, and from companies. CSS at research universities will be able to solve three types of tasks at the same time: - popularization of space activity among broad population, students, experts; - educational tasks of training and re-training of experts, who would have modern knowledge in the field of remote sensing and geo-information systems; - monitoring of the territories of the regions and providing information to support managing/governing decisions. Creation of CSS's at research universities which are supplied at modern scientific level, will lead to significant improvement in the quality of education, improvement of scientific research, efficiency of application of such scientific research. International cooperation between universities from various countries would create unique capabilities in increasing of efficiency of such scientific-educational CSS's and would increase the quality of aerospace education by means of exchange and application of new educational technologies. Concept of creation of Center of Space Services at the basis of Center of Remote Sensing at Moscow State Technical University named after N. E. Bauman is reviewed as an example, as well as role of such Center in outreach and attracting to space technologies of students, and young experts.