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EEOBSS - EO education for Bulgarian secondary schools

Abstract

This poster covers the main objectives and main results of the 'Education in Earth Observation for Bulgarian Secondary Schools' (EEOBSS) Project implemented under the 1st ESA-PECS Call for Bulgaria.

The Project main objective is to provide access to free Earth Observation (EO) education for Bulgarian secondary schools. The main technical objectives of the Project are comprised of:

1) development of EO lecture material for the secondary schools in Bulgaria and 2) promotion of EO to young students through demonstration and social communication activities.

The objectives are to be met through implementation of several tasks connected with EO curriculum development for Science, Technology, Engineering and Mathematics (STEM) subjects, such as testing the EO curriculum and worksheets in class, organizing an EO Summer School, Workshop and an Open Day, social media communications, and development of a project website with a MOODLE as an eLearning platform. The main project sub-contractor is CERTH-ITI, Greece.

Development of Earth Observation lecture materials for Bulgarian secondary schools

One of the first deliverables was T.1.1. Literature review and compliancy check. The work under Task T.1.1. during 2016 included collection, processing and systemizing of literature sources to prepare the literature review and check for compliancy with Bulgarian legislation (regulatory actions), as well as overall compilation and editing of the manuscript.



A)



B)

Figure 1. A) Title page of EEOBSS' "Literature review and compliancy check". The TN1 will be the foundation document to set-up an online directory with EO educational resources for lower-education in Copernicus Academy. B) Cover of the EEOBSS tutorial - EO from Space (in Bulgarian) containing 5 EO modules for Bulgarian secondary schools



Figure 2. Presentation of EEOBSS lecture material in class - left to right: open lecture at Sofia school for architecture, construction and geodesy "Hristo Botev" - 23.11.2017; presentation of EEOBSS and ESA School Atlas before students and teachers at Astro-party 2018, 1-2 June 2018, village of Baykal (Dolna Mitropoliya municipality); awarded students and lectures of 2nd EEOBSS summer school held in 119 SS "Acad. Mihail Arnaudov", Sofia - 26-28 June 2018.

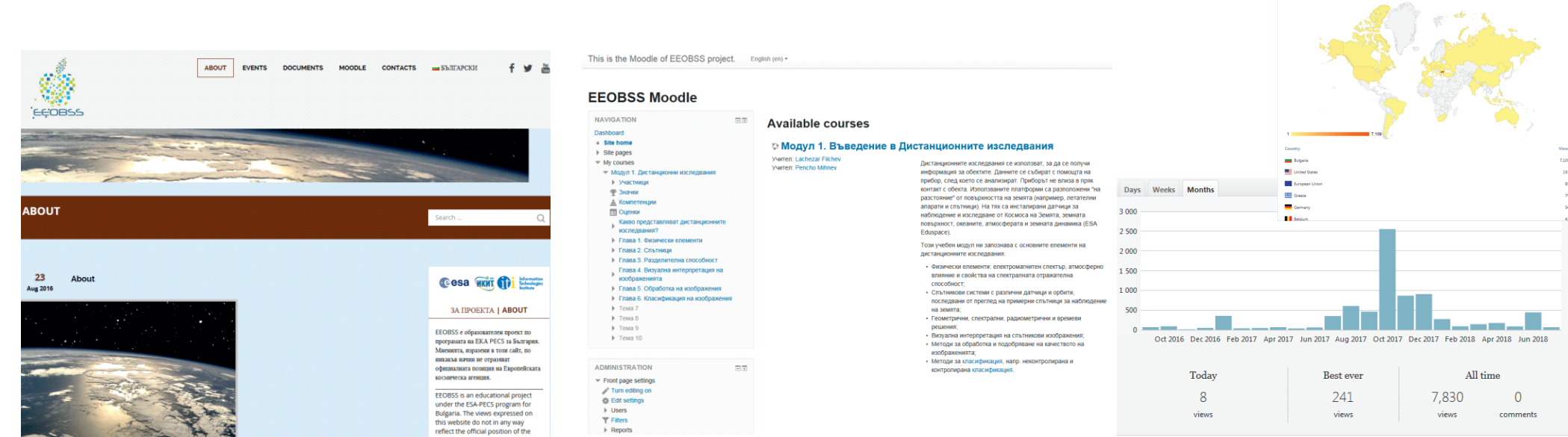


Figure 3. Snapshots of EEOBSS website (from left to right), EEOBSS e-Learning platform - MOODLE and EO lecture notes on EEOBSS website (<http://eeobss.space>), summary statistics and geographic distribution of the web-site visitors.

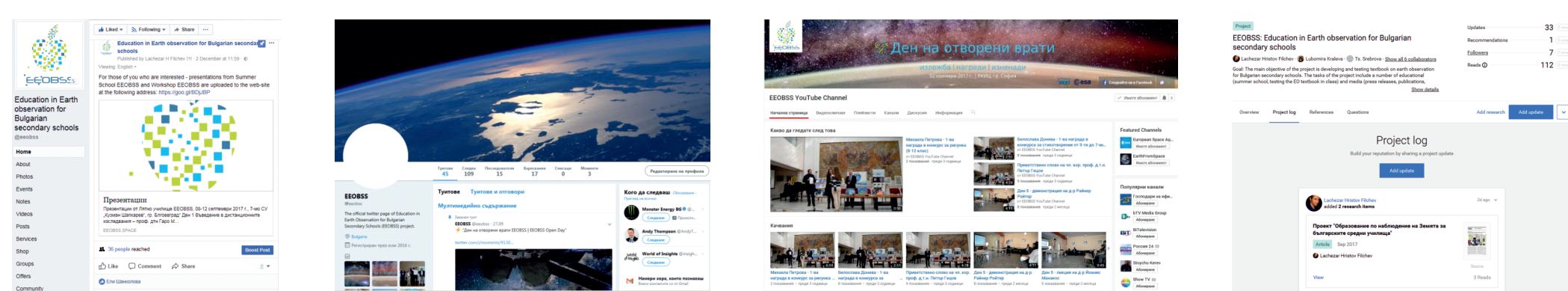


Figure 4. Snapshots from EEOBSS social pages, from left to right: Facebook page, EEOBSS Twitter (@eeobss); EEOBSS YouTube channel; EEOBSS Project page in ResearchGate.

Promotion of EO among young people: Dissemination and communication

This work package of EEOBSS contains four tasks. Some of their results are presented as follows:



Figure 5. Organization of 1st EEOBSS Summer School, 08-12 September 2017, 7th SS "Kuzman Shapkarev", Blagoevgrad, Bulgaria, from left to right: Prof. R. Reuter's presentation; a drone demonstration, awarded participants of the Summer School at the entrance of the school building.



Figure 6. EEOBSS Workshop - 13 September 2018, "22nd September" city-hall, Blagoevgrad, Bulgaria.



Figure 7. EEOBSS Open Day - 2 November 2017, RCIC, Sofia, Bulgaria, from left to right: awarding ceremony for the poem, essay and picture competition "My meeting with the Earth in Space", picture exhibition, awarded participants in the competitions.



Figure 8. Presenting the project results at international scientific conferences, from left to right: presentation of EEOBSS during EO Open Science 2016, ESRIN-ESA, Frascati, Italy; presentation of EEOBSS during EEOBSS workshop 2017, Blagoevgrad, Bulgaria; awarding of EEOBSS project affiliated partners - students and school representatives during ESA Workshop "Balkans from Space" 18-19 April 2018, Sofia, Bulgaria.



Figure 9. Donation of ESA School Atlas - Geography from Space and Water Atlas to Bulgarian public libraries and secondary school libraries.

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The main contractor SRTI-BAS and the sub-contractor CERTH-ITI are members of Copernicus Academy network and as such the events EEOBSS Summer School, Workshop and Open Day are co-branded with Copernicus Academy Logo.

The view expressed herein can in no way be taken to reflect the official opinion of the ESA.

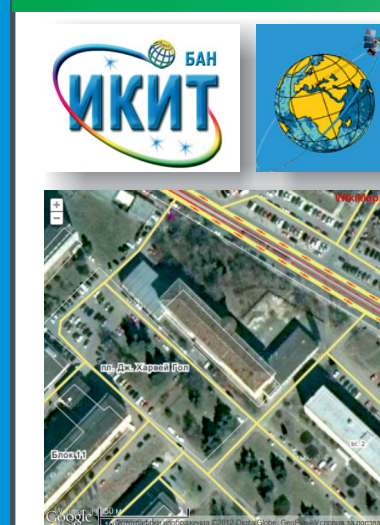
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In the beginning of 2017, SRTI-BAS and CERTH-ITI became Copernicus Academy members. The EEOBSS became part of European STEM network SCIENTIX on 22 August 2017. As part of SCIENTIX the EEOBSS Project is listed in the Projects database and is available in 8 EU languages.

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