



BESTSDI



Funded by the
Erasmus+ Programme
of the European Union

Western Balkans academic education Evolution and professional's sustainable training for spatial data infrastructures – BESTSDI

BESTSDI project SDI curriculum implementation on academic institutions in the region

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BESTSDI objectives

The wider objectives of the BESTSDI project is:

- **to improve the quality of higher education in Geographical Science and Technology field, SDI and geodesy, enhance its relevance for the labor market and society and to improve the level of competences and skills in HEI's by**
- **developing new and innovative education programmes within the field of SDI.**

These wider objectives are fully compliant with the priorities of the Capacity Building projects within the Erasmus+ program.

BESTSDI objectives

The specific project objectives are **to develop, test and adapt new curricula, courses, learning material and tools within the field of SDI.**

In doing so, existing undergraduate and graduate geodesy and geoinformatics curricula's in the academic institutions in the WB region will be lifted to higher levels, recognizing the role of spatial data for modern society and its development.

By the incorporation of SDI concept and other modern concepts based on spatial data and information, the students of the new courses will have the ability to provide efficiently spatial data and services to SDI users.

BESTSDI objectives

In parallel, the project also **introduces SDI and related concepts** in undergraduate and graduate study programs on academic institutions which profiles are well recognized as SDI users, raising awareness among the students and professionals about the relevancy of SDI and advantages of well organized spatial data.

SDI concept

A Spatial Data Infrastructure (SDI) is a framework to share, discover and re-use spatial data among public authorities, the private sector and citizens.

SDI's are based on a “coordinated series of agreements on technology standards, institutional agreements, and policies” (Kuhn 2005) that unlock geospatial information resources for a wide range of application fields, for instance environmental monitoring and policy making, transportation planning, health care, physical planning, national security, etc.

They are an integral part of the e-government movement and open data initiatives.

SDI is much more



Smart environment



Intelligent transportation

Precise farming



Smart cities

SDI framework

- INSPIRE is an EU Directive (2007/2/EC) aiming to establish an infrastructure for spatial information in Europe to support Community environmental policies and policies or activities which may have an impact on the environment (<http://inspire.ec.europa.eu/>). The Directive addresses problems regarding the availability, quality, organization, accessibility and sharing of spatial information. INSPIRE may be seen as the legal framework of a European SDI.
- SDI is introduced in national legislation of all EU countries
- SDI is introduced also in national legislation of partner countries as:
 - Independent law (Albania, Macedonia, Serbia)
 - Part of State Survey and Cadaster law (Kosovo, Montenegro, Republic of Srpska – BiH)
 - Governmental Decree (Federation of Bosnia and Herzegovina – BiH)

BESTSDI partners

Project coordinator:

- University in Zagreb (Faculty of Geodesy & Faculty of Geotechnical Engineering), Croatia

Program countries:

- Catholic University of Leuven, Belgium
- University of Split, Croatia
- Ss. Cyril and Methodius University in Skopje, Macedonia
- Bochum University of Applied Sciences, Germany

BESTSDI partners

Partner countries:

- Polytechnic University of Tirana, Albania
- Agricultural University of Tirana, Albania
- University of Banja Luka, Bosnia and Herzegovina
- University of Mostar, Bosnia and Herzegovina
- University of Sarajevo, Bosnia and Herzegovina
- University of Tuzla, Bosnia and Herzegovina
- University for Business and Technology – UBT, Kosovo
- University of Montenegro, Montenegro
- University of Belgrade, Serbia
- University of Novi Sad, Serbia
- University of “Ukshin Hoti” in Prizren, Kosovo

BESTSDI partners

Associated partners:

- Republic Administration for Geodetic and Property Affairs of Republika Srpska, Bosnia and Herzegovina
- Federal Administration for Geodetic and Property Affairs of Federation of Bosnia and Herzegovina, Bosnia and Herzegovina
- Agency for Real Estate Cadastre, Macedonia

Subcontractors:

- Lantmäeriet, Sweden
- Novogit A.B., Sweden

BESTSDI project activities organization

Work packages:

- WP1 – Preparation – Specification of the core curriculum
- WP2a – Development – Development of curriculum
- WP2b – Development – Implementation of curriculum
- WP3 – Quality Plan
- WP4 – Dissemination & Exploitation
- WP5 – Management

Divided in 25 task groups!

BESTSDI expected results

To develop appropriate curricula, courses and their content for both target groups (SDI providers and SDI users) of academic institutions. This includes the development of:

- SDI compulsory course for undergraduate study programs in geodesy
- SDI modules for graduate study programs in geodesy and geoinformatics
- SDI user course components (not necessary full courses) for undergraduate study programs of partner faculties
- SDI elective courses for graduate study program of partner faculties (SDI users)
- Development of sustainable training courses (life-long education) of broad scope of professionals

BESTSDI expected results

To disseminate the project experiences and results in order to create additional value and multiply the impact of the results. As a consequence, dissemination will be made about best practices in teaching on SDI, the content of the developed courses, experience in introduction of newly developed courses and training courses for professionals to professional society. These dissemination activities are made to targeted audience like professional bodies, public authorities etc.

To establish the necessary foundation for the participation of partner universities in the academic SDI arena.

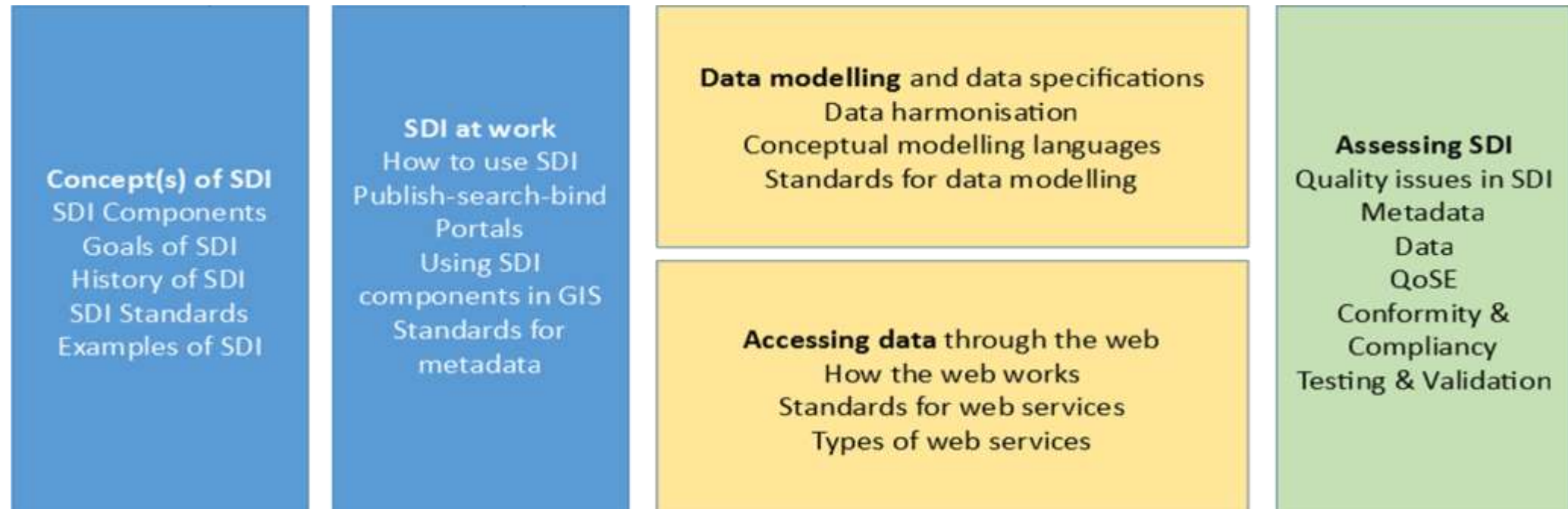
To provide equipment for implementation of modernized curricula to partner universities so that new kind of professionals will be equipped with broad cognition, knowledge and skills about SDI and other modern spatial data related concepts will be result of education process in involved institutions.

BESTSDI additional benefits

- New level of communication and cooperation among the partner universities with the emphasis on SDI but expanding it on institutional and project cooperation.
- Exchange of students and staff will be fostered through the project activities and information about activities conducted by the partners communicated among the partner universities (like International Doctoral Seminar in Dubrovnik starting in 2017).

BESTSDI project – results

- Several surveys conducted, information on status and learning material collected.
- Project SDI curriculum specified and described.
- Content of SDI curriculum, course structure and adaptation rules defined.



BESTSDI project – perspective



- Outcomes, teaching methods and teaching materials in final stage of creation.
- Procedures for implementation of SDI curricula at the partner universities ongoing.
- All listed activities will result with initial lecturing of SDI courses in next academic year (Y3 of the project)!

Implementation of curriculum

- Prepared for Y3 of BESTSDI lifetime:
 - 1 new study program with incorporated SDI content
 - 3 new courses
 - 16 new SDI lectures in existing courses (20%)
- Some 460 students will be involved in test lectures and they will evaluate given courses!
- Planned full implementation (5 years beyond the project):
 - 4 new study programs with incorporated SDI content
 - 9 new courses
 - 19 new SDI lectures in existing courses (20%)
- Some 920 students will be involved in lectures!

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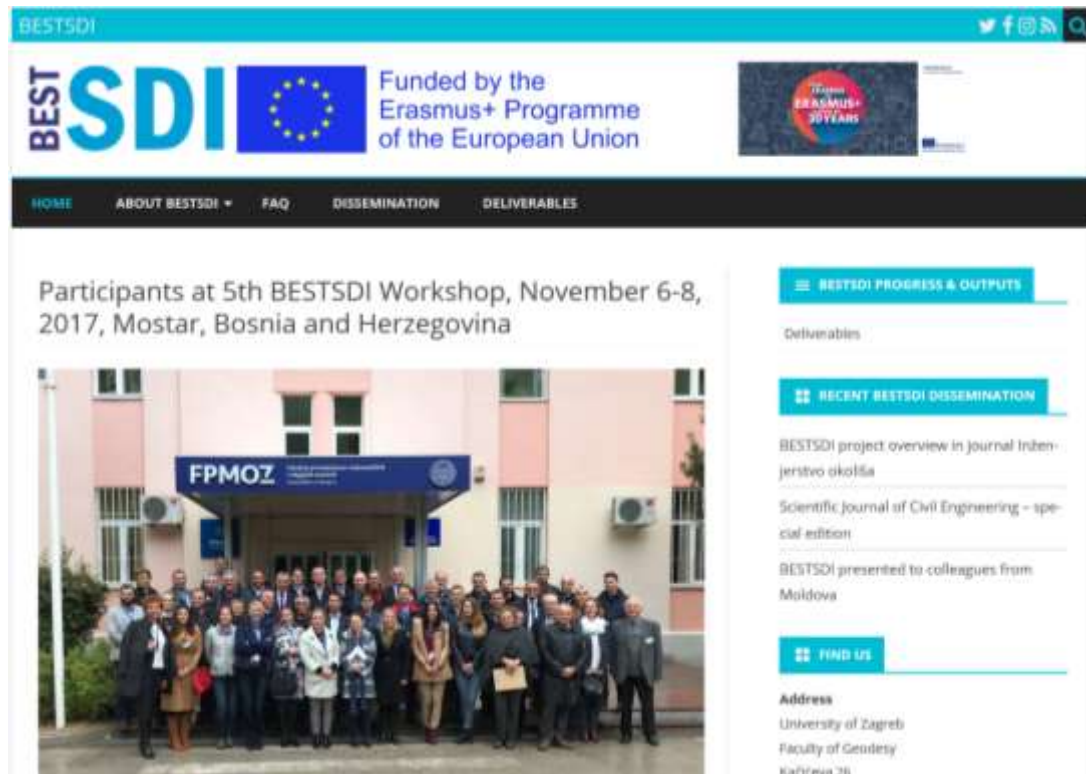
Official web site of BESTSDI project funded by the European Union under ERASMUS+ KA2 Capacity Building in Higher Education.

BESTSDI Social networks



BESTSDI NEWSLETTER:

- Bestsdi INFO
- Bestsdi news



BESTSDI



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