Development of master curricula for natural disasters risk management in Western Balkan countries

NatRisk project and SDI

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SDI Days 2018 and 14th International Conference on Geoinformation and Cartography
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Content

• Basic information about Erasmus+ NatRisk project
• Motivation - Why we are studying natural disasters?
• Goals and Sustainability of NatRisk projekt
• Inclusion of the SDI into the curriculum of the new master course - Protection from Natural Disasters
## Basic Information

<table>
<thead>
<tr>
<th><strong>Contract number</strong></th>
<th>573806-EPP-1-2016-1-RS-EPPKA2-CBHE-JP</th>
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<tbody>
<tr>
<td><strong>Project acronym</strong></td>
<td>NatRisk</td>
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<tr>
<td><strong>Project name</strong></td>
<td>Development of master curricula for natural disasters risk management in Western Balkan countries</td>
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<td><strong>Project duration</strong></td>
<td>15th October 2016 - 14th October 2019</td>
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<td><strong>Programme</strong></td>
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<td><strong>Total cost</strong></td>
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<tr>
<td><strong>Coordinator</strong></td>
<td>University of Niš, Serbia</td>
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<td></td>
<td>Univerzitetski trg 2, 18000 Niš, Serbia</td>
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<tr>
<td><strong>Project website</strong></td>
<td><a href="http://www.natrisk.ni.ac.rs">www.natrisk.ni.ac.rs</a></td>
</tr>
<tr>
<td><strong>Project e-mail</strong></td>
<td><a href="mailto:natriskuni@gmail.com">natriskuni@gmail.com</a></td>
</tr>
</tbody>
</table>
Consortium

Western Balkan partners
- University of Niš (UNI, Serbia)
- Academy of Criminalistics and Police Studies (KPA, Serbia)
- University of Pristina in Kosovska Mitrovica (UPKM, Kosovo)
- University of Sarajevo (UNSA, Bosnia Herzegovina)
- University of Banja Luka (UNBL, Bosnia Herzegovina)
- Technical College of Applied Science temporary seat in Leposavic (TCA)

EU partners
- University of Natural Resources and Life Sciences, Vienna (BOKU, AUSTRIA)
- Middlesex University Higher Education Corporation (MUHEC, UK)
- University of Messina (UNIME, ITALY)
- Óbuda University (OE, HUNGARY)
- Technical University of Crete, Chania (TUC, GREECE)
Development of master curricula for natural disasters risk management in Western Balkan countries

Work Packages

**Preparation WP1**: Analysis of natural disasters needed to be managed in Western Balkan region
Leader: **University of Natural Resources and Life Sciences, Vienna**

**Preparation WP2**: Development of master curricula
Leader: **University of Messina**

**Preparation WP3**: Development of trainings for citizens and public sector
Leader: **University of Defence in Belgrade**

**Development WP4**: Implementation of developed master curricula and trainings
Leader: **University of Sarajevo**
Work Packages

**Quality Plan WP5**: Quality assurance and monitoring
Leader: **Middlesex University Higher Education Corporation**

**Dissemination & Exploitation WP6**: Dissemination
Leader: **University of Niš**

**Dissemination & Exploitation WP7**: Exploitation
Leader: **University of Niš**

**Management WP8**: Project management
Leader: **University of Niš**
2. Motivation

- Natural hazards cause directly significant loss of life, set back economic and social development, reductions in crop yields, destruction of homes and other infrastructure and indirectly increased food prices and food insecurity.
- We cannot avoid natural hazards, but we can prevent them from becoming disasters.
- Management of natural disasters became the greatest global challenge and an indispensable requirement for sustainable development and is set as a goal both in Europe 2020 (target 3. climate change) and the 2030 agenda for Sustainable Development United Nations ("Goal 13. Take urgent action to combat climate change and its impacts").
- WB countries should above all develop new or improve the existing education in this field, to raise technical capacity and accomplish creation of more efficient systems for better response when natural disasters occur.
Climate change or climate variability are also reflected on the frequency and strength of many types of extreme events. Hazardous natural processes, 1980-2012.

Climatic extremes can not be avoided, but with timely prognosis and prediction, while strengthening the society's ability to prepare and adapt to the changes that have occurred, can significantly mitigate or even avoid their negative consequences.
Overall Broader Objective of NatRisk Project

Education of experts for prevention and management of natural disasters in the region of Western Balkan (WB) according to the national and EU policies.

Specific Objectives

- Development and implementation of methodology for identification of natural disasters to be managed in WB region and all aspects of prevention and consequences in order to define specific competencies for professional practice
- Development and implementation of the new advanced master curricula in Natural Disasters Risk Management (NDRM) in line with the Bologna requirements and national accreditation standards
- Development of trainings for the public sector and citizens for reaction in case of various natural disasters
Sustainability

• **Seven new master programmes in NDRM** at the WB partner HEIs that will be developed, accredited and implemented.

• **Three new training programmes in NDRM** (one per each WB partner country) with training materials for public sector and citizens developed and conducted.

• **Retrained teaching staff** with up-to-date knowledge in NDRM to teach on the new master programmes.

• **Introduced new laboratory equipment, library units and software** necessary for the continuation of the new master programmes.
Specific Objective that came about through the implementation of the project

- Particular attention is paid to the importance of spatial planning through the project and use of modern technologies (such as GIS), which could greatly contribute to reducing the consequences of natural disasters.
- The current approach to protecting the society from natural disasters was largely unsystematic, with a pronounced disaster after the disaster in order to save people and goods and reconstruction.
- However, in the new century, with increasing frequency of occurrences of disasters, emphasis is increasingly on prevention.
- Namely, education as an important factor that can greatly contribute in increasing the resistance of society to reduce or at best avoid possible disasters.
At the University of Sarajevo, Center for Interdisciplinary Studies, a new master course in the field of protection and management of natural disasters, starts in the 2018/19 school year.

Website
## 1.2 Nastavni plan

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<td>Doc. dr Adis Skejić</td>
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<td>Geoinformacione i komunikacione tehnologije za upravljanje rizikom od prirodnih katastrofa</td>
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<td>Prof. dr Nusret Drešković</td>
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Recognized the importance of SDI and INSPIRE - increasing mitigation ability of the society

### Connection to BestSDI:
- Spatial databases and SDI
- Geoinformation and communication technologies for risk management from natural catastrophes
DEVELOPMENT OF MASTER CURRICULA FOR NATURAL DISASTERS RISK MANAGEMENT IN WESTERN BALKAN COUNTRIES (NATRISK)

The project is co-financed by the Education, Audiovisual and Culture Executive Agency through the Erasmus+: Higher Education – International Capacity Building (KA2 – Capacity Building in the field of Higher Education). The overall aim is to educate experts for prevention and management of natural disasters in the region of Western Balkan (WB) according to the national and EU policies.

PROJECT

Project date: December 2016 - December 2019    Acronym: NatRisk
Coordinating institute: University of Niš

Work methodology of NatRisk project is elaborated through eight work package types, encompassing in total 34 activities necessary to achieve project aims and objectives. Precise milestones and delivery dates as well as the content of the deliverables are defined in a detailed work plan.

https://danube-inco.net/object/project/18348
Development of master curricula for natural disasters risk management in Western Balkan countries

http://www.natrisk.ni.ac.rs/dissemination/radio-television-videos

https://www.youtube.com/watch?v=U5SMhu0Pkhc

Link 1

Link 2

https://wbc-rti.info/object/event/15578#rel