



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

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Strengthening of master curricula in water resources management for the Western Balkans HEIs and stakeholders
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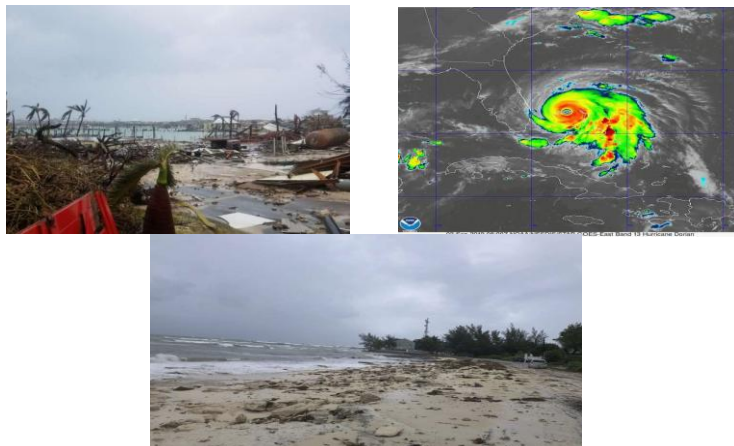
Chalkidiki, Greece, July 2019



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Bahamas, September 2019, hurricane Dorian



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ECHO daily flash – European Civil Protection and Humanitarian Aid Operations

- Sudan - Floods
- Japan - Tropical Cyclone DOLPHIN
- Vietnam, Cambodia, Thailand - Tropical Storm NOUL
- Pakistan - Severe Weather including heavy rain and thunderstorms
- USA - Tropical Storm BETA
- Georgia – Floods
- Portugal, southern Spain, northern France, southern Italy, coastal Croatia, Cyprus, Hungary, Bulgaria, east Romania, Bosnia and Herzegovina, Albania, Turkey, Ukraine - Forest fires

Source: <https://ercportal.jrc.ec.europa.eu/ECHO-Flash> (accessed: 22 September 2020)

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Natural hazards

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.

More than 1.5 billion people have been affected by disasters in various ways and the total economic loss was more than \$1.3 trillion (Sendai Framework for Disaster Risk Reduction 2015-2030). Between 2002 and 2014 natural disasters in the EU caused over 80000 deaths and over €100 billion of economic losses.

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Motivation

Natural disasters risk management (NDRM) 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”).

Western Balkan countries should above all

- develop new or improve the existing education in NDRM,
- raise technical capacity and
- accomplish creation of more efficient systems for better response when natural disasters occur.

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Overall Broader Objective

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

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Specific Objectives

- **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** 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

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Consortium

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)

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Consortium

WB partners



University of Niš (UNI)



University of Criminal Investigation and Police Studies (KPU)



University of Pristina in Kosovska Mitrovica (UPKM)



University of Sarajevo (UNSA)



University of Banja Luka (UBL)



Technical College of Applied Sciences Urosevac with temporary seat in Leposavic (TCASU)



University of Defence in Belgrade (UNID)

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Associated partner



Republic Hydrometeorological Service of Serbia

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Important project results

- **6** master curricula and **1** specialist professional study programme developed, accredited and implemented; one modernized master study programme in NDRM - > **124** students enrolled; **70** new courses developed and **3** modernised
- **7** labs equipped for studies in the field of NDRM in the WB region
- **8** agreements for students' internships between WB HEIs and companies/public bodies in the field of NDRM signed
- **4** handbooks in the field of NDRM created
- **14** trainings for the civil sector delivered (293 participants)

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Internationalisation of the Partner HEIs

- **2** new IROs established and adopted necessary procedures (mobility action plans, guidelines for student and staff exchange and strategy of internationalisation)
- **3** Partner HEIs have also obtained the Erasmus Charter for Higher Education
- **26** Inter-institutional agreements signed between WB HEIs and EU partners
- **115** mobility visits of teaching staff organized (duration **1200** days)
- **24** student mobility visits organized (duration **122** months)
- **28** realized students' internships

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Significant spin-off effects

- Establishment of **2** International Relation Offices in two partners

- Publication by **Springer** of a monograph book titled “**Natural Risk Management and Engineering – NatRisk Project**” including 11 chapters, which will contribute to the visibility of the project

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Developed curricula

- In line with the **European Credit Transfer System (ECTS)** and the **European Standards and Guidelines for ESGs for QA**

- Based on **integration of ICT in teaching and learning process**

- Focused on **student centered learning** and **innovative teaching methods**

- Developed master curricula have a **practical pedagogical approach**

- All master students carried out **internships** as a **mandatory part of the curricula**

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Final remarks

- Project is **presented** as an **example of best practices** at the Erasmus+ Contact Seminar with the Western Balkans organised by the EACEA in Albania in October 2019
- **NEO Serbia recorded a promotional video** related to the NatRisk project
- Project implementation has been qualified as "**VERY GOOD**" by the EACEA

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