



## Synopsis of the project “Development of Professional Courses in Sustainable Water Management” – RESONATE Project

### Резюме на проект „Развитие на професионални курсове по устойчиво управление на водите“ – проект RESONATE

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The project “Development of Professional Courses in Sustainable Water management” (acronym RESONATE) is a two-year project, from October 1, 2019 to September 30, 2021. It is funded by Erasmus+. The aim of the RESONATE Project is to provide comprehensive engineering knowledge and develop professionals’ scientific, communication and problem solving skills through a combination of hands-on courses, industry projects and theoretical background. The professional courses were developed in consultation with industry, to equip engineering professionals with advanced technical expertise, critical thinking and professional skills required to remain competitive in the global workforce and succeed in their future careers. The overall objective of RESONATE is education of engineering professionals in sustainable water management pursuant to national and EU policies and long-term contribution to the development and management of water resources on both local and global scales. The project includes 7 activities relating to intellectual outputs: O1, GAP analysis of competences of engineering professionals in sustainable water management; O2, benchmarking of educational programs; O3, analysis of European trends and policies in engineering and sustainability (regulations, standards, technology, innovation); O4, curriculum

development of professional courses in sustainable water management; O5, development of an ICT learning platform; O6, development of learning materials and handbooks for professional courses; O7, engineering practicum with case studies. The first five intellectual outputs were completed in the first year of the project. Under O1, a questionnaire was compiled for 42 potential course topics. The questions were designed so that respondents would assess (i) their current knowledge about the proposed topic and (ii) their need to update that knowledge. Rating ranged from 1 (no knowledge) to 4 (high level of understanding). The questionnaire was translated into national languages. The responses were evaluated and 11 topics selected for courses in sustainable water management: 1) Water Framework Directive, River Basin Management Plan and the Program of Measures, 2) sustainable water use and available water resource, 3) the standards and boundaries used in status assessment, 4) identification and delineation of surface water and groundwater bodies, 5) GIS for water resources assessment and management, 6) numerical modeling of water balance, 7) statistical analysis: quantitative status, qualitative status and trends, 8) flood risk assessment and management plans, 9) recycling water, 10) SMART (digital) water management – digital

technologies in water resources planning, monitoring and management, 11) water in the context of circular economy – multiple use and multiple users of water.

All the courses will be in English, offered on-line free of charge. Course participants may be from any country, not only the project partner countries. Upon completion of a course, each participant will receive a certificate that will carry a certain number of ECTS credits. The system will be open for

registration at the beginning of next year (January/February 2021). Detailed information is available on the project's website <http://resonate-watermanagement.org/>. For direct contact, please send an E-mail to [resonate.erasmus@gmail.com](mailto:resonate.erasmus@gmail.com). In addition, you can follow the RESONATE Project on Facebook (<https://www.facebook.com/pages/category/Education/Resonate-112498636873998/>) and LinkedIn (<https://www.linkedin.com/company/sustainable-water-management-resonate/>).