

WP2 – Development of a concept for an online format of the teaching and training process, fulfilling the requirements of road infrastructure management

IO.3 – Testing and selection of software and tools for the implementation of online teaching and training processes based on needs analysis.

The task will be carried out under Work Package 1 (WP1. Development of a concept for an online format of the teaching and training process, fulfilling the requirements of road infrastructure management)

Under IO.3, testing and selection of software and tools, necessary for the implementation of didactic and training process in the RIM remotely, will be carried out. Based on the initial concept developed under IO.2, software and tools will be identified and tested to select those that meet most or all the accepted assumptions to the greatest extent possible. The work will be carried out in all partner institutions. Both paid and open access tools and software will be tested, including those generally available and with limited access. The selection of a set of tools and software will be based on a multi-criteria analysis that will provide for: compliance with IO.2 requirements, availability, cost, functionality, development opportunities and long-term use, etc. The set to be selected each time is dependent upon the type of conducted remote class as described in WP2.

Target groups:

1. Research and teaching staff from institutions involved in RIM teaching, in particular partner institutions.
2. Students of civil and transportation engineering.
3. Students of postgraduate studies and courses in the field of RIM.
4. Road authority staff

Innovative elements:

1. Identification of tools and their capacity in the delivery of remote classes, in accordance with the requirements of the assumptions and the initial methodology developed within IO.2.
2. Testing of software and tools necessary for the implementation of the distance learning process along with general indications for their selection.
3. Selection of software and tools necessary for the implementation of the distance learning process that meet the requirements in the field of RIM on the basis of multi-criteria analysis.

Expected impact:

Identification of the capacities of the software and tools for conducting remote classes will enable selection in accordance with the requirements of the assumptions and initially developed methodology. On this basis, recommendations for the selection of software and tools for various types of classes will be developed and their selection will be carried out for the further development of the educational process in the field of RIM.

Transferability potential:

The results of IO.3 will facilitate the transfer of knowledge in the selection of tools and software in delivering the educational process in related specialties. The potential will be realised by sharing the results of the project on an online platform. This will allow for the use of IO.3 results by other teaching institutions across Europe and in other engineering sciences, meeting other specific requirements of distance learning.

The division of work:

Due to the different experience of the partners in the project, the work will be divided among all consortium participants and will include the following tasks for each of the partner institutions:

- Identifying the requirements for tools and software for conducting remote classes.
- Identification of software requirements necessary for the implementation of RIM classes and the possibility of their delivery in a remote format.
- Testing the tools for conducting remote classes, with the assumptions and requirements of the initial concept of the teaching and training process.
- Selection of tools and software necessary for remote implementation of the teaching and training process that meets the requirements in the field of RIM.

The tasks leading to the production of the intellectual output:

The leading institution (AAU) will be responsible for coordinating the tasks carried out within IO.3. The consortium participants will work together to identify the tools and assess their potential use in the RIM classes, supporting each other with their knowledge and experience. The partners will exchange information on the results of tool testing and come to a consensus on the selection of tools and software on the basis of a multi-criteria assessment, taking into account the requirements of the different types of class described in WP2.

Applied methodology:

The methodology will be based on a multi-criteria analysis to select the appropriate set of tools and software for the implementation of remote classes in the field of RIM with the distinction of various types of educational and training activities. The selection will be preceded by identification of tools and software that will comply with the assumptions of the initial concept of the teaching process described in IO.2.