INTEGRATED DOCTORAL PROGRAM FOR ENVIRONMENTAL POLICY, MANAGEMENT AND TECHNOLOGY (INTENSE) 05/06/2018

The project is globally important for PCs and EU as it addresses major environmental challenges in PCs, which are caused by poorly formulated policies, inadequate selection of management actions and the lack of suitable technology. They need to be addressed by high quality multidisciplinary and end user-oriented research.

Higher education and research in MN, UA, VN have developed for long after USSR organisational and conceptual model, and under the transition to market-based economy and globalisation of societies and economies of PCs, doctoral provision had similar problems identified by many national and international observers. For instance, although PhD/aspirantura studies in PCs are recognised as a part of HE system, they are insufficient for developing academic competencies by PhD students, both in relation to subject-specific and transferable skills. The shared problems of PCIs manifest in the poor quality of many dissertations, and in low acceptance rates of papers submitted to international journals, mostly because the research is based on inadequate knowledge of and hence reference to international literature and poor methodology. It is important to address these issues by improving the governance of doctoral training and introducing a robust QA culture.

Postgraduate education is under reform in all the PCs, and although it creates many uncertainties related to unstable regulatory environment, it also gives a good chance to catch a window of opportunities, and introduce new and better doctoral programs bringing to PCs the achievements of the European Higher Education (EHEA) and European Research Areas and adopting them to PCs' context. Addressing the issues identified by the pre-study and previous work, the proposed action will create at PIs governance and learning infrastructure for internationally competitive, policy relevant and practice-oriented doctoral provision in the field of environment, and build capacity for its sustainable operations and expansion after the end of the project. The INTENSE programme seeks to incorporate this approach to researcher development into doctoral training in PCs. It is the first doctoral school to bring together several program countries, and the first in its regions dealing with environmental policy, management and technology.

The project aims:

- 1. To improve the practice of doctoral training and professionalise its governance by integrating PhD programs dealing with environmental policy, management and technology in 7 PCIs to 3 nationwide integrated doctoral schools (INTENSE NIDS), based on common Code of Operational Practices & research framework (COP & RF), and consolidating these schools into the INTENSE International Network.
- 2. To enhance doctoral training provision by integrating and upgrading existing learning contents that can be used for doctoral provision (total 80 ECTS by M36), infrastructure for accessing the courses and setting&monitoring flexible research training trajectories and their progression (INTENSE open education platform, including sustainable mechanisms for its development and maintenance) and shared access to research facilities.
- 3. To build the capacity of PhD students to improve their published output, through a strengthened multidisciplinary approach to doctoral training, aided by facilitating access to

global and EU research networks (including facilitation of academic mobility), development of transferable skills, promotion of joint research/supervision arrangements & interdisciplinary & practice-oriented thesis topics.

Work packages:

WP1. Preparation of intense development and exploitation activities:

WP1 encompasses a range of preparatory activities for the development and implementation of the project. The pre-application need assessment had demonstrated that the partners have interest and sufficient initial capacity to implement the action and to achieve sustainable results, however due to a year-long lag between the pre-application assessment and the projected start of the action, a new and a more detailed survey will be carried out, as the institutional landscape is very dynamic in all the PCs, and we will need more details from the end-users and HEIs in order to complete the ToRs describing the development of institutional and learning infrastructure, and the INTENSE in- and post- project business and dissemination plan.

WP2. Development of the intense institutional infrastructure:

The aim of WP2 is to develop a common, accredited, research framework (RF), code of operational practice (COP) that will support the development and implementation of the INTENSE programme at the partner institutions. WP2 also oversees the launching of national INTENSE schools in MN, UA and VN adhering to the RF and COP and the INTENSE International Network, sets up for a smooth transition of existing organisations to the INTENSE framework, ensures the development of the appropriate range of QA arrangements, and the shared use of research equipment across the partnership.

WP3. Development of learning infrastructure and contents:

The aim of WP3 is to build sufficient capacity for sustainable operation of national INTENSE schools and the international INTENSE Network by developing learning and research training infrastructure, curricula contents and learning materials; the WP will also contribute to PIs' capacity by providing training in ICT-related issues and cutting-edge multidisciplinary topics of environmental studies.

WP4. Quality assurance and monitoring:

A principal aim will be to provide support in exploring an appropriate range of approaches to ensure the quality of project implementation and outputs. WP4 will also seek to address QA issues in the PCs on the level of values, so QA is not only perceived as paperwork to do, but as a valuable tool that needs to be used responsibly. This objective will be supported by an external QA officer.

WP5. Intense dissemination and exploitation:

The WP5 aims at exploitation and dissemination of INTENSE deliverables to ensure smooth transition of pre-INTENSE post-graduate programs, sustainable operations and growth of the INTENSE international network and national schools. The proposed set of activities will attract broader academic community and non-academic stakeholders to cooperation with INTENSE and its partners (including joining the School by universities and research centres). The measures to

enhance the project and (effectively) the INTENSE sustainability through the dissemination of its results include:

- Launching and developing the INTENSE web portal and moderation of online forum discussions on project issues;
- Holding annual INTENSE conferences (2 during the project lifetime) showcasing research, QA and governance achievements related to the INTENSE research training (M3-36);
- Arranging media coverage for important INTENSE events and deliverables in corporative, local and national media, ensuring coverage in social media and regular updates of dedicated FB and Twitter accounts;
- Preparing the INTENSE brochure and newsletter, and circulating them; specifically targeting fee-paying international students;
- Circulating analytical reports and analyses of best practices through the ministries of education, NIS Organisation for Environmental Education (co-hosted by P5) and partner networks in the PCs and beyond;
- Wider outreach activities to HEIs and non-academic stakeholders through information seminars, open international calls for INTENSE training events, stakeholder roundtables, dedicated INTENSE panels or INTENSE co-organised/endorsed conferences (on multidisciplinary environmental issues relevant for the region) followed up by special issues of international peer-reviewed journals.

WP6. Intense management:

The objective of WP6 is to ensure successful project implementation and post-project sustainability. The general management is the task of the Coordinator (Prof. Kalev Sepp of P1) and the Vice-Coordinator to be supported by the Steering Committee and coordination team. The coordination team also includes leads of each of the WPs. The experience of these institutions in the development and support of international partner networks, including Erasmus Mundus Master's programs, Marie Curie innovative training networks and other Framework Programme and Horizon 2020 research projects is of central importance for successful project implementation.

Partners:

- 1. Estonian Life Science University (EMU), Tartu, Estonia.
- 2. University of Natural Resources and Life Sciences (BOKU), Vienna, Austria.
- 3. University of Latvia (LNU), Riga, Latvia.
- 4. Erda Research Technology Education, Rijswijk, the Netherlands.
- 5. 'RZ. Research. Management. Communication' Company (RZ), Lund, Sweden.
- 6. National University of Mongolia (NUM), Ulaanbaatar, Mongolia.
- 7. Khovd University (KHU), Khovd, Mongolia.
- 8. Odessa State Environmental University (OSENU), Odessa, Ukraine.

- 9. Kharkiv V.N.Karazin National University (KKNU), Kharkiv, Ukraine.
- 10. Institute for the Carpathians' Ecology of the Ukrainian Academy of Sciences (IECNASU), Lviv, Ukraine.
- 11. Hanoi University of Science and Technology (HUST), Hanoi, Vietnam.
- 12. Ho Chi Minh City University of Natural Resources and Environment (HCMUNRE), Ho Chi Minh, Vietnam.

Project duration: 15 October 2017 - 14 October 2020.

Official website of project: http://intense.network/