Establishment of training and research centers and Courses development on Intelligent BigData Analysis in CA (ELBA)

Main aim of the ELBA project is to improve academic capacity of professionals through developing and implementing multidisciplinary package of module based courses for bachelor, master students and professionals of engineering on Intelligent Big Data Analysis (IBDA) in Central Asia countries via collaboration with the industry.

The project is aimed at creating the opportunities in training of highly profiled specialists in the field of Intelligent Big Data Analysis (IBDA) with different multidisciplinary backgrounds and enabling the access to highly efficient modern IBDA instrumentation based on EU expertise and technologies which will contribute to sustainable development of educational institutions, local business enterprises and society at large.

First specific objective on developing multidisciplinary package of the module based courses on IBDA for bachelor and master programs of the partner HEIs and for industry companies in CA by July, 2021 addresses problem of the lack of qualified specialists on innovative fields, specifically on IBDA, of CA partner countries' economies. Support to solve this problem will be provided by the partner HEIs in result of implementation of developed courses on IBDA in curricula of current bachelor and master programs. The package courses being developed will contribute to the modernization of existing curricula by introducing new, innovative subjects on the IBDA. These courses will help to more flexibly meet the needs of the economy for qualified specialists and will strengthen collaboration between HEIs and industry.

Second specific objective on establishing IBDA Centres and academic and professional network of IBDA specialists of CA partner HEIs by October, 2020 addresses problem of insufficient awareness of public society and make decision authorities on innovative technologies, or more specifically, on IBDA. This network will promote both more effective cooperation between the consortium partners, and, after its expansion, further cooperation between Central Asia specialists in Big Data Analysis.

The target groups of the project at the regional level include teaching staff of the partner universities, students of different educational programs, local enterprises, private companies and the specialists employed by them. The first specific objective of the project on developing multidisciplinary package of the module based courses on IBDA for bachelor and master programs in 10 partner universities and for industry companies in CA addresses the needs of academic staff of partner HEIs in training from EU experts on developing module based courses in IBDA, subject oriented English and skills on corresponding software, expansion of academic and research collaboration with the EU and CA universities.

Activities relating to that objective include staff capacity building in EU partner universities, 2-weeks training on IBDA there and 1-week retraining in partner HEIs by EU experts. Also staff trainings on technical English by local teachers are planning in each partner HEIs. Project supposes during implementation close cooperation between CA and EU experts based on EU experience that will be prolonged after project and will support to project sustainability as well.

Needs of the students enrolled in different educational programs in partner universities on enhancing their experience at the international level, with their introduction to the latest developments in the field of information and communication technologies and other related fields are supported by the first specific objective as well. During project students of partner HEIs will participate in testing developed new modern courses on IBDA and they will be taught on those courses during regular programs on bachelor and master

levels. Their international experience will be enhanced by the studying IBDA courses of the EU standards and quality.

Needs of specialists employed by the local enterprises, private companies in keeping their skills and competencies up to date, improving their professional skills in IBDA and needs of those companies for qualified specialists to support on more product effectiveness using IBDA will be supported by the first specific objective that supposes implementing new developed courses on IBDA for the advanced training industry specialists. Those courses will be developed taking into account their application in the industry.

Project target groups in Partner Countries are varied in the fields of industry enterprises where results of the project will be implemented. Analysis of relation between project specific objectives and needs of that target group in each country is similar to one done above. Therefore, we will present only the specific fields of the target groups of the industry specialists benefitted from the project.

Partner Country [Uzbekistan]:

In Uzbekistan Partner HEIs it's supposed to implement developed coursed on IBDA to the trainings of specialists from the automotive industry, industry on the design, construction and operation of roads, on disaster prevention, manufacturing and processing, business forecasting, training of regional HEIs' staff, specialists on desert environment and other engineers.

Partner Country [Kazakhstan]:

In Kazakhstan Partner HEIs it's supposed to implement developed courses on IBDA to trainings of specialists or the mining industry, modern technologies in development of digital economy, ICT specialists from the industry enterprises and companies.

Partner Country [Tajikistan]:

In Tajikistan Partner HEIs it's supposed to implement developed coursed on IBDA to trainings of specialists from the manufacturing and processing, water management, other engineering professionals.

Partner Country [Kyrgiz Republic]:

In Kirgiz Republic HEIs it's supposed to implement developed coursed on IBDA to trainings of the representatives of the stakeholders, specialists on industry technologies.

Designed with the participation of all partners, including European partners, the project meets priorities of the partner countries, the needs of the consortium participants and all target groups of the partners. The work plan agreed with the partners and adequate budget makes the implementation of the project as a whole and the achievement of its goals doable. It makes the set of the project objectives be realistic and feasible.