

SIMULTRA – SIMULATION OF LOGISTICS AND TRANSPORT PROCESSES



PROJECT SUMMARY

Funded of the Erasmus+ programme of the European Union, the SIMULTRA project fits the national and EU strategies for Vocational Education and Training (VET), enhancing the "Dual System" through a closer collaboration between the business system and the Educational one, and widening the use of a work based learning approach. It must be considered that the 7 project partners are an institute of research (ITL - IT), a training centre (CIFPA - SP), a university (Antwerp - BE), a company (Freight Village of Parma - IT), a sectoral association (AFT - FR), and two companies for technologies and communication (Poliedra – IT, Grub Solutions SP). Moreover, are more than 10 the organizations (companies, schools, public authorities) that have already proven their support to the project.

Despite its ancient military origin, only today logistics (the sector addressed by this project) has been recognized as fundamental element for business competitiveness, but also as a pillar for the economic, environmental and social sustainability, and its introduction in the education and training system it is somewhat recent, therefore to be enhanced. For this reason, the project aims to realize six simulation tools, addressing the main sectoral fields, that replicate the operational procedures of these areas, in order to allow to students and trainees the carrying out of the practical, typical and daily tasks that they will have to implement on the job.

The main objective is clearly to facilitate the job inclusion of these medium-high skilled professional profiles (4th and 5th EQF level in particular), reducing the gap between training and education, with their more traditional and theoretical methodologies, and the practical business operativity. The tools will be realized in close collaboration with those working and operational contexts that they will replicate. Products will be the complementary element of the current VET courses and will benefits for the attraction that such ICT tools have in respect of the younger generations, as they will be realized as videogames with different scenarios, scores and stages, matching the uses and the today's technologies, especially for youth.

As mentioned, tools will be referred to six fields of activity (and to six professional profiles linked to these fields) that are highly relevant for the sector: Supply Chain Management, intermodal transport, maritime transport and seaport activities, customs procedures, road transport, warehouse management. For each of these fields the processes will be described, together with the operations, the time scheduling, the other actors involved, the tools and the documents available and to be used. The aim is to design simulation tools or interactive software that replicate the main task carried out by the professionals of the sector.

In particular, it will be realized: an interactive tool for the calculation of the all costs related to the logistics and transport chain, a warehouse management software (WMS) for training objectives, a simulator for the operational management of an intermodal terminal, an interactive tool for the calculation of costs of sea-port activities and the planning of infrastructures and equipment, a simulated role game for the management of customs practices and a simulator for the monitoring of road transport missions. These applications represent the whole supply chain related to a container that from an extra-EU country is shipped to an EU customer, therefore their use allow to provide a comprehensive view of the sector and its main sub-sectors.

The tools will be tested during the project through the wide involvement of teachers and learners, and only after the detection of the users' satisfaction, as well as of the quality of learning, they will be finalized.

A specific technical and training documentation will be prepared to support the use: a user manual for the functioning, manuals on technical contents and knowledge related to the simulated procedures, Competence (according to ECVET method) and Educational Standards for the inclusion in training courses and the transparency of learning outcomes.

Expected impacts refer to increased operational skills of learners, to ease the job inclusion, making the training for the sector more attractive, thanks also to an innovative and quality-oriented methodology that merges the training competences with the business operations, and that can be complementary to actual and future courses. The launch of a collaboration between schools and companies will allow the creation of new initiatives, but also an eventual enlargement of the project results (parameters, stages of simulators).

PROJECT PARTNERS

ITL – Institute for Transport and Logistics Foundation (Italy) - Coordinator

CePIM - Freight Village of Parma (Italy)

POLIEDRA (Italy)

University of Antwerp (Belgium)

CIFPA - Vocational Training Centre of the Aragon Region (Spain)

AFT – Association for the Development of Vocational Training in Transport (France)

Grub Solutions S.L. (Spain)

PROJECT DURATION: 2 years (1st October 2017 – 30th September 2019)

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