
## ENHANCED DATA MANAGEMENT TECHNIQUES FOR REAL TIME LOGISTICS PLANNING AND SCHEDULING

**LOGISTAR** ("Enhanced data management techniques for real time logistics planning and scheduling") is a EU research project funded by the European Commission under the Horizon 2020 programme, which was launched in June 2018. It will last for three years, until June 2021.

**LOGISTAR** is aimed at allowing effective planning and optimizing of transport operations in the supply chain by taking advantage of horizontal collaboraMtion relying on the increasingly real-time data gathered from the interconnected environment.

For this, a real-time decision-making tool and a real-time visualization tool of freight transport will be developed, with the purpose of delivering information and services to the various agents involved in the logistic supply chain, i.e. freight transport operators, their clients, industries and other stakeholders such as warehouse or infrastructure managers.

### PRESENTATION

LOGISTAR project started in June 2018 with a kick-off meeting in Bilbao (Spain). Since then, the whole LOGISTAR team has been working to settle the basis of the project, with special focus on the user's need and system requirements definition. In the three years lifetime of LOGISTAR, all the partners will work to achieve the proposed challenges in order to meet the technical objectives and contribute to setting the global objectives closer.

LOGISTAR expects that matching projected demand patterns with information regarding transport modes and locations of factories and warehouses will enable informed decisions based on the performed analysis. The project addresses several advances beyond the State of the Art, framed in the field of smart algorithms for data processing: Artificial Intelligence focused on prediction, parallel hybrid metaheuristics for optimization, automated negotiation techniques, and constraint satisfaction problem solving techniques. The project will be deployed in three Living Labs to test its effectiveness in real operation environments. LOGISTAR seeks to improve the logistic infrastructure by means of the use of cutting-edge ICT technologies. It aims to reduce the distribution cost in a 5 to 10%, loading factors (up to 10%) and to enhance the synchromodality, as the use of different transport means

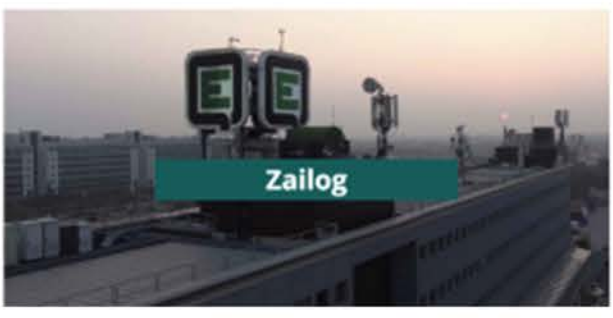
### PROGRESS

In the first months of the project, the LOGISTAR partners were working on the identification of end user needs and system requirements to ensure that LOGISTAR develops tools that are necessary and will be used by logistics companies.

Over a period of four months between August and November 2018, 21 interviews with companies from a range of industry sectors in five different countries were conducted. They represented retailers, manufacturers, logistics service providers and a rail freight terminal operator. The outcomes from these discussions identified not only how the current supply chain operations are conducted, but also identified weaknesses in the current systems.

The information collected during the interviews was then collated and a coherent list of user needs and system requirements was produced. The list will now serve as the basis for further project work and the development of the LOGISTAR services. mmediate steps for LOGISTAR Consortium include finishing the data collection activities covering the identification, specification and processing of every data source requested for implementing the system requirements identified and the definition of the three Living Labs where the solution will be piloted.

## Get to know LOGISTAR partners




**Zailog scarl** was created by the idea of Consorzio Zai (the infrastructure manager of Interporto Quadrante Europa of Verona) and Quadrante Servizi (service provider, shunting and terminal operator). The aim of Zailog is to carry out research and development activity to improve the existing freight village services and to find new business models in the logistics sector, in particular in the combined transport. It shares its knowledge with the Italian industry and especially with the companies placed inside the Interporto of Verona area.

The roles of Zailog in the LOGISTAR project are different. Firstly, it is the leader of the communication. Therefore, it has the duty to spread the results of the project both inside the partnership and externally. For this reason, it developed some dissemination tools to make more effective the disclosure of the project outputs.


**Preston Solutions Ltd** was incorporated in 1999 and has two divisions: systems engineering and supply chain planning.

The role of Preston Solutions Ltd in the LOGISTAR project are varied. One is to establish a set of user requirements and from this, define the functionalities to be developed. This will be achieved by interviewing a wide range of shippers to understand their supply chain networks and transport operations and the systems they use to support this. In addition, the company will be involved in a strategic assessment of company flow data to identify supply chain efficiencies and collaboration opportunities. The final role in the project involves user engagement and the definition of the use cases. The outcomes from the use cases will be monitored and assessed as to whether they have achieved their goals, with opportunities for business improvement and further use cases identified.

## Events

**TRANSPORT LOGISTIC**
**June 4 - 9, 2019**

**IPIC**
**July 9 - 11, 2019**

## Policy News

Multimodal and combined Transport | Interoperability | Safety

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