Category: Crossmodality

Country: Spain

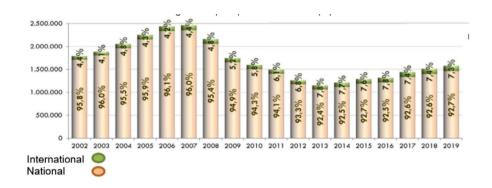
Research Area 1: Smart Solutions & Society

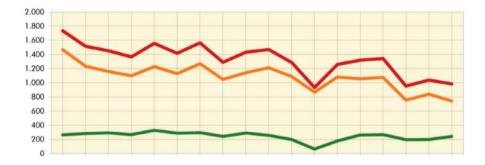
Idea Number: 109



Development of a DSS and prioritization of criteria for synchromodality in transport operations.

Logistics service providers must effectively employ real-time information and integrate new technology into their operations so that it becomes demand-driven. Synchromodal logistics is a new type of logistics that aims to improve supply chain flexibility, stakeholder cooperation, and resource use. This project, called SYNCHRO-NET, is aimed at reducing stress in modern supply chains caused by increasing transportation distances, increased complexity, and susceptibility. The SYN-CHRO-NET concept encourages intelligent coordination that allows a complicated supply chain to be efficiently and optimized. This paper presents a decision support system that incorporates professional evaluation of criteria involved in synchromodal operation. Based on the three primary parameters that affect operations, the decision support system enables the establishment of synchromodality in a transportation operation (economic, operational, and environmental). Many factors, such as the routes geography, the structure of the terminal, and others, can impact the decision. This study will give specialists evaluating synchromodality more freedom, because the tool will allow them to change the weight of the various criteria, based on the evaluation scenario. The base case is built on the integration of expert opinions from several domains, such as transportation, government, and logistics, and is open to the addition of new viewpoints throughout time. The new platform will be able to build a robust database, based on the results of companies that will be collected for the main source for the future customer in the same area. Cooperation amongst other logistic organisations working in this research will be used to test the whole platform's efficiency.





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