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OVERVIEW AND SYNERGIES IN ESA IAP TRANSPORT & LOGISTICS PROJECTS

Abstract

International transport has been growing at a very high rate during the last decades causing a considerable congestion in the European transport systems, mainly on the roads and harbors. The importance of monitoring and optimizing the transport and logistics sector is very well recognized by the European communities and institutions as well as the need for reducing the impact of the traffic congestion on the surrounding environment and air quality. These issues have led to the need of providing better solutions and develop reliable services for tracking, management and response in particular when intermodal transportation is involved, requiring movement by road, rail and water, sometimes across international borders. To address these challenges, several projects have started under the umbrella of the Integrated Applications Promotion programme of the European Space Agency, commonly known as IAP, to develop solutions that combine the capabilities of terrestrial systems with those that can be provided from space. These include satellite navigation, earth observation and telecommunications. The paper provides an overview of the current ESA IAP projects in the thematic area of transport and logistics providing details on the addressed markets, involved users, technologies, space assets and developed services. Each project is user driven and quite individual in its own characteristics but there are commonalities which can be identified in terms of markets, space assets used and services. The paper will address the challenging aspect of identifying synergies amongst the projects, which could allow: • Identification possible partnerships between projects; • Exchange solutions for "horizontal" activities, such as system architecture, evaluation, communication; • Provision of guidelines for the development of transport applications; • Promotion of common specifications, standards and practices Another important aspect which is analyzed in the paper is related to the users of the projects, which can be classified in different categories with common needs and requirements.