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Abstract: Nowadays, the cooperative intelligent transport systems are part of a largest system. Transportations are modal operations integrated in logistics and, logistics is the main process of the supply chain management. The supply chain strategic management as a simultaneous local and global value chain is a collaborative/cooperative organization of stakeholders, many times in co-opetition, to perform a service to the customers respecting the time, place, price and quality levels. The transportation, like other logistics operations must add value, which is achieved in this case through compression lead times and order fulfillments. The complex supplier's network and the distribution channels must be efficient and the integral visibility (monitoring and tracing) of supply chain is a significant source of competitive advantage. Nowadays, the competition is not discussed between companies but among supply chains. This paper aims to evidence the current and emerging manufacturing and logistics system challenges as a new field of opportunities for the automation and control systems research community. Furthermore, the paper forecasts the use of radio frequency identification (RFID) technologies integrated into an information and communication technologies (ICT) framework based on distributed artificial intelligence (DAI) supported by a multi-agent system (MAS), as the most value advantage of supply chain management (SCM) in a cooperative intelligent logistics systems. Logistical platforms (production or distribution) as nodes of added value of supplying and distribution networks are proposed as critical points of the visibility of the inventory, where these technological needs are more evident. (C) 2009 Elsevier Ltd. All rights reserved.

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