

Special Session title

Advances in methods, technologies & tools for Innovative city logistics solutions

Special Session proposer(s)

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Abstract

This session aims to highlight recent developments and advances in city logistics and to discuss the robustness and applicability of innovative solutions proposed for last mile delivery. Urban freight transport causes the 30%-35% of total emissions in cities and is a complicated urban planning & management problem associated to many challenges like increasing levels of traffic congestion, increasing demand due to e-commerce, pollution and energy consumption.

To cope with this complexity, new city logistics solutions were considered & being developed. Most of them enabled by Intelligent transportation Systems - ITS and others by disruptive technologies like CAV (Connected and Autonomous Vehicles). Many solutions aim at increasing efficiency of urban freight transport systems through demand-oriented adaptation of the logistics facilities structures & better operations, improvements in routing, accurate methods for demand prediction and expansion of real-time-based information management. While research makes available new tools & methodologies for optimizing last mile operations & use of resources, and the industry applies innovative, collaborative and sustainable city logistics schemes in response to the corporate social responsibility of shippers and freight carriers, main questions remain open. What is the real impact of the solutions in environment and which are the success factors for their vast taken up? How these solutions will become part of the planning process of the cities and how technologies will disrupt the city logistics sector and influence new business models development? This special session will provide the audience with: a) state of the art methodologies & tools for optimizing city logistics operations in the e-commerce era, b) results of disruptive technologies implementations in last mile delivery, c) needs for further research and innovation and d) opportunities for joint academia & industrial research in the field of sustainable & innovative city logistics.

Keywords

- Intelligent Logistics
- Data Mining and Data Analysis
- Network Management

Topics of interest

- Autonomous vehicles for last mile deliveries
- Demand forecasting for e-commerce city logistics
- Big data analytics for urban freight transport
- City logistics planning
- Collaborative sustainable city logistics



The 23rd IEEE International Conference on
Intelligent Transportation Systems



- Optimization technics for fleet management
- Traffic management for freight vehicles