

ITS 2019 Singapore
Special Session AP-SIS964: TFMI
Part III: Intelligent Multimodal Urban Freight and Urban Logistics
Wednesday 23 October 2019 | 16h00 - 17h20 | Room 327

Report of the session

This session examined how Intelligent Transport Systems (ITS) are changing urban freight transport operations and policies in cities around the world. After moderator Laetitia DABLANC (IFSTTAR) presented the issues, identifying consumer demands and the need for a cleaner urban environment as two major drivers of change, speakers from the United States, Asia and Europe presented solutions designed and implemented to optimize urban freight.

Wen Tung CHIU, of the Singapore Urban Redevelopment Authority (URA), presented freight planning issues in Singapore, using case studies on port and site logistics. Moshe BEN-AKIVA, MIT and MIT SMART Centre in Singapore, presented online detection and analysis as new methodologies for delivery optimization. Marcel HUSCHEBECK, from PTV and ALICE European Platform for logistics, then spoke about service-oriented urban logistics and the importance of cooperation in urban freight solutions. Sanggyun KANG, Korea Transport Institute (KOTI), discussed e-commerce deliveries in Seoul and new ways to manage them. Matthias WINKENBACH, MIT Boston, Megacity Logistics Lab and Visual Analytics Lab, presented new delivery models and new delivery concepts and vehicles. Finally, Joelle VAN DEN BROEK, TNO, Netherlands, presented her roadmap for intelligent mobility in the Connected and Automated Transport Living Lab.

A round table with the speakers was then organized to answer questions from the audience. In particular, the very rapid development of e-commerce and on-demand deliveries has been discussed, as it seems to significantly increase freight flows in cities. Technological developments are facilitating the optimization of urban supply chains, including advanced automation and connectivity in warehouses for the near future; and in the longer term, also for freight vehicles. Companies, from start-ups to very large groups, are designing new vehicles for the delivery of goods in cities, from cargo bikes to urban barges and drones. However, costs are sometimes an obstacle to the deployment of new innovative technologies for urban logistics.

The round table ended with a discussion on the role of local and national governments in better organising transport and logistics: to what extent should they intervene? For the majority of speakers, urban public authorities will have to intervene more, particularly for the regulation of polluting vehicles, enforcement of rules, incentives, including financial incentives for changes in practices towards more sustainable urban logistics services.