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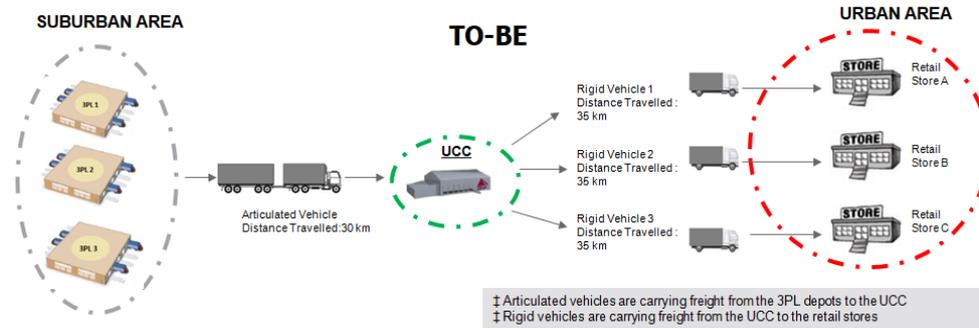
Policy implications for urban logistics: Insights from three major European cities

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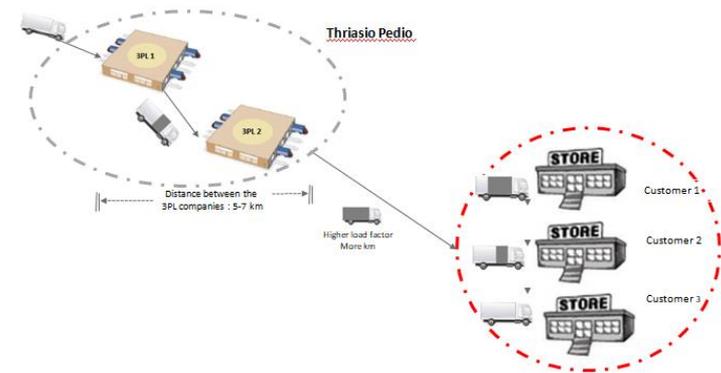
Pilot 1: Concept and main results (Athens)

Two collaborative cases have been examined

Case A: UCC



Case B: Shared vehicle



Main results

Case A

- 5% reduction in the total costs
- 7% reduction in the CO₂ emissions within the city centre (last mile)
- 10% reduction in the vehicles used during the last mile
- 19% reduction in the total distance travelled
- 11% increase in the total number of delivery points visited per trip (last mile)

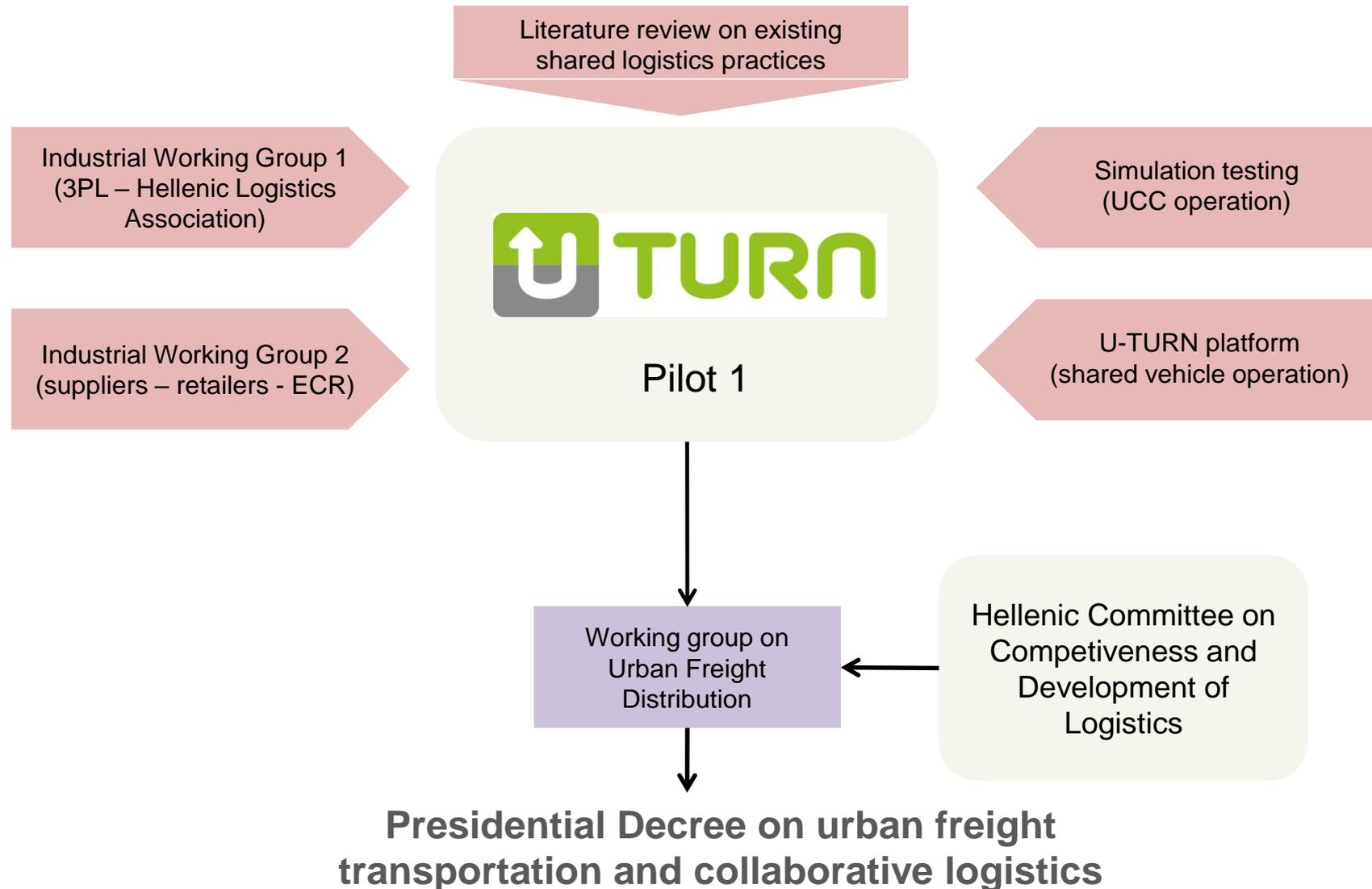
Case B

- 21.5% of the total loads and 48.5% of the total vehicles uploaded were matched
- 8% increase in the sectors (i.e. post codes) served by a vehicle
- 11% increase in the vehicle loading factor

The challenges for a successful UCC operation: Lessons learned from Pilot 1

- The UCC should handle high volumes of goods in order to optimize the vehicles' loading factor.
- The UCC operation is optimal when the delivery points are close enough, in order to minimize travel time
- The location of a UCC is crucial for its viability. The UCC should be close to the distribution areas
- Support (and often participation) of local public authorities (e.g. Municipality) is particularly important.
- Development and implementation of specific legislation in favor of the UCC operation (e.g. free movement of UCC vehicles within Low Emission Zones, use of bus lanes, special parking zones for deliveries)
- Wide acceptance of the UCC by all stakeholders

U-TURN results shaped the law of urban freight distribution and collaborative logistics in Greece



Pilot 2: concept and main results (Milan)

Pilot 2 focuses on the distribution of fresh food from local producers in the urban area of Milan, aiming to improve the efficiency of the transport operations, cutting down the delivery costs incurred by farmers and reducing the environmental impact. These objectives could be achieved adopting a collaborative strategy for the transport and logistics operations.

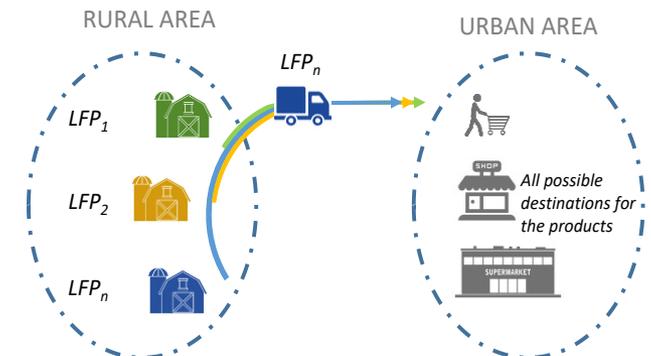
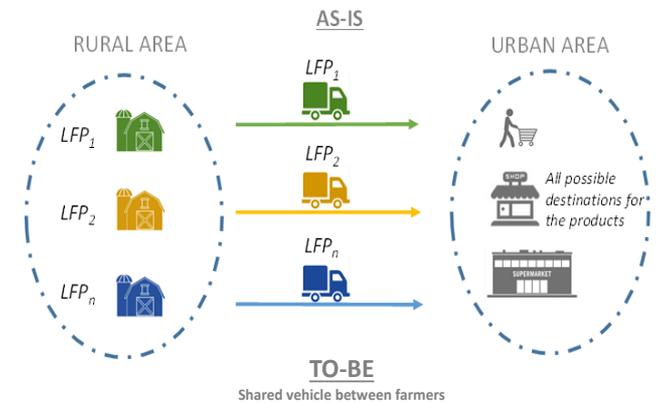


AS-IS scenario - Food deliveries are made by farmers independently, without any collaboration and using their own vehicles

TO-BE scenario - Some farmers collect goods in rural area and distribute in Milan, sharing their vehicles

Main results are:

- more than **80%** of collaborative deliveries
- about **20%** overall reduction in travel distance
- **20%** reduction in total emissions



U-TURN perspectives in Milan

City of Milan promoted urban food policy towards a **sustainable food system** and following a group of pilot cities generated **Milan Urban Food Policy Pact (MUFPP)**.

Pilot results support the above and form basis for **future debates** and **policy evaluations** in respect to the link between **rural area and city centre**.



The 5 priorities for the Milan Food Policy:

1. ensure healthy food and water for all citizens
2. promote the sustainability of the food system
3. promote food education
4. fight against food waste
5. support scientific research in agricultural sector



MUNICIPALITY OF MILAN



MILAN URBAN FOOD POLICY PACT

Pilot 3 – Grocery retailers & last mile deliveries (London)

Background

- The UK eCommerce grocery market is significantly challenged of the cost burden of last mile distribution and the need to satisfy a complex mix of customer service options
- Pilot assesses opportunities for micro hubs to reduce costs & improve customer service

What we did

- Three different supply chain structures were identified with the micro hub playing a different role in each case and then the scenarios were modelled to identify potential benefits

New Delivery Models - Recap



Different 'To Be' models to be studied:

1. Shared Micro-Hubs and shared last mile delivery from these Micro-Hubs to the customers' houses
2. Shared routings / trucks from retailer picking locations to shared Micro-Hubs without considering the customer delivery
3. Shared Micro-Hubs where customers collect their online orders

Results

With a focus on the last mile delivery journey, the benefits include:

- 25% reduction in travel distance
- 40% reduction in number of trucks
- 50% increase in fleet utilisation

Pilot 3 ... Micro hub concept in action

Supporting a new London Initiative



Sainsbury's trials UK's first grocery deliveries service by zero emission electric cargobike

- e-cargobikes delivered online orders to customers in London from April 17th 2018
- Shows Sainsbury's strategy to serve customers whenever and wherever they want

Pilot 3 ... Supporting a new London Initiative

U-TURN has been supporting and coaching the E-Cargo Bikes team through their development of the trial with Sainsbury providing:

- Regular sense checks and options of their business planning and design
- Data from U-TURN to validate likely volumes and drop densities to arrive at the 2 to 3.5 mile radius number
- Support for design of the early trial runs, timing and productivity potential
- Coaching on the sales engagement and contractual expectations when opening discussions with the retailers
- Reviews for route data provided by retailers and working on consequent productivity assumptions
- Creating revenue, cashflow and investment models

Final Thoughts: Policy in Urban Transport Collaboration

Policy Challenges:

- Land use and planning for logistics capacity

U-TURN paved the way by generating:

- Unique insights for 3 major cities
- Compelling insights for 3 different supply chain structures

- Major Impact / Shaped new Law (Pilot 1)
- Platform for future policy evaluations (Pilot 2)
- Influence & support to stakeholders / New Business Model (Pilot 3)

Thank you!



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