



What have we been learning in SPOTLOG?



The SPOTLOG Interreg Europe Project started on March 1 2023 and it has been full of interregional and learning activities. The project focuses on involving local communities in creating socially responsible logistics systems, based wherever possible on zero-carbon modes, through the intelligent use of all available resources and taking advantage of the digitalisation of goods and passenger transport services. By focusing on low-density communities and medium-sized cities, SPOTLOG partners aim to improve regional policy instruments toward the European goals of inclusive and carbon-neutral mobility.

Based on the Exchange of Experience through interregional cooperation, the SPOTLOG partnership highlights potential solutions for improving last-mile logistics in a more sustainable and efficient way.

Low Investment Solutions:

1. Optimized Routing and Scheduling:

- **Description:** Utilizing advanced software and algorithms to plan the most efficient delivery routes, considering traffic, time windows, and delivery density.
- **Benefit:** Reduces fuel consumption, delivery time, and overall costs.

2. Delivery Time Window Management:

- **Description:** Allowing customers to select specific delivery time slots, improving first-time delivery success and reducing redelivery attempts.
- **Benefit:** Increases customer satisfaction and reduces delivery failures.

3. Improved Communication and Real-Time Tracking:





- **Description:** Providing customers with real-time updates on their delivery status through mobile apps or SMS notifications.
- **Benefit:** Enhances transparency and reduces customer anxiety.

4. Flexible Delivery Options (e.g., "Leave at Door" Instructions):

- **Description:** Giving customers the option to provide specific delivery instructions, such as leaving packages in a safe place.
- **Benefit:** Increases delivery flexibility and reduces failed deliveries.

5. Partnerships with Local Businesses (Click and Collect Points):

- **Description:** Using existing local stores as pickup points for customers.
- **Benefit:** Low startup cost, utilizes existing infrastructure, and increases foot traffic for local businesses.

Medium Investment Solutions:

6. Cargo Bikes and E-Cargo Bikes:

- **Description:** Using electrically assisted or traditional cargo bikes for deliveries in dense urban areas.
- **Benefit:** Reduces emissions, navigates congested areas easily, and lowers operational costs compared to vans.

7. Parcel Lockers (Open Access):

- **Description:** Installing publicly accessible lockers where customers can pick up their packages at their convenience.
- **Benefit:** Reduces failed deliveries, provides 24/7 access, and increases customer convenience.

8. Micro-Consolidation Hubs (Basic Setup):

- **Description:** Establishing small, strategically located warehouses within urban areas to consolidate packages for final delivery. These hubs can be basic warehouse spaces.
- **Benefit:** Reduces delivery distances, improves delivery efficiency, and allows for the use of more sustainable delivery methods.

9. Dynamic Delivery Pricing:

- **Description:** Adjusting delivery fees based on factors like delivery time, distance, and demand.
- **Benefit:** Optimizes delivery capacity and encourages customers to choose off-peak delivery times.



High Investment Solutions:

10. Automated Guided Vehicles (AGVs) and Delivery Robots:

- **Description:** Deploying autonomous robots or AGVs to deliver packages in specific areas.
- **Benefit:** Reduces labor costs and provides 24/7 delivery capabilities.

11. Drones:

- **Description:** Utilizing drones for fast and efficient delivery of small packages, especially in remote or hard-to-reach areas.
- **Benefit:** Reduces delivery time and improves accessibility.

12. Advanced Micro-Consolidation Hubs (Automated):

- **Description:** Building highly automated micro-consolidation hubs with advanced sorting and handling systems.
- **Benefit:** Maximizes delivery efficiency, reduces labor costs, and improves package tracking.

13. Dedicated Electric Vehicle Fleets:

- **Description:** Replacing traditional delivery vehicles with a fleet of electric vans or trucks.
- **Benefit:** Reduces emissions, lowers fuel costs, and enhances brand image.

14. Smart Parcel Lockers (Advanced):

- **Description:** Parcel lockers with advanced features such as temperature control, and integration with delivery companies systems.
- **Benefit:** Improves the delivery of temperature-sensitive goods, and provides better security.

SPOTLOG: Paving the Way for Smart and Sustainable Logistics

The SPOTLOG project has been focused on fostering interregional collaboration to enhance sustainable logistics solutions, particularly in low-density communities and medium-sized cities. By leveraging digitalization and community involvement, the project has explored a range of solutions, from low-investment strategies like optimized routing and real-time tracking to high-investment innovations such as automated delivery systems and electric vehicle fleets. These efforts aim to create more efficient, environmentally friendly last-mile logistics while aligning with European goals for carbon-neutral and inclusive mobility. The exchange of experience among partners has provided a valuable contribution to increasing partners and stakeholders capacity to implement cost-effective and scalable solutions for sustainable logistics.

Check more [here](#)!