GRETA latest results in urban logistics innovation and final events

Welcome to the sixth and last edition of the GRETA Project Newsletter! As the GRETA project **approaches its official conclusion**, implementation and data-collection activities are almost complete, as five Functional Urban Areas (FUAs) have concluded the core implementation phase of their pilot actions. Over the past two years, cities and partners have worked closely to **test innovative solutions** combining governance models, regulatory measures, digital tools and infrastructure interventions. While each pilot addressed specific local challenges, they were jointly implemented under a shared objective: improving the sustainability and efficiency of urban freight systems while ensuring economic viability and operational feasibility for both logistics operators and public authorities.
The final phase of the project has therefore focused not only on **delivering tangible results through pilot actions**, but also on **analysing lessons learned, identifying enabling conditions and defining realistic pathways for scaling up**. The experience gained across FUAs and throughout all project activities has been consolidated into a **structured training course** comprising different modules, which will soon be available on OPEN ENLOCC's website.

The following sections present the main outcomes of the Final Conference held on 18 February 2026 in Bologna, organised alongside the Urban Mobility and Logistics Conference 2026., as well as an overview of the results **and reflections on pilot actions** implemented across GRETA's FUAs.

Final Conference held in Bologna: from pilot results to cross-fertilization and future capacity building

The GRETA Final Conference brought together policymakers, researchers, logistics operators and European initiatives active in the field of sustainable freight transport. After the welcome address by the Lead Partner, the **GRETA project was presented**, retracing the main objectives, partnership structure and key milestones.

One of the central moments of the event was the **roundtable session** entitled "***From pilot actions to practice: Results and future pathways from GRETA's FUAs"***, which gathered representatives from the pilot cities of Budapest, Maribor, Poznań, Reggio Emilia and Verona.
Through an interactive session, partners discussed not only the **tangible results** achieved – in terms of reduced emissions, improved organisation of deliveries and stakeholder

involvement – but also the **conditions that made a successful implementation possible**. A key message emerging from the debate was that pilot actions are most effective when they are embedded in a **clear regulatory framework**, supported by **political commitment** and accompanied by **early and continuous stakeholder engagement**. Participants also stressed that **scalability** depends on combining technical reliability, sound governance models, financial feasibility and integration into existing planning tools such as SUMPs and urban logistics plans

The project officer Claudia Pamperl from the **Joint Secretariat of Interreg Central Europe** also addressed the audience, highlighting how **GRETA embodies the core values of transnational cooperation promoted by the programme**. She stressed that cooperation is essential to build solidarity across regions, achieve synergies through shared knowledge and resources and deliver tangible change by testing innovative solutions in real-life settings. In this perspective, GRETA's partnership, its five pilots and its capacity-building actions were presented as concrete contributions to the greening of urban freight transport in Central Europe, with strong potential for further capitalisation and uptake in the next programming period.

The second session, organised as the ***5th Workshop of the Permanent Working Group***, focused on **capacity building for smarter urban logistics**. GRETA partner OPEN ENLoCC presented the **training course** developed within the project, which will be available within the end of the project on the partner's website. The aim of these training modules is to **transfer knowledge and practical tools** related to urban logistics to policymakers and operators working in Central European FUAs and beyond.

External contributions further enriched the discussion: Speaker from **EIT Urban Mobility, Wiebke Muller,** illustrated its role in supporting cities in testing and scaling innovative mobility solutions through a dedicated funding programme, while project manager from **URBANE project** (*Upscaling Innovative Green Urban Logistics Solutions Through Multi-Actor Collaboration and PI-Inspired Last Mile Deliveries*), John Limaxis of Inlecom Innovations, shared experiences on deploying urban logistics innovations through living labs across Europe, whose results are expected to lead to cross-fertilization and operational improvements. Lastly, the **HALLO project** (*Hubs for Last Mile Delivery Solutions*) was presented by Paco Gasperin from CIMNE Barcelona, with a focus on its

approach to fostering collaborative and sustainable last-mile solutions based on the creation of shared urban consolidation and distribution centres (UCDCs) through a series of pilots in Barcelona and Stockholm.

Together, these contributions highlighted how **capacity building, knowledge exchange and cross-project synergies** are **essential to accelerate the transition** towards greener and more efficient freight systems.

Update on the pilot actions in GRETA FUAs: local solutions to shared challenges

In Reggio Emilia, the pilot centred on the co-creation and testing of a collaborative governance model for an **urban micro-hub serving the city centre**. From the outset, the municipality adopted a participatory approach, establishing a Freight Quality Partnership (FQP) as a permanent working group between public authorities and transport operators. Through dedicated workshops and technical meetings, the **governance model** was designed together with stakeholders rather than imposing it to them.

The micro-hub was conceived as a **modular space** within which each operator has its own dedicated area, while the transhipment zone is shared and used by conventional vans to deliver parcels to the hub, where goods are transferred by cargo bikes for last-mile distribution in the city centre. In this framework, the municipality provides the space and regulates the access to the micro-hub, while **operators maintain full independence over their internal processes** and share operational data. This approach proved crucial to ensure acceptance. **Engaging operators** was **challenging**, as any perceived increase in risk or complexity could undermine participation. **Predictability in regulation** therefore became a key factor: clear rules and progressive environmental requirements allow companies to plan investments in the long term.

The pilot also demonstrated how **space can become a powerful lever for sustainable logistics**: by offering a strategically located site close to the city centre, the municipality created a practical alternative to conventional deliveries.
During the testing phase, the hub supported approximately **720 deliveries** and enabled around **600 km to be cycled by cargo bikes**, providing an initial quantitative basis for assessing environmental and operational impacts. The micro-hub is expected to reach full capacity in the short term – with interest also expressed by Poste Italiane – while a **business model based on operators' fees** will support its financial sustainability. In the medium and long term, the city foresees additional micro-hubs and the development of a curbside management platform integrated with the hub. Cameras in the city centre will further reinforce the regulatory framework.

The experience ultimately demonstrated that **scalable solutions do not necessarily require costly infrastructure,** but rather **clear rules, stakeholder trust and adaptable governance models**.

Branding, location and structure of the microhub in Reggio Emilia FUA

Maribor FUA – Establishing a micro urban consolidation centre at the edge of the pedestrian zone to streamline deliveries in the historic centre

In Maribor, the pilot focused on establishing a **micro-hub at the border of the pedestrian zone** to enable deliveries with zero-emission vehicles. The intervention area covers a historic city centre of approximately 1.2 km², including a 0.26 km² pedestrian zone expected to expand in the coming years. By locating the micro-hub at the border of the pedestrian area, the municipality created a consolidation point enabling last-mile deliveries with zero-emission vehicles (ZEVs) therefore allowing **deliveries also outside the traditional 5–10 a.m. time window**.

The initiative started with the preparation and distribution of a **dedicated survey**, which involved **72 businesses** in the city centre. Participants stressed the **need for more flexible delivery arrangements**, as most parcels are small and many deliveries occur in the afternoon using diesel or petrol vans.

The micro-hub offers a **practical response to these needs**, allowing transhipment from vans to clean vehicles and supporting the gradual expansion of the pedestrian area. The FQP also played an important advisory role, facilitating dialogue between stakeholders and local authorities as well as supporting the development of the city logistics plan.

Implementation was not without challenges: obtaining permissions and coordinating with broader urban renovation works in the chosen area led to **substantial delays**. However, **strong interdepartmental coordination and political support** proved decisive.

The micro-hub will enter its operational phase, initially managed by the Mobility centre Maribor and becoming fully integrated into municipal infrastructures. As discussed during

the final event's roundtable, **combining regulatory measures with practical alternatives** is essential to ensure acceptance. While smaller municipalities may face greater difficulties in replicating such infrastructure, Maribor's experience represents a **concrete first step towards the systematic decarbonisation of urban logistics** which could be replicated in other cities facing similar challenges across Slovenia and beyond.

Renders and location of the MUCC in Maribor FUA

Poznań FUA – Operating a microhub to shift parcel deliveries from vans to cargo bikes in cooperation with logistics operators

In Poznań, the pilot tested the **use of a micro-hub combined with cargo bikes for last-mile deliveries**, involving a single operator (GLS). The micro consolidation centre covers an area of 34.8 m² and consists of **two modular units** (6 x 5.8 x 3.2 m), built with approximately 90% recycled materials and equipped with two access gates. During the pilot, GLS used three cargo bikes daily (with potential capacity for four), serving an average of around **20,000 shipments** over the monitored period.

A **comprehensive data collection strategy** was implemented, gathering information from infrastructure (cameras), operator records and GPS sensors installed on three cargo bikes, which tracked location every five seconds. Reconciling these different data sources required significant effort, as discrepancies emerged regarding distances travelled, including walking segments indirectly linked to parcel weight and vehicle type. The experience, therefore, highlighted how complex it can be to **define reliable KPIs** and the **importance of high-quality, usable data for impact assessment**.

From an environmental perspective, the pilot achieved an estimated **29% reduction in greenhouse gas emissions** (corresponding to approximately 1.52 tonnes of CO_2 over six months), assuming the minimisation of electric van traffic supplying the hub. Cargo bikes covered around 31% of the total delivery distance within the test area.
Operationally, delivery efficiency was comparable to van-based distribution, but deliveries required more time and generated at least 6% **higher costs for the operator.**

It must be noted that since the cargo bikes were used only four hours per weekday and by a single operator, their **potential was not fully exploited**. In this framework, sharing resources among multiple operators could significantly improve financial performance. Recipients were generally unaware of the change in delivery method, though feedback on cargo bikes was positive.
Despite bureaucratic hurdles in obtaining permits, the municipality expressed **strong interest in further developing this model,** recognising its environmental benefits and scalability potential.

Structure of the microhub, operator's cargo bike and overview of data collected through GPS sensors in Poznan FUA

Verona FUA – Developing and testing a digital platform for booking and managing delivery bays to improve curbside operations

In Verona, the pilot introduced a **digital curbside management platform combining hardware and software components**. Sensors installed beneath parking lots detected occupancy, while a web application allowed logistics operators to **book loading and unloading slots in real time**. They could also verify the availability of slots beforehand.

Before the pilot, the use of these spaces was often unpredictable, leading to **double parking and illegal occupation** of non-designated areas. During testing, a reduction of **67 double-parked vehicles per month** and **115 empty trips per month** was recorded, corresponding to a decrease of approximately **32 kg of CO_2 per month**. To achieve these results, **LoRaWAN network coverage** was expanded from 4 to 10 gateways, significantly improving sensor reliability and real-time data transmission. In this framework, preliminary assessments of network coverage proved essential to avoid delays.

Beyond the technical dimension, the pilot demonstrated that **scalability depends on organisational and regulatory factors**. Clear and structured rules, strong cooperation with public bodies and an effective communication campaign were necessary to encourage uptake among relevant stakeholders. As operators became familiar with the system, it was increasingly perceived as a **tool to enhance operational efficiency** rather than as a constraint.

Integrating the platform into the broader municipal mobility strategy will ensure that it does not remain a stand-alone experiment but rather becomes part of a long-term vision for transparent and efficient curbside management.

Sensor installed and app dedicated to logistics operators in Verona FUA

Budapest FUA – Implementing and evaluating a curbside management framework to guide the planning of logistics-related street functions

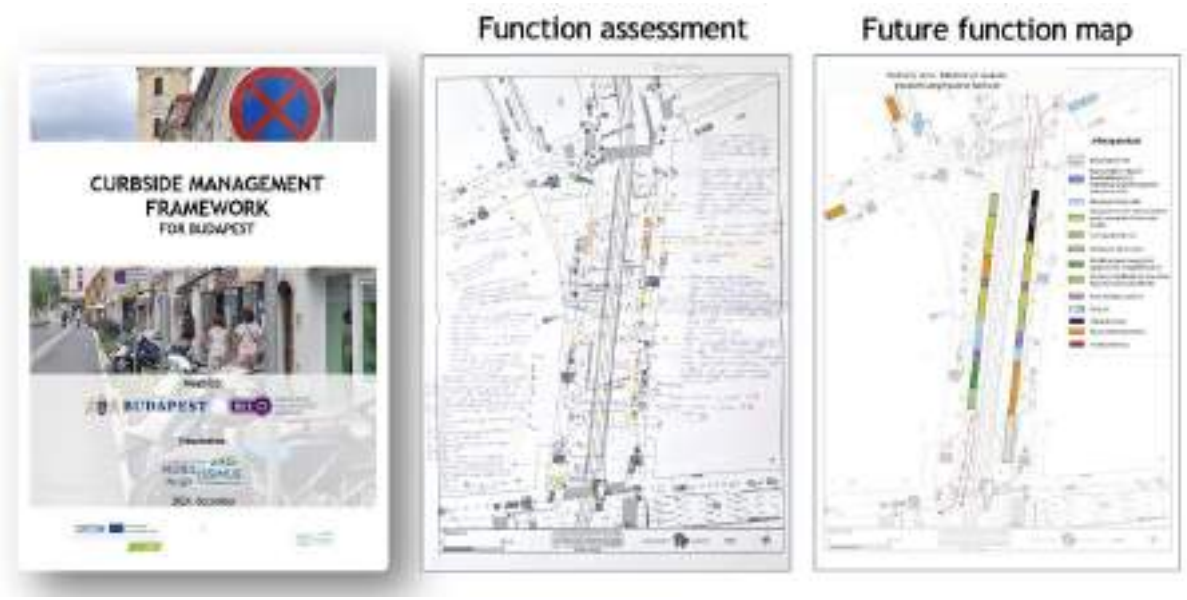
In Budapest, the pilot aimed at creating more liveable and better-managed public spaces through a **structured curbside management framework**. Two pilot areas in different districts were selected to address challenges such as irregular parking, limited space and lack of reliable data. **Static and dynamic data** were collected through **surveys and field activities**, forming the basis for a functional assessment methodology.

This theoretical framework supported the **design and testing of specific interventions**, including short-term parking, dedicated food delivery areas, kiss-and-ride spots, loading

bays and bicycle racks, all defined through a unified methodology for assessing, evaluating and redesigning curbside functions within a dedicated **future function map layout.**

The pilot demonstrated how **data-driven methodologies can guide space reallocation and support evidence-based policymaking**. As highlighted during the final event's roundtable, integrating the curbside framework into the sustainable urban logistics plan and clearly defining the roles of the different authorities were crucial steps, together with establishing a structured monitoring phase.

It should be noted that the methodology has already been **applied on a larger scale in the redevelopment of the Grand Boulevard**, one of the city's main central roads, thus confirming its transferability and long-term relevance beyond the project lifetime.



Example of a function assessment based on Curbside Management Framework in Budapest FUA

Project conclusion. Keeping knowledge and cooperation alive

Although GRETA will formally conclude on 31st March 2026, its **results will remain fully accessible** on the project website, including public project deliverables, pilot descriptions and capacity-building materials developed throughout the cooperation. Moreover, the Final Publication is also available for consultation at the following link.

The partnership built over the past three years has laid the foundations for continued dialogue and future initiatives. **GRETA partners** remain **open to new synergies and capitalization actions at local, national and European level**, with the shared objective of advancing sustainable urban logistics solutions across Functional Urban Areas.

The project may be closing, but the cooperation and the ambition to **shape greener, more efficient freight systems in urban areas** will continue **beyond GRETA**.

Learn more:

- GRETA project website
- GRETA LinkedIn page

Social Media Channels

GRETA-urban-logistics

@Greta_centralEU

Contacts

Institute for Transport and Logistics Foundation

European Project Unit

Contact Person: Ms. Alice Benini

Email: alice.benini@fondazioneitl.org

Address: Via Aldo Moro 38, 40121, Bologna (BO), Italy.

Project Partnership