



THE INSTITUTIONAL DIALOGUE PROJECT OF THE GREEN LIVING AREAS MISSION

SUSTAINABLE URBAN LOGISTICS PLAN (SULP) OF BOLOGNA AS A MODEL FOR GREENER FREIGHT MOBILITY IN THE MEDITERRANEAN

POLICY BRIEF

ABSTRACT

Sustainable Urban Logistics Plans (**SULPs**) are critical for advancing the decarbonisation of urban freight and ensuring logistics integration into wider urban mobility strategies. Urban freight accounts for a significant portion of greenhouse gas emissions, which are expected to increase further with the growing popularity of e-commerce, highlighting the pressing need to optimise logistics systems to reduce these impacts. This brief reflects on the outcomes of the ***First Institutional Dialogue of the Green Living Areas Mission*** (GLA) and the Green Mobility Thematic Working Group roundtable discussion about Bologna's SULP, offering practical guidance for drafting within the framework of Mediterranean urban dynamics. Building on key takeaways from the 1st Institutional Dialogue, this brief highlights the replicability and upscaling potential for the SULP of Bologna. It provides a critical analysis of the Dialogue's comments and inputs, addressing the requirements of the revised Trans-European Transport Network (TEN-T) regulation, the critical role of urban nodes, and relevant tools and resources developed through GLA Thematic Projects.

KEY TAKEAWAYS FROM POLICY RECOMMENDATIONS

- Establish cross-sectoral working groups, bringing together all interested stakeholders.
- Align SULP development with EU, national and regional strategies, (e.g. Revised TEN-T regulation).
- Build your plans using existing tools developed in INTERREG Euro-MED (or other) projects.
- Foster public-private cooperation.
- Collect and analyse data, allowing for collaborative work between interested stakeholders, as well as contributing to optimise delivery routes, increasing efficiency, and reducing emissions.



It also incorporates insights from organisations such as *ALICE-ETP* (Alliance for Logistics Innovation through Collaboration in Europe), *POLIS Network*, and other initiatives advancing sustainable freight strategies. Recommendations target policy-makers in local authorities, urban planners, and stakeholders involved in urban logistics, underscoring the need for adaptability to diverse city typologies, fostering collaboration across sectors, and integrating innovative digital solutions (*European Commission, 2021; TEN-T Regulation, 2022; ALICE, 2023; POLIS Network, 2023*). The brief emphasises the role of SULPs in enhancing urban resilience, reducing socio-economic disparities in freight access, and leveraging advanced analytics to forecast urban freight trends.

Keywords: Sulp, Policy, Sustainable Urban Logistics, Urban Nodes, TEN-T Regulation, Sump, Green Mobility, Climate-Resilient Cities

KEY TAKEAWAYS FROM POLICY RECOMMENDATIONS

- Create urban consolidation centres in the periphery, serving the last-mile delivery with low or zero-emission vehicles.
- Encourage logistics service providers to invest in more sustainable policies, including the transition to zero-emission vehicles, among others.
- Engage businesses, SMEs, and citizens in co-creating logistics solutions to enhance practicality and widespread support.
- Consider specific criteria replicating successful Sulp models, i.e., city typology, the capacity of local authorities, and cultural background.



INTRODUCTION

Sustainable Urban Logistics Plans (SULP) are relatively newer and less widespread planning frameworks when compared to Sustainable Urban Mobility Plans (SUMPs), now also a requirement for the 431 TEN-T Urban Nodes. To face increasing challenges related to the increase in emissions from logistics, paired with scarce space in congested urban areas, cities across Europe are devising SULPs as key guides to face these, and other issues.

The city of Bologna designed its very own SULP as a cornerstone for advancing sustainable freight systems and achieving climate targets in alignment with European and national mobility frameworks, serving as a complementary policy instrument to its already existing SUMP. As an urban node in the TEN-T network, Bologna faces the dual challenge of addressing its unique local needs while contributing to transnational transport efficiency. Further, the city also lies on 3 TEN-T Corridors, a unique characteristic (Scan-Med, Mediterranean, Adriatic-Baltic).

The city's strategic location within the TEN-T core network demands careful coordination between local logistics strategies and broader European objectives for decarbonisation and multimodal connectivity. Expanding on this, Bologna's role as a Mediterranean urban node provides a unique case study in balancing historic preservation with modern logistics requirements.

Incorporating and/or taking inspiration from experiences from other Mediterranean cities, such as Valencia's integration of urban micro-hubs and Barcelona's use of autonomous delivery vehicles, Bologna's SULP has high potential to be a unique replicable model. Furthermore, Bologna's potential to leverage the TEN-T funding framework to support cutting-edge logistics infrastructure, such as hydrogen-powered freight corridors, is a critical opportunity for alignment with European Green Deal objectives (*Municipality of Bologna, 2023; ALICE, 2023; POLIS Network, 2023*).

INSTITUTIONAL DIALOGUE: ACCELERATING MEDITERRANEAN SUSTAINABILITY EFFORTS

On October 10, 2024, the Institutional Dialogue Project of the Green Living Areas Mission hosted its 1st Institutional Policy Dialogue in Brussels in parallel with the European Week of Regions and Cities. The event showcased successful policies with high replicability potential, across thematic domains, including Bologna's SULP in the mobility sector. The Institutional Dialogue aims to bring together policy champions – policy-makers who successfully implemented a given policy instrument in the Mediterranean – with other stakeholders interested in replicating and transferring these policies. The insights gathered shaped the recommendations in this brief, ensuring a practical and collaborative approach.

For further information on the Policy Instrument (in Italian), scan the QR below.



Or visit the Policy Instrument webpage

https://pumsbologna.it/Engine/RAServeFile.php/f/documen ti_approvazione/RELAZIONE/Relazione.pdf



CONTEXT

The revised TEN-T regulation highlights the critical role of urban nodes like Bologna in ensuring seamless freight flows while mitigating environmental impacts. Urban nodes bridge long-distance freight corridors and urban logistics systems and require the development of Sustainable Urban Mobility Plans (SUMP) by 2030, incorporating zero-emission urban logistics aligned with broader TEN-T objectives and including reducing carbon emissions, enhancing digitalisation, and improving logistics system efficiency (*TEN-T Regulation, 2022*).

Mediterranean cities such as Bologna exhibit unique logistical and spatial characteristics that shape their approach to urban logistics. Compact historic centres limit vehicle access, while fragmented suburban zones create challenges for consolidation hubs. Seasonal tourism flows further complicate the balancing act of ensuring efficient freight while preserving livability. Expanding this analysis, the importance of climate-adaptive infrastructure in Mediterranean cities should be emphasised. This includes implementing freight solutions resilient to extreme weather, such as heatwaves, which can disrupt supply chains. Bologna's potential to pilot shared delivery infrastructure that accommodates both freight and passenger needs can position it as a model for integrating logistics into urban mobility systems. Cities like Milan and Nice provide examples of how smart urban nodes can leverage real-time data to streamline multimodal freight corridors (*MEDCOLOURS Project, 2023; ALICE, 2023; POLIS Network, 2023*).

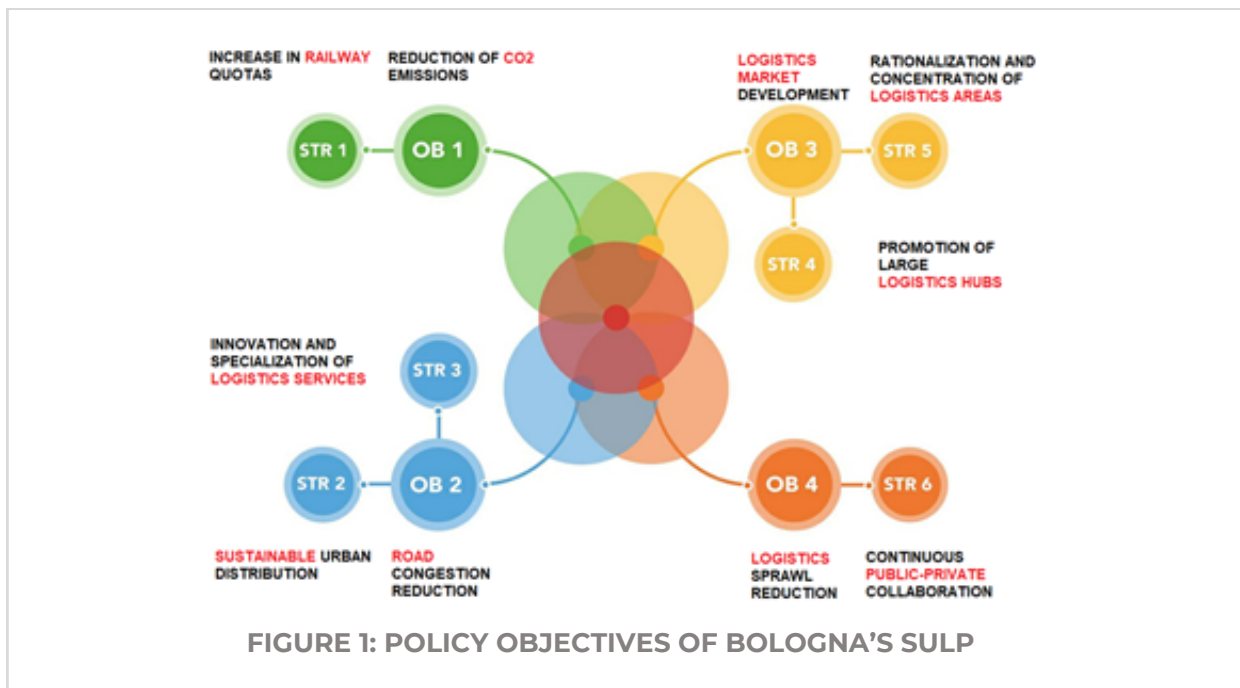
POLICY IN THE SPOTLIGHT

Key frameworks for SULPs include the EU Urban Mobility Framework, which focuses on achieving zero-emission urban logistics by 2030, and the TEN-T Guidelines, which establish requirements for integrating logistics with multimodal transport systems at urban nodes. More recently, the Expert Group on Urban Mobility (EGUM) delivered a set of recommendations, to encourage the adoption of *SULPs at the EU level*, serving as additional guidance to the *SULP Topic Guide* published in 2019. Such frameworks provide a roadmap for local authorities to align their urban logistics strategies with broader EU objectives (*European Commission, 2021; TEN-T Regulation, 2022*), while ensuring that eco-friendly logistics planning is seamlessly integrated into SUMP and SULPs alike.

Moving from EU to the national level, in France, the Ministry responsible for Ecological Transition and Territorial Cohesion selected the InTerLUD programme to create forums for dialogue between public and economic players. The goal was to draw up sustainable urban logistics charters to promote low-carbon, energy-efficient goods transport and helped developing SULPs in 40 French cities. This practice could be used elsewhere in the Mediterranean to enable the development of logistics planning.



Italian policies promoting sustainable freight strategies, such as the National Guidelines for Sustainable Urban Freight, complement these priorities but require adaptation to reflect local contexts (*Italian Ministry of Transport, 2022*). In brief, Bologna Sulp is implementing stricter management of loading/unloading permits and parking rules, enforcing tighter time windows for more polluting freight vehicles, and introducing nearby delivery areas for transshipment from diesel vans to light electric vehicles. To enhance effectiveness, Bologna's Sulp policy landscape could also incorporate the public health impacts of urban freight emissions. The role of zero-emission zones and eco-driving policies, as trialed in Rotterdam and Stockholm, could be considered to further expand the scope of this Sulp, and strengthen its replication potential. Additionally, aligning the Sulp with public transport policies to create synergies, such as shared infrastructure for bus and delivery lanes, can maximise resource efficiency.



ENHANCING THE REPLICABILITY AND UPSCALING POTENTIAL OF BOLOGNA'S Sulp

Governance and stakeholder coordination:

- Establishing a cross-sectoral working group involving municipal authorities, private sector actors, logistics operators, and community representatives to ensure effective coordination of Sulp development and implementation.
- Aligning Sulp strategies with TEN-T and regional plans while fostering stakeholder buy-in (*POLIS Network, 2023*).
- Drawing lessons from Vienna's "Smart Urban Logistics" working groups, which incorporate innovation incubators to test emerging technologies.



Digital tools for scalability and replication:

- Utilising the MEDCOLOURS self-assessment tool and ALICE's digital solutions to create replicable roadmaps for improving logistics operations in other cities (*ALICE, 2023*).
- Customising logistics strategies to Bologna's unique context, including historic centre restrictions and high commuter traffic, while ensuring adaptability for other urban areas.
- Establishing a centralised data-sharing platform, as recommended by ALICE, to optimise delivery routes and enhance coordination among stakeholders.

Public-Private collaboration for sustainable logistics solutions:

- Developing urban consolidation hubs near Bologna's periphery to reduce the number of delivery vehicles entering central areas, cutting emissions and congestion.
- Expanding electric cargo bike programmes and night-time deliveries to enhance efficiency and create a replicable urban logistics model.
- Encouraging SMEs to co-develop innovative logistics solutions aligned with sustainability goals.

Methodology for Replicating Bologna's SULP in Other Cities:

- Creating a comprehensive catalogue of logistics solutions implemented in different cities to facilitate adaptability.
- Developing a replication methodology that considers local factors such as city typology when designing logistics strategies.
- Taking into account specific criteria replicating successful SULP models, i.e., city typology (size, infrastructure, and existing logistics networks), the capacity of local authorities (human and technical resources), and cultural background (local practices, governance structures, and priorities influencing logistics models).

Mobility hubs for last-mile delivery

- Designing mobility hubs at peripheral urban areas or connecting central hotspots, integrating low-emission transport modes to optimise urban logistics.

Effective communication and engagement:

- Strengthening communication between EU institutions and local authorities to ensure logistics guidelines are effectively translated into practice.
- Engaging businesses, SMEs, and citizens in co-creating logistics solutions to enhance practicality and widespread support.



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CONCLUSIONS AND NEXT STEPS

Bologna's Sulp offers valuable lessons for peer cities, particularly in the Mediterranean, seeking to lead in sustainable urban logistics. By aligning local strategies with EU decarbonisation goals and the TEN-T framework, cities can replicate Bologna's approach to achieving sustainability while addressing their unique challenges.

The outcomes of the 1st Institutional Dialogue provide ideas for action, highlighting the importance of tailored solutions, stakeholder collaboration, and the use of innovative tools. Mediterranean cities can draw inspiration from Bologna to enhance their green logistics efforts by establishing knowledge-sharing platforms to spread insights across territories. To stay responsive to emerging technological, regulatory, and environmental changes, cities should continuously evaluate and refine their logistics strategies (*European Commission, 2021; Municipality of Bologna, 2023*).



PROJECT SUMMARY

The Institutional Dialogue Project of the Green Living Areas Mission seeks to enhance policy transfer through dialogue among policy-makers and public stakeholders. It focuses on continuous policy improvement and transformation, and aims to establish long-term cooperation on public policy instruments at the Euro-Mediterranean level, ultimately improving citizens' quality of life.

PROJECT CONTACT INFORMATION

Scan the QR to see the Contact information



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