

FeDerated nEtwork of pLatforms for Passenger and freigHt Intermodality

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D.6.9: Initial Report on DELPHI Networking and Engagement Activities Plan

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Executive Summary

The DELPHI project aims to deliver a framework that allows passenger and freight transport thrive together in cities, through optimised usage of all resources, e.g., urban space, infrastructure, networks, and vehicles. To achieve optimise utilisation of resources, the DELPHI project will work with all relevant stakeholders to facilitate standardised data sharing and information exchange as well as enable policy and regulatory frameworks. Conventionally, practitioners from the public transport and urban logistics sectors do not interact with each other. To achieve the ambitions of the DELPHI project, bringing stakeholders from passenger and freight transport together, as well as policy makers, researchers, city climate action campaigners, etc is essential. Therefore, the DELPHI project has a dedicated task (Task 6.2: Networking, Community Building, and liaison activities) on liaising and engaging with relevant stakeholders. This DELPHI deliverable "D6.9 Initial Report on DELPHI Networking and Engagement, and networking activities to support all project activities and maximize the impact of the project.

The deliverable includes:

- Objectives of networking and stakeholder engagement.
- Identification and definition of stakeholder groups.
- Plan for stakeholder engagement.
- Identification of targeted events for stakeholder engagement and networking.

This deliverable is the first deliverable of Task 6.2 and two more deliverables, namely, D6.10 "Interim DELPHI Report on Networking and Engagement activities plan" and D6.11 "Final Report on DELPHI Networking and Engagement activities plan" will continue reporting on networking and engagement activities of the DELPHI project.



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Abbreviations & Acronyms

| Abbreviation / acronym | Description | |
|---------------------------|--|--|
| AI | Artificial Intelligence | |
| CSA | Coordination and Support Actions | |
| DTLF | Digital Transport and Logistics Forum | |
| EC | European Commission | |
| EEA | European Environment Agency | |
| GHG | Green House Gas emissions | |
| H2020 | Horizon 2020 Research and Innovation Programme | |
| HE | Horizon Europe Research and Innovation Programme | |
| ICT | Information and communication technology | |
| ITS | Intelligent Transportation Systems | |
| JU | Joint Undertaking | |
| КРІ | Key Performance Indicator | |
| MaaS | Mobility-as-a-Service | |
| ML | Machine Learning | |
| РО | Project Officer | |
| TRL | Technology Readiness Level | |
| WP | Work Package | |
| UAM | Urban Air Mobility | |
| UAV | Unmanned Aerial Vehicle | |
| ZLC | Zaragosa Logistics Centre | |



1. Introduction

1.1Purpose of the document

E-commerce and home delivery have been booming for many years due to ubiquitous internet access and wide use of smart phones. COVID-19 has reshaped people's shopping habits and more products have been purchased via e-commerce platforms, e.g., fresh food and daily grocery. At the same time, there are changes in lifestyle, such as living close to the city centre rather than in a sub-urban area, not owning a car. Such a change is jointly driven by further urbanisation, concerns on climate change, as well the improved public transport service, availability of mobility options, e.g., car-sharing, micro-mobility, widely available e-commerce, and home delivery services. While cities are facing the increasing demand for urban freight transport, they also need to continue their efforts on sustainable mobility to meet citizens' travel demands.

Conventionally, public transport (or passenger transport) and freight transport are managed and governed separately in a city administration. Public transport, often seen as one of essential public services provided by a city administration, receives public investment into infrastructure and vehicles and subsidies on operation. Until very recently, freight transport is seen as a private sector's matter and receives no investment. Policies on freight transport from a city administration are often to discourage use of the conversational vehicles and promote smaller vehicles, e.g., cargo bikes. Such policies are often related to low emission zone planning. With the increased traffic flow from urban freight transport including home delivery, associated issues, such as safety and use of urban space, have become challenging and require urgent attentions.

Some practitioners pioneered use of public transport network for freight transport, e.g., the ULaaDs project experimented Cargohitching in several European cities.¹ Optimising the usage of current networks, infrastructure, and vehicles of public transport for freight transport has a potential to address the increased demand of the freight transport for space and vehicles, thus mitigating overall negative impacts of urban transport on the environment and citizens' life 0. Unlock the potential of optimised the usage of all available transport network is key to achieve goals set by EU Green Deal, according to a study from European Environment Agency (EEA) Error! Reference source not f ound..

However, planning, operation and management of passenger and freight transport remain separate. The DELPHI project aims at delivering a framework that allow

¹ https://ulaads.eu/cargohitching/



passenger and freight transport thrive together in cities through optimised the usage of all resources, e.g., urban space, infrastructure, networks, and vehicles. To achieve a optimised utilisation of resources, the DELPHI project will work with all relevant stakeholders to facilitate standardised data sharing and information exchange as well as enabling policy and regulatory frameworks. As conventionally, practitioners from the public transport and urban logistics sectors do not interact with each other. To achieve the ambitions of the DELPHI project, bringing stakeholders from passenger and freight transport together, as well as policy makers, researchers, city climate action campaigners is essential. Therefore, the DLEPHI project has a dedicated task, i.e., *Task 6.2 Networking, Community building and liaison activities* on liaising and engaging with relevant stakeholders.

Activities and results of Task 6.2 will be reported in three deliverables:

- D6.9 Initial Report on DELPHI Networking and Engagement Activities Plan, due in M4;
- D6.10 Interim DELPHI Report on Networking and Engagement Activities Plan, due in M18;
- D6.11 Final Report on DELPHI Networking and Engagement Activities Plan, due in M36.

This deliverable, D6.9, will provide the first version of plan of the stakeholder engagement and liaison activities of the DELPHI project. Based on an initial stakeholder and relevant projects/initiatives mapping, D6.9 analyses specific roles of various stakeholders of urban logistics and passenger transport ecosystems, identifies potential cooperation opportunities, that can deliver mutual benefits for all relevant stakeholders, advancing uptakes of innovative solutions developed by the DELPHI project, thus boost impacts of the project.

1.20bjectives of the networking and engagement activities

Objectives of the networking and engagement activities are to build a community where stakeholders from logistics and passengers transport sectors will come together to discuss their practices, share their experiences, and form partnerships that will lead zero emission urban mobility and improve quality of life in cities. The networking and engagement activities will support all activities of the DELPHI project, particularly in dissemination and exploitation.

1.3 Intended readership

The deliverable D6.9 "Initial Report on DELPHI Networking and Engagement Activities Plan" is a public deliverable, addressed not only to the consortium members, but also to any interested reader (i.e., PU dissemination level). It is primarily written for the European Commission (EC), Project Officer (PO) and the consortium members of DELPHI project, as a useful guidance for the first available communication and



dissemination tools and channels. Nevertheless, special effort and focus have been given on making this report as a stand-alone document and comprehensible for all relevant stakeholders and the general public.

1.4 Document Structure

The document is structured in four sections:

Section 1 introduces the scope of the document including the purpose of this document, the project task related to this deliverable, objectives of networking and engagement and intended readership.

Section 2 presents the strategy of the networking and engagement activities, including objectives of the networking and engagement activities, the methodology of mapping stakeholders, potential networking and engagement and the activity.

Section 3 describes the engagement plan with various stakeholders according to innovations the DELPHI project will develop.

Finally, section 4, provides the document conclusions and summary.



2. Strategy of networking and stakeholder engagement

2.1Types of stakeholders for networking and engagement

The DELPHI project concerns stakeholders of the logistics and passenger transport sectors from companies, governments, research and innovation communities, and civil society.

In the logistics innovation ecosystems, stakeholders are categorised into four groups: companies, government, research and innovation, and civil society². These four categories of stakeholders can also be applied to the public transport sector. The DELPHI project involves both stakeholders from logistics and public transport sectors as shown in Figure 1:

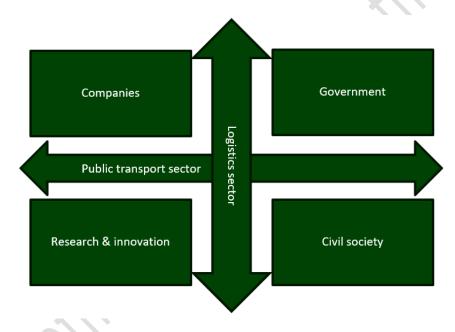


Figure 1 Types of stakeholders for the DELPHI project

Table 1 gives indicative examples of various types of stakeholders:

Table 1 Stakeholder' details

| Category | Sub-category | Examples |
|--------------|----------------------|--|
| Companies | End users of freight | Shippers and manufacturers (cargo owners), |
| and their | transport and | wholesalers, retailers, logistics service |
| associations | logistics system | providers, freight forwarders, postal and parcel |

² The logistics stakeholder category is based on BOOSTLOG deliverable D5.1 Plan for Stakeholder engagement, communications & dissemination 1st version [online]. ALICE website. Available at: https://www.etp-logistics.eu/boostlog [Access 06 September 2023]



| | | operators, carriers/hauliers and transport companies | | |
|--------------------------|--|--|--|--|
| | Public transport companies | Public transport operators | | |
| | OEMs | Vehicle manufacturers | | |
| | Logistics and mobility tool providers | ICT solutions providers, service providers and digital platforms | | |
| | Hubs and logistics note managers | Transport hub operators (e.g. port, railway stations), car park and depots' operators | | |
| Government | Intergovernmental organisations | OECD including ITF and IEA; UN Agencies including UNFCCC, UN HABITAT, UNDP, World Bank | | |
| | European Commission services and Agencies | DG Research, DG MOVE, DG GROW, DG CLIMA; EIB Committee of Regions | | |
| | Member States | National ministries | | |
| | Transport authorities and public infrastructure managers | National and regional road operators | | |
| | Regions and cities, and their associations | Individual regional and city governments, Regional and city associations such as C40, EUROCITIES, ICLEI etc. | | |
| Research institutions | Universities, national research institutions, and any research organisations and centres | | | |
| Civil society | Environmental and Climate NGOs | NGOs that advocate for climate actions and environment protections such as WWF, WRI | | |
| | Think Tanks | Think tanks that are interested in policy R& I advocacy | | |
| | Philanthropies | Philanthropies that fund transport programmes | | |

2.2Mapping relevant stakeholders

Mapping relevant stakeholders comprises two steps:



Firstly, identifying practitioners in combinations of passengers and freight, i.e. stakeholders that have carried out projects, initiatives, or studies in combination of passenger and freight to identify who has done **what**, **when** and **where**. Networking and engagement with such stakeholders will focus on sharing best practice and lessons learnt, technical cooperation, jointly development of regulatory and standard recommendations, as well as policy advocacy.

Secondly, identifying stakeholders who can play an important role in advancing innovation in combination of passenger and freight transports but have not been involved in any projects, initiatives, and studies on this topic. Networking and engagement with such stakeholders will focus on raise awareness, dissemination of project activities and achievements, understanding potential user needs and potential barriers.

Identifying stakeholders will capitalise and be based on inputs from Task 2.1, which provides an overview of state-of-the-art of combination of passenger and freight transports, including the first step of the task to map past and ongoing projects, demonstrations, trials in Europe and beyond. Other tasks of WP2, e.g. T2.3 Governance, Regulatory and Stakeholder Analysis, will also provide inputs to the stakeholder mapping, such as identifying stakeholders in regulation and standard development. The overall approach of stakeholder mapping is shown in Figure 2 below:

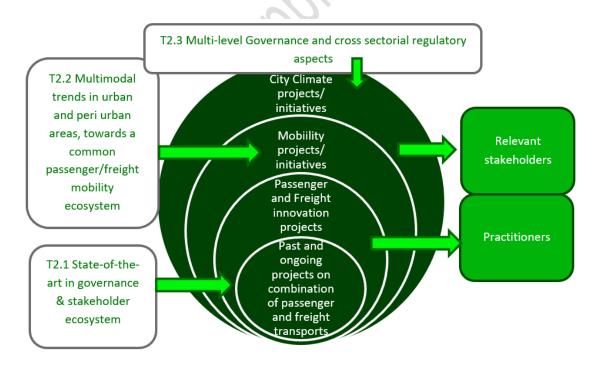


Figure 2 DELPHI Stakeholder mapping approach

Mapping projects (ongoing and past) will first focus on projects on combination of passengers and freight transport. Detailed analyses of those projects will provide a comprehensive list of stakeholders as well as their knowledge and experiences in



combining passenger and freight transport. Those stakeholders are key to the DELPHI's networking and engagement activities. Mapping then will extend to innovative projects that have worked only on passenger transport or freight transport, particularly those projects on data sharing, development of ICT solutions and digital tools for either passenger or freight transport, or traffic management control. Through the mapping, practitioners who have been developing innovative solutions in either urban mobility or urban logistics will be identified as additional stakeholders. Practitioners are expected to cover all types of stakeholders in Table 1. In the Annex 1, the first result of project mapping is shown.

Projects and initiatives on development in mobility policy, regulation and standards will also be studied. From studying such projects and initiatives, key stakeholders who are active in policy, regulation and standard development related to transport and mobility will be identified.

ALICE, a technology platform, has a large network of logistics innovation stakeholders. ALICE also has a strategic partnership with POLIS³, a city network for sustainable transportation. The partnership enables ALICE access to local authorities. ALICE's membership covers relevant associations in the transport sector, e.g., ACEA, ERTICO. ALICE in partnership with other transport associations (e.g., ERTRAC) in organising the Transport Research Arena (TRA)⁴. Such partnership enables ALICE to access all types of transport stakeholders.

2.3Potential networking and engagement activities

Networking and engagement activities can be carried out in various formats, such as:

- Cooperation on technical development, including exchange technical knowledge, re-use or future development of current innovative solutions or infrastructure;
- Co-organise demonstrations, trials and living lab implementations including sharing best practices and lessons learnt;
- Site visit and knowledge exchange;
- Cooperation on standardisation development;

³ POLIS is the network of European cities and regions cooperating for innovative transport solutions; more information about POLIS can be found: <u>https://www.polisnetwork.eu/</u>

⁴ Transport Research Arena (TRA) offers a great venue for researchers, policy makers and industry representatives to get together and contribute to the discussion on how research and innovation can reshape the transport and mobility system. The conference provides a unique opportunity to hear about mobility trends in different parts of Europe, learn from achievements in industry as well as share best practices of policies and deployments.

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- Cooperation on policy and regulatory recommendations and advocacy;
- Co-organise events including webinars, project events, conference sessions;
- Joint publications or social media communication.

Different activities may be carried out different type of stakeholders, as shown in Table 2 below:

| Table 2 Potential | networking | and | engagement activities |
|-------------------|------------|-----|------------------------|
| | networking | unu | chydychicht detivities |

| | Activity | Type of stakeholders | Expected impact |
|---------------|--|---|---|
| | Cooperation on technical development | Companies and their associations (e.g., ERTICO). Research institutions (e.g. ZLC) | Ensuring that outcomes from other R&I projects will be taken into consideration. |
| Practitioners | Co-organise demonstrations, trials and living lab implementations | Companies and their associations (e.g. ERTICO); Government (e.g. city of Breme); Research institutions (e.g. Technical University of Venice) | Ensuring that DELPI will not 're-invent' the wheel and benefit from existing infrastructure and services. |
| Prac | Site visit and knowledge exchange | Companies and their associations (e.g., VIL); Government (e.g., DINALOG) | Ensure knowledge exchange among various stakeholders to avoid make the same mistakes and use the most appropriate approach |
| | Cooperation on standardisation development | Government (e.g., City of Breme); Research institutions (e.g., ZLC) | Maximise supports from other organisations in standard development |
| | Cooperation on policy and regulatory recommendations and advocacy | Government (e.g., ITF - OECD); Research institutions (e.g., TNO); | Joint force in advocacy |



| | | Civil society (e.g., SFC) | |
|-----------------------------|--|---|--|
| | Co-organising events | All | Joint force in dissemination |
| | Joint publications | Research institutions (e.g., TNO) | Joint force in dissemination |
| | Site visit and knowledge exchange | Companies and their associations (e.g., UITP); Government (e.g., Flemish government); research institutions (e.g., UCL) | Raise awareness of combination of passengers and freight transport |
| Other Relevant stakeholders | Cooperation on standardisation development | Government (e.g. UNECE, ITU); Research institutions (e.g. CERTH) | Maximise supports from other organisations in standard development |
| | Cooperation on policy and regulatory recommendations and advocacy | Government (e.g. UNECE); Research institutions (e.g. ULB); Civil society (e.g. Covenant of Mayors) | Raise awareness of benefits of combination of passengers and freight transport among policy makers |
| | Co-organising events | All | Raise awareness of the DELPHI project activities |
| | Joint publications or social media communication | Research institutions (e.g. École des Mines de Paris); Civil society (e.g. Covenant of Mayors) | Reach out a wider range of stakeholders |



3. Plan of networking and engagement activities

3.1Initial plan

Networking and engagement will evolve along with the DELPHI project developments. The project has initially reached out projects that have been funded by the same programme, such as ACUMEN⁵ and SYNCHROMODE⁶. The purpose of cooperation is to create significant and powerful liaison and cross fertilization activities, to amplify the projects' outreach and impact around the advanced multimodal network and traffic management for seamless door-to-door mobility of passengers and freight transport topic. Some key milestones and indicators can be planned at this moment to set a framework.

The following plan covers the indicative course of activities from M01 to M18 of the project period, for the networking and engagement activities (Figure 3).



Figure 3 Initial plan for networking and engagement activities

⁵ <u>https://cordis.europa.eu/project/id/101103808</u>

⁶ <u>https://cordis.europa.eu/project/id/101104171</u>



3.2Key performance indicators (KPIs) for networking and stakeholder engagement

The following Table 3 provides a set of key performance indicators (KPIs) for networking and stakeholder engagement, for the first 18 months of the DELPHI project and it provide a guidance for the project consortium members:

| КРІ | Explanation | How |
|--|---|--|
| Number of projects to liaise with: 3 | DELPI will form agreement with at least 3 ongoing projects to cooperate on dissemination, policy recommendation and standardisation. Technical cooperation or knowledge exchange will also be foreseen. | Through ALICE Liaison Programme which gathers all key research and innovation projects fund by EC or national/regional programmes, DELPHI will reach out consortia of projects identified. |
| Number of stakeholders per type: 2 | DELPHI will reach out at least 1 representative of each type of the stakeholder identified. | ALICE membership covers companies and research institutes. Through ALICE, those stakeholders who have carried out projects related to DELPHI will be identified and reached out. ALICE has strategic partnership with POLIS, a city network for sustainable transport; ALICE is also in close cooperation with C40 ⁷ , particularly its urban freight programme. Through such city network, DELPHI will be able to connect with cities and local authorities. |
| Joint event: 1 | DELPHI will organise event with other projects and organisation to facilitate discussions and raise awareness | With support of EC, a workshop is foreseen to be organised with other liaison projects in February 2024. |
| Knowledge exchange event: 1 | DELPHI will meet other practitioners and exchange knowledge | TRA2024 ⁸ the biggest transport research conference in Europe, will be held in April 2024 in Dublin. It will gather representatives of all research projects and key innovation practitioners in passenger and freight transport domains. The DELPHI consortium will take the opportunity to meet other practitioners for knowledge exchange and discussion for future cooperation. |

Table 3 KPIs of the network and stakeholder engagement activities

⁷ C40 Cities Climate Leadership Group, <u>https://www.c40.org/</u>

⁸ More information about TRA2024: <u>https://traconference.eu/</u>



3.3First stakeholder mapping for the development exploitation of innovative solutions developed by the DELPHI project

In order to ensure that the innovations that will be developed by DELPHI project will meet the needs of relevant stakeholders, engaging stakeholders during the innovation development phase is essential. As those innovations with Technology Readiness Levels $(TRLs) \leq 7^9$, exploitation of those innovations will focus on further developments to advance TRLs with appropriate partners and potential users to jointly test and validate those innovations, aiming to be ready for real life applications or commercial products or services. Stakeholder engagement for development will start from M4 when WP3 Federated ecosystem, interoperability and integration begins. Stakeholder engagement for exploitation will start from M12 when WP5 Demonstration Activities begins.

As those innovations are rather different, types of stakeholders and methods to engage stakeholders vary. As the DELPH project works on Urban Air Mobility (UAM) and Unmanned Aerial Vehicle (UAV) technologies, they are relatively new and stakeholder networks are rather dynamic. Therefore, the initial plan described in this deliverable will be updated and validated according to technical and policy development for D6.10 Interim DELPHI Report on Networking and Engagement Activities Plan, due in M18.

The following Table 4 summarizes initial mapping of stakeholders who will be engaged for development and exploitation respectively. Stakeholder mapping is based on project mapping that identifies past and ongoing research and innovation projects working on similar topics. Consortium members of identified projects will be mapped to analysed to understand key technology developers and researchers, policy makers (government), relevant network organizations, and key technology and policy advocators (Civil society). Some examples are given in the table but reach-out will not limit to those stakeholders only.

⁹ TRL 7 means – system prototype demonstration in operational environment, according to: https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415annex-g-trl_en.pdf



Table 4 Network and stakeholder engagement activity plan for innovations development

| Innovation of DELPHI | TRL | Stakeholders to be engaged for development and exploitation |
|---|-----|--|
| Cross-modal, multi-level Governance framework that will advance the roles and coordination of transdisciplinary and cross- sectoral Stakeholders (urban air mobility related) | 5 | Companies: HORMONY consortium members (e.g. ENIDE) Government including cities and city networks: SESAR Joint Undertaking (JU), Metropolis GZM, City of Rotterdam, EUROCITIES, and POLIS Research: Łukasiewicz Research Network – Institute of Aviation (ASSUME-UAM coordinator), CIRA (Italian Aerospace Research Centre), TNO Civil Society: Distretto Tecnologico Aerospaziale scarl (DTA) |
| Reference architecture and enablers for seamless, secure data sharing – extension of data spaces | 6 | Companies: DISCO consortium members (e.g., AKKODIS), MAP Traffic Management, YUNEX (the Synchromode project' consortium members) Government including cities and city networks: Madrid (living lab in the LEAD project) Research: TU DELFT, Kühne Logistics University, Zaragoza Logistics Centre (ZLC) Civil Society: International Data Space Association (IDSA) |
| Multi-source, Unmanned Aerial Vehicle (UAV)- based urban traffic monitoring systems | 7 | Companies: HORMONY consortium members (e.g., AIMSUM) Government including cities and city networks: SESAR Joint Undertaking (JU), Thessaloniki & Zuid-Holland region (living labs of the Synchromode project), POLIS Research: TNO, CERTH, UNIVERSIDAD DE LA IGLESIA DE DEUSTO ENTIDAD RELIGIOSA |
| Blockchain-powered data resilience methods | 6 | Companies: Card4B, Trapeze Software Civil Society: Calypso Networks Association |
| Integrated passenger transport and parcel delivery | 5 | Companies: DB Schenke, Trapeze Software Government including cities and city networks: Centre for Budapest Transport, Region Ile-de-France, City of Gothenburg Research: Technical University of Venice, CERTH, ZLC Civil Society: UITP, POLIS |
| Use of UAV for emission and noise estimation | 5 | Civil society: Smart Freight Centre (SFC) |



4. Conclusion and Summary

The fundamental differences between passenger and freight transport systems are that they commonly move through separate conveyances. However, the differences are the most at public policy measures. Passenger transport, as an essential public service, is often publicly funded with subsidises and heavily regulated while freight transport, except postal services, is seen as private sector's matter. Improving public transport service is always welcomed by citizens and policy makers. Policy measures, such as allocated spaces for passenger terminals and dedicated bus lanes are popular. Such policy measures are regarded as key actions of city's climate action to reduce GHG emissions. However, policy measures for freight transport are aimed to reduce freight traffic flow and use of urban space.

It is therefore not surprising that stakeholders in the public transport sector and in the urban logistics sector are different, and rarely meet and interact with each other. To enable combination of passenger and freight transports, effective strategies creating a unified vision and working towards common goals that break down the silo are essential. This deliverable D6.9 presents the strategies and plans to implement the corresponding strategies. As some projects have pioneered using public transport vehicles for freight transport or use public transport networks or facilitates for freight transports, such projects have been successfully engaged with individuals and organisations who are open to this approach. Such individuals and organisations will be mapped to identify their roles, responsibilities, and experiences which will create a base for DELPHI's networking and stakeholder engagement activities. The DELPHI consortium will also benefit from ALICE membership, ALICE's strategic partnership with POLIS and ALICE's network with other city networks and transport associations.

The DELPHI consortium will organise events, in cooperation with liaison projects, to invite stakeholders to create opportunities for networking. The DELPHI consortium will also participate in key transport conferences (e.g., TRA) and events organised by other projects. Such events will be key instruments to engage with stakeholders by facilitating knowledge exchange and partnerships.

References

- (EEA), E. E. (n.d.). Use of collective transport modes for passenger transport and non-road transport modes for freight transport in Europe (8th EAP). Retrieved September 06, 2023, from European Environment Agency (EEA): https://www.eea.europa.eu/ims/use-of-collective-transport-modes
- De Oliveira L, D. O. (2022). Integrating Freight and Public Transport Terminals Infrastructure by Locating Lockers: Analysing a Feasible Solution for a Medium-Sized Brazilian Cities. *Sustainability 2022, 14(17): 10853.* doi:https://doi.org/1

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Annex 1: Project mapping outcomes

| Туре | Name | Basic information | Main contents related to DELPHI |
|-----------------|---------|---|--|
| Urban logistics | MOVE21 | H2020 (ID 953939) 01.05 2021 – 30.04.2024 https://move21.eu/wha t/ | Transforming European cities and their surroundings into smart zero emissions nodes for mobility and logistics. → Oslo Living Lab – Integrated approach to passenger and goods transport (infrastructure, vehicles, energy sources, technology and interoperability, policy, and governance). Test use of existing on-demand service for last mile delivery (people and freight); joint use of existing public buildings; etc. → Gothenburg Living Lab – mobility hubs for combination of passengers and freight: implementation of 3 test-sites to take advantage of urban changes (massive redevelopment of an area or fast-growing neighbourhood) to develop mobility hubs, combining goods (consolidation centres, zero-emissions last-mile hubs) and personal transport (public transport, bikes, and micro-mobility). → Hamburg Living Lab – mixed-use micro-hubs for passenger and freight on 4 test sites; enhancement of micro-hub interconnections. Some of these sites are repurposing space (e.g. old parking lots). → Munich, Rome Logistic Living Lab, Bologna – LLs that will replicate the previous experiments on mobility hubs – services to the population, sustainable mobility, and integration with logistics. |
| | TANGENT | H2020 (ID 955273) 01.09.2021 – 31.08.2024 <u>https://tangent- h2020.eu/</u> | Enhanced Data Processing Techniques for Dynamic Management of Multimodal Traffic → Rennes, France - Fostering intermodal cooperation of passenger and freight transport in urban areas |
| | URBANE | HE (ID 101069782) 01.09.2022 – 28.02.2026 https://www.urbane- horizoneurope.eu/ | Upscaling Innovative Green Urban Logistics Solutions Through Multi-Actor Collaboration and PI-Inspired Last Mile Deliveries. → Helsinki Living lab – use of Autonomous Delivery Vehicles (ADVs) assisted operations on trams |

| | DISCO Green-log | HE (ID 101103954) 01.05.2023 – 31.10.2026 https://doi.org/10.3030 /101103954 HE (ID 101069892) | Data-driven and Dynamic Space and Assets for Physical Internet-led Urban Logistics and Planning, Integrated, Synchromodal, Collaborative and Optimised urban freight meta model for a new generation of urban logistics and planning with data sharing at European Living Labs → Voluntary data sharing → Optimise use of urban space for logistics including dynamic curb site management and user-oriented micro-hubs Cooperative and Interconnected Green delivery solutions towards an era of optimized zero |
|--------------|--------------------|--|---|
| | | 01.01.2023 – 30.06.2026 <u>https://cordis.europa.e</u> <u>u/project/id/101069892</u> | emission last-mile Logistics → Use of autonomous vehicles and delivery droids for last mile delivery → Development of business models |
| Data sharing | UNCHAIN | HE (ID 101103812) 01.05.2023 – 31.10.2026 <u>https://cordis.europa.e</u> <u>u/project/id/101103812</u> | Implementation of a standardised and reliable data exchange ecosystem → public-private collaborative framework to establish reliable data sharing agreements, break data silos and make the urban freight data more available and accessible → optimisation of allocation of urban space, improvement of policy-making capacity of local authorities and optimisation of network management and logistics operation |
| | ACUMEN | HE (ID 101103808) 01.06.2023 – 31.05.2026 <u>https://cordis.europa.e</u> <u>u/project/id/101103808</u> | Ai-aided decision tool for seamless multimodal network and traffic management → multi-layered Digital Twin for urban mobility → generic data-driven network management to enable efficient and reliable door-to-door journeys for people and goods |
| | SYNCHROMODE | HE (ID 101104171) https://cordis.europa.e u/project/id/101104171 01.05.2023 – 30.05.2026 | Advanced traffic solutions for synchronized and resilient multimodal transport services → Transport network-wide data exchange and integration system → Cooperative dashboard for real-time monitoring and prediction of network-wide multimodal transport and traffic → Resilient multimodal transport network and traffic management support tool |
| | KEYSTONE | HE (ID 101103740) https://cordis.europa.e u/project/id/101103740 01.06.2023 – 31.05.2026 | Development of a sustainable, efficient, safe transport system, allowing enforcement authorities to access data for the purpose of checking compliance with rules applied in the transport of goods and passengers. → tailored standardised digital solutions that can be used from several realities to standardize the transport system (seamless, interoperable, and intermodal digital transport system to be replicated at European level) |

| SUM SETO | HE (ID 101103646) https://cordis.europa.e u/project/id/101103646 01.06.2023 – 31.05.2026 HE (ID 101103695) https://cordis.europa.e u/project/id/101103695 01.06.2023 - 31.05.2026 | Seamless Shared Urban Mobility to transform current mobility networks towards shared mobility systems (NSM) integrated with public transport (PT) in more than 15 European Cities by 2026 reaching 30 by 2030. SUM will introduce a federation of solutions including prediction, scheduling, integrated NSM-PT ticketing, and real-time NSM management. Smart Enforcement of Transport Operations – SETO → Innovative digital solution for authorities to access all information required for the smart enforcement of transport and safety legislation in real-time using the 'one-click' principle. |
|-------------------------|---|--|
| | | → Addressing the significant challenge of handling unstructured transport data from different streams (paper and digital), sources, and languages, reducing the administrative burden/time while achieving increased control efficiency and consistency. |
| TRACE | HE (ID 101104278) https://cordis.europa.e u/project/id/101104278 01.06.2023 - 31.05.2026 | Integration and Harmonization of Logistics Operations → synchromodal operations and integration of heterogeneous logistics services and securing the uninterrupted deliveries and its resilience universal platform with functionalities → demonstrators in European countries with different goals: transportations with shared resources, disruptive events detection and re-scheduling of transfers, use of unmanned vehicles to automate the last mile deliveries. |
| REMUNET | HE (ID 101104072) https://cordis.europa.e u/project/id/101104072 01.07.2023 – 30.06.2026 | Resilient Multimodal freight Transport Network → Standardized method to describe multimodal transport networks with Europe-wide practicability. → Algorithm capable of calculating multimodal route alternatives and capacity utilization in the face of disruptive events, using real-time data. → Collaborative platform connecting relevant freight operators and enables them to manage disruptions. |
| PrepDSpace4M obility | EIT Urban Mobility 10.2022 – 09.2023 https://mobilitydataspa ce-csa.eu/ | PrepDSpace4Mobility lays the foundation for a secured and controlled way of pooling and sharing mobility data across Europe. |

| | CIVITAS MUSE | HE (ID 101103716) | Mobility for Urban Sustainability and the Environment CIVITAS 2030 Coordination and Support |
|----------------------|--------------|-------------------------|--|
| S | | 01.05 2023 – 30.04. | Action: Sustainable and Smart Mobility for All |
| < < | | 2027 | |
| CIVIT | | https://cordis.europa.e | This project will deliver a wide range of services to the European Commission and its funded |
| 0 | | u/project/id/101103716 | urban mobility-related projects, to enhance their results through further communication, |
| | | | capacity building and exploitation activities. |
| | HARMONY | H2020 (ID 815269) | This project aimed to develop new mobility services and freight transport modes including |
| itγ | | https://harmony- | Integration of automated vehicles and drones with traditional transport modes and collect data |
| pili | | h2020.eu/ | from citizens and freight operators. |
| Air Mobility UAM) | | | |
| Air Mo (UAM) | ASSURED-UAM | H2020 (ID 101006696) | ASSURED-UAM is a Coordination and Support Actions (CSA) project to assure broad and |
| Urban (| | https://assured- | comprehensive organisational and policy definition support for authorities, policy makers and |
| Jrb | | uam.eu/ | urban industry organizations for UAM. |
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