Data-driven and Dynamic Space and Assets for Physical Internet-led Urban Logistics and Planning

D7.2 - DISCO Knowledge Hub For Innovation, Upscaling and Capacity Building

Rupprecht Consult

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Table of Contents

List of Figures

List of Tables

Abstract

The DISCO Knowledge Hub deliverable encapsulates a comprehensive strategy for innovation and upscaling within the urban logistics landscape. Serving as the premier destination for stakeholders involved in urban logistics and sustainable mobility, it embodies a vision of fostering collaboration, knowledge sharing, and innovation to drive positive change. Targeting a diverse array of groups including cities and local authorities, academics, professionals, policymakers, and businesses, the Knowledge Hub aims to empower stakeholders with the tools and connections needed to enact transformative solutions. Embedded within its framework are core values and attributes such as collaboration, innovation, knowledge sharing, and sustainability, all facilitated by its user-friendly interface, engagement tools, and learning resources.

Central to the Knowledge Hub's operation is its robust platform, designed to facilitate seamless interaction and collaboration among stakeholders. Through continuous maintenance and updates, the platform ensures optimal performance and relevance to its users. Complementing the platform, a comprehensive Capacity Building programme has been conceptualised and designed, starting with a Training Needs Assessment (TNA) to then create a programme that responds to the training needs (skills/knowledge gap) of our target audience.

This deliverable is organized into three chapters. Chapter 1 presents the aim, vision, target groups, values, and attributes as well as the structure and components of the DISCO Knowledge Hub. Chapter 2 provides detailed information for the appropriate operation and maintenance of the platform, including content creation and curation, roles and responsibilities, implementation timeline and dissemination. Finally, chapter 3 is focused on the Capacity Building programme, starting by showing the results of the TNA and then going into detail about the Training Programme, training activities and topics, online learning platforms to be used, roles and responsibilities among partners and monitoring for success.

Summary sheet

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Project Acronym	DISCO
Full Title	DATA-DRIVEN, INTEGRATED, SYNCROMODAL, COLLABORATIVE AND OPTIMISED URBAN FREIGHT META MODEL FOR A NEW GENERATION OF URBAN LOGISTICS AND PLANNING WITH DATA SHARING AT EUROPEAN LIVING LABS
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Website	https://discoprojecteu.com/
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Reviewer feedback	12.04.2024	Thato Motloung (BUAS)	Review of the first version	Minor revision
Reviewer feedback	17.04.2024	Jonas Hönglund (LSP)	Review of the first version	Minor revision

List of acronyms

ALICE	The Alliance for Logistic Innovation and Collaboration in Europe
BCN	Ajuntament De Barcelona
BOOSTLOG	BOOSTing impact generation from research and innovation on integrated freight transport and LOGistics system
BUAS	Breda University of Applied Sciences
CERTH	The Centre for Research & Technology, Hellas
DISCO	Data-driven, Integrated, Syncromodal, Collaborative and Optimised urban freight meta-model for a new generation of urban logistics and planning with data sharing at European Living Labs
EU	European Union
FAQ	Frequently Asked Questions
FVH	Foeum Virium Helsinky Oy
FZCC	Fundacion Zaragoza Ciudad Del Conocimiento
IDSA	International Data Spaces Association
IMEC	Interuniversitair Micro-Electronica Centrum
ITL	Institute for Transport and Logistics
KH	Knowledge Hub
KLU	Kühne Logistics University GmbH
KPI	Key Performance Indicator
LAS NAVES	Fundacion De La Comunitat Valenciana Para La Promocion Estrategica, El Desarrollo y La Innovacion Urbana
LEAD	Low-Emission Adaptive Last Mile Logistics Supporting on Demand Economy Through Digital Twins
LL	Living Labs
LSP	Lindholmen Science Park AB
PI	Physical Internet
POLIS	Promotion of Operational Links with Integrated Services
R&I	Research and Innovation
RC	Rupprecht Consult
REGIONH	Copenhagen Capital Region
SULP	Sustainable Urban Logistics Planning
SUMP	Sustainable Urban Mobility Plan
TIF HELEXPO	The Thessaloniki International Fair
TNA	Training Needs Assessment
ULaaDs	Urban Logistics as an on-Demand Service
UVAR	Urban Vehicle Access Regulations
VIU	Venice International University

1. The DISCO Knowledge Hub for innovation and upscaling in the urban logistics world

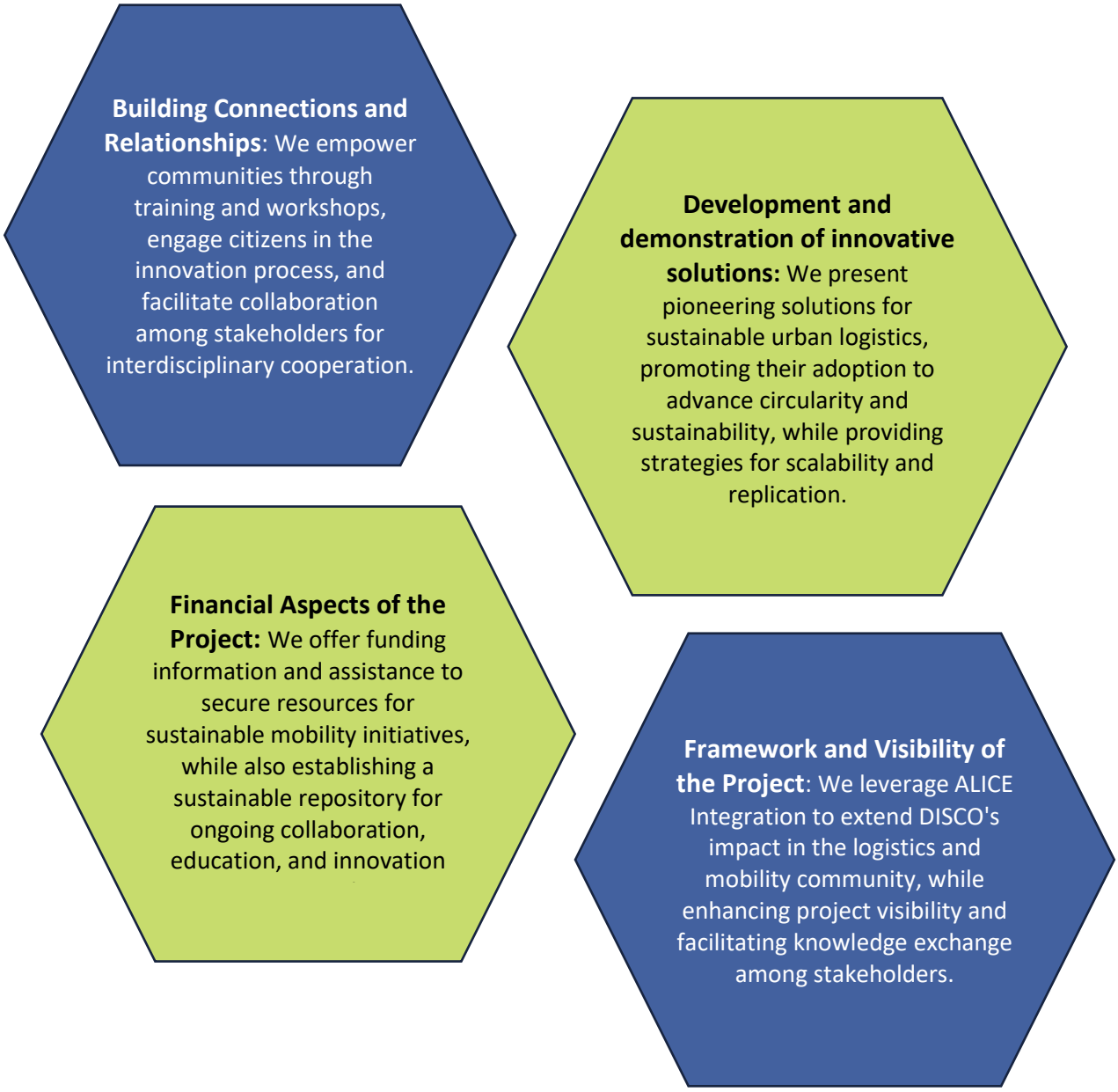
The DISCO Knowledge Hub is a freely accessible digital platform created to function as an interactive online hub for participants in urban logistics and sustainable mobility. It is thought to provide various resources, tools, and opportunities for sharing knowledge, enhancing skills, fostering innovation, and facilitating collaboration in this sector, within DISCO and beyond.

The platform stands out due to its holistic approach, seamlessly integrating various components essential for urban logistics and sustainable mobility. It distinguishes itself by involving a wide range of stakeholders ensuring diverse perspectives and expertise contribute to its initiatives. Moreover, its adoption plans and replicability strategies enable the implementation of DISCO-X measures in different contexts, enhancing their scalability and impact. Additionally, the platform provides ample engagement and collaboration opportunities, fostering active participation and collective efforts towards sustainable urban mobility.

1.1 Aim, vision and contribution to the project goals

The DISCO Knowledge Hub strives to become the primary destination to achieve knowledge exchange (but not limited to) for stakeholders, equipping them with the resources, knowledge, and networks necessary to instigate beneficial transformations and advancements in urban logistics and mobility.

The aim is to establish a digital cooperation hub that fosters collaboration among stakeholders in urban logistics and sustainable mobility. Accordingly, the following goals aligned with the overarching objectives of the DISCO project, are intended to be achieved at the end



1.2 Target Groups

The DISCO Knowledge Hub strategically targets a diverse range of stakeholders crucial for advancing urban logistics and sustainable mobility (Figure 1). Firstly, policymakers and authorities involved in shaping urban mobility policies are pivotal in enacting regulatory frameworks and allocating resources. By engaging them, the Knowledge Hub aims to influence policy decisions and support the implementation of sustainable solutions. Government and private funding organizations provide crucial financial support for urban mobility projects. By including these organizations, the

Hub facilitates connections between project proponents and funders, promoting innovation and sustainable initiatives.

Businesses involved in transportation, logistics, technology, and sustainable mobility are essential drivers of innovation and implementation in urban mobility. Their industry expertise and resources contribute to the Hub's ecosystem, fostering collaboration and showcasing innovative technologies and business models. Apart from them, the DISCO Living Labs are also targeted as well as the other interested cities/users beyond DISCO.

Together, these target groups represent a comprehensive network of stakeholders committed to advancing sustainable urban mobility. Through targeted outreach, user-friendly interfaces, and interactive tools, the Knowledge Hub connects and empowers these stakeholders, driving positive change and fostering a culture of collaboration and innovation in urban logistics and mobility. The DISCO Knowledge Hub will offer a variety of instances for knowledge exchange, peer-to-peer learning, network building and training so that the key stakeholders have the possibility to interact and engage at different levels.

Figure 1: The Target Groups of DISCO Knowledge Hub

1.3 Values and attributes

The DISCO Knowledge Hub is dedicated to fostering collaboration, innovation, knowledge sharing, capacity building, inclusion, empowerment, and sustainability. It embodies core values that drive its mission and objectives. Collaboration and innovation are promoted, encouraging partnerships among stakeholders to address urban logistics and sustainable mobility challenges through pioneering projects and nurturing a culture of creativity and improvement. Also knowledge-sharing

and capacity building is prioritized, facilitating the exchange of best practices and insights and providing training programs to empower stakeholders.

In addition, the DISCO Knowledge Hub is characterized by a range of attributes that enhance its functionality and effectiveness. The integration into the ALICE platform provides access to a wealth of resources and expertise, enhancing collaboration and knowledge sharing. The repository feature serves as a centralized source of information and knowledge, facilitating easy access to resources and best practices. The interactive community space fosters collaboration and engagement among stakeholders, providing opportunities for networking, discussion, and knowledge exchange through a user-friendly interface and engagement tools for active participation.

The Knowledge Hub is complemented by the Mobility Academy, which will host various learning activities to support capacity building and professional development. Additionally, a marketplace will be tested as a platform for stakeholders to connect and collaborate on projects and initiatives, facilitating partnerships and resource sharing for sustainable urban development.

These values and attributes align with our vision of creating a vibrant digital cooperation hub, serving as the primary destination for stakeholders seeking to advance sustainable urban mobility. They are essential components that support the holistic approach of the platform, seamlessly integrating various elements. Through these values and attributes, the DISCO Knowledge Hub aims to empower stakeholders, foster innovation, and drive positive change in urban logistics and sustainable mobility (Figure 2).

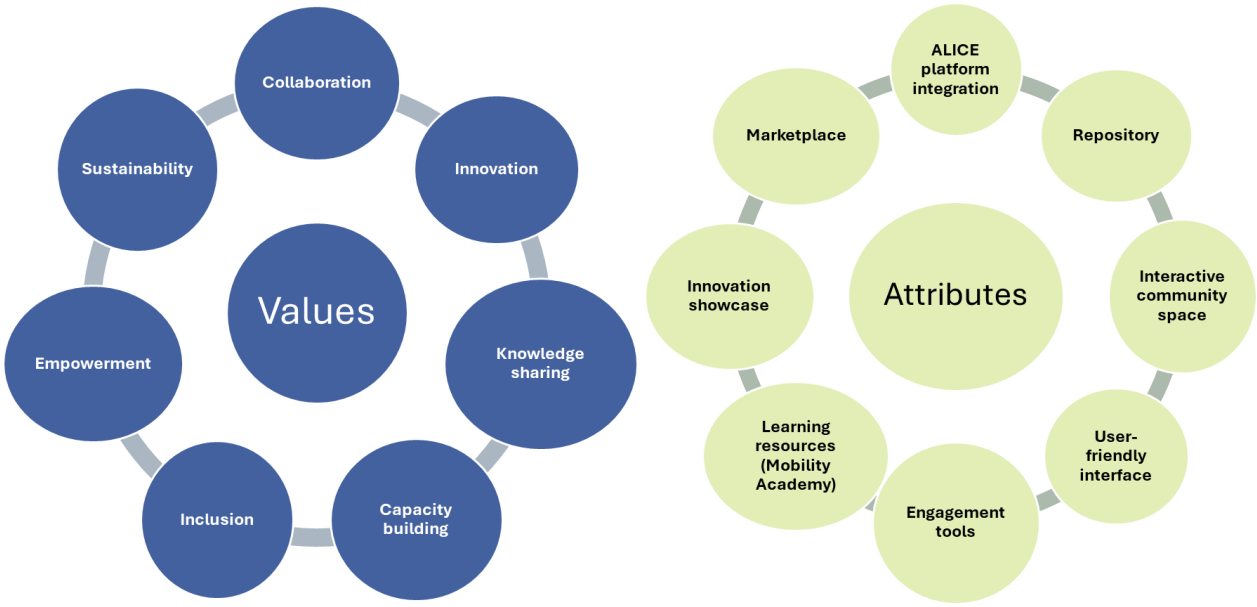


Figure 2: Values and Attributes of DISCO Knowledge Hub

1.4 The ALICE platform

The ALICE Knowledge Platform serves as an online hub[1] that consolidates extensive resources on logistics innovation. It provides comprehensive insight into the primary deliverables, outcomes, and implementation cases derived from EU-funded Research and Innovation (R&I) initiatives.

Moreover, the ALICE Knowledge Platform serves as a repository for valuable information on funding prospects, pioneering enterprises, and maintains an extensive library housing pertinent documents and reports. Additionally, it features the ALICE Innovation Marketplace[2], facilitating connections between innovation seekers, aiming to address a particular problem, and stakeholders possessing the expertise, or solutions derived from R&I projects.

This platform is ideal to host the DISCO Knowledge Hub, acting as a conduit for the DISCO project to synergize with other relevant R&I endeavours while garnering visibility within a dedicated arena for logistics innovation. The platform facilitates the centralized storage of essential content, encompassing deliverables, funding opportunities, updates from living labs, and project outcomes.

This centralized repository ensures longevity beyond the project's conclusion, crucial for ensuring that future endeavours can leverage tangible insights and feedback gleaned from preceding initiatives. Therefore, the DISCO Knowledge Hub will be hosted on the ALICE platform to exploit the synergies and benefits of the ALICE platform, and to ensure sustainability beyond the project lifetime.

1.5 The Knowledge Hub structure and components

The DISCO Knowledge Hub can be accessed directly from the DISCO project website (DISCO - Upscaling a new generation of urban logistics (discoprojecteu.com) through a tab in the top called “Knowledge Hub”, shown in Figure 3.

[1] https://knowledgeplatform.etp-logistics.eu/
[2] https://knowledgeplatform.etp-logistics.eu/course/view.php?id=259

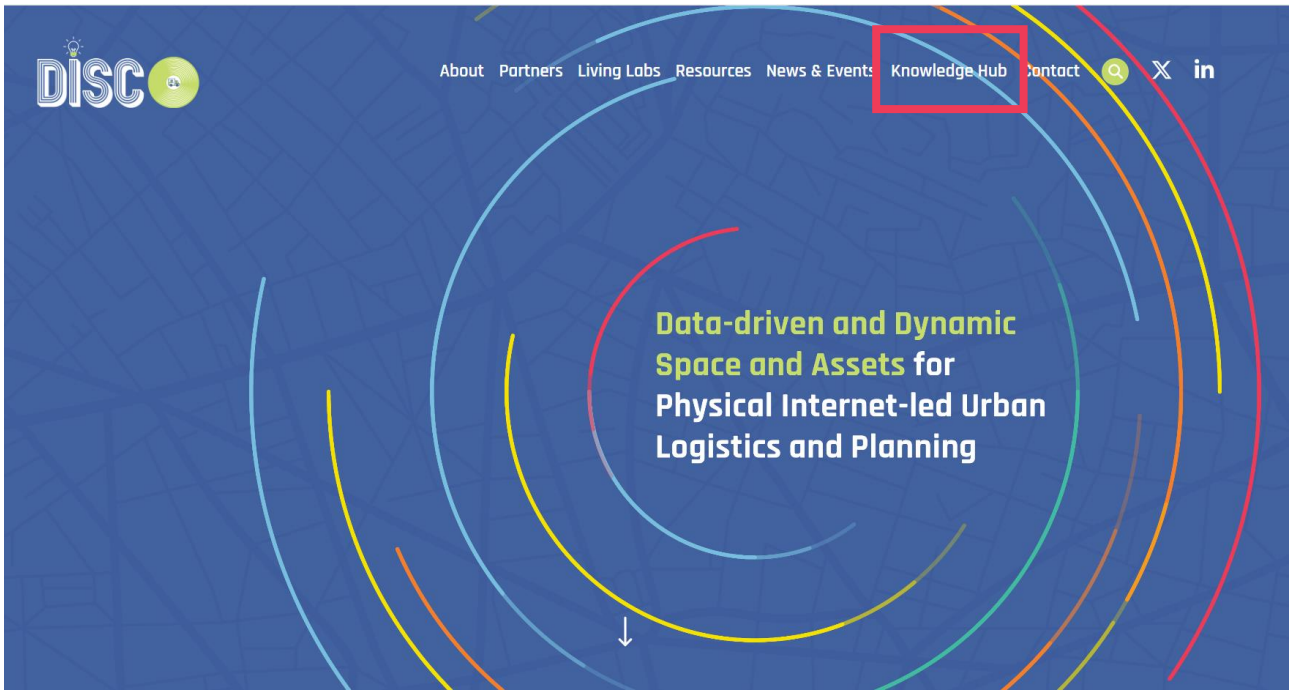


Figure 3: DISCO Website Capture with Tab to DISCO Knowledge Hub

In terms of structure and components, the Site-Map graph below shows the different components and their organisation on the platform (Figure 4). Within the ALICE platform, a dedicated space for the DISCO Knowledge Hub has been created. Inside this space, six (06) subcomponents have been set up to host and cluster clearly all the categories within the hub, and subcategories within each of them.

The next section will briefly present each of the categories and subcategories.

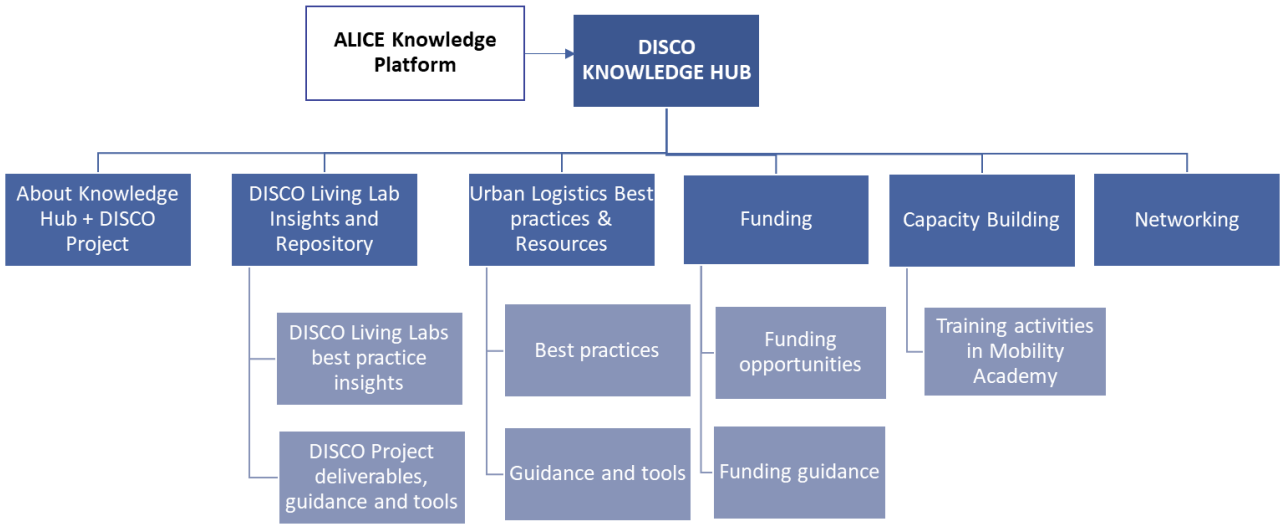


Figure 4: DISCO Knowledge Hub Site-Map and Structure

About Knowledge Hub & DISCO project

This category provides the introductory information related to the Knowledge Hub. Moreover, the aim and vision of the DISCO project is also shared within the scope of this first tab.

DISCO Living Labs Insights and Repository

The next category consists of insights within the DISCO project, DISCO living labs (LL) and its repository which is divided into two parts. Firstly, under "DISCO LLs Best Practice & Insights", the innovative LL applications are described considering groundbreaking projects and their solutions while delving into a comprehensive overview of ongoing initiatives. Secondly, with "the DISCO Project showcase, guidance, and tools", the technical project's deliverables, guidance and tools are presented for an in-depth understanding of the project's technical aspects which helps gaining insights into the detailed documentation and outcomes that showcase the technical achievements and contributions of the project.

Urban Logistics Best practice and Resources

In this category, urban logistics best practice and resources outside of the DISCO project are shown. Under "best practices", the best practices beyond DISCO are showcased here, highlighting the most effective ways to achieve urban logistic goals and sustainability from sister projects, other EU initiatives and beyond. Moreover, under "guidance and tools" the resources, advice and instruments are referred to provide direction, assistance, and support on solving a problem or decision-making.

Funding

Within this section, funding opportunities are delineated and categorized into two distinct sections: Funding Opportunities and Funding Guidance. Under "Funding Opportunities," stakeholders can access various avenues for funding living lab projects and other initiatives. Meanwhile, "Funding

Guidance" offers clear directives aimed at enhancing the financial sustainability of these projects, providing stakeholders with comprehensive guidance to navigate the funding process effectively.

CAPACITY BUILDING

This category clusters the training activities developed within the DISCO project to strengthen the abilities, skills, knowledge, and resources to effectively address urban logistic challenges in cities. These activities include webinars, e-courses, seminars, discussion forums and networking opportunities which will be hosted in the Mobility Academy and is accessed through a link from the DISCO Knowledge Hub.

NETWORKING

The Networking Section offers a platform for engagement, encouraging community involvement and feedback. While citizen participation & engagement activities empower users to actively engage in discussions, share feedback, and contribute ideas, the collaboration and networking section gives users chance to connect with the project team and among other users to enhance the engagement and contribute to positive change.

The screenshot below shows the landing page of DISCO Knowledge Hub platform and the different categories it offers, which can be accessed by clicking on each of them (Figure 5). To access directly to the Knowledge Hub, it can be accessed through this link: Course: DISCO Knowledge Hub | Knowledge Platform & ALICE members Intranet (etp-logistics.eu)

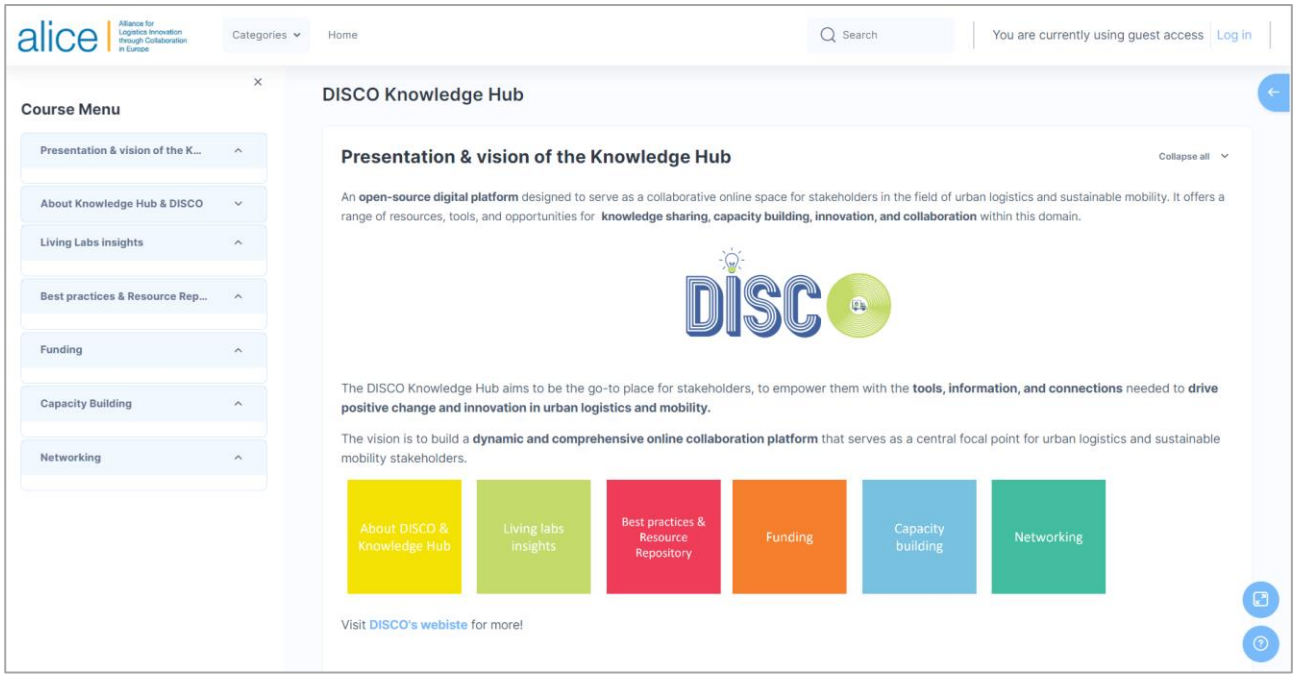


Figure 5: The Landing Page of DISCO Knowledge Hub

2. Knowledge Hub operation and maintenance

A well-maintained knowledge hub facilitates continuous learning among peers and key actors who can access resources, best practices, and lessons learned from past experiences, allowing them to develop new skills and supporting decision-making processes by providing stakeholders with relevant data, analysis, and insights. Regular updates ensure that decision-makers have access to the most current information, enabling them to make informed decisions quickly and effectively.

Effective maintenance and operation of the DISCO knowledge hubs will provide a competitive advantage to DISCO Living Labs and interested users by leveraging their collective expertise and insights. Additionally, a well-managed knowledge hub enables them to adapt to changing market conditions, anticipate trends, and respond quickly to opportunities and challenges.

The adequate operation and maintenance of the DISCO Knowledge Hub will have the following steps:

- the content creation and curation which requires a clear path and templates;
- the platform population and maintenance that will determine the process to populate the platform and regularly update the information;
- the policies, roles and responsibilities among the content leader, technical leader and contributors as well as guidance; and
- the continuous improvement task which entails the monitoring of the usage of the platform and feedback for enhancement.

The next section will provide detailed information on how each of the steps will be conducted.

2.2 Content creation and curation

Relevant content should be created and shared on a regular basis. To achieve this objective, the content should be categorized and clustered in a way that fulfils our expectations. Also, the curation should be conducted following a clear selection process and specific criteria.

Therefore, we aim to filter and select the content starting first with a topic clustering according to the DISCO key topics, then follow up with a content categorization through the types of resources and finalise identifying the content formats as the table below shows (Table 1).

Action	Description	Examples

1	Topic clustering	Following the DISCO key topics	SUMP, SULP, Physical internet, data spaces, etc.
2	Content categorization	Categorization by types of resources	Best practice and example, guidance, policy, tool, training
3	Content formats	Identification of the content formats	Article, PDF document, Excel, other.

Table 1. Content clustering and categorization approach

2.2.1. Topic clustering

To start with, we believe that a "topic clustering" will be required to facilitate the searching, filtering and selection of resources. Thousands of documents and resources could be added into the DISCO knowledge Hub; however, a selection of the most important resources that are relevant within the DISCO project, for DISCO Living Labs and beyond DISCO, interested cities who wish to accelerate the implementation of their urban logistic measures should be included. Following this, it is very important that all resources uploaded into the DISCO Knowledge Hub are linked to one or more DISCO key topics; thus, this is a mandatory criterion when selecting resources for the hub. Also, a clear link to a specific DISCO key topic, will be helpful when users start to browse in the knowledge hub.

For this, we have determined to use as a base the topics identified as part of the Training Needs Assessment task. The resources initially populated in the DISCO Knowledge Hub were already clustered following those DISCO key topics. And each of the resources to be uploaded in the DISCO knowledge hub platform will be clustered topic-wise following the below list. The clustering and tags associated that will be implemented, will also highly support users to quickly find the resources based on the topic they are looking for.

The DISCO key topics are the following:

- Physical Internet
- SUMP
- SULP
- Data Spaces
- Data Protection Measures and Interoperability Standards
- Digitalization and Digital Technologies
- Dynamic Allocation of Urban Space
- Urban Logistics and Planning
- Data Collection and Management

If new key topic (s) are identified at a later stage, those can be certainly added. The new topic (s) will be included in our database and also as tags in the knowledge hub.

2.2.2. Content categorization

The content will be structured along the following categories (Table 22).

Content categorization	Description	Formats
Best practice examples	A method, process, or technique recognized as superior in achieving a specific outcome, typically established through empirical evidence, consensus, and experience within urban mobility or urban logistics. It can embody one or more features such as proven effectiveness, relevance to the context, continuous improvement, standardization, transparency, benchmarking utility, and risk mitigation. Best practices serve as benchmarks for performance, facilitate decision-making, promote efficiency, and drive innovation and improvement.	Article
Guidance	A document that provides recommendations, instructions, or advice on how to comply with regulations, standards, or best practices in the urban logistics and sustainable mobility fields. It typically offers non-binding suggestions rather than enforceable requirements and serves to clarify complex issues, outline recommended approaches, or offer interpretations of regulations or standards. Guidance documents are often issued by a number of organisations, agencies, or industry groups and aim to assist stakeholders in understanding and implementing applicable rules or procedures effectively. These documents may include guidelines, manuals, handbooks, FAQs (Frequently Asked Questions), or other forms of written communication designed to support cities in their objective to achieve sustainable urban logistics.	PDF documents Links to websites
Policy	Policy documents are formal statements or documents that outline the principles, rules, guidelines, or procedures adopted by an organization, government agency, or institution to guide decision-making, behaviour, and action within a specific context or area of operation. Policies serve as a framework for addressing various issues, setting expectations, allocating resources, and managing risks. They typically articulate a specific stance or position on specific matters and provide a basis for consistent and transparent governance.	PDF documents Links to websites
Tool	A tool is an instrument, device, or software designed to perform specific tasks, solve problems, or achieve objectives more efficiently or effectively. Tools are typically designed to streamline workflows, automate repetitive tasks, enhance accuracy, improve productivity, or facilitate collaboration. They can range from simple implements to complex systems and are tailored to meet the needs of specific users or industries. These can include for instance, tools for data collection, analysis, monitoring, etc.	Other formats including excel, software or websites.

Training	Refers to the provision of instruction, guidance, or education to individuals or groups with the aim of developing or enhancing their knowledge, skills, competencies, or abilities in the urban logistics filed and the topics relating to the DISCO project. Training can cover a wide range of topics and formats, including workshops, seminars, courses, e-learning modules, and more. More details will be provided in the respective chapter in this deliverable.	Various formats that will be available on Mobility Academy

Table 2: Content Categorization

2.2.3. Content formats

This section provides information in terms of the various formats that will be used to present the resources already indicated. The content formats that will be used for the DISCO Knowledge Hub include (1) articles with visuals, (2) PDF documents, (3) other formats (files or web tools), (4) webinars and discussion forums, and (5) links to websites (Table 3). The table below gives details (description and main features) of each of the formats to be used, their linkage to the specific categories in the platform and additional information.

Content format	DISCO Knowledge Hub Component	Description and main features	Additional information
Articles with visuals	DISCO Living Labs insights and repository	Short articles of 250 to 300 words maximum reflecting and highlighting best practices and examples on specific processes that worked out well in one or more DISCO Living Labs. Each article will have a related visual and the sources that were used	A template for contributors is provided in the Annex
	Urban Logistics Best practices & resources	Short articles of 250 to 300 words maximum reflecting and highlighting best practices and examples on specific processes that worked out well in one or more cities beyond DISCO in Europe and internationally.	A template for contributors is provided in the Annex
	Funding	Short articles of 250 to 300 words maximum presenting the funding opportunities along with the topic, call, funder, budget and requirements to apply and other relevant details.	A template for contributors is provided in the Annex
PDF documents	DISCO Living Labs insights and repository Urban Logistics Best practices & resources	Documents in PDF format which could either be uploaded into the DISCO Knowledge Hub and enable a download function, or a link to it will be provided to enable access.	NA

	Funding		
Other formats (excel, web tools, etc)	DISCO Living Labs insights and repository Urban Logistics Best practices & resources	Depending on the format, the resource will be uploaded into the DISCO Knowledge Hub and enable a download function, or a link to it will be provided to enable access.	NA
Exchange through webinars and discussion forums	Networking	Knowledge exchange will be organized using various formats, such as live exchanges (synchronous) in a webinar style, or asynchronous exchanges through discussion forums. For each format, a specific topic and dynamic will be defined in advance.	NA
Links to websites	Funding	Link to websites will be provided where required to facilitate access to resources, such as PDF documents, tools or other materials.	NA

Table 3: Content Formats

2.2.4. Content development

Articles with visuals will be developed for the Knowledge Hub. These will use as a basis other sources, such as articles already available from DISCO and beyond, documents, etc. The development of these articles will be distributed among task contributors and other interested DISCO partners. A specific template for the development of best practice example articles is provided in the Annex of this deliverable.

Other content in other formats, such as PDF documents of deliverables, guidance, tools (in excel or other formats) and policy from DISCO and beyond, will not be developed specifically for the Knowledge Hub, but rather will be shared from documents already existent. The aim here is to upload and facilitate on a regular basis, the knowledge already created towards our users and in this way strengthen their skills and knowledge.

Training content will be developed for DISCO specifically and together with other initiatives and sister projects to exploit synergies. Further details on the training activities are provided in the chapter 3 of this deliverable.

Content Ownership and Accessibility

In principle, the content of the DISCO Knowledge Hub will be publicly accessible and available to basically anyone who would like to learn about it. Part of the content will consist of the results of

the DISCO project, for instance project deliverables with a public dissemination feature. Each resource will have their own authors indicated and provided the authors are cited, resources can be used and downloaded freely and publicly by users.

2.2.5. Research and selection

Content mainly referring to guidance, policy and tools will be researched through Google search and in European project websites of current and past projects relating to urban logistics innovations, such as ULaaDs, BOOSTLOG, URBANE, URBANIZED, LEAD among many others.

Key Urban Logistic Networks such as ALICE and POLIS will share and provide on a regular basis resources that could be relevant for the DISCO Knowledge Hub. All those resources will be assessed and selected thoroughly in terms of their relationship to the DISCO key topics and the contribution and usefulness those resources can provide to DISCO Living Labs, follower sites and interested cities and stakeholders. Also, key policy documents that have particular relevance for cities in the European context will be included, e.g., from the European Commission, etc. In other words, the criteria for selection could be summarized as follows:

- Linkage to DISCO key topics
- Contribution to DISCO Living Labs, follower sites and beyond
- Relevance at European level

2.4 Roles and responsibilities

A clear distribution of roles and responsibilities among DISCO partners is crucial for an adequate operation and maintenance of the DISCO Knowledge Hub. In this section, we will detail the distribution of roles and responsibilities for specific processes such as content creation and curation, quality review, population and maintenance of the knowledge hub platform and moderation.

FOR CONTENT CREATION AND CURATION

The content creation and curation task are distributed among Task participants in T7.3, including: IDSA, LSP, BUAS, POLIS, IMEC, BCN, VIU, LAS NAVES, FZC, FVH, REGIONH and TIF HELEXPO.

Content creation and curation includes:

a. preparation of best practice and example articles to be published in the DISCO Knowledge Hub and,
b. Searching and filtering relevant resources to be uploaded into the platform.

For the preparation of best practice articles, a template is provided in the Annex of this document. This template should be used by contributors for the development of articles.

For the filtering and selection of relevant resources to be added into the DISCO Knowledge Hub, we will use an Excel document located in the Project Sharepoint (
). The purpose of this tool is to help us keep track of the resources already added in the platform and the evaluation of the resource in terms of its relevance towards the DISCO key topics.

The sections in the Excel document follow our approach for topic clustering, content categorization, and content formats already detailed in the previous sections. The sections in the excel document will contain the following: Name of Resource (article/document), Resource format (PDF, website, other), Content category (Guidance, Tool Policy document, Training), Identification of DISCO Key topics of the resource, Language, Link to the document and a Brief description of the Resource for the preview. See image below. The content category, DISCO key topics and language will be added as tags in the DISCO Knowledge Hub to be used as a filtering engine for users.

All the information detailed in the Excel document relating to a specific resource, will be provided by the contributor in order to be used for uploading the resource into the DISCO Knowledge Hub.

DISCO - Knowledge Hub - Resource filtering and selection

		Tags				
Name of the Resource (Article/Document)	Resource format (PDF, website, other)	Content category (Guidance, Tool, Policy document, Training)	DISCO Key topics (from TNA)	Language	Link	Introductory Paragraph
How-to Guide Zero-Emission Zones: Don't Wait to Start with Freight!	PDF Documents	Guidance	Urban Logistics and Planning, Decarbonisation	English	https://www.polisn	Logistics professionals have faced increased demand and challenges but have maintained the supply, earning appreciation for their dedication. Despite progress, there's still a significant distance to cover in achieving green freight objectives, emphasizing the need for prompt action. Truck emissions remain a major concern, with initiatives like ZEZ-zones in the Netherlands aiming to address this issue. Achieving environmentally friendly logistics involves more than just vehicle replacement, requiring new strategies and collaborations. The overarching goal of the Transport Decarbonisation Alliance is to foster global cooperation towards greener transport, with this guide serving to support partners by sharing experiences and promoting the potential of zero-emission freight. The emphasis is placed on the imperative to commence action promptly, as outlined in the title of this guide: "Don't wait to start with freight." Through this guide, the intention is to extend support to these partners by sharing the experiences of ZEZ-F pioneers and highlighting the vast potential of zero-emission freight.
UVAR in Sump	PDF Documents	Guidance	Logistics, UVAR, SUMP	English	https://programme	As the fight against climate change intensifies, Urban Vehicle Access Regulations (UVARs) are gaining popularity for their potential to reduce emissions and enhance air quality. UVARs encompass measures such as Low Emission Zones, Traffic Limited Zones, Pedestrianisations, and Parking Regulations, as defined by the European Commission. However, their implementation often faces challenges due to their broad impact beyond geographical boundaries, affecting factors like accessibility, social inclusion, and affordability. While the UVAR SUMP Topic guide published in 2019 provides valuable insights, further guidance is needed, especially regarding stakeholder engagement, complementing measures, and information for tourists. Projects like Dynaxibility4CE are working on producing additional guidance documents and tools, including an annex elaborating on UVAR implementation considering Functional Urban Areas (FUAs). This annex provides detailed information on FUAs and links to guidance developed by other EU projects, accompanied by case studies and best practices from across Europe. Ultimately, these efforts aim to compile UVAR guidance into an operational library to facilitate access for policymakers and urban planners, ensuring compliance with European sustainable mobility planning guidelines and supporting the implementation of sustainable transport measures.
Insights from the Implementation of Vehicle Access Regulations in Six Cities	PDF Documents	Guidance	Urban Freight, UVAR	English	https://civitas-revea	Since the 20th century, motorized traffic has significantly influenced urban development, shaping where people reside and how they experience city life. The proliferation of internal combustion vehicles has brought about various challenges, including air and noise pollution, greenhouse gas emissions, congestion, safety risks, inequality, and urban sprawl. Across Europe, local authorities are addressing this issue by implementing Urban Vehicle Access Regulations (UVARs), which prioritize sustainable mobility and restrict vehicle access in urban areas, particularly private cars, to create more livable cities focused on people rather than automobiles. UVARs encompass measures like Low Emission Zones, congestion charges, Limited Traffic Zones, and alterations to road layouts. Accordingly, this document presents the insights of the six cities (Bielefeld, Helmond, Jerusalem, City of London, Padova and Vitoria-Gasteiz) integrated UVARs into their standard urban mobility strategies within The Horizon 2020 project ReVeAL (2019-2022) context.

Table 4: Screenshot of Excel Tool to Track and Select Resources for the Knowledge Hub

FOR QUALITY REVIEW

Each content selected to be uploaded in the DISCO Knowledge Hub, either in the form of articles, PDF documents, and other formats, will be carefully reviewed in terms of quality and the compliant with the standards determined and already detailed in the previous sections.

Rupprecht Consult will be in charge of quality review of all content to be uploaded into the DISCO Knowledge Hub, including articles and resources such as documents, publications and others.

FOR MANAGEMENT, POPULATION AND MODERATION

The population and moderation of the DISCO Knowledge Hub platform is task shared with ALICE. The overall management of the platform is on Rupprecht responsibility. ALICE is the contact for technical support of the platform. ALICE and Rupprecht share the task for population and moderation of the platform during the project lifetime.

After the project ends, ALICE will be in charge of the DISCO Knowledge Hub management, since it is hosted in the ALICE platform. It should be also indicated, that once the project ends, the content will be static as no further information will be added; however, all the content will remain accessible beyond the project end.

2.5 Implementation timeline

The population of the DISCO Knowledge Hub will be conducted following "population periods" which will be conducted every 3 months along the tentative dates shown below covering the project lifetime (Table 55). It will include the preparation and upload of up to four (04) best practice examples and, up to ten (10) selected documents/ publications. Specifically, the number of publications to be uploaded will depend on the availability of relevant resources; thus, in some cases, it might be less than 10 documents/ publications in a specific population period.

The tentative timeline proposed, aims to avoid clash with other activities already taking place, thus, avoiding high peak-seasons and ensuring the delivery and upload of the indicated resources. However, we will test how the proposed timeline works for the upcoming year (2nd year of the project) and by the end of the 2nd year will assess if any adjustments in terms of dates or number of resources to be uploaded in the knowledge hub are needed for the 3rd year of the project.

Population period	Resource	Number	Tentative Date
1	Best practice articles	Up to 4	15 August 2024
	Selected resources or publications	Up to 10	
2	Best practice articles	Up to 4	15 November 2024
	Selected resources or publications	Up to 10	
3	Best practice articles	Up to 4	15 February 2025
	Selected resources or publications	Up to 10	
4	Best practice articles	Up to 4	15 May 2025
	Selected resources or publications	Up to 10	
5	Best practice articles	Up to 4	15 August 2025
	Selected resources or publications	Up to 10	
6	Best practice articles	Up to 4	15 November 2025

	Selected resources or publications	Up to 10	
7	Best practice articles	Up to 4	15 February 2026
	Selected resources or publications	Up to 10	
8	Best practice articles	Up to 4	15 May 2026
	Selected resources or publications	Up to 10	
9	Best practice articles	Up to 4	15 August 2026
	Selected resources or publications	Up to 10	

Table 5: Proposed Dates for Population Periods

2.6 Dissemination and continuous improvement

INTERNAL AND EXTERNAL DISSEMINATION

Dissemination internally within the project, of the resources periodically uploaded into the DISCO Knowledge Hub, is proposed to be done through the internal Newsletter that is being sent monthly by the project coordinator. A section for the Knowledge Hub and Capacity Building updates will be included and updated information on resources and training will be added on a regular basis to inform the project consortium on the upcoming activities.

Also, updated information on the Knowledge Hub and Training component will be shared monthly through the Work Package Leaders meetings organised by the coordinator.

External communication and dissemination of the resources added to the Knowledge Hub and capacity building activities will be done through the project website, social media channels such as LinkedIn, X; through the public newsletter released every semester, events and conferences, and our networks, such as POLIS, ALICE, CIVITAS, NZC, etc..

CONTINUOUS IMPROVEMENT

Analytics from the DISCO Knowledge Hub platform

ALICE Knowledge Platform provides analytics to measure the number of views of the Knowledge Platform. It is possible to measure the number of views of the overall DISCO Knowledge Hub platform on different timeframes (from one week to 5 years) and differentiate between all views/guest views/admin views (Figure 6). For example:

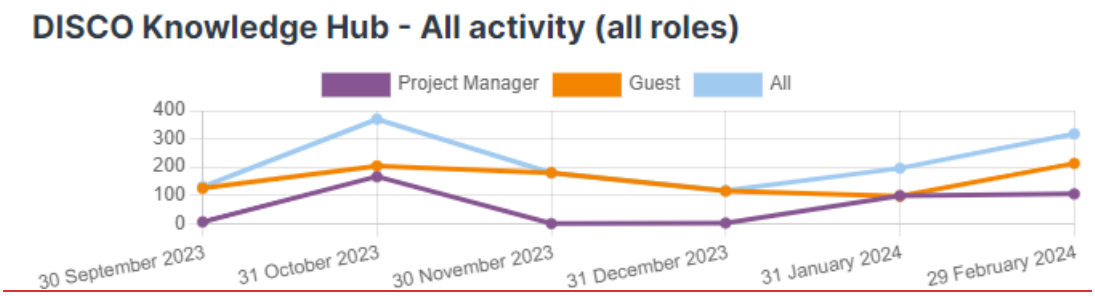


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Figure 6: DISCO Knowledge Hub analytics

To have analytics a little more detailed, for each page or section of the DISCO Knowledge Hub, it is possible to see how many views are registered, and for how many users (e.g. 13 views by 7 users). It is also possible to see when the latest access to the page or section was.

Review for improvement
By the end of each project year, we will conduct an assessment of the number of visitors to the DISCO Knowledge Hub platform and evaluate the number of views and engagement that taken place in the platform. The aim is to evaluate the outreach of the platform in terms of users and views of resources and evaluate the next steps accordingly. We also aim to complement the above with short surveys to be sent to DISCO Living Labs at the end of each project year and ask for their feedback.

3. Capacity Building programme

Capacity building should provide the necessary skills and knowledge to DISCO Living Labs to successfully plan, develop, implement and up-scale their urban logistic use cases, as well as to adapt to changing conditions in their own local contexts. The DISCO project will develop a series of learning activities that are aimed to equip local and national policy makers, practitioners, entrepreneurs, and operators with the skills and knowledge required to develop, implement, and operate successfully innovative urban logistic solutions. The objective is to establish long-lasting capacities and capabilities at all levels and for all key stakeholders to successfully support the upscaling to a new generation of urban logistics and smart planning and in this way, supporting the DISCO main objective towards the transition to decarbonised and digital cities, delivering innovative frameworks and tools, and changing the Urban Logistics and Planning paradigm with a Physical Internet (PI) – led approach.

Training topics address key DISCO themes including data spaces, data protection measures and interoperability, urban space and dynamic reallocation, digitalization, physical internet, Key Performance Indicators (KPIs) among other topics.

The learning activities are mainly targeted to those key stakeholders who are involved in the management, development, implementation, and operation of urban logistic solutions in DISCO Living Lab cities, beyond the Living Lab representatives. This includes technical staff working in the city administration, policy makers (from different departments, such as planning, operations, implementation), advisors, practitioners, entrepreneurs, subcontractors, consultants, operators as well as the political level. The groups can be extended to include groups from different government levels (local, metropolitan, provincial, national), as well as universities and knowledge organizations. Also, the training activities will be open beyond DISCO Living Labs to basically anyone who is

interested to learn about the topic and wish to reinforce or build their knowledge and understanding about a specific topic.

Our approach includes a combination of two approaches, a bottom-up process by the identification of the trainings needs in our main target group, the DISCO Living Labs; combined with a top-down process, where all Work Package leaders, as experts evaluate the training needs results and complement with their views and suggestions to build a solid base for the training component. The result of both approaches serves as the basis for the creation of the DISCO Training Programme and it is presented in the following chapters.

3.1 Training Needs Assessment (TNA)

To comprehensively address the training needs of DISCO Labs, a methodically crafted Training Needs Assessment (TNA) questionnaire has been developed, focusing on DISCO's core topics. To ensure inclusivity, responses were requested from all 8 of DISCO's Living Labs, including both Starring and Twining LLs.

The TNA, conducted online from December 2023 to January 2024, comprised four main sections:

- The introductory section provided an overview of LL representation and the expertise of their representatives.
- The second section assessed the knowledge and confidence levels of LL representatives regarding DISCO's key topics and focal areas.
- In the third section, specific inquiries were made concerning each key topic and focus area to gain insights into their current states.
- The fourth and final section delved into the preferred training formats and the type of support needed.

This structured approach ensured a thorough exploration of DISCO Labs' training requirements, catering to the diverse needs and preferences of its members.

3.2.1. Participation and knowledge level on DISCO key topics

The questionnaire was effectively covered by all LLs, garnering a total of 19 responses, with an average of 2 responses per LL. Notably, Copenhagen had the highest level of engagement with 4 responses, followed by Helsinki and Padua with 3 responses each. Ghent, Barcelona, Zaragoza, and Valencia each contributed 2 responses, while Thessaloniki had the fewest responses with only 1.
Regarding the expertise of TNA respondents, the responses underscored the diverse backgrounds within DISCO LLs teams. Expertise ranged from transportation planning, urban and city planning, traffic engineering, economics, and environmental engineering to social sciences, academia, and other disciplines.

Assessment of Basic DISCO's key topics Knowledge & Needs

The second section featured a scale question where LL representatives rated their knowledge levels on key DISCO topics, such as physical internet, data collection methods including indicators, SUMP, SULP, data spaces, data protection measures, interoperability standards, digitalization, dynamic allocation of urban spaces, demo description and assessment, identifying suitable KPIs, with an option to add other responses (Figure 7). Ratings ranged from 1 to 3, with 1 indicating a new topic, 2 representing basic knowledge, and 3 representing expertise in the rated topic.

The analysis of responses revealed that data spaces received the lowest average grade of 1.71, indicating the least familiarity among DISCO LLs. Following closely were the dynamic allocation of urban space (average rating of 1.78), then data protection measures (1.88),and physical internet (1.94), followed by SUMPs and SULPs (2.0). Knowledge of demo description and assessment and identifying suitable KPIs received average ratings of 2.06 and 2.18 respectively. Furthermore, methods for data collection and indicators, and digitalization and digital technologies garnered the highest ratings at 2.35 and 2.41 respectively.

On a scale of 1 to 3, please rate your level of knowledge about the following topics: 18

On a scale of 1 to 3, please rate your level of knowledge about the followi...	Average	Minimum	Maximum
Physical internet	1.94	1.00	3.00
Methods for data collection to create indicators	2.35	2.00	3.00
SUMP	2.00	1.00	3.00
SULP	2.00	1.00	3.00
Data spaces	1.71	1.00	3.00
Data protection measures and interoperability standards	1.88	1.00	3.00
Digitalization and digital technologies	2.41	1.00	3.00
Dynamic allocation of urban space	1.78	1.00	3.00
The Knowledge to Describe / Assess the Demo	2.06	1.00	3.00
Identifying suitable KPIs	2.18	1.00	3.00

Figure 7: Evaluation of the knowledge level on DISCO key topics

The subsequent section entailed the detailed assessment of the knowledge levels pertaining to various DISCO key topics, including physical internet, SUMPs and SULPs, data spaces, stakeholder cooperation and governance, and dynamic allocation of urban spaces.

3.2.2. Evaluation on involvement, challenges and risks in DISCO Key Topics

PHYSICAL INTERNET – NETWORK OF NETWORKS

Among respondents, 61% lacked practical experience in implementing Physical Internet (PI) concepts, with only 11% serving as core members of a PI-focused team, 17% has been involved as a stakeholder, and 11% were involved as a secondary member of an organization (Figure 8).

Moreover, half of the respondents (50%) had not yet adopted digital tools like warehouse management systems or machine learning, while a significant portion (33%) had extensively integrated such tools into their operations.

Figure 8: Evaluation of Physical Internet knowledge of participants

In terms of concerns and risks associated with PI implementations, achieving seamless interoperability emerged as the most prominent concern, with 12 respondents highlighting its significance. Following closely, resistance to change due to cultural and organizational barriers was noted by 11 respondents, while concerns about high infrastructure costs were expressed by 7 respondents. Additional concerns included willingness to share data, data protection measures, and navigating legal frameworks.

SUMPs & SULPs:

In this section, a majority of respondents (72%) reported that their cities had a Sustainable Urban Mobility Plan (SUMP), indicating a relatively high level of awareness and engagement in sustainable urban planning. However, none of the respondents reported having a Sustainable Urban Logistics Plan (SULP), suggesting a potential area for development and focus.

Challenges in the development of SUMPs and SULPs were multifaceted, encompassing political support, lack of comprehensive data, government and stakeholder participation, technical knowledge, and securing adequate financing. These challenges underscored the complexities inherent in crafting holistic urban mobility strategies that integrate both passenger and freight transportation needs (Figure 9).

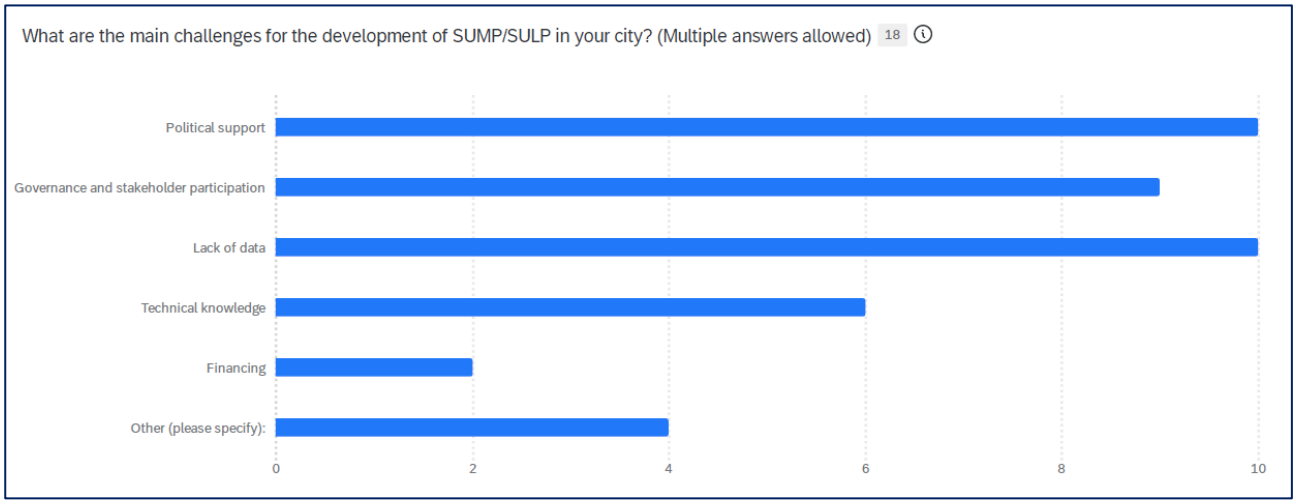

Figure 9: Main Challenges for the Development of SUMP/SULP

DATA:

Regarding data collection methods, respondents reported a mix of approaches, with 12% relying on manual data collection processes, 24% utilizing advanced systems and infrastructures such as sensors and cameras, and the majority (59%) employing a combination of manual and advanced methods.

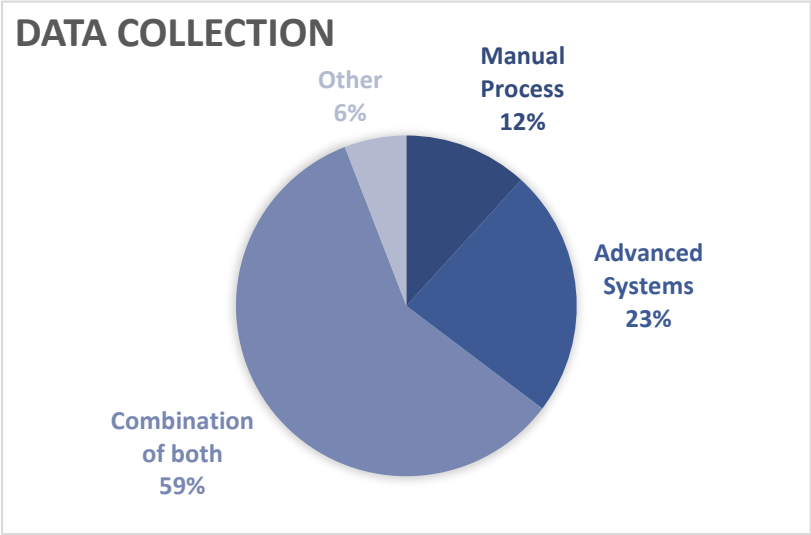

Figure 10: Data Collection Methods

Challenges in data collection and management included concerns about data privacy, reluctance to share data, limited technical expertise, and constrained financial and human resources. Additionally, respondents highlighted legal and legislative hurdles, as well as the need for data in standardized formats to facilitate analysis and decision-making (Figure 10).

STAKEHOLDERS ENGAGEMENT STATUS:

Engagement with stakeholders in urban logistics and planning projects varied among respondents, with 59% indicating moderate levels of engagement and 41% reporting high levels of engagement. Challenges encountered in collaborating with stakeholders and establishing appropriate governance structures included low stakeholder interest, potential conflicts of interest, lack of stakeholder support, and limited communication channels. Respondents also identified challenges in engaging with citizens, citing the need for substantial resources and efforts, as well as difficulties in understanding and receiving useful feedback from the public (Figure 11).

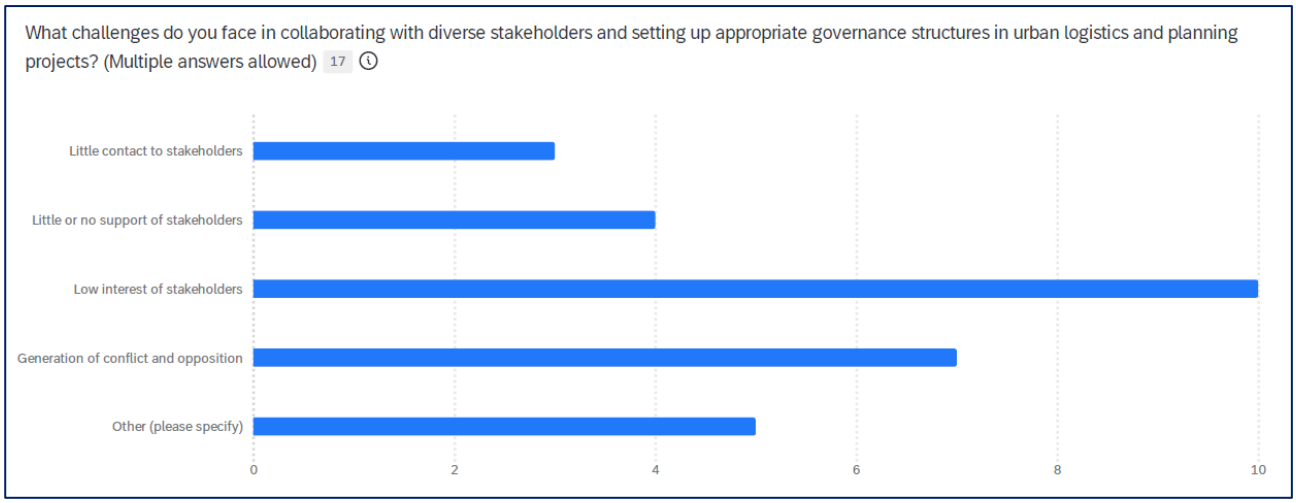

Figure 11: Challenges Related to Collaborating with Diverse Stakeholders and Setting up Appropriate Governance Structures in Urban Logistics and Planning Projects

DYNAMIC ALLOCATION OF URBAN SPACE:

Most respondents (82%) reported a lack of practical experience with dynamic space allocation for urban logistics, highlighting a significant gap in hands-on experience with innovative urban planning concepts. Furthermore, a majority (59%) reported minimal utilization of digital technologies or platforms to support dynamic allocation of urban spaces, indicating a potential opportunity for technological integration and advancement in urban logistics management.

Challenges foreseen in the dynamic allocation of urban space included obtaining up-to-date and accurate data, integrating digital technologies and smart city solutions, navigating zoning regulations, ensuring future growth considerations, and maintaining safety and security standards. These challenges underscored the complexities involved in optimizing urban spaces to meet evolving logistical needs while balancing competing urban development priorities (Figure 12).

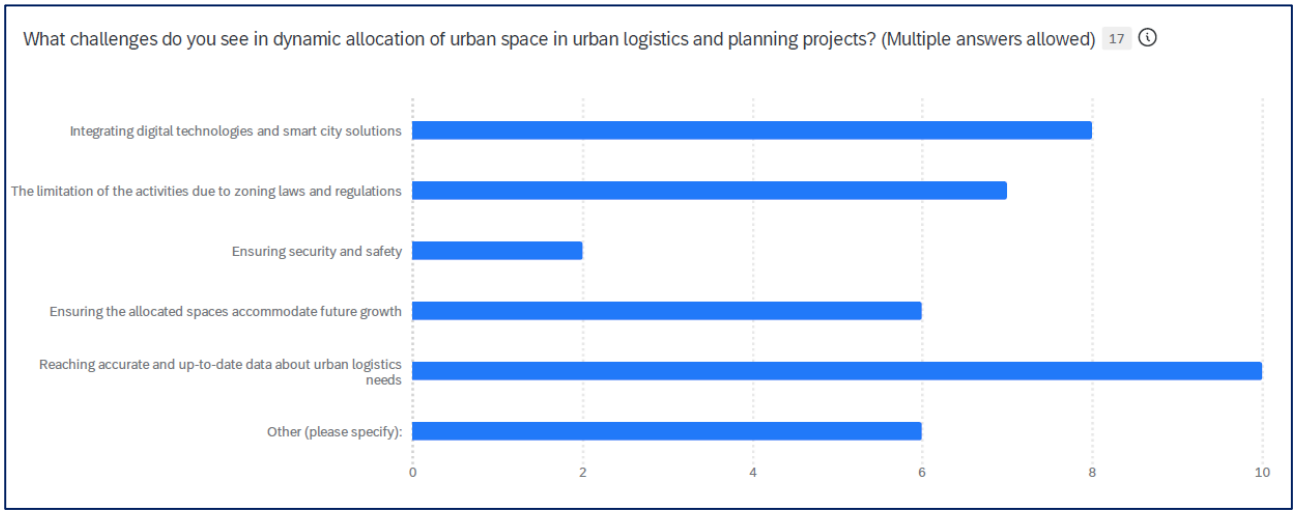

Figure 12: Challenges Related to Dynamic Allocation of Urban Space in Urban Logistics and Planning Projects

TRAINING FORMAT PREFERENCES:

In terms of support preferences, respondents prioritized access to content and knowledge based on best practices, reflecting a desire for practical guidance and expertise. Online courses and webinars emerged as the preferred modes of training, with 9 votes each, indicating a preference for flexible and accessible learning opportunities. Face-to-face training also garnered considerable support, with 7 votes, suggesting the value of interpersonal interactions and hands-on learning experiences. Meanwhile, workshops received 5 votes, signalling an interest in interactive and collaborative learning formats. These preferences highlighted the importance of tailored training approaches that cater to diverse learning styles and preferences within the DISCO community (Figure 13).

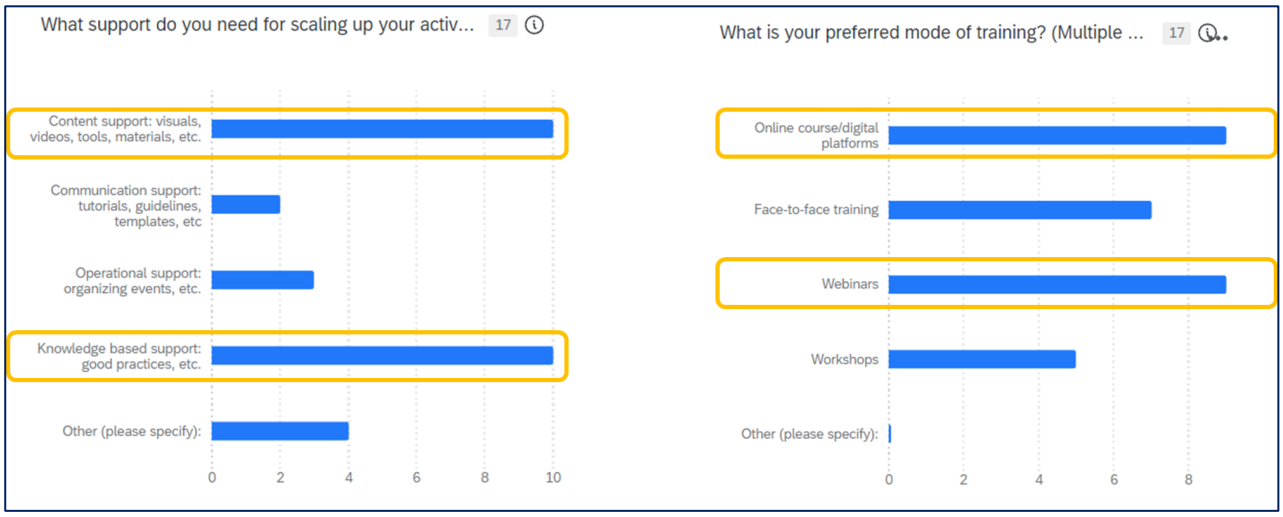

Figure 13: The Needed Support for Activities and Preferred Mode of Training

3.2.3. TNA Results

Following the Training Needs Assessment (TNA) results collected from DISCO Living Labs, several key insights have emerged to guide the development of tailored training programs. Among these findings, there is a high training need identified in the areas of data spaces and urban space management, dynamic allocation, and digitalization, reflecting the pressing demand for expertise in leveraging data and digital technologies within urban logistics contexts.

Additionally, a medium training need has been identified in understanding the concept of the Physical Internet, indicating a moderate level of interest and potential for further exploration in this domain. Conversely, a low training need has been observed in subjects related to Sustainable Urban Mobility Plans (SUMP/SULP), Key Performance Indicators (KPIs), and the assessment of demonstrations, suggesting a relatively lower demand for training in these particular areas (Figure 14).
These TNA results serve as a valuable roadmap for crafting targeted training that address the varying levels of expertise and interest among project stakeholders, ultimately maximizing the impact and effectiveness of capacity-building efforts within the DISCO project.

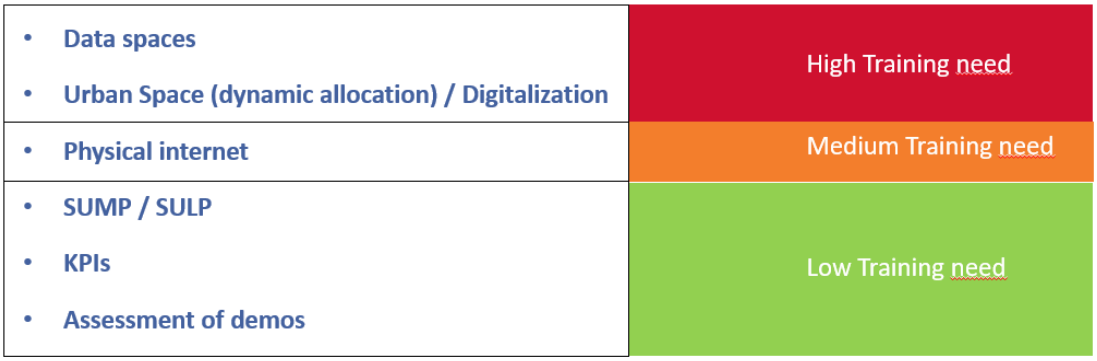

Figure 14: Training Needs Assessment Results

WORK PACKAGE LEADERS FEEDBACK

Once the results of the TNA were finalised, those were presented and discussed with Work Package leaders to ensure from expert (top-down) view, all important topics are well-addressed in the training programme. The objective was to validate and confirm the training topics, and particularly receive feedback and adjust the training timeline according to the project progress and DISCO Living Lab demos implementation.

Work Package leaders indicated that the “Assessment of demos” and “KPIs identification” are not topics of low training need as DISCO Living Labs have indicated; rather those are quite crucial and need to be well-addressed through trainings in two instances, one this year in the next couple of months, and another instance in one year. This feedback is already included in the training outline that is presented in the next chapter.

An additional training topic suggested by Work Package leaders was "Transitions processes" covering the requirements, pre-requisites, readiness level, etc for those transitions to take place. It was suggested to conduct an introductory training this year and a follow up training activity in the next years of the project. This feedback is also already included in the outline below.

It was also highlighted that the content on quite technical topics, such as data spaces, should be determined towards the specific audience it is intended. Indeed, the training programme we present here is flexible enough to allow for various trainings with different focus, while some could be more technical targeted to technical experts; other trainings could be more strategic at a higher level targeting to municipal authorities and practitioners. All the feedback received is already included in this deliverable.

3.2 Training programme

Our aim is to provide an open, friendly and flexible learning environment with a combination of online components and offline activities – **blended learning** – aligned to the DISCO transition towards a new generation of urban logistics and smart planning.

We do this by:

- providing clear, concise, easy to understand information on innovative urban logistic-related topics as well as links to relevant case studies, examples and other resources;
- helping participants to **look at their local context** critically, identify challenges and opportunities and apply information gained through training participation;
- delivering knowledge not only on the technicalities of **different urban logistic solutions**, but also on the **policy frameworks and enabling contexts** required for a successful deployment of such innovations;
- offering **online trainings in various formats including e-courses, webinars, podcasts**, among other formats to exploit the opportunities that each of these training formats offer and generate opportunities for peer-to-peer exchange whenever possible;
- **offering online courses which** will enable the opportunity to **apply the knowledge acquired** by the elaboration of tasks throughout the e-courses, designed to create a win-win situation for individual learning;
- providing **follow-up, feedback and a certificate** to participants to strengthen learning and keep motivation up along learning activities;
- **building networks** that sustain after training activities have ended;
- including **webinars**, serving as a platform for **lively exchange** on **case studies, examples and good practices**;
- providing **supporting material** as preparation for online activities (pre-event surveys, evaluation forms etc);

- developing a **concept that can be used for regular replication** in the future, incorporating the lessons learned from the first trainings.
- Setting-up a training programme that is **dynamic and flexible** and constantly **adapts to the needs** of DISCO Living Labs in relationship to the assets being developed in the project;
- Taking advantage of the **synergies with sister projects** such as URBANE, UNCHAIN, and others, to organise training activities together and benefit both audiences; as well as **networks** like CIVITAS and the Urban Logistics cluster.

Our approach combines different learning formats, methods and activities to ensure a flexible, open and friendly capacity-building framework that suits the needs of the different key stakeholders, at all levels. This approach integrates a suite of learning activities in a **Blended Learning Programme** for the course of three and half years that the DISCO project is running. This approach also enables the incorporation of new training needs, demands, feedback and lessons learned in an ongoing basis.
A summary of the various learning formats and exchange opportunities we will be offering can be seen in the list below:

E-LEARNING COURSES

Online courses will be conceptualized, organised and delivered for the thematic areas outlined in the **Errore. L'origine riferimento non è stata trovata.** below. E-learning courses will last maximum 3 weeks and will require approximately 2-3 hours of weekly effort from participants. E-courses are moderated during their running time and will include detailed content in the form of short videos, examples, best practices, tools, tasks, and a moderated forum for discussion and exchange. Most of the content is accessible at their own pace "self-learning" in the form of videos, discussion forums and tasks; thus, enabling participants to complete the training at their own pace and time within the course running time.

WEBINARS

Webinars will be organised either as part of a particular e-course as a complementary activity, or as standalone learning activity, depending on the topic. Webinars will address thematically the topics outline in the Table 6 below. Webinars will have a duration of 1 hour to 1.5 hours maximum, and require the participation at a given day and time for active engagement and Q&A. Of course, we offer the possibility to record the sessions for those who could not join online and would like to see the recording afterwards.

PODCASTS

In the same way, podcasts will be organised either to complement a specific e-course providing content in a different format or as a standalone training activity, according to need and topic. Podcasts will have a duration of 30 minutes approximately. As podcasts are recorded in advance, they are accessible basically anytime the participant wishes to listen to it, which give high freedom and great ease to access option.

Those three training formats are designed to complement each other whenever possible, offering different settings and opportunities for knowledge sharing, various levels of participant interaction and ease of access as well as the effort required by the target audience. Participants can take part in a complete package of trainings if they wish, or in standalone training activities of their own interest.

3.2.4. Training Programme Outline

The table below presents an outline of the training activities within DISCO (Table 7). This outline will be evolving progressively in terms of specific topics to address at each training, contributing partners and timeline in order to match the project progress, milestones and needs of DISCO Living Labs.

In total, we propose the development and delivery of 16 training activities (03 e-courses, 08 webinars and 05 podcasts) along the project lifetime including e-courses, webinars and podcasts addressing several topics as the table below shows.

The number of e-courses, webinars and podcasts proposed is indicative. The formats and specific topics might be subject to change depending on the needs of the target audience and particular topics to address. Therefore, in conversation with the training leader of each training activity, some modifications are expected which might lead to a few changes in this initial proposed outline.

Training main theme	Timing	E-course (possible topics)	Webinar (possible topics)	Podcast (possible topics)	Project partners to coordinate/ contribute
(1) Data Spaces	Part 1 -> August-September 2024 Part 2 -> August-September 2025	**01 E-course** • Introduction to Data spaces (overview, benefits, challenges and limitations) • Fundamentals of data spaces • Architectures and technologies • Tools and platforms • Standards and protocols	**01 Webinar** • Data spaces applications and use cases (smart cities, urban analytics, etc) • Practical implementation (designing and deploying a data space architecture, data ingestion and processing, monitoring and maintenance)	**01 Podcast** • Future trends and challenges (emerging technologies, ethical and privacy considerations, governance models, addressing complexity and scale	Lead: IDSA, IMEC Contributors: INLE, AKKA, IRTX

(2) Urban space management, dynamic allocation and digitalization	May-July 2025	**01 E-course** • Introduction to Urban Space Management • Flexible urban logistics infrastructure • Digitalization in urban logistics • Data drive-decision making	**01 Webinar** • Sustainable urban freight solutions (green logistic practices, low-emission zones and congestion charging, collaborative delivery initiatives)	**01 Podcast** • Case studies and best practices from DISCO and EU projects	Lead: FVH, IMEC, POLIS Contributors: BUAS, LSP
(3) Physical Internet	April-June 2025	**01 E-course** • Physical internet basic concepts, key principles, aims • Network design and operations • Collaborative logistics	**01 Webinar** • Successful implementations of physical internet concepts, industry applications and use cases	**01 Podcast** • Resilience and risk management within physical internet (flexibility, adaptive logistic strategies)	Lead: ALICE, IMEC Contributors: KLU
(4) SUMP / SULP	August-September 2025	N/A	**01 Webinar** • Sustainable Urban Logistics adaptive planning and strategies • Best practices and examples	**01 Podcast** • Reflecting on the transition from the planning to implementation along examples	Lead: RC, BCN, Contributors: CERTH, FZCC
(5) KPIs identification	Part 1 -> July-August 2024 Part 2 -> July-August 2025	N/A	**02 Webinar** • Determining effectively the KPIs • Linking the data collection to the monitoring process	N/A	Lead: ITL, LSP Contributors: CERTH, LAS NAVES
(6) Demonstration Assessment	July-August 2024	N/A	**01 Webinar** • Defining clearly how to assess a	N/A	Lead: ITL, LSP

			demonstration along with examples		Contributors: THEHELEXPO
(7) Transition processes	Part 1 -> October-November 2024 Part 2 -> October-November 2025	N/A	**01 Webinar** • Basic concepts on Transition processes theories and practical application • Real-life examples and best practices	**01 Podcast** • Reflecting on the challenges when implementing transition processes on the ground and how to overcome	Lead: CERTH Contributors: VIU, LAS NAVES, REGIONH

Table 6: Outline of Training Activities within the DISCO Project

3.2.5. Synergies with sister projects and other initiatives

Whenever possible, synergies with sister projects, e.g., URBANE, UNCHAIN, DECARBOMILE and others will be explored to join forces and organise joint training activities, mainly when a common training topic is intended to be addressed by both projects. Also, through our network and DISCO key partners, such as ALICE and POLIS who also participate in other EU funded urban logistic projects, we can investigate and identify in advance the possibilities for those collaborations. Key conferences like TRA 2024 and others will be used as the platform to identify those opportunities.

Additionally, we aim to collaborate with the CIVITAS network and the City platform to be able to reach wider audiences with our trainings, and we will do so through regular conversations via the project coordinator FIT, POLIS and ALICE.

3.2.6. General considerations for e-courses

Rupprecht Consult will develop an e-learning course guidance document for partners developing courses and will supervise/ guide the course development processes. This will ensure consistency among different materials to be developed as well as the inclusion of all relevant partners.

Courses will be actively promoted on well-established and widely used dissemination channels (e.g. EU Urban Mobility Observatory, CIVITAS) as well as through DISCO partners to attract a wide audience. Courses will be designed in a way that ensures high user interactivity. Specific tasks will be given to course participants in each module in order to ensure that users reflect on the course contents and relate this to their own situation. A forum will allow for course participants interacting with each other and reacting to other's questions and inputs. This will ensure the project's community building.

Rupprecht Consult will include user surveys at the end of courses in order to assess user satisfaction and collect feedback on how the project can improve its e-learning activities. Rupprecht Consult will also provide statistical analyses and visual usage overviews on how courses have been running and how active learners have participated. Based on user feedback, Rupprecht Consult will also provide lessons learnt.

After completion of courses, the DISCO project will provide certificates of course completion to incentivise the active participation in courses and attract a wider audience.

3.3 Online Learning Platforms

MOBILITY ACADEMY

The Mobility Academy, offered by Rupprecht Consult, is an e-learning platform focused on sustainable mobility (Figure 15). It utilizes various formats, including texts, images, videos, and quizzes, for knowledge exchange.

A central element of the Mobility Academy is its discussion forum. This feature enables direct interaction among participants, facilitating an active exchange of ideas and insights. It ensures visibility for all participants' contributions, fostering a genuine exchange of knowledge.

E-learning through the Mobility Academy is noted for its effectiveness, allowing learners to study at their own pace, regardless of their geographical location or time constraints. This approach supports asynchronous learning activities, including accessing educational materials and engaging in forum discussions.

In our process of creating video lectures for e-courses, we prioritize timely delivery and alignment with course objectives. We utilize user-friendly tools like Canva or PowerPoint for self-recording, simplifying editing and enhancing accessibility. We aim for concise content delivery, with shorter videos of 10 to 15 minutes, to maintain student engagement and maximize learning outcomes.

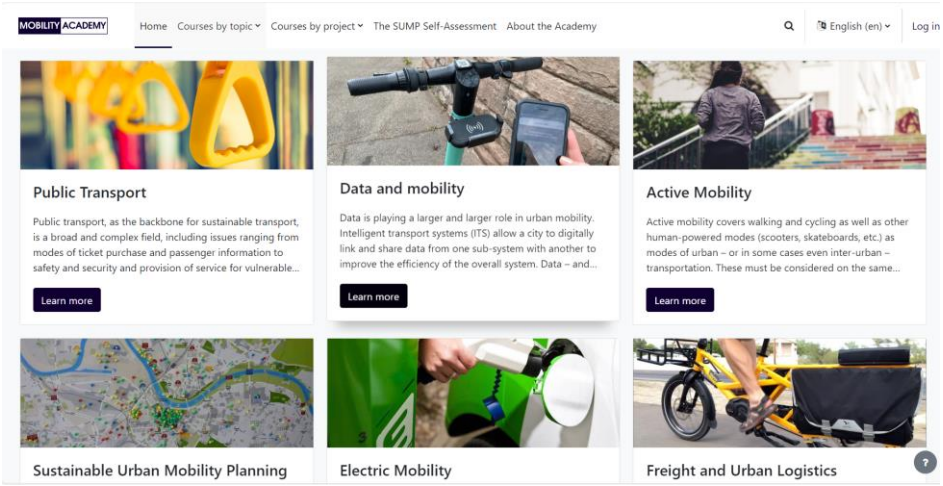

Figure 15: Screenshot of Mobility Academy Platform of Rupprecht Consult

MOBILITY PLANET

Mobility Planet by Rupprecht Consult is a podcast platform designed to share ideas and projects within the sustainable mobility community and beyond (Figure 16). It serves as a medium for exchanging expertise, featuring up-to-date debates and discussions on mobility topics. With a commitment to accessibility and inclusivity, the platform invites experts from diverse fields and locations.

The podcasts on Mobility Planet cover a wide range of topics, from policy implications to practical implementation strategies in sustainable mobility. Each episode delves into projects undertaken by Rupprecht Consult and its partners, providing insights, success stories, and challenges encountered in the field.

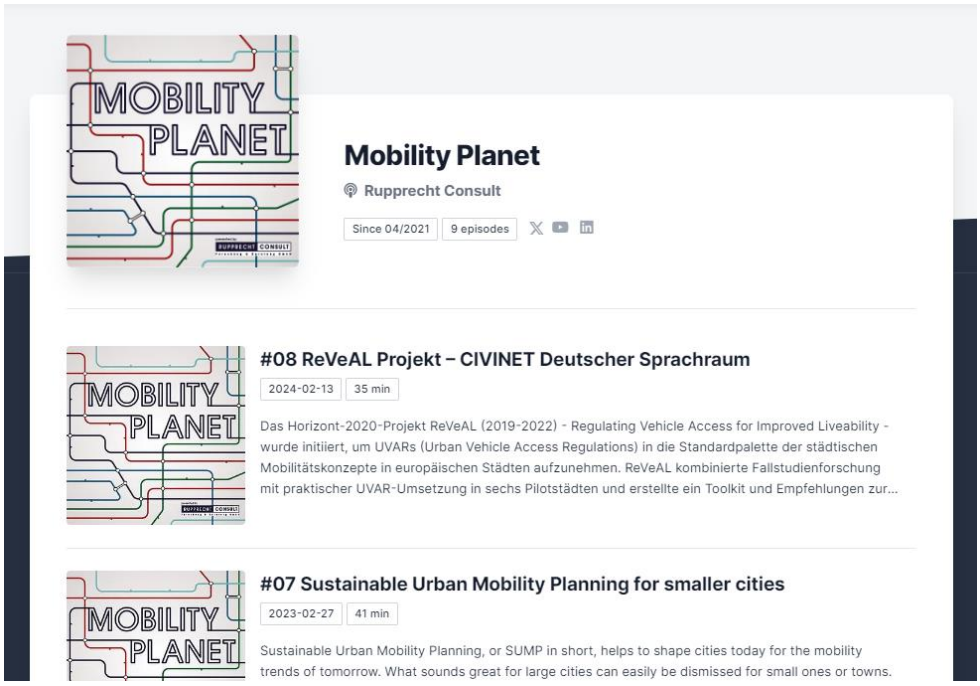

Figure 16: Screenshot of Mobility Planet Platform of Rupprecht Consult

3.4 Roles and responsibilities

The successful conduction of a training requires a collaborative work effort among partners with different roles. The table below provide information on the roles, description of tasks and responsibilities to be shared among DISCO partners (Table 7). While Rupprecht Consult oversees the Capacity Building programme as a whole and provides guidance and support for the organisation and implementation of trainings, other DISCO partners will be responsible for training coordination, contributions to trainings, moderation and reporting.

The training coordinator and contributors will not be the same for each training activity, with some exceptions. In general terms, the training coordinator will be the knowledge partner who proactively proposes to address one of the training needs topics with a capacity-building activity. An initial identification of partners who can play the role of training coordinators and/or contributors for identified topics is detailed in Table 6.

Role	Description of tasks	Responsible
Capacity building task leader	• Overall management and supervision of the training programme • Provision of guidance for training organisation and implementation	Rupprecht Consult

Training coordinator	• Conceptualisation of a specific training activity, for instance an e-course, webinar or podcast • Creation of the training concept, e.g., aim, objectives, structure, components and formats. • Nominate and confirm contributors • Coordinate the training organisation, delivery and reporting • Provision of content (training materials and tasks) for the training, if the training coordinator is also a contributor	DISCO partner responsible
Contributor (s)	• Provision of content for the training activity, e.g., power point presentations. • Participation either recorded or live, in case of webinars	DISCO partners confirmed as contributors for a specific training
Technical support	• Provision of technical support in Mobility Academy and Mobility Planet	Rupprecht Consult
Moderator (s)	• Moderate the training, e.g., the discussion forums in e-courses or live webinars	Training coordinator and contributors
Reporting	• Prepare the reporting of the specific training to be added to the Project Reporting	Training coordinator

Table 7: Roles and Responsibilities for Training Activities

3.5 Measuring success and e-course certification

After the finalisation of each training activity, we will report on the number of participants who participated in the activity. Participants will enrol themselves in the training and we can later obtain a list of participants from our learning environments, for instance from Mobility Academy.

Also, the level of engagement can be retrieved, including the number of views of specific training units, views and responses to discussion forums, etc. This information will also be of help to assess whether a participant is accredited for a certificate or not after the successful completion of a training activity. The certification minimum criteria will include the following

- the successful completion of at least 60% of the tasks given a particular e-course.
- Active participation throughout the e-course running time

Important to indicate that only e-courses will allow certification, while participation in webinars or podcasts will not provide this option.

4. Annex

Template for best practice and example articles

1. Short Style Guide

Provide

1. Maximum text length is indicated below
2. Use examples to make the text easy to read and understandable
3. Graphics and photos to illustrate your text
4. Follow the proposed structure

Councils:

1. Always formulate light, clear and easy to understand
2. Avoid formality and lengthy sentences
3. Do not use the first and second person "I", "we", "us", "you", etc.
4. Avoid colloquial language
5. Use the passive voice judiciously
6. Careful review

2. Template for best practice and example articles.

Title	
Add the title of your best practice or example	
Photo(s) and/or figures	
Insert at least one photo and/or graph/figure/chart (ideally high quality).	
Source	**Photo title**
What is the source/copyright of the photo/figure provided?	*Please add a caption for the photo/figure provided.*

References

Insert any references used.

Text (250 - 300 words)

Please insert the text of your example. The idea is to reflect and highlight on a specific approach that worked well on a city, context or Living Lab for instance. E.g., a stakeholder engagement initiative that helped the implementation of a measure, a governance structure that was successful, data collection or analysis process that worked out well, etc.

The content should follow and provide: explain in detail the approach, what was it about? and why it has taken place? how it was conducted? who participated? What were the results? What are the lessons learned and recommendations for other cities?

Author(s), organization and role

e.g. name, project manager

Project and link to the website

e.g. ReVeAL project, www.civitas-reveal.eu

Funded by the European Union

DISCO is a project under the CIVITAS Initiative.
Read more - civitas.eu