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**ShareDiMobiHub**

**Draft hubs deployment reports Rotterdam**

**WORK PACKAGE 1 DELIVERABLE 5**

**August 2024  
(City of Rotterdam)**

## Summary sheet

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## Project partners

<b>Organisation</b>	<b>Abbreviation</b>	<b>Country</b>
<b>Province of Utrecht</b>	ProvU	Netherlands
<b>Capital Region of Denmark</b>	CRD	Denmark
<b>Vestfold and Telemark county</b>	VTFK	Norway
Subpartner: Statens vegvesen	SVV	Norway
Subpartner: Tønsberg kommune	TK	Norway
Subpartner: Porsgrunn municipality	PK	Norway
Subpartner: Skien municipality	SK	Norway
<b>Promotion of Operation Links with Integrated Services</b>	POLIS	Belgium
<b>City of Amsterdam</b>	AMS	Netherlands
<b>City of Leuven</b>	LEU	Belgium
<b>University of Antwerp</b>	UAntw	Belgium
<b>Transport Authority for the Amsterdam Region</b>	VRA	Netherlands
<b>Mpact</b>	Mpact	Belgium
<b>Autodelen.net</b>	Auto	Belgium
<b>City of Rotterdam</b>	ROT	Netherlands
<b>Hamburg University of Applied Sciences</b>	HAW	Germany
<b>University of Applied Sciences Utrecht</b>	HU	Netherlands

## Document history

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## 1. Introduction

This document outlines the process for deploying shared mobility hubs in Rotterdam as part of the ShareDiMobiHub project provides a step-by-step guide for preparing locations, including obtaining permits, modifying existing infrastructure, and implementing best practices. The goal is to create efficient and user-friendly mobility hubs that encourage the use of shared transportation options.

## 2. Hub Deployment Process

In Rotterdam there are different types of hubs. A shared mobility hub in this document is a mobility hub for shared-(cargo)bikes, with or without electric assistance, and mopeds. This shared mobility hub is characterized by white markings on the ground and a green hub sign in the national ‘Mijksenaar hub’ style. An example of this shared mobility hub is pictured below.



Figure 1: Example of a sidewalk-based hub

## 2.1 Site Preparation

Before deploying a mobility hub, the following steps are taken to prepare the location:

### 2.1.1 For sidewalk-based hubs

1. Assess the need for removing or relocating existing street furniture (e.g., bike racks, poles).
2. If removal/relocation is necessary:
  - a. Consult with the relevant people within the municipal department.
  - b. Upon approval, the department responsible for public space construction implements the changes.
3. If no changes are needed or once changes are completed:
  - a. Commission an external organization to apply white lines on the sidewalk, marking the hub area. This is chosen because it's faster, environmentally friendly, and easier to remove when the hub is not performing well.
  - b. Install a standardized HUB pole next to the parking spaces.

### 2.1.2 For parking space-based hubs

1. Evaluate the parking space configuration. This is based on parking pressure counting. When this is over 80% it is not possible to place a shared mobility hub.
2. If there are not two 'vertical' parking spaces with 'ears' on the sides, or in other words, in the situation a parking space is located directly besides the hub:
  - a. Order and install a planter on the third parking space to prevent vehicles from falling against cars, Figure 3.
3. If the location is sensitive to parking space removal, inform nearby residents via letter. This depends on the situation, for example the entire street or within a radius of 200 meters.

Below the different options are visualized.

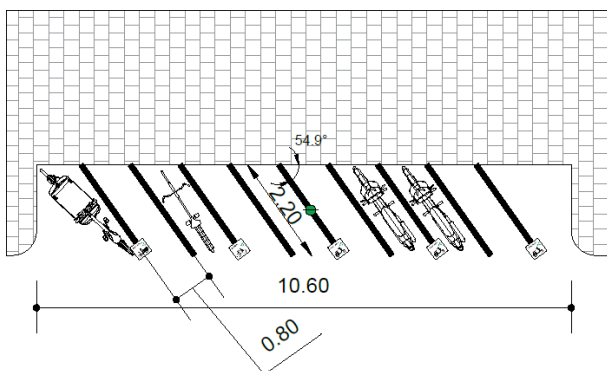


Figure 2: Hub on parking space with two 'ears'

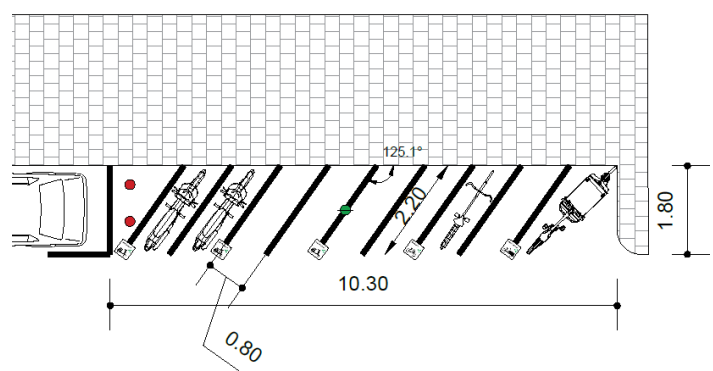


Figure 3: Hub on parking space with one 'ear' and a planter

4. Once the space is prepared:
  - a. Apply white lines to mark the hub area.
  - b. Install a standardized HUB pole next to the parking spaces.

## 2.2 Digital Integration

After physical installation

1. Add the hub to the "dashboard deelmobiliteit" (shared mobility dashboard).
2. Create a 200m no-parking zone around the hub in the dashboard.
3. Share hub and no-parking zone information with shared mobility providers for integration into their apps. A KML-file of the hub is downloaded from the shared mobility dashboard. This KML-file will be sent to the different shared (cargo)bikes and moped providers via E-mail.

## 2.3 Monitoring and Evaluation

1. Use the shared mobility dashboard and a custom PowerBI dashboard to monitor:
  - Number of rentals from each hub
  - Number of vehicles present in different hubs
2. Use this data to inform decisions on:
  - Altering hub size
  - Placing new hubs in surrounding areas
  - Removing underperforming hubs

## 3. Best Practices

Based on Rotterdam's experience, the following best practices are recommended for efficient hub deployment:

**Standardization:** Use consistent branding and signage (e.g., HUB poles) to increase visibility and user recognition.

**Internal communication:** Create a clear oversight of the different stakeholder involved in the process of placing shared mobility hubs. Involve these internal stakeholders in the decision-making process of the location of the hubs. These include landscape architects, traffic engineers, neighbourhood representatives and potentially colleagues from other clusters. (for example bicycle parking or street execution). To ensure an ongoing process clearly depict everyone's roll and who needs to be involved in which step. In this way it is possible to ensure placement of hubs in a relatively short time. The exact time depends per location.

**Flexible Design:** Opt for easily removable markings (e.g., glued white lines) to allow for quick adjustments if a hub underperforms.

**Digital Integration:** Ensure seamless integration with mobility apps and dashboards to facilitate user adoption and data-driven decision-making.

**Community Engagement:** Inform and involve local residents, especially when removing parking spaces, to build support and address concerns.



**Multi-stakeholder Collaboration:** Work closely with shared mobility providers, municipal departments, and local stakeholders throughout the process.

**Adaptive Management:** Continuously monitor hub performance and be prepared to make adjustments based on usage data and community feedback.

**Environmental Considerations:** Choose eco-friendly materials and methods where possible, such as using glued lines instead of paint.

#### 4. Conclusion

The deployment of shared mobility hubs requires careful planning, stakeholder engagement, and ongoing monitoring. By following these procedures and best practices, cities can create effective hubs that encourage the use of shared mobility options, reduce street clutter, and improve overall urban mobility.

## The ShareDiMobiHub Consortium

The consortium of ShareDiMobiHub consists of 13 partners and 4 subpartners with multidisciplinary and complementary competencies. This includes European cities and regions, universities, network partners and transport operators.

<p><b>Regional authorities and cities</b></p> <p>PROVINCIE :: UTRECHT</p> <p>leuven</p> <p>Gemeente Amsterdam</p> <p>Gemeente Rotterdam</p> <p>The Capital Region of Denmark</p> <p>Vestfold og Telemark FYLKESKOMMUNE</p> <p>TØNSBERG KOMMUNE</p> <p>PORSGRUNN KOMMUNE</p> <p>SKIEN KOMMUNE</p>	<p><b>Universities</b></p> <p>HAW HAMBURG</p> <p>University of Antwerp TPR   Department of Transport and Regional Economics</p> <p>UNIVERSITY OF APPLIED SCIENCES UTRECHT</p>
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For further information please visit <https://www.interregnorthsea.eu/sharedimobihub>

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