



eHUBs implementation report

Dreux

DELIVERABLE D.T 5.1

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Summary sheet

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Project partners

Organisation	Abbreviation	Country
Gemeente Amsterdam	AMS	The Netherlands
Promotion of Operation Links with Integrated Services aisbl (POLIS)	POLIS	Europe
Taxistop asbl	Taxi	Belgium
Autodelen.net	Auton	Belgium
Bayern InnovativGmbH	BI	Germany
Cargoroo	CA	The Netherlands
URBEE (E-bike network AmsterdamBV)	URBEE	The Netherlands
Gemeente Nijmegen	NIJ	The Netherlands
Transport for the Greater Manchester	TfGM	Great Britain
Stad Leuven	LEU	Belgium
TU Delft	TUD	The Netherlands
University of Newcastle uponTyne	UN	Great Britain
Ville de Dreux	DR	France
Stadt Kempten (Allgäu)	Kemp	Germany
Universiteit Antwerpen	UAntwerp	Belgium

Document history

Version	Date	Organisation	Main area of changes	Comments
0.1	June 2022	City of Dreux	Completed entire phase of eHUBs	

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1 Introduction

Dreux has been taking actions for years to revitalize its city center and to offer services, economic possibilities, and high-quality life environment. Convinced of the need to initiate environmental, social and economic transition through these actions, the city is pursuing an active policy in favour of renovating housing in the city center and in favour of the development of new modes of transport with less CO2 emissions.

It is in this context that the city has chosen to modify the place of the car in the city (paid parking in the city center, speed reduction in the city center (zone 30 km / h), to give place to active mobility (construction of 16 km of cycle paths in 2019, and another 20 km in 2020 and establishment of eHUBS shared mobility stations).

The municipality decided to implement two types of shared electrical mobility service :

- E-bike service, in partnership with French mobility provider Green-On
- E-car service, in partnership with French mobility provider Citiz

Dreux selected its majority of location through strategic evaluation. Indeed, the city of Dreux has embarked on a project to restructure its city center for several years. The creation of cycle paths and facilities to facilitate active mobility is part of this overall project. Therefore, the city of Dreux first strategically identified the e- Hubs stations in the downtown area. A first displacement triangle is thus created.

In a second step, thanks to the results provided by the heat maps carried out by the University of Delft (cf Deliverable T2.2.1) on the choice of station locations, 3 new eHUBS station locations have been determined and allow to cover a large area of Dreux territory.

Finally, the last planned eHubs stations were extra municipal ones, in an area close to Dreux. We anticipated that neighbouring cities will be the first replication cities, which will enable the shared-mobility stations network to start at the “Dreux Agglomeration” level.

Budget restrictions finally prevented us from realizing more than our first 3 eHUBS.

N°	ID	Type eHUB	XY-coordinate	Strategic or neighbourhood
1	DRE - Station La Gare	2	48.731718, 1.370470 (LVE) 48.730521, 1.370426 (car)	Strategic
2	DRE - Station Place Mésirard	3	48.734699, 1.364892	Strategic
3	DRE - Station Place du Champ de Foire	3	48.732190, 1.360025	Strategic
4	DRE - Station du Murger	3	48.743292, 1.361549	Strategic
5		3		Strategic

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	DRE - Station des Bâtes		48.737310, 1.347348	
6	DRE - Station Place du Moulec	3	48.730829, 1.379302	Strategic
7	VER – Piscine/Mairie de Vernouillet	3	Near 48.720655, 1.356093	Strategic
8	ANET – Château d’Anet	3	Near 48.730829, 1.379302	Strategic
9	NON – Gare de Nonancourt	3	Near 48.775957, 1.192913	Strategic
10	CHE – Cherisy Centre	3	Near 48.747049, 1.420236	Strategic

Table 1 Initial Implementation of eHUBS in Dreux

2 Overview of installed eHUBS

Phase	Launch date	Number of eHUBS installed	Number of EVs offered	Number of e-bikes	Number of e-cargobikes
1	12/02/2021	3	0	15	3
2	18/05/2021	0	3	0	0

Table 1: Implementation process of Mobipoint and vehicles in Dreux

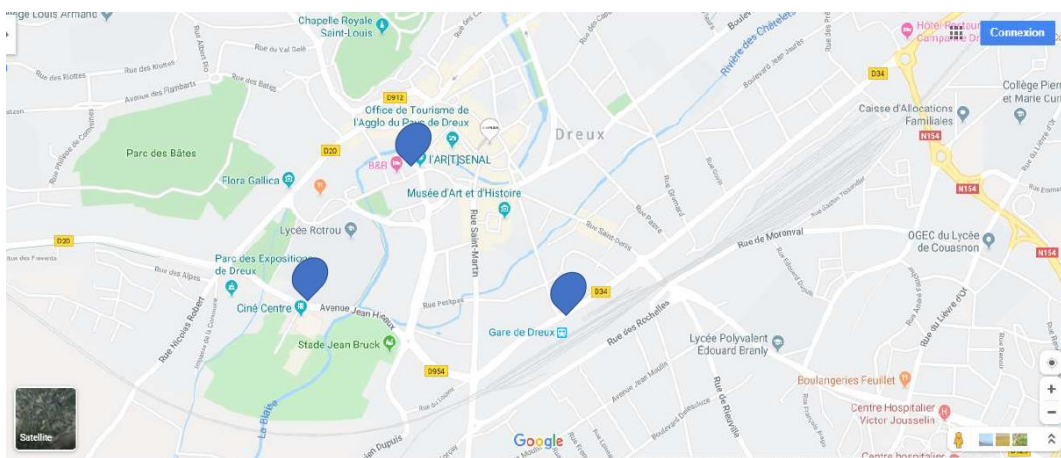


Figure 1 Implementation Map of planned eHUBS, 2021

3 Details of installed eHUBs

3.1 Phase 1: February 2021 Implementation of e-bike service

We implemented our 3 first eHUBs locally called “Mobipoints” and officially inaugurated them on February 12th 2021 with our local municipal councilors at Mésirard Place in the City Centre. The implementation planning of our Mobipoint was a lot delayed by health restrictions due to Covid 19 pandemic.

3 Mobipoint offers 15 e-bikes and 3 e-cargo bikes for hour to day rental.

A lot of work was necessary to technically prepare the locations, as our Mobipoints are relying on on-site electrical charge : the batteries of the e-bikes can not be removed hence requiring electrical supply and ground works. As the 3 e-bike Mobipoint were not located on public roads/street, no floor sign was affixed. We also had to face concrete issues on information panel : 2 of our Mobipoint are located within the scope of historical monuments, the Royal Chapelle of Dreux and the strain station. Our proposals of sign panels were rejected by state services, pushing us to decide to implement temporary panels that stayed in place up until now.

N°	ID	Sub-municipality	Approach	EV	E-Bikes	E-cargobikes
1	DRE - Station La Gare	City Centre	Strategic		5	1
2	DRE - Station Place Mésirard	City Centre	Strategic		5	1
3	DRE - Station Place du Champ de Foire	City Centre	Strategic		5	1

Table 2 March 2022 - eHUBS and their vehicles in Dreux

3.1.1 Dreux Gare

3.1.1.1 Service

Information Pillar	Public transport	Public car parking	Public bike parking	EV	E-Bikes	E-cargobikes
Plastic Pannel	Train station Bus station	Yes	Yes	0	5	1

Table 3 March 2022 - Availables services at Mobipoint Gare de Dreux

3.1.1.2 Plan

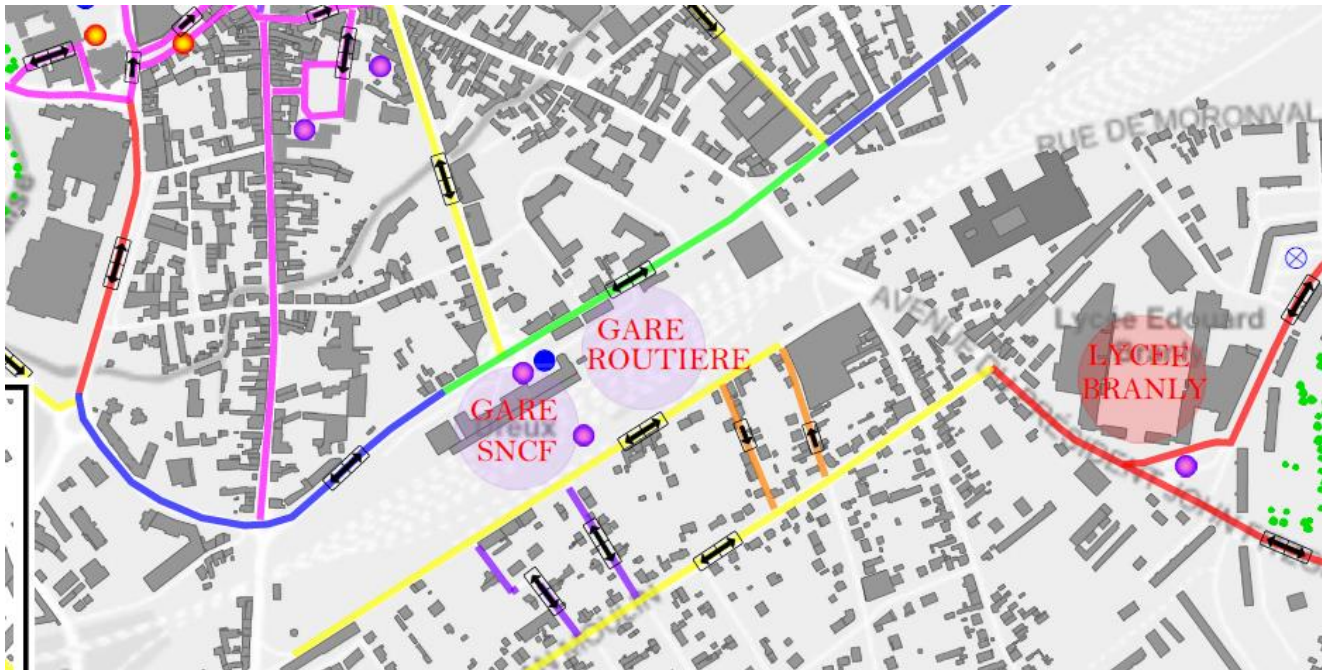
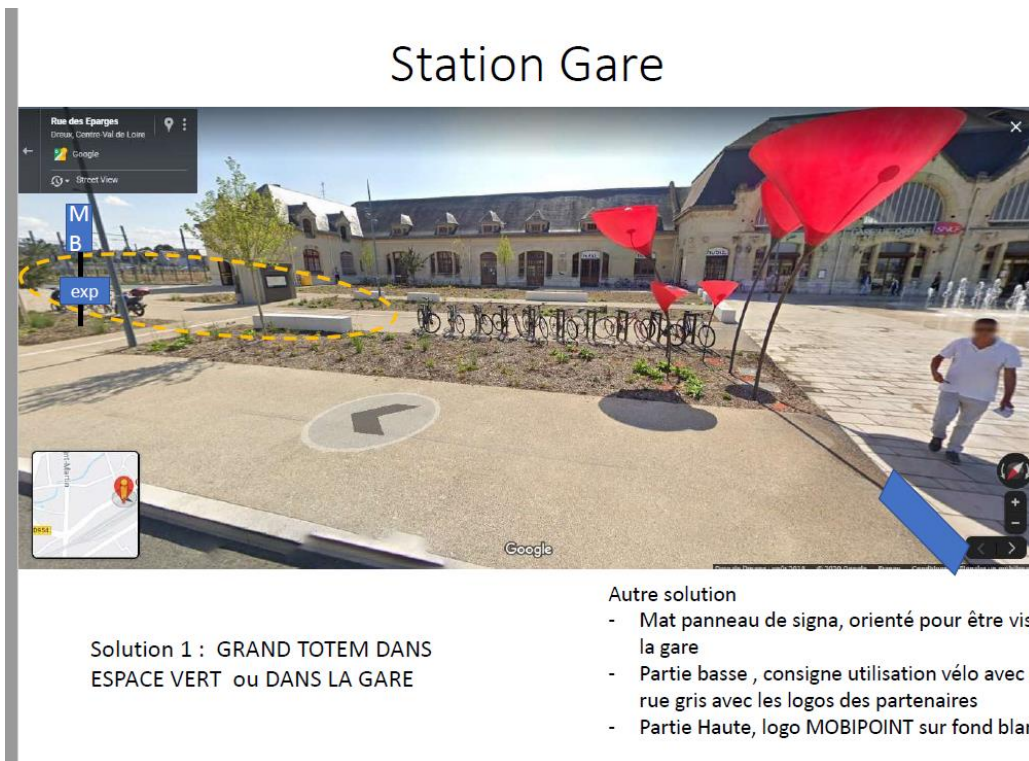


Figure 2 Site plan for eHUBS at Dreux train station (blue and purple dot)

Station Gare



Solution 1 : GRAND TOTEM DANS
ESPACE VERT ou DANS LA GARE

Autre solution

- Mat panneau de signa, orienté pour être visible de la rue et de la sortie de la gare
- Partie basse , consigne utilisation vélo avec coté gare les consignes, côté rue gris avec les logos des partenaires
- Partie Haute, logo MOBIPOINT sur fond blanc, gris, noir sur les deux faces

Figure 3 Screenshot with implementation plan of Mobipoint station at Gare de Dreux

3.1.1.3 Realization



Figure 4 February 2022 : e-bike Mobipoint at Dreux Gare



Figure 5 Informative Panel implemented on e-bike Mobipoint "Dreux Gare"

3.1.2 Place Mésirard

3.1.2.1 Service

Information Pillar	Public transport	Public car parking	Public bike parking	EV	E-Bikes	E-cargobikes
Plastic Panel	Bus station	Yes	Yes	0	5	1

3.1.2.2 Plan

JA1



Station Place Mésirard

IDEE : Être visible sans polluer

- Mat panneau de signa, orienté pour être visible de la rue et de la sortie du parking
- Partie basse , consigne utilisation vélo avec coté place les consignes, côté rue gris avec les logos des partenaires (dim : 50 * 60cm)
- Partie Haute, logo MOBIPOINT sur fond blanc?, gris?, noir? sur les deux faces
- Ou TOTEM 60 *250, recto consigne, plan, logo Mobipoint, verso gris RAL 7031 avec logo partenaires

Figure 6 Implementation Plan of e-bike Mobipoint at Station Mésirard

3.1.2.3 Realization



Figure 7 February 2021 - Mobipoint at Place Mésirard



Figure 8 February 2021 : e-bike Mobipoint at Place Mésirard



Figure 9 Informative Panel implemented on Mobipoint "Place Mésirard"

3.1.3 Place du Champ de Foire

3.1.3.1 Service

Information Pillar	Public transport	Public car parking	Public bike parking	EV	E-Bikes	E-cargobikes
Plastic Pannel	Bus station	Yes	Yes	0	5	1

3.1.3.2 Plan

Station Place du Champ de Foire



- IDEE : Être visible sans polluer
- Mat panneau de signa, orienté le long du grillage
 - Partie basse , consigne utilisation vélo avec coté place les consignes, côté internat gris
 - Partie Haute, logo MOBIPOINT sur fond blanc, gris, noir ? avec les logos des partenaires

Figure 10 Implementation plan of Mobipoint "Place du Champ de Foire"

3.1.3.3 Realization



Figure 12 May 2021 - Mobipoint Implemented at "Place du Champ de Foire"



Figure 11 Informative Panel implemented on Mobipoint "Place du Champ de Foire"

3.2 Phase 2 : May 2021 – Implementation of e-car service

E-car service was launched on May 18th in presence of municipal councilor and representative from our mobility provider Citiz at Place Mésirard in the city centre of Dreux. The service offers 3 e-cars (e-208, e-Zoé, e-Kangoo) dispatched in 2 hubs : Dreux Gare and Place Mésirard. The location were decided based upon proximity to transport network and dense areas. Location at Dreux Gare was chosen on the less frequented side of the station because of the very few parking space on northern side of the station.

We were facing similar issues for our informative panels with culture protection services which led us to install temporary and finally long-term plastic panels.

3.2.1 Dreux Gare

3.2.1.1 Service

Information Pillar	Public transport	Public car parking	Public bike parking	EV	E-Bikes	E-cargobikes
Plastic Pannel	Bus station Train station	Yes	Yes	2	0	0

3.2.1.2 Plan

Station Autopartage de la Gare Rue des Rochelles



- Sur le Mat du panneau de signa, orienté perpendiculairement à la rue, panneaux réglementaires pour l'autopartage
- Vérifier où mettre les consignes utilisation voiture- Sur la borne de recharge elle-même
- Partie Haute du mat, logo MOBIPOINT sur fond blanc, gris, noir ?
- En sortie du passage sous la gare, il faudra prévoir un affichage pour indiquer les voitures en autopartage. Une solution à l'intérieur du passage pourrait être suffisante, et ne surchargerait pas le parvis Sud.

Figure 13 Implementation Plan of e-car Mobipoint "Gare Dreux"

3.2.1.3 Realization



Figure 14 June 2021 : Informative Panel and charging station at Mobipoint "Dreux Gare"



Figure 15 Line Markings for e-car Mobipoint "Dreux Gare" May 2021

3.2.2 Place Mésirard

3.2.2.1 Service

Information Pillar	Public transport	Public car parking	Public bike parking	EV	E-Bikes	E-cargobikes
Plastic Pannel	Bus station	Yes	Yes	1	0	0

3.2.2.2 Plan

Station Autopartage Place Mésirard (Rue Anatole France)

- SOLUTION 1 : Totem à la place du zébra ou
- SOLUTION 2 : Ajouter le logo MOBIPOINT sur le candélabre , avec lumière ? Ou à côté de.
- Sur le Mat du panneau de signa, orienté perpendiculairement à la rue, panneaux réglementaires pour l'autopartage
- Vérifier où mettre les consignes utilisation voiture-
Sur la borne de recharge elle-même



Figure 16 Implementation Plan of e-car Mobipoint "Place Mésirard"

3.2.2.3 Realization



Figure 18 Photo of e-208 available at Mobipoint "Gare Mésirard"



Figure 17 Informative Pannel at e-car Mobipoint "Place Mésirard"

4 The eHUBS Consortium

The consortium of eHUBS consists of 15 partners with multidisciplinary and complementary competencies. This includes European cities, leading universities, networks and electric and shared mobility providers.



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For further information please visit <http://www.nweurope.eu/ehubs>



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