



Operational plan eHubs Wallonia

DELIVERABLE T3.1.2

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Summary sheet

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Project partners (Capitalisation)

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 Innovativ GmbH	BI	Germany
Cargoroo	CA	The Netherlands
URBEE (E-bike network Amsterdam BV)	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 upon Tyne	UN	Great Britain
Ville de Dreux	DR	France
Stadt Kempten (Allgäu)	Kemp	Germany
Universiteit Antwerpen	UAntwerp	Belgium
Service Public de Wallonie – Autorité Organisatrice du Transport	SPW - AOT	Belgium

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1. Introduction

The vision of the Walloon Region for mobility towards 2030 has been defined in 2017 ([link](#)). This vision summarized by the acronym FAST (Fluidité-Accessibilité-Sécurité-Santé-Transfert modal) has defined objectives in terms of mode of transport repartition for people to target for 2030 as follow:

2017	3%	1%	4%	9%	83%	1,3 p.
						
2030	5%	5%	10%	15%	60%	1,8 p.

Figure 1: 2030 objectives for Transport Mode shift (Walloon Region FAST Vision, 2017)

In 2019, this vision has been complemented by a Regional Mobility Strategy ([SRM](#)) which defined strategic orientations to follow in order to meet the FAST objectives. 2 of these orientations are particularly relevant for eHubs:

- The redeployment of the Bus transport public offer, to insure the connection of all Wallonia municipalities to the structuring TP offer (Train and/or structuring Bus offer (express lines))
- The development of “Mobipôles” and “Mobipoints” which are intermodal hubs where different transport mode and services can be found (TP, shared mobility, safe bike parking, ...) on the structuring transport network (“Mobipôles”) or as a network in more urban zones (Mobipoints)

The combination of these two objectives contributes to optimize the travel chain from the most structuring transport mode to the last km in a redefined public transport offer at all levels of this chain. Indeed, a public transport offer redesigned and optimized by the redeployment is completed by an offer which allows to connect to this public transport in particular with shared mobility services and contributes to achieve the objectives of distribution of transport mode in Wallonia as shown in the above table

In parallel, Wallonia has officially formalized (see “[Décret Climat](#)”) greenhouse gas reduction objectives for 2050 with intermediates objectives (30% in 2020 compared to 1990 and 85 to 95% in 2050). An additional objective of 55% reduction in 2030 compared to 1990 has been set in the Regional Policy Statement ([DPR](#))

In this context, the development of eHubs in 5 pilot cities in Wallonia (Gembloux, La Bruyère, Namur, Ottignies-Louvain-la-Neuve et Wavre) is ideal to demonstrate how to operationalize the regional strategy into concrete implementation. It can after be used as laboratory and show case for further replication in additional municipalities in Wallonia.

The objectives for these 5 municipalities have been defined as follow:

Number of eHubs	15
Shared e-Bikes, e-Cargo / e-Family / e-scooters	140
Shared Electric cars	15

Figure 2: eHubs objectives for Wallonia (Shared vehicles), eHubs Capitalization Call 2021

With this estimated impact:

kg CO2 reduction per year per Shared e-Bike	410
kg CO2 reduction per year per shared EV	8.879
kg CO2 per year - Shared e-Bikes, e-Cargo / e-Family / e-scooters	57.400
kg CO2 per year - Shared EV's	133.185

kg CO2 - total	190.585
tons CO2 reduced	191

Figure 3: eHubs objectives for Wallonia (emission reduction), eHubs Capitalization Call 2021

This project focuses on the promotion, deployment and implementation of shared e-mobility modes that are maximally organized in e-hubs. These are the concrete project targets for Wallonia:

1. Number of eHubs: 15
2. Shared e-cargo-bikes: 35
3. Shared e-bikes: 110
4. Shared e-car capacity: 5

2. Location determination

Strategic plan reminder

In the Strategic Plan we discussed the method used to identify potential eHubs locations. Through a combination of desk research and site visits, we selected 49 interesting locations.

During the desk research phase, we analyzed the population density, the parking pressure, the main POI's, the existing shared mobility offer and the public transport network. We also indicated that it was interesting to consider real estate projects and planned road works.

After this phase, we made on-site visits that confirmed or denied the pre-selection.

During a workshop with the mobility managers of the 5 partner cities, we then made a ranking of the location where it is relevant to set up an eHub in each city and a prioritization across the 5 cities. The objective was to identify the hubs to be developed in priority and to focus on.

Our goal was to define 15 priority eHubs, but we kept a selection of 24 locations, which allowed us to remain flexible in case a location could not be developed into eHubs within the project timeframe.

In the below table, this is the list of the 24 eHubs location for the 5 municipalities.

eHubs priority (supra-municipal)	Municipal priority	MobiPoints	MobiPoint Type
1	1	Namur : Place de la Station	XL
2	2	Ottignies-LLN : Gare d'Ottignies	XL
3	1	Gembloux : Gare	M
4	1	Wavre : Gare de Wavre	L
5	1	La Bruyère : Gare de Rhisnes	M
6	5	Namur : Gare Jambes	L
7	1	Ottignies-LLN : Gare SNCB Louvain-la-Neuve	L
8	2	Namur : Joséphine Charlotte	S
9	10	Namur : Boulevard du Nord	XL
10	2	Wavre : Zoning Nord	XS
11	4	Wavre : Gare de Profondsart	M
12	3	Ottignies-LLN : Gare des BUS LLN	L
13	4	Ottignies-LLN : Centre-Douaire	M
14	3	Namur : Place Wiertz	XS
15	2	Gembloux : Arrière Gare	M
16	3	Gembloux : Place de l'Hotel de Ville / Rue du 8 mai	XS
17	3	Wavre : Limal Gare	M
18	4	Namur : Boulevard Frère Orban	XS
19	6	Namur : P+R Saint Nicolas	XS
20	8	Namur : Square Arthur Masson	S
21	9	Namur : Namur Expo	S
22	8	Ottignies-LLN : Beton Lemaire	M
23	8	Wavre : 4 Sapins	XS
24	3	La Bruyère : Centre de Meux	XS

Figure 4: prioritized list of eHubs in the 5 municipalities in Wallonia, Wallonia eHubs project 2022

Adapting the plan

The locations selected with the methodology above, were ideal location that we needed in a second step to move to operationalization. As expected, some of these ideal theoretical locations had to be redefined or deprioritized for operational reasons.

Some areas are or will be under construction in the coming months and cannot be developed with shared electric mobility by the end of the project. This is the case of the "Place de la station" in Namur, the Ottignies train station, the Zoning Nord in Wavre and the back of the train station in Gembloux. We therefore had to go down the list of 24 previously selected locations. Here is the results of this phase with the 15 adapted eHubs:

	Municipality	eHubs priority (supra-municipal)	Municipal priority	Mobipoints
1	OLLN	2	2	Ottignies-LLN : Gare d'Ottignies
2	Gembloux	3	1	Gembloux : Gare
3	La Bruyère	5	1	La Bruyère : Gare de Rhisnes
4	Namur	6	5	Namur : Gare Jambes
5	OLLN	7	1	Ottignies-LLN : Gare SNCB Louvain-la-Neuve
6	Namur	8	2	Namur : Joséphine Charlotte
7	Namur	9	10	Namur : Boulevard du Nord
8	Wavre	11	4	Wavre : Gare de Profondsart
9	OLLN	12	3	Ottignies-LLN : Gare des BUS LLN
10	OLLN	13	4	Ottignies-LLN : Centre-Douaire
11	Namur	14	3	Namur : Place Wiertz
12	Gembloux	15	2	Gembloux : Université
13	Gembloux	16	3	Gembloux : Place de l'Hotel de Ville / Rue du 8 mai
14	Wavre	17	3	Wavre : Limal Gare
15	Namur	18	4	Namur : Boulevard Frère Orban

Figure 5: 15 priority eHubs after operational adjustments, Wallonia eHubs project 2022

In order to remain flexible and to allow operators to express their vision of what makes sense from an operational point of view with their experience, we agreed that, even though the 15 defined locations remain the priority eHubs on which a minimum service offer will be mandatory, there will be flexibility for the operators, if it makes sense operationally, to install vehicles potentially outside the 15 eHubs but still within the 49 locations that have been defined by the cities.

Therefore, we have decided to impose a minimum number of vehicles for each of the 15 priority eHubs (see point 3. Services) and to let the shared mobility operators propose a distribution of additional vehicles among the 49 locations identified at the beginning of the territory analysis. This openness will allow operators to bring their point of view and allocate vehicles according to their market analysis, while guaranteeing a minimum service in locations where we want shared mobility services, but which may not be the first choice of mobility operators.

Next steps

As the BEP is working on the Concession market (see Governance), the mobility managers of the partner cities are working on technical documents. These documents allow to detail the location of the different services at the eHubs (totem, bicycle parking, car, charging station, ...) and other information relevant for operators to submit an offer. These will help to accelerate the procedure in the case minor infrastructure works (like bike rack installation) and authorization requests are necessary. They will also allow operators to know the available space for each service.

Finally, once the shared mobility operators have been selected, there will be a short negotiation phase in consultation with the mobility managers of the 5 partner cities, to determine e-hubs outside of the 15 preselected in which the vehicles will be distributed and to fine-tune the number of vehicles in each e-hub.

3. Services

Adapting the plan

In the strategic plan we planned to install 15 shared electric cars and 140 light electric vehicles. The larger eHubs were supposed to have 2 cars and 10 electric bikes or cargo bikes and the smaller ones were supposed to have 1 car and 8 bikes or cargo bikes. As you can see in this table:

Priority eHubs (supra-communal)	Mobipoints	electric cars	e-bikes/ e-cargo/ e-scooters
1	Namur : Place de la Station	2	10
2	Ottignies-LLN : Gare d'Ottignies	2	10
3	Gembloux : Gare	1	10
4	Wavre : Gare de Wavre	2	10
5	La Bruyère : Gare de Rhisnes	1	10
6	Namur : Gare Jambes	1	10
7	Ottignies-LLN : Gare SNCB Louvain-la-Neuve	1	10
8	Namur : Joséphine Charlotte	1	10
9	Namur : Boulevard du Nord	1	10
10	Wavre : Zoning Nord		10
11	Wavre : Gare de Profondsart		8
12	Ottignies-LLN : Gare des BUS LLN	1	8
13	Ottignies-LLN : Centre-Ottignies		8
14	Namur : Place Wiertz	1	8
15	Gembloux : Arrière Gare	1	8
	TOTAL	15	140

Figure 6: initially planning for vehicles distribution between the 15 eHubs, Wallonia eHubs project 2022

As with the locations, the distribution of vehicles has changed. There are several reasons for this.

The first reason is due to the current lack of charging station for e-cars in Wallonia and the non-mature regional plans to develop them. The Region is currently starting to implement a regional plan that will install 2000 stations in Wallonia but the first one will be operational in 2024 at the earliest.

While waiting for this plan, local authorities are not taking coordinated initiatives to develop other charging stations. Regarding our tight schedule for the e-hubs project, this charging station context led us to decide to reduce the number of electric cars initially planned. We went from 15 to 5 in all the eHubs. As we only have 5 vehicles left to distribute in the 5 partner cities, we have chosen to give priority to La Bruyère, a municipality where there are no shared vehicles yet, and to install 2 shared electric cars there. We also decided not to install electric cars in Namur because the offer of shared cars is already important there. The 3 remaining cars will be distributed between Wavre, Ottignies Louvain-la-Neuve and Gembloux where car sharing exists but to a lesser extent than in Namur.

The challenge and the tight schedule are similar for electric bikes and cargo bikes, which led us to acknowledge that solutions with battery swap rather than with charging station will be more realistic to implement. However, we want to keep the vehicles in the eHubs and plan drop-off zones so that a mobility offer is always present in the eHubs and municipality can better control the impact of the vehicle fleet in the public space.

The second reason for these adaptations is the fact that the city of Namur already has a very dense network of shared bikes (even if they are not electric) and that there is no need for additional bikes. The e-bikes will be distributed to the eHubs of the 4 other cities. The distribution of electric bikes is planned as follow: we impose to the shared mobility operators a minimum of electric bikes in some eHubs, then we let them propose how to distribute the rest of the bikes among the eHubs not located in Namur.

The same method will be applied to cargo bikes, a minimum is required in the 15 priority eHubs and the rest is to be distributed among the other eHubs. The city of Namur would be very interested in having cargo bikes on its territory to complete the mosaic of shared mobility offer on its territory.

Distribute the Shared vehicles

As mentioned above, we decided not to distribute all the vehicles among the 15 eHubs. But to impose a minimum number of vehicles in some eHubs and to leave the operators the opportunity to propose a distribution for the rest of the vehicles among the 49 potential eHubs identified. Depending on their business model, their maintenance model, etc. They may have different needs, and leaving the door open for discussion seems essential to the smooth running of this project.

The figure below summarizes the decision made for the vehicle distribution among the eHubs:

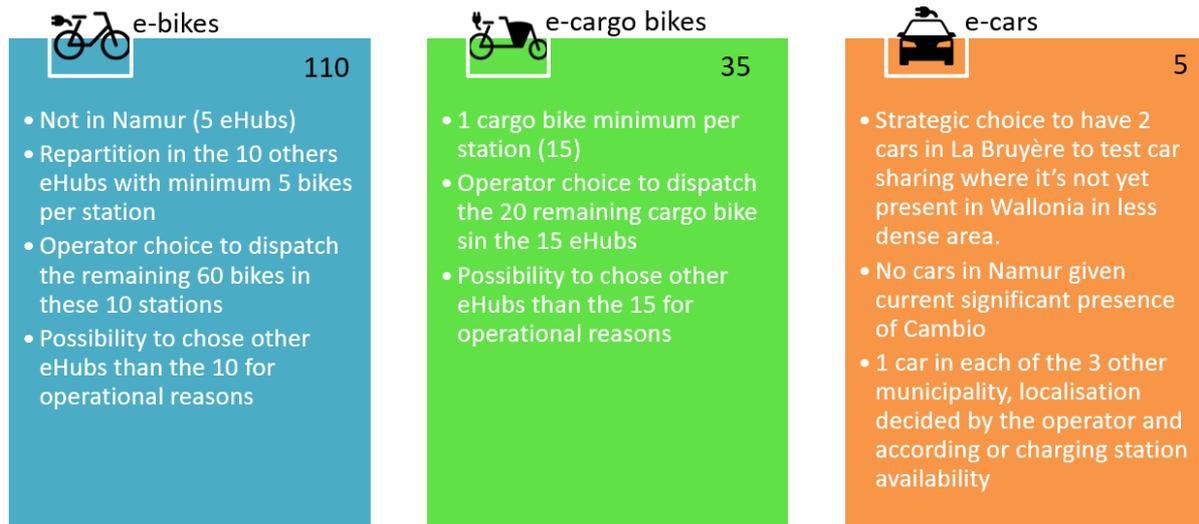


Figure 7: Vehicles repartition final guidelines, Wallonia eHubs project 2022

4. Totems & Visual branding

Based on the work already done by the consortium for the visual branding, we have launched public tender in July 2022 in order to define the eHubs visual branding material for Wallonia, to make it available for stakeholder (municipalities or other local authorities) and to produce totem prototypes.

The decision has been made to keep 2 names for the hubs:

- MobiPôles: for the hubs that are directly connect to the main public transport network (train stations and express bus stops)
- MobiPoints for the hubs that are connected to secondary Bus network or not directly connected.

The MobiPoint logo defined by the eHubs project has been kept and the color have been adapted to match colors of the mobility campaign on going in Wallonia for Public Transport ([mobilli](#))

A new set of icons for services has been defined in harmony with Mobilli design

The visual branding document is available in Annexes

This visual branding material will be available on the Wallonia Public Services Internet for all municipalities that would want to develop totems or Mobipoints branding material even after the eHubs project.

5. Governance

Governance model

The governance model that we want to establish for eHubs is as follow:

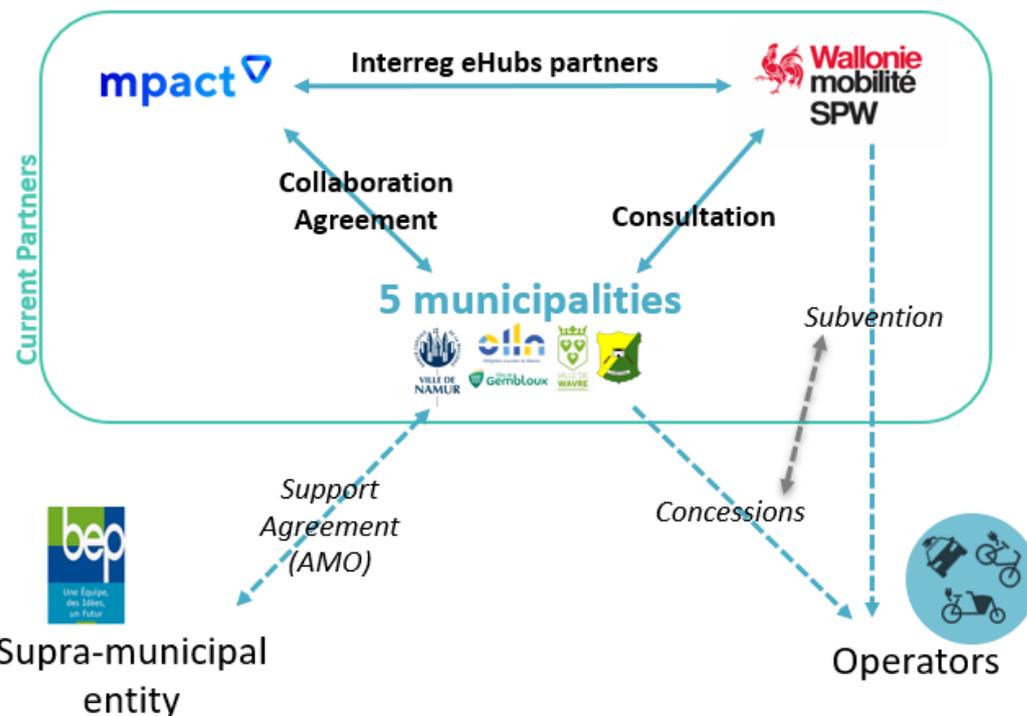


Figure 8: eHubs governance model in Wallonia, Wallonia eHubs project 2022

We aim to put in place a governance model that will be replicable in Wallonia also in non eHubs municipalities. In this model a supra-communal entity is supporting the municipalities to produce Specifications for Concession tenders. In the case of the eHubs project, this supra-municipal entity is the [BEP](#) (Bureau Economique de la Province de Namur)

The solution proposed in this governance model will be twofold:

1. Subsidy of operators at regional level to insure shared electric mobility services via a Minister decree
2. Concessions between the municipalities (with support from a supra-municipal entity) and the operators to operate in the 15 eHubs on their territory. The condition to be selected as concession holder will be the same to be eligible for the regional subsidy.

The advantages of a supra-municipal entity involvement are:

- Representing all municipalities in a consistent way without giving all the work on one of them
- Create links between municipalities and insure a long-term mobility vision in the area
- Provide technical and legal expertise

- Play a role in communication and promotions of the shared mobility solutions
- Be more attractive for operators that have access to a bigger area than a municipality

The subsidy repartition and the concession duration will be as follow:

Service	Number of vehicles	Concession duration	Subsidy per vehicle (EUR)	Subsidy total (EUR)
Shared e-bikes	110	2 years	1.000	110.000
Shared e-cargo bikes	35	3 years	3.000	105.000
Shared e-cars	5	4 years	10.000	50.000

Figure 9: eHubs services subsidy and concessions duration, Wallonia eHubs project 2022

Concessions

After several iteration with our partner (BEP) assisting the municipalities to publish concessions for operators, it was decided the following elements:

- We will make 3 different concessions (one for each service (e-car, e-bike, e-cargo bike), each of them will cover the services for the 5 municipalities
- These concessions will be joined tender launched by the 5 municipalities being jointly the contracting authority

It took us some time with all the local partners to identify the current governance model and the proposed solutions and to set things up. For these reasons, we had to review our eHubs timeline for Wallonia and the expected start of shared mobility services at the eHubs. This new timeline is illustrated on the figure below:

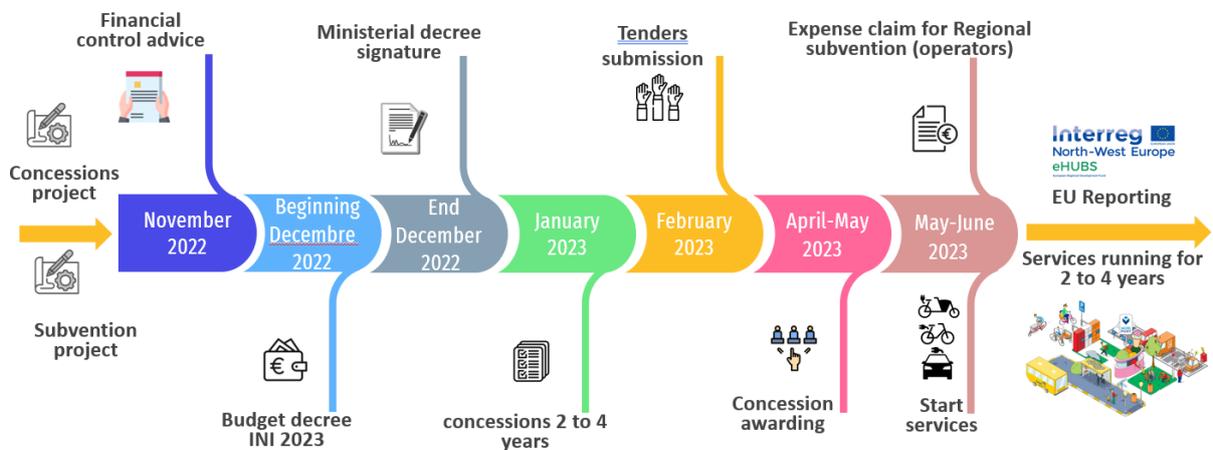
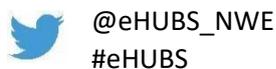


Figure 10: Timeline for services installation, Wallonia eHubs project 2022

6. 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.



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



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ANNEXES

See documents joined separately:

- Visual Branding MobiPoint Wallonia.pdf
- Concessions eHubs -V2- 23 12 2022 – Vélo. Draft.pdf
- Concession eHubs - V2 - 23 12 2022 - Vélo cargo.draft.pdf