

MaaS and the TOMP-API

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Topics for today

1. Mpact
2. eHUBS
3. Why should we standardize?
4. TOMP-API

Mpact

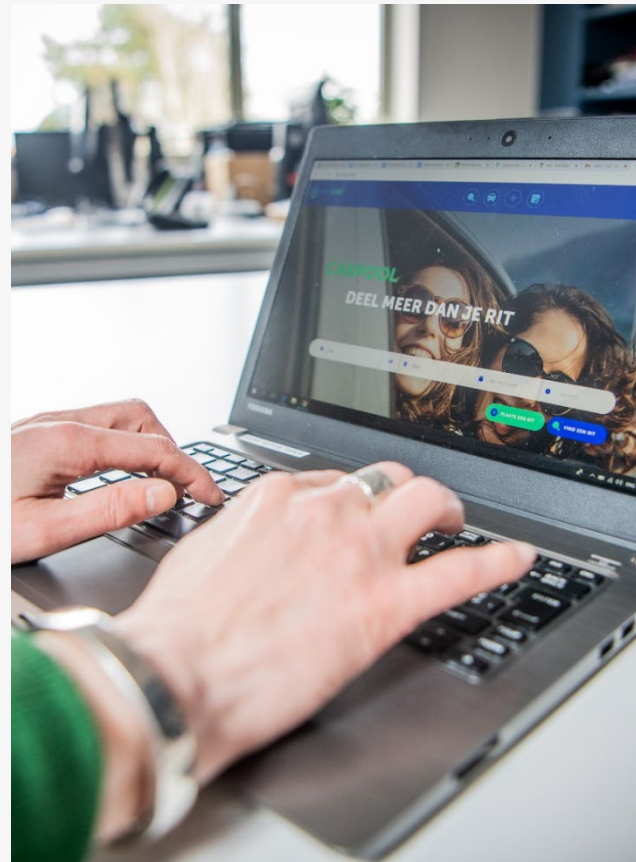
The organisation formerly known as Taxistop.
Do more with less – since 1975

More efficient mobility by **mpact**

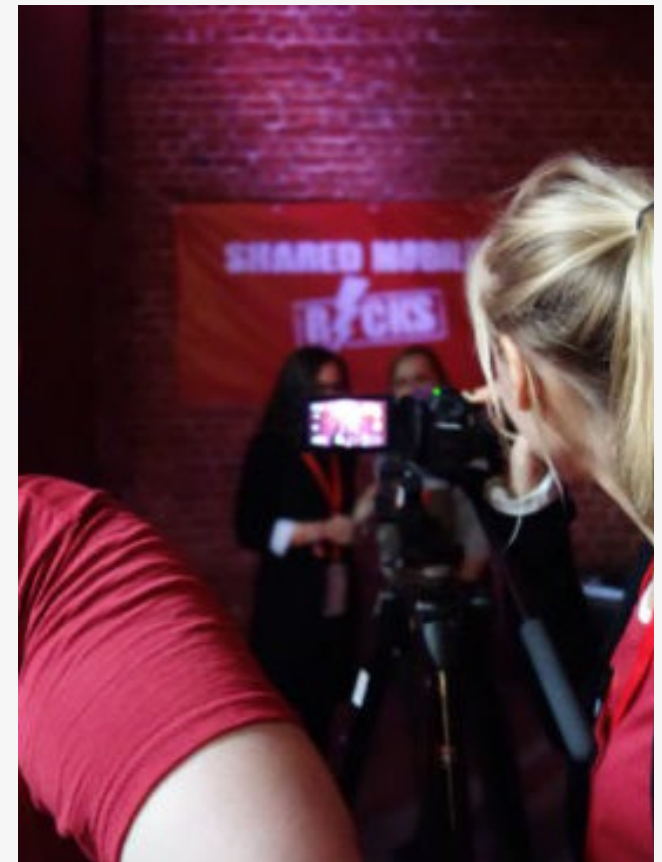
Solutions



Innovation



Awareness





- We enable more efficient use of resources, often linked to mobility.
- Create real solutions for people.
- Increasing political and public awareness.
- Aim to realize a social and ecological impact.
- We prefer to do this through cooperation

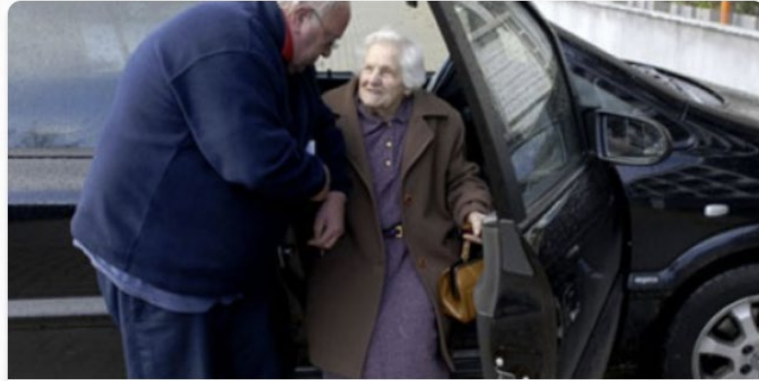
Some of our services in shared mobility



Cozycar

Have you ever considered starting a carsharing group to share the costs, use and maintenance of a car? Cozycar, by Autodelen.net...

[› know more](#)



The Less Mobile Services

A Less Mobile Service connects people with a mobility need to voluntary drivers in order to meet their needs. You probably...

[› know more](#)



Carpool.be

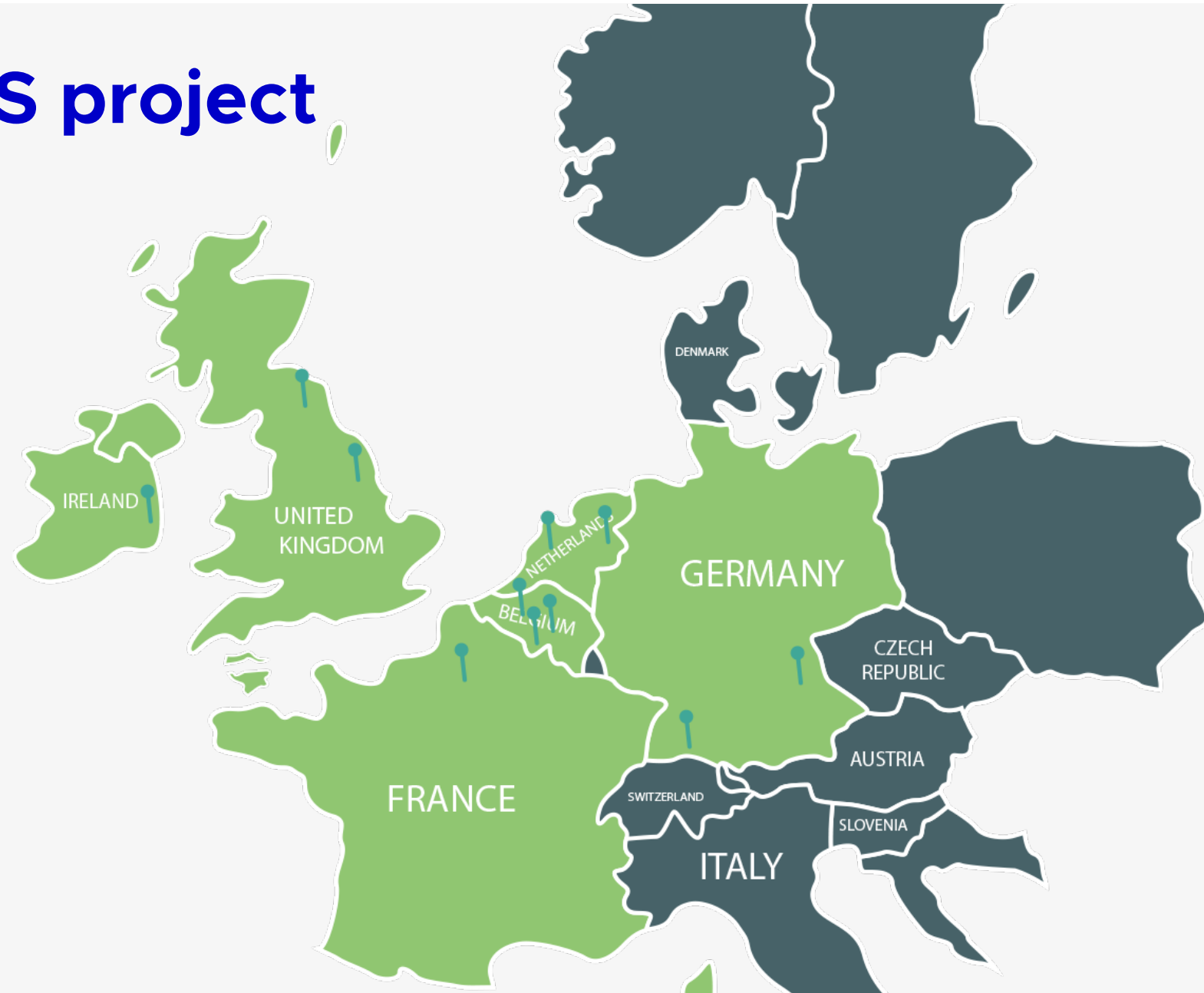
Through carpool.be you can find a carpool partner for regular or single rides. Why carpool? By carpooling, your journey...

[› know more](#)

eHUBS

Let's get physical

The eHUBS project



What is an eHUB?

- A place in the public space where multiple electric mobility modes come together.
- This offers a wide range of possibilities to get from A to B without taking the most obvious mode : a private car.

What have we created?

Different tools to manage & inform:

- A website - User
- eHUBS kiosk - User
- eHUBS dashboard - Municipality

The kiosk



**TREINEN
BIJ VERTREK**

12:30

ANTWERPEN-BERCHEM

12:30	IC	→	CHARLEROI SUD	+5'	9
12:30	S33	→	ANTWERPEN CENTRAAL		8
12:31	IC	→	ANTWERPEN NOORDERDOEK		10
12:37	S34	→	ANTWERPEN CENTRAAL		7
12:37	IC	→	LEUVEN		5
12:38	IC	→	AMSTERDAM CENTR	+23'	10
12:42	IC	→	BRUSSEL ZUID		12
12:43	IC	→	POPERINGE		6
12:44	S32	→	ESSEN		7
12:44	S1	→	NIJVEL		5
12:47	IC	→	ANTWERPEN CENTRAAL		8
12:48	S32	→	PUURS		6
12:50	IC	→	ANTWERPEN CENTRAAL		7

STARTSCHERM

HOE BETALEN?

KAART

INFORMATIE

12:30

23°C

maandag 28 juni 2021

12:36	136	→	CAMPUS	
12:40	S32	→	ESSEN	
12:42	72	→	INDUSTRIEZONE IV	
12:57	928	→	LUCHTHAVEN	
13:07	IC	→	BRUSSEL ZUID	
13:09	120	→	KERKPLEIN	
13:18	IC	→	ANTWERPEN C	

FIETSDOLEN

AUTODELEN

TREIN

BUS

TAXI

OPLADEN

STALLING

LOCKERS

STALLING

FIETSPOMP

FIETS HERSTELLEN

MEER INFO

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23°C

maandag 28 juni 2021

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Fietsdelen

Autodelen

Trein

Bus

Taxi

Opladen

Stalling

Lockers

Stalling

Fietspomp

Fiets herstellen

Meer info

KAART

12:30

maandag 28 juni 2021

Startscherm

Inzoomen

Uitzoomen

Informatie

The importance of data

Let's get digital

What's data for?

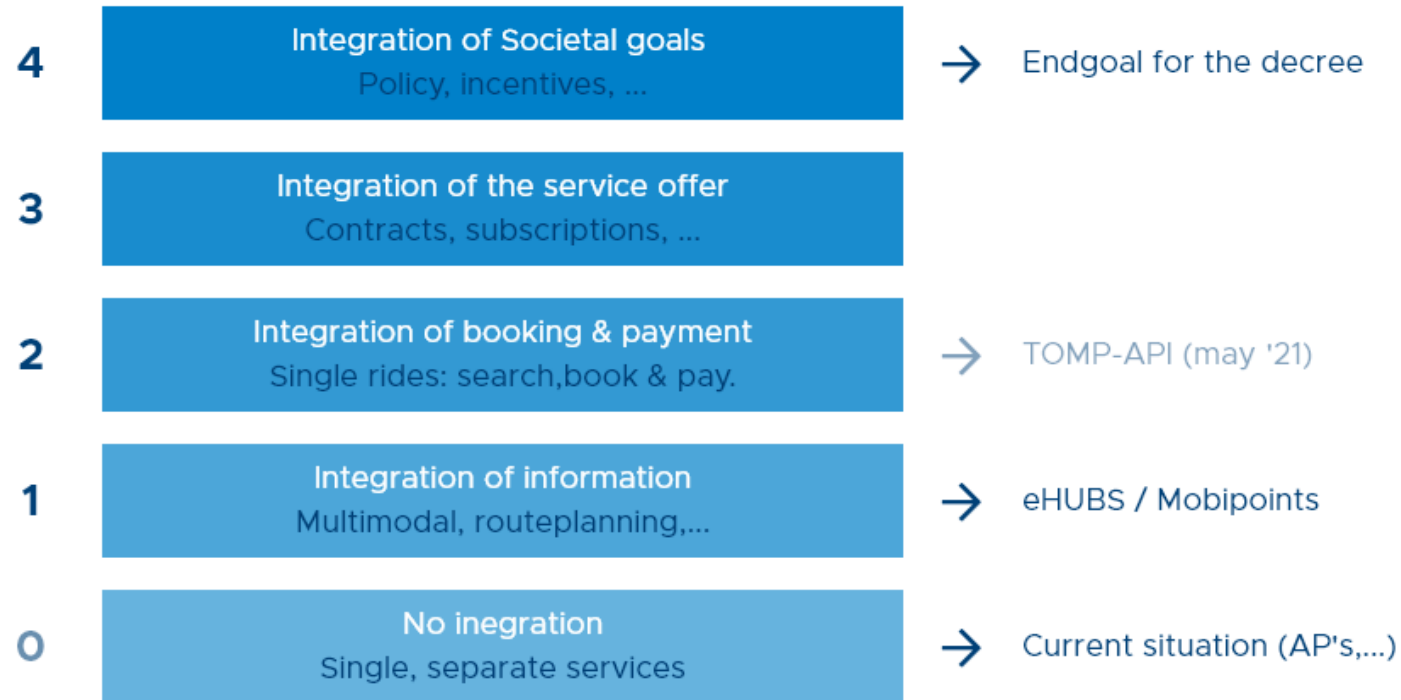
- Helps with making well founded decisions
- Analyzing the trends over long/short periods of time
- Make targeted improvements & follow up the effect.
- Even if you can't use the data now, in the future you most likely can.

Why standardisation



- It's all different
- Find/work for the perfect fit
- Each piece has its own specifications.
- Forcing it will break it

The four levels of MaaS (sochor et al.)



Data & MaaS (standardized)

- Get mobility modes integrated faster & easier into a MaaS(-like) platform.
- Facilitate regulation for mobility modes
- Create a fair & equal opportunities for all players.
- Offer cities/municipalities/... an insight in the use of mobility on their territory.

TOMP-API



TOMP-API

MaaS
Mobility as a Service

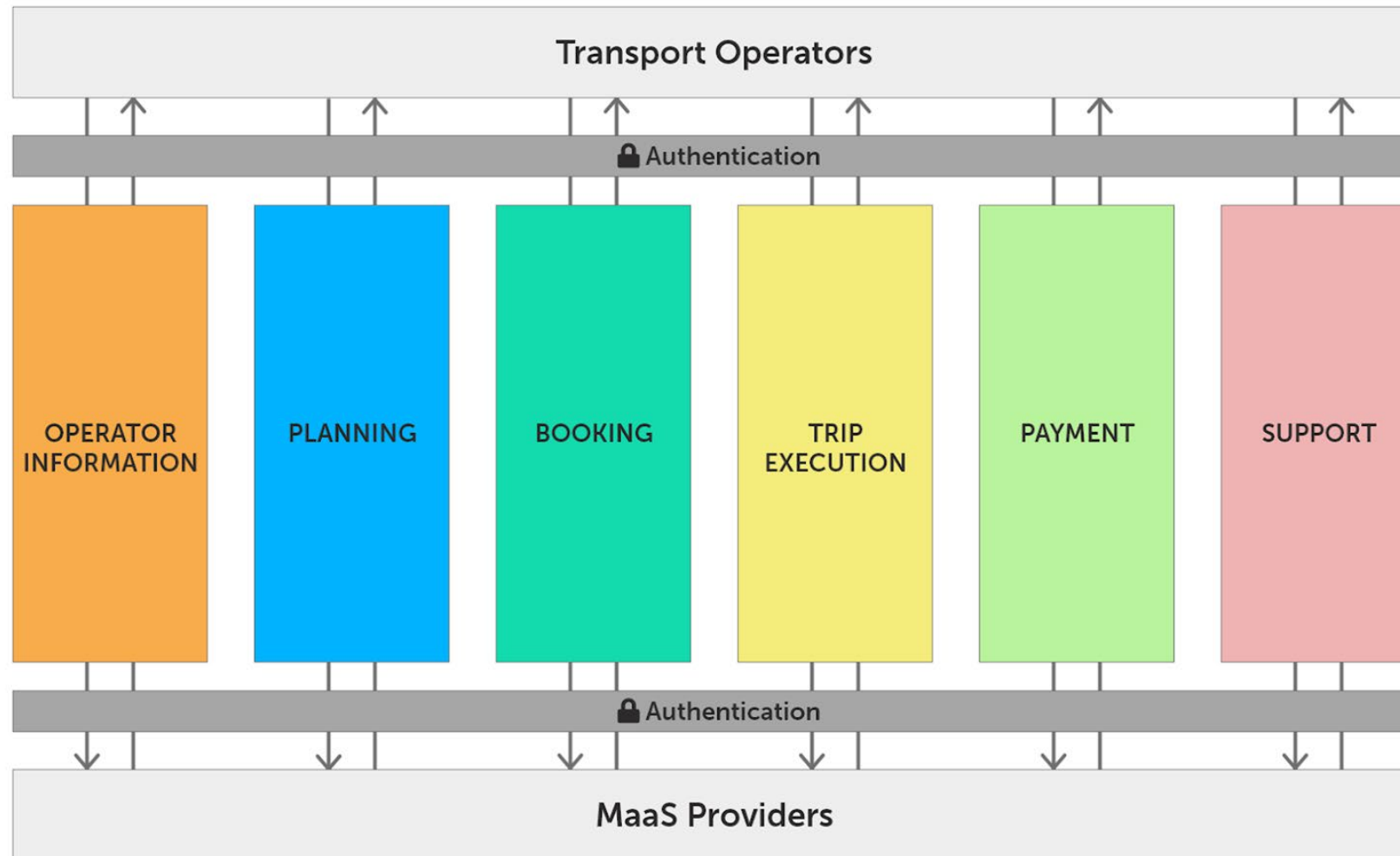
What is the TOMP API

- Technical specification of how to exchange data between **T**ransport **O**perators & **M**aaS **P**roviders
- Transport Operators will need to provide data conforming to this protocol, MaaS Providers need to interact according to this protocol.
- Covers the complete trip for a user – for any Mobility mode
- Open Source model working group with players over the whole spectrum.

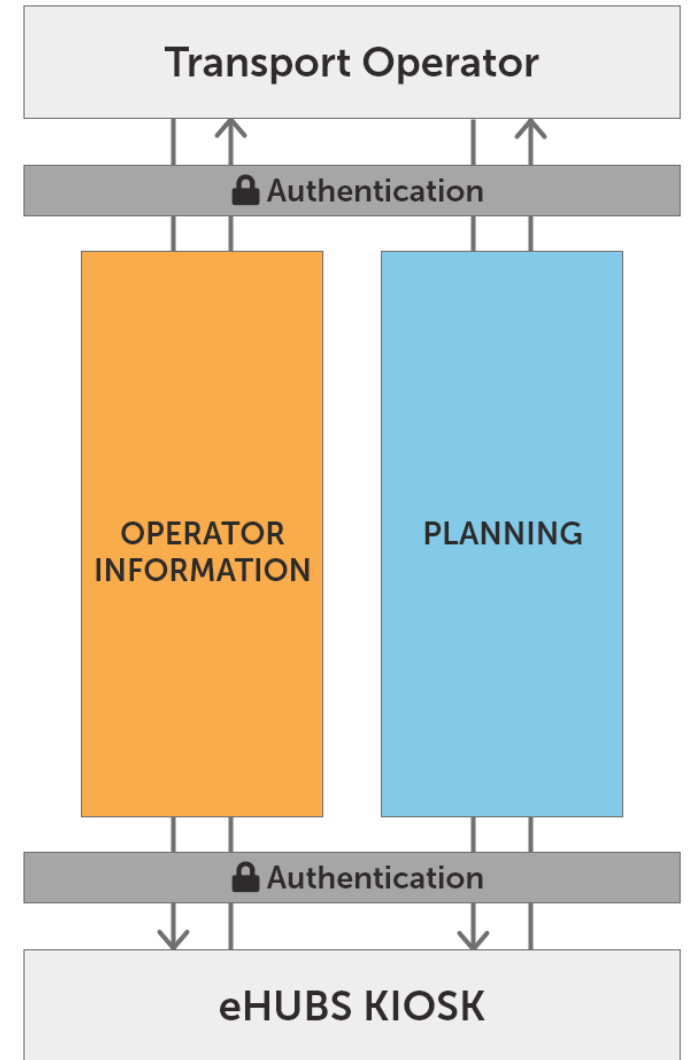
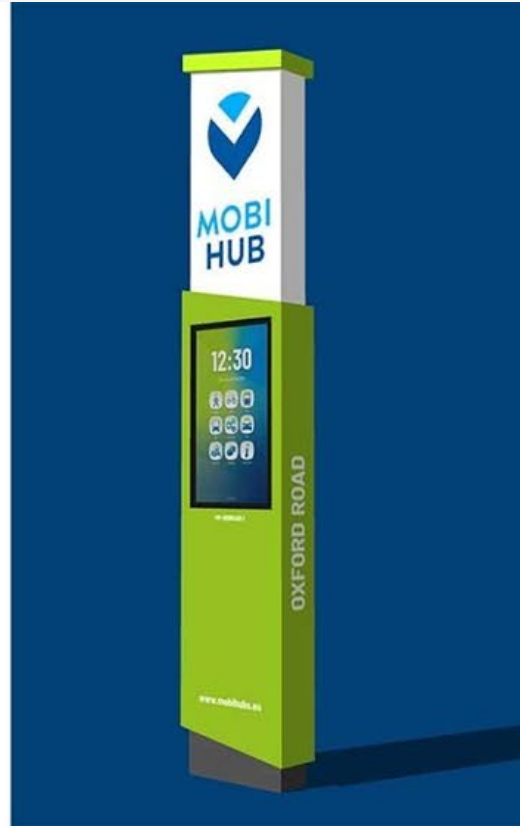
The TOMP working group aims to develop and sustain an internationally governed interoperable open standard for technical communication between Transport Operators and MaaS Providers, by means of definition, improvement, alignment and dissemination.



The modules



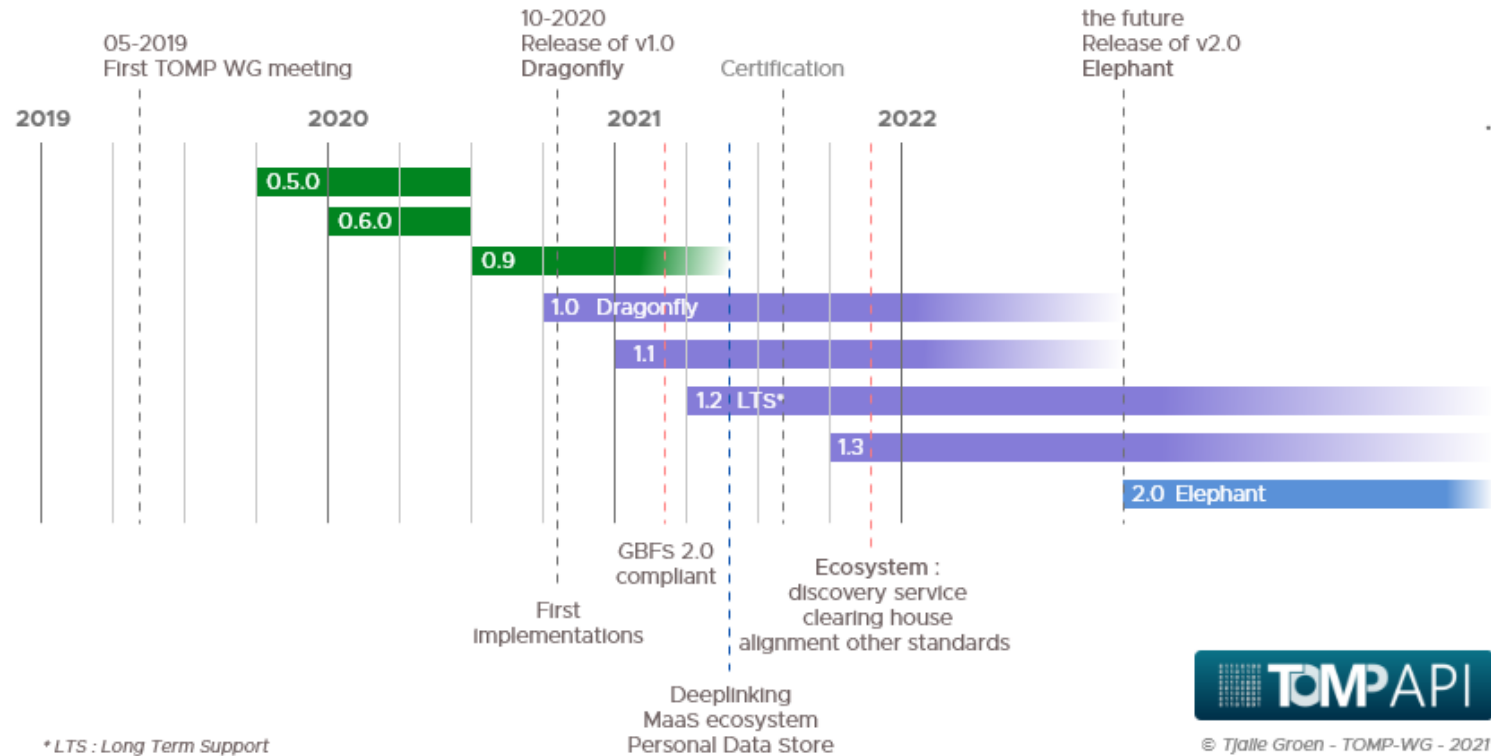
eHUBS



Roadmap

TOMP-API roadmap

05-2021



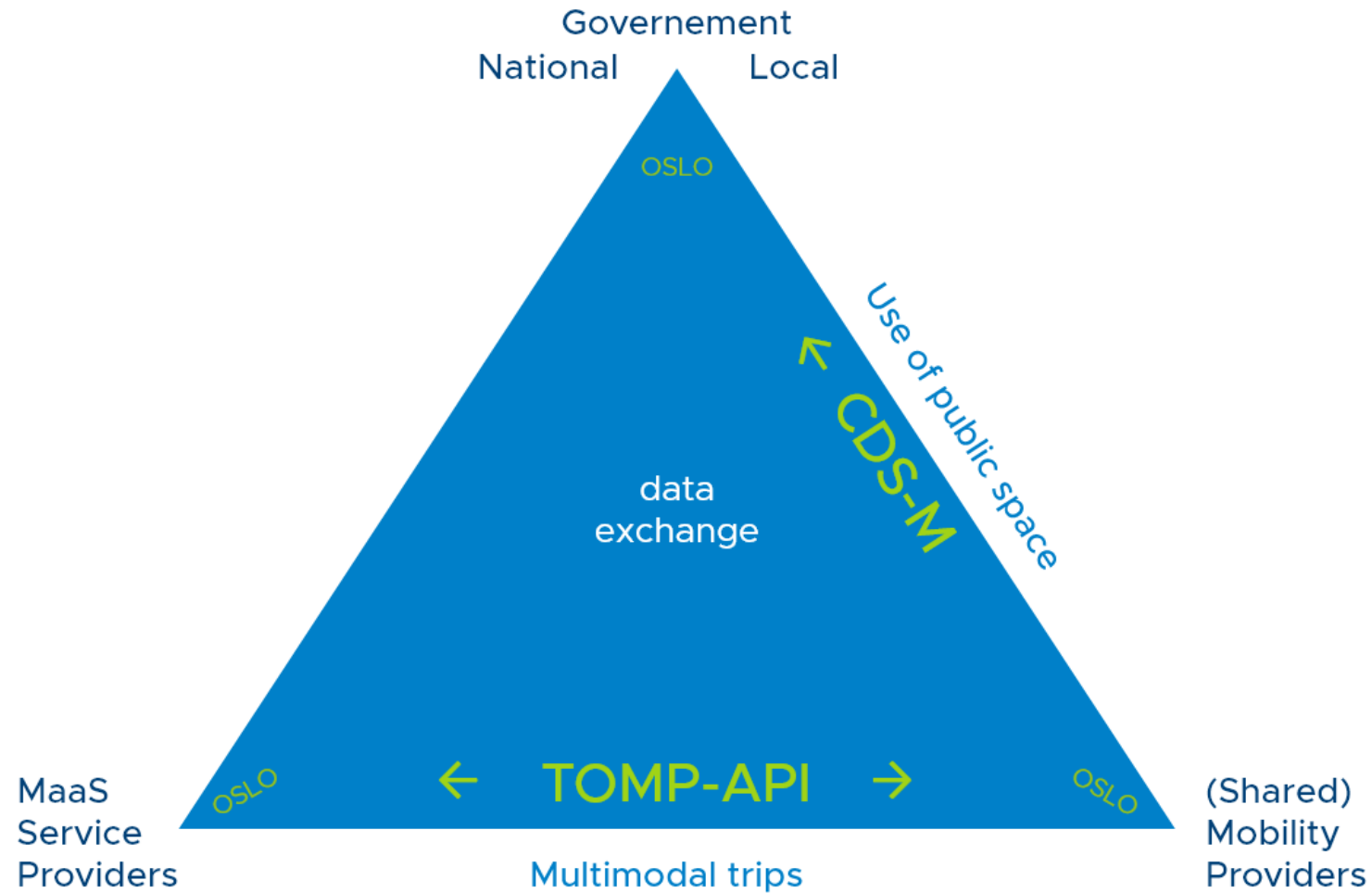
New version

- Early 2022 a new version has been released.
- Backwards-compatible with the current version
- New features :
 - Integration with “On-Demand” mobility solutions (GOFS)
 - More ancillary options (accessibility)
 - Support for external user verification (Blockchain?)

Now what?

- TOMP-API standard itself is mature, ready & currently being used in real life applications in multiple countries.
- 50+ production versions, 100+ working on implementation.
- Frees up time for other things
 - Dissemination
 - (self)Certification
 - MaaS islands
 - Ecosystem of trust
 - Discovery services
 - Personal information – standardized
 - Governance

How do TOMP-API & CDS-M compare?





Dig a bit deeper?

- TOMP-API
 - Website : <https://tomp-wg.org/>
 - WIKI : <https://github.com/TOMP-WG/TOMP-API/wiki/TOMP-API-for-dummies>
 - Swaggerhub : https://app.swaggerhub.com/apis-docs/TOMP-API-WG/transport-operator_maas_provider_api/1.2.0
 - eHUBS : DL LTP6.3 : <https://www.nweurope.eu/projects/project-search/ehubs-smart-shared-green-mobility-hubs/#tab-7>
- CDS-M
 - <https://www.polisnetwork.eu/wp-content/uploads/2021/03/Principles-CDS-M2.pdf>

QUESTIONS?

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