







# MaaS for Cities of All Shapes and Sizes

CIVITAS POLICY ADVISORY COMMITTEE STATEMENT

2021

### Dear Urban Mobility Decision Makers,

With this policy statement, we, the CIVITAS Policy Advisory Committee (PAC), would like to share our views on the theme of Mobility as a Service (MaaS), especially its implementation in European cities taking into consideration all their shapes and sizes.

In recent years we have been going through an incredibly rapid digital transformation that has affected various sectors, including the one of urban mobility. It is within this aim that the concept of Mobility as a Service (MaaS) emerged, making it possible to integrate various forms of transport services into a single mobility service accessible on demand. Although recent, MaaS is already seen as one of the main tools to achieve the cities' key societal objectives (like sustainability, accessibility, and inclusivity) with a focus on people and their needs.

However, MaaS is still a challenge for many European cities given the lack of regulation, public-private cooperations and incentives for smaller regions to invest. Taking advantage of our group of local politicians experiences, we produced this statement trusting that these barriers can and should be overcome for our cities to walk one step closer to EC's sustainability goals.

We look forward to continuing cooperation with you in the framework of the CIVITAS Initiative.

Yours sincerely,

The CIVITAS Policy Advisory Committee



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# 1 Why this statement?

The CIVITAS community stands by the EC's mission area, "Climate-neutral and smart cities" – a mission with the aim of achieving the goals and targets set out by international policy frameworks, where cities play a key role. The proposed mission is to achieve 100 Climate-Neutral Cities by 2030. According to recent studies, Mobility-as-a-Service (MaaS) is considered an enabler to reaching this goal.

MaaS is a fairly new concept that is changing the way mobility solutions are offered to citizens/users. The concept was first described in Finland by MaaS Global as "a service that integrates and seamlessly provides multiple existing mobility services" [1]. Levels of integration might vary, but in the original definition, the summum of MaaS is a monthly fee to gain access to all modes. Since this original definition, it has become clear that the potential of MaaS is bigger than a simple B2C offering. More recent definitions of MaaS no longer focus on "one app to rule them all" but on the potential of a MaaS-ecosystem in which there's space for various business models and innovative products, all focused on creating added value for all stakeholders and, in the first place, create a better user experience for the citizen.

A healthy MaaS-ecosystem [2] is a cooperation between several stakeholders. They include:

- Citizens;
- MaaS operators;
- Transport operators and, in general, mobility service providers;
- Cities, transport authorities and infrastructure managers;
- Data providers and info mobility/application service providers;
- Technology and platform providers;
- ICT infrastructure;
- Payment system providers;
- Insurance companies;
- Regulatory organisations;
- Universities and research institutions;
- Investors.

A particularly important role in the development of a sustainable MaaS ecosystem needs to be assumed by the public administration, both at a local, national and EU level, setting out policy objectives serving their community in close dialogue with other stakeholders. The administration should work with the global picture in mind and encourage the development of the service sector towards the provision of innovative services matching the users' varied needs. [2]

The CIVITAS Political Advisory Committee (PAC) is confident that the implementation of MaaS solutions will make mobility more sustainable. However, they share the challenge of aligning local goals with the commercial goals of MaaS' providers. Specifically for small and medium-sized cities<sup>1</sup> as well as rural areas, it is challenging to harness the potential of MaaS since these regions are less economically interesting for the commercial players and the cost to setup a MaaS ecosystem is not lower.

# 2 The roles of MaaS

Inspired by Mobility-as-a-Service by SYSTRA and Usbek & Rica [3]

MaaS can play various roles in supporting and achieving societal and policy goals. The opportunities of a MaaS - approach lay not only improving services for citizens but also can be used to involve them, bring stakeholders around the table, create mutual understanding and stimulate innovative solutions. Below is an overview of roles MaaS can play when well executed.

#### 2.1 Enable a mind and modal shift

MaaS is about providing the user with the right solution at the right time for the right price. By providing the user with options, it can help to create a mind shift for the user and lift existing psychological, sociological and technical barriers. Through communication and incentives, the mobility experience can be altered, and travel behaviour can be influenced. MaaS places the user/citizen at the centre.

# 2.2 Facilitate multimodality

Through MaaS the user can not only be provided with the right information for a unimodal trip, but MaaS also facilitates the combination of various modes in one trip. Switching between modes is often complex, requires various ticketing systems and creates uncertainty. A MaaS offering lowers complexity, simplifies payment and reduces uncertainty.

# 2.3 Unlock mobility data

To provide the right information at the right time to a user, data is important and key for MaaS. MaaS can not only make sure there's better insight into mobility behaviour but also - with the right policies - unlock data sources from other stakeholders, requiring them to be involved in sharing and exchanging it. This is preferably done as open data where possible (with respect

<sup>&</sup>lt;sup>1</sup> For reference: small cities (<100 000 inhabitants); medium-sized cities (100 000 – 250 000 inhabitants) and large-sized cities (>250 000 inhabitants).

to GDPR when it comes to personal data). The data is not only usable for MaaS-players but can also be used in other applications like traffic models, information screens and ITS systems.

### 2.4 Optimise mobility flows

The aim of MaaS is to compile data from various transport service providers to offer an optimised service and a seamless user experience. The data needed for this seamless experience combined with usage insights can be used to optimise the various mobility flows, resulting in a better service for the user and a potential cost saving for a city/region. Data can also provide information for investments/modifications in infrastructure (new bike lanes, drop zones, ...).

### 2.5 Support sustainable mobility

By providing the users with the right information (data), it is possible to nudge them towards the most sustainable mobility solution. At the same time, a well-executed MaaS solution will provide the users with the necessary insights (CO<sub>2</sub> emissions) that will support their choice. Since there's no extra barrier for the user when choosing a certain mode, a concerned user will choose their preferred choice (E.G. some users will more likely choose a more sustainable option).

### 2.6 Create innovative business models

MaaS, as merely a reseller of tickets in a low margin market, just adds an extra middleman; therefore, it is key to stimulate the market in creating new product combinations which benefit both users, mobility providers and MaaS providers. To strike this balance, it is important to provide MaaS and mobility providers with sufficient freedom to create an offering that provides the right added value in a transparent way (E.G. the added value of the MaaS provider can be made by offering a subscription (with fixed prices) for users). Policies and initiatives should support this search for the right market balance while at the same time keeping all mobility options open and accessible for all. Policies should make clear to all stakeholders that each has to respect each others KPIs and that there shouldn't be exclusivity on certain products (although the price might vary in reselling or making it available through third parties).

# 2.7 Persuade people to change their behaviour

At the moment, the first concern of mobility providers is to conquer a greater market share and optimize their profit. But users must be put at the centre if the aim is to change their behaviour. In this regard, multimodality should be designed to be as easy and extensive as possible in order to meet the politicians' goal of getting people to use MaaS and encouraging them to leave their private cars behind.

For the early adopters (students, millennials, ...), subscription plans can be seen as indispensable to persuade them to join MaaS.

### 2.8 Connect systems across regions and countries (interoperability)

By stimulating the interoperability of MaaS and mobility solutions through the sharing of services and data, it is possible to connect regions in MaaS. Pushing for interoperability between MaaS solutions benefits citizens living in a certain region and makes it easier for them to use the same tools for their transport needs in other regions without changing their behaviour.

Cross-border traffic must also be eased by making MaaS solutions universal in use and by new mobility offerings for cross-border traffic.

### 2.9 Build partnerships

Since a MaaS-ecosystem involves many stakeholders, it is key to build trust and understanding between the various stakeholders. Approaching the mobility challenges from a MaaS perspective provides a framework for public-private partnerships and can create a more open and resilient mobility system. The right governance model supports this collaboration.

# 3 The role MaaS can't play

It is important to note that although there's much potential in MaaS, there are also various roles that a MaaS-app or a MaaS-ecosystem cannot play. MaaS is not a silver bullet. Appropriate infrastructure and investments in mobility solutions are still key in shaping the user experience and convincing people to change their user behaviour.

It is clear that MaaS can play an important role in achieving goals set forward towards sustainable mobility. However, it is important to keep in mind that mobility as a service is part of a bigger whole and depends greatly on how all these other aspects are handled. Mobility as a service will not compensate for the lack of investment in public transport nor will it build the necessary infrastructure to enable shared mobility or simple walking and cycling.

MaaS alone will not change users' behaviour if it only provides to them a tool to access mobility solutions, but it remains easier to just drive their own car and park it in the city centre. But if MaaS could give them an economic benefit and a more convenient method of transport

(multimodality) with enough mobility options for every type of trip, this could persuade users to change their behaviour.

It is also key to make sure that spatial planning in a city, region and country is adequate so that there is no necessary need to use the car to move from point A to point B. MaaS is part of a sustainable urban mobility plan and can be the digital layer that links all initiatives together, but it is an empty shell without those initiatives.

Although MaaS could be a single access point for all mobility solutions, it should never be the only one. For users, it should always be possible to access mobility solutions through the platform/ticketing systems of the mobility provider themselves.

# 4 The challenges for MaaS in small to medium-sized cities

Small and medium-sized cities are the backbone of Europe. These cities are scattered all around the continent and play an important role to bring services to citizens<sup>2</sup>. The challenges these cities face related to economic development and attracting innovation, in general, are bigger. This is also true for MaaS.

Current implementations of MaaS are mainly focused on larger cities since there is a higher number of potential customers that can be reached, a higher appetite for innovation and more (shared) mobility solutions already in place. The challenges for small to medium-sized cities on sustainable mobility, however, are not lower. Implementing MaaS and all its advantages is often more challenging for these cities since they don't benefit from economies of scale.

Furthermore, smaller cities and rural areas also often face an ageing population with a greater need for access to healthcare. This increased the need to provide access to not only public transport but also to other - more individual - modes of transport. MaaS can help to provide this diverse offer in an accessible way and simplify administration for both users as government/support organisations, but it comes with a cost that is less likely to be offset by

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https://urbact.eu/vitality-small-cities-priority, adapted quote from Emmanuel Moulin, director of URBACT secretariat.

normal commercial users. To make it economical more feasible for smaller cities and municipalities they should collaborate in rolling out mobility providers and MaaS.

# 5 Creating a successful MaaS-ecosystem in cities of all sizes

MaaS can be an enabler to move towards more sustainable and inclusive mobility in all cities and rural areas. As MaaS is a complex solution, there are several key elements that should be in place to enable the successful creation of such an interconnected and integrated system. Based on the *MaaS Readiness Level Indicators* [4] developed within CIVITAS Eccentric and the *MaaS Maturity Index* [5] developed by MaaSLab, various elements are identified that contribute to building a successful MaaS-ecosystem.

### 5.1 Join forces

Understanding that, in economic terms, it is not attractive for a MaaS or mobility provider to offer a service in a small area, neighbouring towns should unite and offer joint contracts to providers. In addition to increasing the service area, and consequently the options, they make it easier for the customer to use the service - with this union, the customer does not have to change applications every time he crosses a border, which will increase his willingness to use this service.

Cross-border MaaS solutions can also be something to be taken more seriously in the future.

# 5.2 Policy, regulation and legislation

Policy, regulation and legislation that enable and support MaaS are key to its successful implementation. In addition to the local framework, national governments and the EU have an important role to play to stimulate collaboration and especially cross-border collaboration, data exchange and data standards. This also includes allowing flexibility in pricing for reselling and allowing third parties to sell public transport tickets. It is key that the user stays at the centre of any policy, regulation or legislation but also take into account the different key success factors for the different stakeholders in the ecosystem.

# 5.3 Openness and data sharing

Openness is one of the most important points of a successful implementation of a MaaS solution A MaaS-ecosystem is built on openness and data sharing, providing the right information, whether for booking a trip or just informing the general public about mobility

solutions. Therefore, all stakeholders in the ecosystem should provide and share data with each other digitally and in a non-proprietary format. Requiring opening data and services for third parties enables innovative mobility solutions and makes sure that cities are less likely to suffer from a vendor lock-in or monopoly.

It is key to keep/build an open dialogue with all stakeholders in order to create a clear understanding of each other's challenges and bottlenecks. There are many possible implementations of MaaS [2]. Not one model fits all. Finding the right type of implementation for a certain city or region can only be done through open discussions with all stakeholders. Cities play a key role in this process. Therefore, knowledge exchange between cities of all sizes should be stimulated.

### 5.4 Citizens familiarity and willingness

MaaS is still a relatively new and unknown concept for many citizens. Therefore, the introduction of MaaS requires a solid communication strategy and clear branding/positioning in the market. Also, it is important to involve citizens in the design of the applications and their communication in order to understand what are the needs and wishes of users. In doing so, they will contribute to persuading citizens with attractive proposals when introducing them MaaS solutions (customized subscription models for target groups can be interesting to attain this goal).

### 5.5 Transport services and infrastructure

Public transport together with active mobility solutions like walking and cycling are the backbone of a sustainable mobility solution. This also must be the backbone of any MaaS implementation. A MaaS-solution does not replace required investments in public transport or infrastructure. All sustainable modes benefit from good public transport infrastructure and good infrastructure for walking and cycling. It is important to develop a MaaS/Mobility vision across modes and keep in mind that it's more about converting car users to multimodal users than worry about users shifting from one sustainable transport mode to another.

# 5.6 Create a single point of contact for MaaS and mobility players

Since many stakeholders are involved across many domains, it is important for cities of any scale to have a single point of contact who knows their way around in the MaaS-ecosystem and who can bring players together or play an intermediate role in conflict solving.

### 5.7 Promote and support collaboration among stakeholders

To make MaaS work, collaboration and trust at various levels and between all stakeholders are key. Governments should play an active role in promoting and stimulating collaboration and building trust. For smaller cities and regions that might mean collaborating together to create a larger service area and align policies in order to facilitate entry to the market for the various players.

# What do we expect from the EU

- Create data standards together with the transport stakeholders and stimulate the creation of tools for data conversion across modes.
- Allow all stakeholders to choose their own role within the European Mobility Data Space and stimulate interoperability among them.
- Encouragement for cross-border collaborations for all stakeholders to make it possible to offer cross-border mobility solutions or subscriptions.

# 6 Would you like to know more?

### **About CIVITAS**

CIVITAS is one of the flagship programmes helping the European Commission achieve its ambitious mobility and transport goals and in turn those in the European Green Deal.

It does this by acting as a network of cities, for cities, dedicated to sustainable urban mobility. Through peer exchange, networking, and training, CIVITAS fosters political commitment and boosts collective expertise, equipping cities to put mobility at the centre of decarbonisation.

Since its launch in 2002, CIVITAS has advanced research and innovation in sustainable urban mobility and enabled local authorities to develop, test and roll out measures via a range of projects.

CIVITAS supports cities to make smart and sustainable urban mobility a reality for all. In doing so, it is ensuring that mobility is a driving force behind the creation of climate-neutral and resilient cities. The CIVITAS Initiative is currently coordinated by CIVITAS ELEVATE.

Find out more on the CIVITAS website: https://civitas.eu/

### About the CIVITAS Policy Advisory Committee (PAC)

The Policy Advisory Committee (PAC) is a group of leading and dedicated elected politicians that act as an advisory board to the CIVITAS Initiative and network of cities. It convenes regularly to share experiences on sustainable urban mobility policy and interact with DG MOVE. The main activities of the PAC members are:

- Delivering policy recommendations to the European Commission (EC) 's Directorate-General for Mobility and Transport (DG MOVE) – such as this PAC statement;
- Reinforcing the liaison between the DG MOVE and the CIVITAS network of cities, as well as the CIVINET national and regional networks;
- Supporting DG MOVE in evaluating CIVITAS city applications to host the CIVITAS Forum conference, and providing input for its agenda;
- Taking part in key CIVITAS activities such as study tours, peer reviews and policy support groups;
- Ensuring and strengthening the involvement of local politicians from CIVITAS cities in the implementation of CIVITAS activities;
- Advising and supporting the organisation of CIVITAS core activities.

Find full information on the CIVITAS PAC webpage: <a href="https://civitas.eu/pac">https://civitas.eu/pac</a>

For any further questions concerning the PAC, please contact its Secretary: Ms. Ana Costa at <a href="mailto:pac@civitas.eu">pac@civitas.eu</a>.

#### References

# Sources

- [1] Ramboll, "Whimpact insights from the world's first Mobility-as-a-Service (MaaS) system," 2019. [Online]. Available: http://ramboll.com/-/media/files/rfi/publications/Ramboll+whimpact-2019.pdf. [Accessed 1 10 2021].
- [2] ELTIS, "Mobility as a Service and Sustainable Urban Mobility Planning," [Online]. Available: https://www.eltis.org/sites/default/files/maas\_sump\_topic\_guide\_2021.pdf. [Accessed 2 10 2021].
- [3] Systra and Usbek & Rico, "MaaS as seen by Systra and Usbek & Rica," [Online]. Available: https://www.systra.com/en/maas-as-seen-by-systra-and-usbek-rica/. [Accessed 01 10 2021].