

MaaS Alliance Suggestions for legislative and financial measures supporting the digital and green transformation of the mobility sector during and after the COVID-19 pandemic

Mobility as a Service (MaaS)

MaaS is the integration of various forms of transport services into a single mobility service accessible on demand. For the user, MaaS offers added value through the use of a single application to provide access to mobility, with a single payment channel instead of multiple ticketing and payment operations. To meet a customer's request, a MaaS operator facilitates a diverse menu of transport options, be they public transport, ride-, car- or bike-sharing, taxi, car rental or lease, or a combination thereof. A successful MaaS service also brings new business models and ways to organise and operate the various transport options, with advantages including access to improved user and demand information and new opportunities to serve unmet demand for transport operators. The aim of MaaS is to be the best value proposition for its users, providing an alternative to the private use of the car that may be as convenient, more sustainable, and even cheaper while contributing to the achievement of societal and environmental goals.

The mobility sector has been strongly hit by the COVID-19 crisis with a wide societal and economic impact. During the lockdown period the transport demand in almost all affected countries went drastically down. Later, in the phase of gradual de-confinement, cities and transport operators face challenges in matching demand, capacity and space needs while trying to comply with the social distancing requirements. The long-term impacts and their gravity are still difficult to predict; the most argued topics are the willingness of users to return to high capacity (high occupancy) mass transit systems and unforeseen consequences related to general economic uncertainties. The threat of an economic recession, affecting directly also the demand of transport as well as the impact on logistics services and on employment in the sector (namely car manufacturing), are also points of concern amongst mobility stakeholders.

While this crisis was something difficult to foresee and that no one wished for, its consequences have included some positive aspects as well, such as an increase in cycling and the rapid take-off of teleworking. These new habits might bring along a long lasting impact on mobility patterns; for example, several studies have now indicated improved air quality and less emissions in major metropolitan areas. MaaS can act as an enabler of new **agility** in the mobility sector – it brings a much needed variety to the demand side and at the same time helps with optimisation of the supply side. MaaS operators, as the interface between users and mobility providers, are in a very good position to **understand and match the demand and supply**, based on **the preferences of the users and the prevailing circumstances**. Providing users with various public, private and shared mobility options and the optimised offering for every single journey MaaS can be a valuable asset in **reconstituting the user's trust**. Also detailed up-to-date information on various options becomes more and more essential now as the importance of safety is hugely increasing.

After the pandemic, more than ever, our world will need comfortable and smart mobility solutions. The MaaS Alliance sees this as a turning point, bearing a lot of opportunities in improving our urban mobility systems and accelerating transformations that normally would have taken 10-15 years to be implemented.

What is now needed is to boost the

- 1) availability and provision of **multimodal integrated mobility services**
- 2) **complementarity of public and private sector** in mobility service provision.

Both these aspects play a key role in making the transport system more **sustainable** (with reduced emissions) and **efficient** (by optimising resources and operations of transport system), but also more **resilient and agile** for possible forthcoming crisis and disruptions.

As a part of the planned stimulus packages, MaaS Alliance invites governments, public organisations, such as the European Union, and institutions to launch **targeted legislative and financial measures** to support the **digital and green transformation of the mobility sector**, benefitting cities, citizens and environment. The following suggestions (A-D) are selected based on their potential to be:

- highly impactful
- neutral to changes with regards to the technology roadmaps
- universally applicable to different environments and administrative systems.

A. Incentive schemes for greener behaviour and optimised mobility mix

Increased availability of different new and shared mobility options enables the transition towards a more efficient and less asset-dependant transport system. The uptake of new mobility services is currently hindered by the fact that the incentives schemes within the transport system are often linked to the use of fixed, owned assets while similar incentives are not available for the use of shared resources. In order to ensure that environmentally friendly mobility services are treated equally in terms of financial incentive, it would be necessary to re-evaluate such incentive schemes to enable the use of an optimised mobility mix including shared fleets and mobility services especially in multimodal urban environments. This would generate an easily understandable scheme for users and employers supporting the adoption of daily mobility new habits. In order to build comprehensive and aligned schemes, a stronger collaboration between the administrative departments responsible for transport, finance, housing and national health would be beneficial at all levels of administration and throughout the various jurisdictions.

- 1. Mobility Credit schemes:** Mobility Credit schemes¹ would require participants to scrap their older polluting vehicles to access credits to spend over a set period on greener transport options. As an incentive to consumers, the credits offered would exceed the market value of the car and could be available for a range of more sustainable and efficient modes of transport that would suit their lifestyles. Depending on the local area, the credits would include bus, active travel initiatives such as bike share or hire, mobility club and daily rental, rail and tram. The scheme could be delivered through alongside digital MaaS applications.
- 2. Incentives to end-users:** Interesting opportunities lie in the concept of subsidies and incentives directly allocated to end-users, instead of transport service providers. Some schemes exist in the transport sector and are well known, for example tax incentives for

¹ More information: <https://www.ump.org.uk/wp-content/uploads/2019/10/Mobility-Credits.pdf>

electric and hybrid cars. In the context of MaaS, the incentive scheme could take a form of tax deductions based on the use of public transport or shared mobility services; tax incentives for the acquisition of e-bikes and e-scooters; or allocation of cheques to be spent on multimodal MaaS-services. Allocating the incentives to end-users instead of service providers also support the creation of a competitive market. In this context, it could also be advisable to separate the passive micromobility (scooters, segways, small electric vehicles) from active mobility (cycling and walking). Also, being still a novelty in our mobility system, information and awareness-raising campaigns are needed to make end-users aware of the MaaS services, their benefits and to encourage them to make a conscious decision about their mobility.

- 3. Incentives for corporate mobility:** Companies are more and more conscious of their mobility solutions in terms of their economic and environmental impacts. Often corporate mobility schemes offered by employers dictate the everyday mobility behaviour of the employees. Also additional flexibility is needed for sustainable travel innovations. Taxation systems, in particular, should be planned to incentivise a move away from single occupancy private vehicle use for business travel. If businesses make mobility club or carpool vehicles available for not only business purposes but also for commuting to and from their place of employment, the tax system must not penalise these options but recognise and reward them. Governments should look at examples such as the LOM² Bill in France, with a provision enabling business to provide tax free mobility credits to be used on sustainable modes of travel.

B. Investing in trust and creation of an open MaaS ecosystem

Open systems bear multiple benefits as they encourage more balanced development of the markets and provide more choices for the users. Open data policies accompanied by appropriate platform regulation that ensure access to market, fair competition and a wider choice for the consumer are the building blocks for the creation of open systems. This is valid also for the mobility market. The success of data policies depends on how well the interest of data providers and data users can be aligned; in that regard there is still a need for a creation of new incentive models and schemes to create a dynamic and fair data economy.

- 4. Creating foundations for fair data economy:** The principle of data reciprocity should be emphasized in all policies. Governments should also be a strong voice for protecting customer rights, by requiring only absolutely necessary data from the users, respecting user privacy and endorsing the principle of empowering users to be informed and decide on the use of their data, in accordance with the data protection schemes. The framework for data access and use should put the individual in the central position and make ethical data sharing and the MyData principles³ the norm. In a MaaS market, individual data portability does not just make customer choice simpler and more seamless, it also makes roaming between several MaaS services possible.

² <https://www.ecologie.gouv.fr/loi-mobilites>

³ More information: <http://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/78439/MyData-nordic-model.pdf?sequence=1&isAllowed=y>

However, open data cannot alone enable an industry like MaaS; a MaaS-market also requires services with a high level of interoperability as well as fair and non-discriminating commercial terms. By ensuring that MaaS-operators are not hindered by protectionism and market distortion, decision-makers support the MaaS ecosystem and make it thrive. By providing additional guidance on the relationship of public and private MaaS-players and on what constitutes fair and reasonable terms, decision-makers can speed up the development of MaaS and decrease mistrust in the sector. It is also suggested that, especially in the EU, regulators would evaluate the use of the good benchmark set by PSD2 (Payment Services Directive) to facilitate trust building in the mobility system.

Additionally, investments are needed in further research about the sustainability and transparency of the business and fiscal models that underpin new services and market places. Historically public transport is a subsidised sector, while new market players have blended public and private funding models depending on national and local arrangements. For MaaS to be effective, there should be a viable business model for all actors in the ecosystem and transparency about the influence of public funding in pricing and revenue sharing. The regulators should consider incentives that can also be put in place to **encourage the multitude of actors to participate** in the MaaS services and their alignment with public policy goals. Finally, further development of appropriate information and pricing to encourage off peak trips would be beneficial to maintain social distancing and flatten peak demand and supply. Integration of real time information on transport **crowdedness** is now similarly critical and MaaS solutions can play a key role in travellers' contribution in re-establishing safe and attractive public transport system.

- 5. Using public procurements as a tool to facilitate deployment of open data and open APIs.**
With open data being a fundamental element in the MaaS developments, public procurement can also be used to encourage open data by setting requirements for data sharing and to enable the interoperability of interfaces (APIs) in public tendering. The requirements can be used either as ex ante selection criteria or as a requirement for the selected solution and/or service provider.
- 6. Streamlining the contractual models:** As transport is a very local business, with need of extensive knowledge of local conditions, supply and demand needed for every operation, the transaction costs remain very high for the multilocal service providers. Creating standard contractual models for recurring commercial situations would significantly reduce the transaction costs and improve the scalability of services. This would simultaneously create a framework to improve the trust of players in the ecosystem. This development could be sped up also with funded R&I projects, where MaaS providers and other service providers (including data providers) would be able to cooperate and work on mutually beneficial business models.

C. Investments to support interoperability and integration readiness of public transport to MaaS

Public transport is and should remain the backbone of MaaS. The most efficient public transport systems benefit from the idea of complementarity of services where the mass transit solutions are complemented by various shared and on-demand services. The development of multimodal integrated systems and services can be accelerated by ensuring the viability and high quality of public

transport services and networks and also by integration readiness and interoperability. When allocating stimulus funding, digitalisation of public transport ticketing and payments systems would be high-value investments. Also, it is worth noting that while the definition of public transport is also evolving (e.g. bike sharing is in effect a part of public transport in many cities, being partially operated, integrated and subsidised by the public or public transport authorities) the same conditions should apply to all public service modes.

- 7. Access to public transport integration:** One of the key challenges for MaaS operators is being able to access public transport ticketing and scheduling information and APIs and to the actual reselling of tickets and this should be further facilitated by governments. A supportive legal framework should lead to a more competitive market place, where MaaS operators can sell public transport tickets directly to end users.⁴
- 8. Support to develop interoperability and integration readiness of private mobility service providers:** By introducing new, low-threshold funding for digital development decision-makers can ensure that both small players, with limited resources, and large players, with complex systems, have the possibility to strengthen their MaaS-market and deliver green growth. Open data and open interfaces should be mentioned as funding prerequisites.
- 9. Stimulus funding for the development of contactless ticketing frameworks:** COVID-19 has sped up the digitalisation of ticketing systems across the world. Decision-makers should use this momentum to push the development of modern ticketing systems with high usability with stimulus funding.
- 10. Standardisation:** Coordinated EU-level and international efforts and funding to support technical interoperability and standardisation, including funding available for implementation of standards, would represent a great boost for the development of scalable integrated services. They would also reduce costs of cities and public transport authorities and operators at later stage.

D. Facilitating the roll-out of active and micromobility schemes in cities and their integration to multimodal systems

MaaS can enable agile city development and transport supply adaptation to a rapidly changing context and regulation as seen worldwide in 2020. With a better knowledge of travellers' needs and main patterns, available from MaaS data, cities could make better decisions. Then, related changes in transport supply should be integrated almost instantly into the MaaS solution.

- 11. Appropriate licensing structures for light mobility:** Today overcomplicated licensing hampers the operations of both MaaS operators and mobility providers. To encourage the integration

⁴ In the European Union, there remains a clear need for further action on interoperability and APIs, ticketing, cooperation and data sharing, including the respective security and privacy protocols at place. The challenges identified in the report [Remaining Challenges For EU-wide Integrated Ticketing And Payment Systems](#) should be addressed in the upcoming review of the ITS Directive.

of new mobility services into MaaS, licensing should be tied to the integration with other mobility partners⁵.

12. Supporting interchanges: Multimodal and MaaS facilitated trips only work when the interchanges are seamless. Car parking and public transport interchanges may be well mapped and integrated, but cycle parking, bike sharing stations and dockless micromobility vehicle stations or areas are not; a better availability of stations would drastically improve the attractiveness of soft modes and increase intermodal trips.

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⁵ Good policy example can be found from City of Antwerp