



URBAN TRANSPORT GROUP

Evidence

Mobility as a service enquiry

Transport Select Committee

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1. Introduction

- 1.1. The Urban Transport Group brings together the public sector transport authorities for England's largest city regions (West Yorkshire Combined Authority, Transport for London, Transport for Greater Manchester, Transport for West Midlands, North East Combined Authority, Merseytravel, South Yorkshire PTE). We also have the following associate members: Tees Valley Combined Authority, Strathclyde Partnership for Transport, Bristol and the West of England, Nottingham city council. However this response is on behalf of our full members.

2. What is MaaS?

- 2.1. There is no fixed definition of the concept which is universally shared but the phrase is most commonly employed to describe a means by which a package of transport services can be purchased via an app through a subscription over different period of times.
- 2.2. To some extent MaaS is already available in the form of multi-modal public transport ticketing in the city regions (Oyster being the most well-known example) but MaaS is usually understood to be packages that also include non-public transport modes such as cycle hire, car hire, car sharing and access to taxis.
- 2.3. The three main elements of a MaaS offer are: the set of transport services which are available; an information payment platform and a subscription.
- 2.4. This is the definition which we will adopt for the purposes of this submission.
- 2.5. One of the chief advantages of MaaS is that it offers the potential for a viable alternative to car ownership because it provides access to a range of vehicles as an alternative when the user can't, or does not want to, use public transport. By taking cars off the road it can also reduce traffic levels with all the consequent benefits for air quality, traffic congestion and public health.

3. The experience of MaaS so far, barriers to MaaS and issues around MaaS

- 3.1. The experience of MaaS is limited as there are no examples at scale anywhere in the world which we are currently aware of.
- 3.2. Reasons for this could include that the business models, partnerships and alliances, and trials necessary to achieve a MaaS offer at scale take time to develop. A further challenge is around providing a comprehensive MaaS offer at a price people are willing to pay. These challenges inter-relate as for a MaaS offer to provide a viable alternative to a car it has to deliver on its promise to provide access to public transport as well as making rental cars or taxis available when the user needs them. At the same time the providers of the commercial element of the MaaS offer (including taxi and car hire companies) will wish to ultimately make a financial return. Instead of buying each element of the offer separately the user will be buying the availability of all the elements whenever they need them.
- 3.3. It is possible that achieving MaaS at scale may require either the private sector to pump prime MaaS in order to build economies of scale, or for the public sector to build the MaaS offer off the back of the core public transport proposition and the subsidies already provided



in one way or another to public transport. If MaaS results in a shift to active travel (with the consequent health benefits and consequent savings to the NHS) or to public transport (with the consequent reductions in traffic congestion) then there is also a case for looking at how these benefits could be monetised in a way which can help fund a MaaS offer.

3.4. In the UK MaaS trials involving our members include:

- Whim in the West Midlands: This project is a result of co-operation between MaaS Global (from Helsinki), Transport for West Midlands, National Express bus and the Gett taxi service. It is currently available on a pay per ride basis to consumers who have signed up via the Whim website. The next steps are to make the service available to all West Midlands commuters through the App Store and Google Play where monthly packages and new transport modes, such as coaches, rental cars and city bikes will be added.
- TfGM is developing a MaaS business model. Its first phase included mapping current travel behaviour to ensure the service reflects local needs

3.5. More widely the most well-known international example is in Helsinki (although it's important to note that this is still at the trial stage as it has been for a number of years). The early reported results from the scheme promoters suggest that it has led to an overall shift away from car use by those involved in the trials.

3.6. Less well known, but of as great a relevance, those in Hannover and Vienna. The Hannovermobil MaaS offer is led by the transport authority and allows users to pay a monthly fee which includes discounted taxi use, car hire and national rail travel. In Vienna a MaaS pilot initiative called Smile involved a wide range of providers of public transport, car hire, taxi services and bike hire. An app was created which informed the user about available means of transport in the area for the journey they want to make including departure times of public transport at a stop, available rental bikes, car-sharing availability, available charging points and so on. The options could also be sorted by transport mode, time, price and CO2. More than 1,000 people took part in the pilot with 75% stating that they were very content or content with Smile with surveys of users suggesting that the app encouraged a shift to more public transport use and greater combining of modes.

4. MaaS issues / barriers

4.1. Who has influence over the information a MaaS app might provide is also something that needs to be considered as it would be possible for a MaaS service to steer users towards particular transport options (such as a taxis or car hire) when walking or cycling might be a better option in terms of personal and public health as well as traffic congestion. This could happen because motorised options are easier to monetise in favour of direct or indirect commercial interests. Conversely a MaaS app could be used to nudge people towards a healthier lifestyle where an active travel option was practical.

4.2. This is one reason why, where an authority has the capacity and aspiration to do so, that a strong case can be made for transport authority involvement. Another reason is that transport authorities in a position evaluate in a holistic way the wider impacts of MaaS offers in a way that balances consumer benefits with wider implications for the transport system, local economies and the environment.



- 4.3. In a recent report on MaaS (Reimagining Places - Mobility as a Service) KPMG¹ sought to provide an analytical framework to help determine the degree of transport authority involvement.
- 4.4. They argued that:
- An open MaaS market (with light touch regulation) may be more appropriate where there are lower risks of an open market exacerbating wider public policy challenges (such as air quality or congestion)
 - Light MaaS regulation could be more appropriate where modal choice is greater and the risks of exacerbating wider public policy challenges are greater. For example in these circumstances there could be regulation around ensuring that any mobility service provider offering integrated journey planning has to display all available travel options not just its own services
 - Full MaaS regulation could be more appropriate for the very largest cities where a number of players operate offering huge complexity of modal choice and with a higher risk of leading to increasing congestion and air quality problems
- 4.5. We reference the KPMG work not to necessarily endorse its conclusions but to show that there is a case for transport authority involvement in MaaS - although in our view it should be for each area to determine how best to approach MaaS for local transport networks in line with local circumstances and aspirations.

5. Digital exclusion and wider social dimensions to MaaS

- 5.1. Clearly not everyone will have access to all, or some of the elements, of a MaaS offer. For example children and many young people will not have bankcards or driving licences. Some people may not be willing, comfortable or able to use a smartphone, an app or some travel options. This could be for a host of reasons including age, disability or preference. Transport authorities have a key role in ensuring that those groups do not lose access to transport even where the cost of provision for these groups is greater, costs that purely commercial providers of MaaS offers may be less willing to incur. For example, the need to ensure wide access to transport in London is one reason why, despite the higher transaction costs, Oyster cards will continue to be provided in London, alongside the ability to pay by contactless bankcards.
- 5.2. More widely much of the attention given to MaaS is around the benefits for the typical consumer but a broader view of the potential of the technology behind MaaS could result in wider socially inclusive benefits. Indeed on-demand transport managed by the public sector and provided through sophisticated software is already here to some extent in the form of dial-a-ride services.
- 5.3. But looking ahead there are other ways in which technology can be used to achieve wider social and public policy goals. For example it can be used to provide more finely tuned information to people with particular disabilities around appropriate travel options as well as to ensure that the providers of those travel options provide any support and assistance that may be required.
- 5.4. There are also ways in which these technologies can support 'Total Transport' services. Total Transport refers to the pooling of budgets and/or transport fleets which are currently

¹ <https://home.kpmg.com/uk/en/home/insights/2017/08/reimagine-places-mobility-as-a-service.html>



deployed and organised separately for public transport, education transport, social service transport and patient transport services. Through pooling Total Transport has the potential to offer people a higher level of more flexible shared transport provision at less cost to the public purse. Technology can be used to more efficiently manage a larger fleet of pooled vehicles, to ensure the right vehicle is provided for the right need, and to ensure that the public can access those services and pay for them in convenient ways.

6. The role of central Government / data

- 6.1. The existing regulatory and legislative framework for transport struggles to accommodate transformative technological change, new business models and new formats for transport provision which are reshaping the sector.
- 6.2. The challenges for the existing regulatory and legal framework include:
 - rapid changes in vehicle technologies (for example in what constitutes a green vehicle or in relation to connected and autonomous vehicles);
 - changes within sectors. For example the legislation governing taxis and PHVs results in frequent legal challenges, including due to unclear definitions on what constitutes plying for hire in the age of apps;
 - expansion in available data and its ownership and use (including in relation to third party apps).
- 6.3. The Government's Autonomous and Electric Vehicle Bill which is currently passing through Parliament addresses some of the insurance issues around autonomous vehicles as well as some issues around charging points for electric vehicles. The Government also currently has a working group looking at potential reform of taxi and PHV law and regulations and its industrial strategy commits to wider moves to create a flexible legal environment for new and emerging transport technologies.
- 6.4. However, there is a sense hitherto that the approach to the legislative aspects of transformative technological change has been incremental rather than systematic. Having said that with technological change moving so fast there are inherent challenges in seeking to ensure that legislation can accommodate the rapidity and uncertainty of change in an all-encompassing and meaningful way.
- 6.5. We would argue that one element in any wider strategic approach to legislative change in this area would be to ensure that devolved authorities have sufficient flexibilities in order to test and pursue different approaches to MaaS and wider technological change.
- 6.6. The open data provisions of the Bus Services Act also offer the opportunity to open up more data in relation to bus provision particularly around fares and performance. At present the regulatory framework around bus data is antediluvian. So for example the only time when a bus operator is required to provide bus fare information is when a passenger boards a bus. This means that they are not required to provide this information to transport authorities even where it is the transport authority that provides the wider public transport information website and phone-line. Although the Bus Services Act became law in July 2017, and much of the secondary legislation and guidance has now been issued, progress on the open data elements of the legislation has, unfortunately, been limited so far.



- 6.7. More widely on data ownership and privacy emerging data relating to individual travel behaviour (such as smartcard and contactless payment records, as well as mobile, bluetooth and wifi tracking data) has enormous potential to improve the planning, oversight and operation of transport services and ensuring that travellers can make informed choices in more convenient ways (such as through MaaS). At the same time for this to happen there is a need to re-assert and guarantee individual privacy in line with wider legislation, and consider appropriate legislative measures, to ensure that greater social and economic value can be created from this information.
- 6.8. In terms of transport authority data, in our Smart Futures for Urban Transport report² we collectively committed to share our data where this best serves: the interest of travellers; the efficient and effective operation of our transport systems; and the wider goals of our cities (environmental, economic and social). We have set up an internal 'emerging data' group which is charged with making faster and further collective progress on four key issues for us on data sharing and integration; ownership and privacy; quality and standards; and building the skills. This follows on from the findings of a report we published in 2016 on getting smart on data.³
- 6.9. In moving forward on transport data it is important to note that the data that different transport authorities holds varies partly as a function of size and scale of the authority but also in relation to the age of the technology that generates it. Reductions in revenue funding for transport authorities also reduces the potential, particularly of smaller transport authorities, to recruit, retain and compete for data scientists and specialists.

² <http://www.urbantransportgroup.org/resources/types/reports/our-vision-smart-futures>

³ <http://www.urbantransportgroup.org/resources/types/reports/getting-smart-data>