

Dear reader,

What if a concept exists that can improve travelling habits and the efficiency of the transport network? What if a transport service can cut costs for the user, improve the use of different transport providers and reduce city congestion? Mobility as a Service (MaaS) is such a concept, combining services from public and private transport providers through a unified gateway that creates and manages the trip, which users can pay for with a single account.

In this e-update, we throw a spotlight on this concept and its role in Mobility Management, which was also one of the main topics at the [2017 ECOMM in Maastricht](#).

## Mobility as a Service: A new transport model(?)



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As defined by the [European Mobility as a Service Alliance](#), the key concept behind MaaS is to “put the users, both travellers and goods, at the core of transport services, offering them tailored mobility solutions based on their individual needs. This means that, for the first time, easy access to the most appropriate transport mode or service will be included in a bundle of flexible travel service options for end users”.

With this logic, **MaaS is not limited to individual mobility**, as the approach can apply to transporting goods as well, particularly in urban areas. Myriad innovative new mobility services such as bike-sharing and carpooling or car sharing are fuelling this shift. This shift is further enabled by improving the integration of multiple modes of transport into seamless sequences of trips, with bookings and payments managed collectively for all legs of a journey.

## Benefits and risks of MaaS



The transport sector is entering a period of significant change, with new technologies, products and services fundamentally shifting people's expectations and opportunities – and the market for intelligent mobility is rapidly developing. Customers, transport authorities, businesses and governments understand the huge potential of mobility opportunities as part of a wider, integrated system.

- **Users:** Developed, personalised and smart mobility services reflect users' diverse needs. Seamless, transport services function well and provide easy access to mobility, strong user orientation, high-quality services and competitive pricing (see also [Balancing the mix - An innovative Mobility Alliance in the region of Aachen for citizens and visitors](#), Reyhaneh Farrokhkhiavi at ECOMM 2017).
- **Public sector:** Information and communications technology (ICT) improves the effectiveness of the whole transport system. Benefits include being able to allocate resources efficiently (based on a user's real needs), creating new businesses and jobs, improving the management of traffic incidents, and having a more reliable transport system through advanced data (see also [Insights from the ongoing MaaS evolution in Sweden](#), Maria Coulianos at ECOMM 2017).
- **Businesses:** MaaS is a profitable market for new transport services. Renewed opportunities for the traditional transport and infrastructure business sectors are part of innovative service concepts and co-operation (see also Kamargianni, M., and M. Matyas 2017. [The Business Ecosystem of Mobility as a Service](#). 96th Transportation Research Board (TRB) Annual Meeting, Washington DC, 8-12 January 2017).

However, as stated in the discussion paper “[Mobility as a Service: Implications for urban and regional transport](#)” (Polis Traffic Efficiency & Mobility Working Group, September 2017), it **may happen that MaaS increases inequality where premium levels of service are on offer to those who pay more.**

On the one hand, this can be due to **dis-incentivising sustainable mobility**. The success in some markets of new services, including apps for private-hire vehicles and ride-sharing, clearly has the potential to disrupt existing urban mobility services and could also encourage a shift towards car use away from more sustainable modes.

On the other hand, because of **higher costs for the user or the transport provider and unequal services**. In the case of commercial Megaservices, the operator will need to receive payment for the services delivered. Who will ultimately bear the cost for these services remains to be defined: will it be the customer or will it be the transport provider, such as the bus or tram operator?

Lastly, inequality may increase due to a **disconnect between the user, the transport provider and the transport authority**. The digitalisation of transport services may create an additional disconnect for those who are less tech-savvy, leading to the widening of the so-called digital gap.

## Bundling services to simplify access to mobility ensures the best use of all transport modes



The transport system as a whole, and those who have a part in it, is becoming more integrated as the focus shifts from solely providing the supply of transport to what and where the demand is and how to cater for it more effectively. In its publication **Journeys of the Future - Introducing Mobility as a Service**, the consultancy Atkins provides some key trends that are manifesting this shift in thinking.

- 1. Integration and convergence:** Many different forms of transport are now an integral part of transport networks. **Walking and cycling** are key parts of the whole system. Furthermore, the modes may start to expand or the distinctions become blurred with new services such as **Uber, Lyft** and **Bridj**.
- 2. User experience:** Transport is redefining itself as “mobility” and focuses on the customer rather than as a product to the customer. This is a profound shift due to an increase in and the ability to share information, and by **new business models** becoming possible thanks to technology and a greater willingness among people to try new things.
- 3. Access over ownership:** Providing **access to mobility rather than owning the means of mobility** is changing the landscape. Furthermore, the collaborative economy and technological developments will jointly enable people to be more selective, thus continuing this trend.

**Use of a combination of technologies:** The whole approach to a journey, centred on the user, is the underlying driver to these changes. People are now looking at transport as a whole network and understanding the full range of seamless opportunities available. Technology is enabling journey-planning tools such as **Moovit** to provide solutions that give people the ability to navigate the transport network more easily.

## A chance for a fundamental change in people’s behaviour in and beyond cities



“The millennials don’t value cars and car ownership, they value technology — they care about what kinds of devices you own”, says **Mimi Steller**. A new lifestyle where people drive less is emerging among millennials, a **generation exchanging driving for cycling and walking** and more enthused about the latest technological product than owning their first car.

That’s why it is important to remind ourselves that people sit at the heart of transport and mobility, and transport systems should meet their changing lifestyle needs. Therefore, **with Mobility as a Service, the user will no longer be the only consumer in the transport system**. Instead, the whole transport system will be generated together with and by the people.

## Creating a seamless travel experience based on demand



Image Credit: [Telematics News](#)

To make advanced travel planning a reality, Europe's transport system must **move towards a more user-friendly, digital and intelligent mobility model** by analysing and developing coherent concepts, and encompassing all relevant elements, systems and services. Many expect a **paradigm shift in transport through MaaS**, whereby the service providers could offer travellers easy, flexible, reliable, affordable and environmentally sustainable daily travel.

The best example is **Finland**, where the MaaS concept already plays a key role in national transport policy. **MaaS Finland** has started operations as an independent company focusing on the international market, intending to serve as an operator between transport service providers, users and third parties.

In 2016, the City of Hanover launched "**Mobility Shop**", the **first operational example of MaaS**. Its core feature is an integrated process that includes registration, routing, booking and invoicing for several transport modes (public transport, taxis and car-sharing).

The Horizon 2020 project **IMOVE** ([www.imove-project.eu](http://www.imove-project.eu)) is based on investigation, development and validation of bottom-up novel solutions able to define sound MaaS business models, smoothing their efficient and profitable service operation. A further Horizon 2020 project, **MaaS4EU** ([www.maas4eu.eu](http://www.maas4eu.eu)), aims to provide quantifiable evidence, frameworks and tools, to remove the barriers and enable a cooperative and interconnected EU single transport market for the MaaS concept, by addressing challenges at four levels: business, end-users, technology and policy.

## MaaS Readiness Level Indicators for local authorities



CIVITAS ECCENTRIC - MaaS Readiness Level Indicators for local authorities (2017)

Several European cities are currently seeking how they could support the establishment of new multi-modal transport services in their area. The challenge is how to create high-performance service packages from the existing services to change the mobility behaviour towards a more sustainable transport system instead of using private cars.

In September 2017, the **CIVITAS ECCENTRIC** project published the **MaaS Readiness Level Indicators for local authorities**, which give a cross-sectoral view on how prepared each local authority is for the change and what sort of transport decisions it has already made and how these support the implementation of the new transport services.

Therefore, the CIVITAS ECCENTRIC project partner cities **Madrid, Munich, Ruse, Stockholm** and **Turku** have identified several critical elements to be considered before the new transport culture can flourish. It is vital that local authorities learn from each other so that all possible aspects of the current situation are taken into consideration before the environment is ready for Mobility as a Service.

## Conclusion



Society is moving towards an era where everything is a service. **People's needs and expectations will continuously become more demanding and fragmented**, while the resources for developing transport systems are decreasing. New technologies enable travellers to take a more dynamic, proactive role as a developer and data producer in the transport system.

In its White Paper - **Guidelines & Recommendations to create the foundations for a thriving MaaS Ecosystem** - the MaaS Alliance states that a fundamental principle and core motivation behind deployment of MaaS is that **MaaS is a user centric, customer-centric, market-centric proposition** within a context grounded in society. MaaS is to become the best value proposition for both private and business users, by helping them meet their mobility needs and solve the inconvenient parts of individual journeys, as well to improve the efficiency of the entire transport system.

## Upcoming events in January & February 2018

- **Autonomous vehicles: what impact on European cities?**  
25 January 2018 | Brussels, Belgium  
<http://www.uitp.org>
- **Act TravelWise Annual Conference: Forward Thinking, Future Planning**  
25 January 2018 | Birmingham, UK  
<http://www.acttravelwise.org/events>
- **MaaS Market Conference**  
20 - 21 February 2018 | London, United Kingdom  
<http://www.maas-market.com/>

For more events, please visit the [EPOMM calendar](#).

