Webinar: (re)-Regulating mobility & MaaS – lessons learned from the Finnish Transport Act

28 April 2020
(RE)-REGULATING MOBILITY & MAAS - LESSONS LEARNED FROM THE FINNISH TRANSPORT ACT

28 April 2020
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A **moderator** will guide us through the webinar. The webinar will be **recorded**.

You do not have to introduce yourself. A **list of participants and the slide deck** will be distributed after the webinar.

Some **questions** will be answered at the end of each agenda item. You can type your questions in the **chat box**. At the end of each agenda item, the moderator will select a few questions.

**Moderator:**
Hendrik Van Eldere
Deloitte Consulting Belgium
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PARTICIPANTS OF TODAY
ITS.BE
“SUSTAINABLE MOBILITY ENABLED BY TECHNOLOGY - IMPARTIAL, PUBLIC-PRIVATE, MULTIMODAL”
PRIORIT Y DOMAINS

• Multimodality
  » MaaS - Mobility as a Service
  » MMM - Multimodal Mobility Management

• Automotive
  » ACE - Autonomous, Connected and Electrical vehicles
  » RUC - Road User Charging extensions

BE MaaS Alliance
www.its.be/maas
OUR SPEAKERS

Stijn Vandeweyer
Future of Mobility Leader
Public Sector, Deloitte Consulting

Peter Van der Perre
Director ITS.be

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Sami Sahala
ITS Chief Adviser City of Helsinki

Sampo Hietanen
CEO MaaS Global

Laura Eiro
Program Director ITS Finland
AGENDA FOR TODAY

• Introduction - (re)-Regulating Mobility & MaaS
  Peter Van der Perre, director ITS.be & Stijn Vandeweyer, director Deloitte

• The Finnish Transport Act today - public perspective
  Altti Iiskola, Ministerial advisor Finnish Ministry of Transport and Communications & Sami Sahala, ITS Chief Advisor City of Helsinki

• Point of view private sector on MaaS Regulation in Finland and abroad
  Sampo Hietanen, CEO MaaS Global & Laura Eiro, Program Director ITS Finland

• Discussion & conclusions
INTRODUCTION

Peter Van der Perre & Stijn Vandeweyer
SETTING

1. Cities and metropolitan regions
2. Regions
3. Federal level

• European level (eg ITS Directive)
• Emerging best practice (eg Finnish Transport Act)
URBAN & METROPOLITAN LEVEL
EG (HARMONISED) LICENSE MODELS FOR SHARED MOBILITY

- License constraints
  - Max # Providers
  - Max. # Vehicles
- Location constraints
  - Drop-off zones
  - Operational zones
  - No-go zones
  - Concentration zones
- Term of license
- Average usage
- Action plan
- Cost/Reward
  - For a license
  - Per vehicle
  - Per trip

- Operational demands
  - Quality towards users
    - Service desk
    - Web/app
    - Insurance
    - GDPR
    - Multilingual
    - No ads on vehicles
  - Quality of Vehicles
    - Replacement
    - Maintenance
    - Compliance to traffic regulations
  - Quality of operations
    - No hindrance
    - Spread
    - Continuity of offer
    - Max # day vehicle unavailable

- Data exchange
  - MaaS integration
    - Integration offer
    - TicketingAPI
  - Usage/Trip data
    - Regular reports
  - Operational data
    - Product offer & Pricing
    - Contact information
    - Real-time availability

- Societal criteria
  - Environmental impact
  - Financial viability
  - Corporate social responsibility
  - Ethical chart
  - Product quality

E.g. license model shared mobility city of Antwerp
Tender published – deadline 15 May 2020
Regulatory strategies for innovation and uncertainty

1. **Adaptive regulation**
   Shift from "regulate and forget" to a responsive, iterative approach.

2. **Regulatory sandboxes**
   Prototype and test new approaches by creating sandboxes and accelerators.

3. **Outcome-based regulation**
   Focus on results and performance rather than form.

4. **Risk-weighted regulation**
   Shift from one-size-fits-all regulation to a data-driven, segmented approach.

5. **Collaborative regulation**
   Align regulation nationally and internationally by engaging a broader set of players across the ecosystem.
“Given the number of variables at play in real-world driving situations, it will likely prove impossible to craft comprehensive and binding rules for AV operation for the foreseeable future. That makes it important to take an iterative, adaptive approach.”

“Mobility-related cybersecurity is fertile ground for collaborative regulation, in part because governments and industry want the same thing: safe, secure transportation.”
## Our key take aways for transport authorities

### Mobility is an interconnected system
- Adopt a system wide perspective within the limits of the legal authority and political reality putting users’ needs first
- An integrated approach by regulators and transit operators vs. regulations for a single type of transportation or geography
- Adopt a streamlined and simplified policy framework

### "Regulation vs. innovation" can be a false choice
- Avoid too restrictive regulation hampering private initiatives
- Regulation as a catalyst for the development of new forms of mobility
- Regulation covering progressively larger geographic areas
- Clear guidance on the standards of new technologies for regulatory approval
- Make regulation future-proof, or at least future-ready for new emerging technologies

### Trust will fuel the future of mobility
- Regulators should aim to foster trust among all parties
- A collaborative approach is key to draft a smart and agile regulation
- Make use of industry best practices

### Shifting from 'spot-regulation' to de- and re-regulation
- Avoid case-by-case regulation (e.g. taxi vs. ride-hailing) by focusing on the bigger picture of mobility
- Re-regulation: e.g. adding new data sharing requirements for both public and private mobility providers
- De-regulation does not stop the follow-up of policy objectives and market failures
MaaS is gaining traction in Belgium and has a track record of delivering modal shift.

There is an appetite for MaaS in Belgium, both B2B and B2C.

- Helsinki: Usage of private car dropped by half for Whim users.
- Vienna: 48% used Public Transport more often and intermodality became more popular.

Source: Whim, Smile Wien
The need for MaaS (soft) regulation in Belgium

1. **Develop a future-proof strategy for MaaS** tailored to a rapidly changing and open ecosystem, supported by all government levels

2. **Obligatory release of data & ticket structure** by both private and public mobility providers

3. **Exchange of usage data** (PT, car, origin-destination)

4. **MyMobility profiles**: enable personalized services & nudging

5. Enable the **reselling of (multimodal) public transport tickets** by commercial MaaS operators, including subscriptions, based on **fair share of revenues**

6. Create **openness and trust** between all actors via co-creation & market innovation platforms

7. Exchange data syntax & definitions over all government levels enabling **standardisation & harmonisation**

8. A common approach for **urban license models** for shared mobility

9. Put **customers first** and improve the user experience to scale initiatives

10. **Monitoring & evaluation** of the impact of MaaS regulation (modal shift, climate, road safety, inclusion, …)
HOW TO REGULATE THE FUTURE OF MOBILITY?

- Adaptive regulation
- Regulatory sandboxes
- Outcome-based regulation
- Risk-weighted regulation
- Collaborative regulation

Thank you!

Free download
THE FINNISH TRANSPORT ACT TODAY - PUBLIC PERSPECTIVE

Altti Iiskola, Ministerial adviser Ministry of Transport and Communications
Sami Sahala, ITS Chief Advisor City of Helsinki
How familiar are you with the Finnish Transport Act?
Mobility as a Service

• Customer at the centre
• Public transport as the backbone
• Public-Private-Partnerships and ecosystems
• More efficient transport system
What we want to achieve?

Smarter use of vehicles

Smarter travel chains from door to door

Smarter & sustainable mobility service packages for customers
MaaS – different perspectives

SERVICE PROVIDERS
✓ Passanger transport
✓ Logistics

INFRASTRUCTION
✓ Parking
✓ Lanes for biking, shared rides and walking
✓ Information systems and connections
✓ Stations and service hubs

MAAS OPERATOR
Combines a seamless travel chain for the customer with data

PUBLIC SECTOR
✓ Legislation
✓ Planning
✓ Taxation
✓ Procurements...
Act on Transport Services

• Better and more agile services
→ Travel chains, apps and platforms, mobility bundles

• Data utilisation and regulation
→ Enabling digital services, open data, MyData, APIs

• Deregulation and market access
→ All transport modes, new services and businesses
DATA as a key element

- Access and availability
- Interoperability
The Act on Transport Services: Data provisions

1. Provide essential data on mobility services (all modes)
   • Essential data = routes, timetables, prices, accessibility information etc.
   • All transport modes and services
   • Help and flexibility for small operators

2. Interoperability of ticket and payment systems (rail and road)
   • Anonymous single tickets

3. Acting on the passenger’s behalf (all modes)
   • Seasonal tickets, personal discounts
Checklist for MaaS legislation

- Easier market access
- Access to essential data
- Interoperability of ticketing and payment systems
- Enabling, technology neutral rules
- Unfragmented legislation
Current MaaS initiatives in Finland

• Whim Mobility as a Service application offers public transportation, taxi services, city bikes and e-scooters trough single payment channel

• Perille Mobility Services offers different local and long-distance transport services trough single payment channel

• Kyyti Group and Matkahuolto (a nationwide provider of passenger, parcel and carrier services) have recently agreed on a partnership to create Finland's first nationwide travel chain solution

• Government owned railway company VR announced that they have started to create multimodal travel chains adding other modes to their traditional service offerings

• Several other smaller regional initiatives and pilots
Work in progress

- Traficom continues enforcing the Act on Transport Services
- Taxi legislation is currently under impact assessment
- The preparation for Finland’s first parliamentary National Transport System Plan continues
- The National Growth Programme for the Transport Sector
- The assessment of the legislative and action plans for transport automation covering all modes
- A Roadmap for Fossil-Free Transport – MaaS and services part of the solution
Usefull links

• The Act on Transport Services
  • Missing the third phase regulation
• Codes of Practice for Travel Chains
Thank you!
POINT OF VIEW PRIVATE SECTOR ON MAAS REGULATION IN FINLAND AND ABROAD

Sampo Hietanen, CEO MaaS Global
Laura Eiro, Program Director ITS Finland
In how many regions is MaaS Global active?

[Bar chart showing distribution of regions:
- 3 regions: 4
- 4 regions: 6
- 5 regions: 9
- 6 regions: 14]
The Act on Transport Services and MaaS - private sector view

Laura Eiro, Programme Director, ITS Finland
Sampo Hietanen, CEO, MaaS Global
28.4.2020
The network for the Future of Mobility

• A forum for 110+ organisations comprised of public and private sector actors and research institutions to develop digitalization and servitization of the whole transport system.

• A non-profit association funded by membership fees.

• Activities: networking, communications and influencing. Coordination of the National Growth Programme for the Transport Sector.

• A part of the Network of National ITS Associations.
SERVICES

INFRASTRUCTURE

Integrated online services and interfaces
Online services platforms: Open Data, Interfaces and APIs, Cloud Services, Internet of Things

Intelligent traffic infrastructure
Traffic management systems
Digital ticketing, routing services
Seamless connectivity
Interoperability, real time information

Telecommunications and information infrastructure
Mobile data networks 4G/5G
Static networks enabling international interoperability, broadband for all

Core infrastructure & vehicles
Automation & clean vehicles in all the modes
Roads, rails, airports and ports
Land use planning

Mobility services
Mobility-as-a-service operators, multiple customized services, public transport, all transport modes, Internet of traffic
Implementing MaaS - the Finnish learnings
The Act on Transport Services pushing the MaaS development forward

• Preparation of the Act in broad PPP collaboration increased the shared understanding amongst stakeholders.

• The vision from the public sector side is clear – MaaS on the Governmental and city level agendas as well as in the PTA’s strategies.

• New services being developed both in cities and in rural areas.

• The Finnish approach allows many different MaaS models to be developed.
The enforcement is the key

The law is as good as its enforcement is, some remarks:

• Data regulations are of general nature, leaving the technical side and commercial agreements for the market players to define

• In principle a good approach, but requires a lot of guidance and steering from the authorities and effort from the private sector

• Both PTA’s and companies find the negotiation processes burdensome

• The negotiation powers are uneven, f.e. in liabilities, commissions and in API maintenance and development

• The powers of various authorities are somewhat unclear (transport regulator vs. competition regulator) and complaint procedures too long
A horizontal approach needed to promote MaaS

- Continuous PPP collaboration and co-creation needed: building a joint vision, roles of the various MaaS market players, understanding the value chain and business models...
- Clear responsibilities between authorities, the steering of the development in one place
- Coordination between various cities, sharing of best practices
- Systematic experimenting, goal-setting and documenting
- Continuous monitoring of market situation and at the transport system level (f.e. sustainability, service level etc.)
- Public procurement to support innovation, early market dialogue
- Performance management and KPI’s to be in line with the vision and strategies
- Taxation and incentives to support services and sustainable modes
Building blocks for a sustainable MaaS system

- Policy measures and regulative steering
- Public transport as a backbone and Public Private Partnerships
  - ticketing and payment systems = transport infrastructure -> open API’s & interoperability
- Ensuring competition at the MaaS operator level -> customer orientation & freedom of choice
- Advanced data exchange models for design & monitoring
  - Information from MaaS to advanced Traffic Management operations and transport planning -> both public & private sector data
- Shared Connected and Co-operative Automated Mobility
- Integration & interoperability of everything
  - Standardization as a tool
- MaaS on the Circular Economy agenda
THANK YOU!

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Mobility as a Service
The end of car ownership?

Sampo Hietanen / CEO, Founder / MaaS Global Ltd
Twitter: @sampohietanen, @whimappFI / @maas_global
What would be better than owning a car?
Freedom of mobility:
Anywhere, anytime on a whim
76% of mobility spend is on cars that are used 4% of the time.

We need to hold that value.

Sources: LeasePlan, World Bank, World Health Organisation, Inrix, European Commission, Eurostat, Frost & Sullivan
HOW TO MAKE MONEY FROM MULTIMODAL

Perceived value of MaaS

Cost of transportation
Nudging customers from most expensive modes to least.
"Your every move on a whim."
whim
travel smarter.

- Public transport
- Taxi rides
- Cars
- City bikes

1 app

- Travel info
- Planning
- Tickets
- Payments
- Pay As You Go Subscription

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<table>
<thead>
<tr>
<th>Plan</th>
<th>Price</th>
<th>Features</th>
</tr>
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<tbody>
<tr>
<td>Whim Urban 30</td>
<td>€59.7</td>
<td>30-days HSL ticket, city bike, and €10 taxis.</td>
</tr>
<tr>
<td>Whim Weekend</td>
<td>€249</td>
<td>Weekend rental car, 30-day HSL ticket, city bike and discounted taxis.</td>
</tr>
<tr>
<td>Whim Unlimited</td>
<td>€499</td>
<td>Unlimited access to car, taxi, public transport, and city bike.</td>
</tr>
<tr>
<td>Whim to Go</td>
<td>Pay as you go</td>
<td>Each trip is paid separately with no subscription fee.</td>
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Whim Ride in a nutshell

- Whim Ride takes you to your destination via best route and right transport methods.
- Weather and public transport traffic data is taken into account in recommended routes.
- Maas Global is piloting the service now in greater Helsinki area.
How it works from users point of view

Search a route

Recommendation

Dynamic upgrade offer
Under the hood

- Get routing options on public transfer
- Verify against serviced area
- Assess service level of best public option (walking, waiting, speed, transfers)
- Check realtime weather forecast for searched area
- Gather rolling spend of past 30 days
- Calculate taxi upgrade price based on other options, weather, budget and spending
- Check for walk and micromobility options in case of short distance
- Apply User Preference Model to score options

Gather rolling spend of past 30 days

Assess service level of best public option (walking, waiting, speed, transfers)
Real customer data is used to train 100 slightly different ML models. When they are given a set of routing options, each model predicts whether user would choose it: the sum of positive answers represent an aggregate route score.
What do the first test users say?!

- “I don’t need an own car but occasionally I need a car or taxi in addition to PT, therefore Whim!”
- “Variety of traffic options and replaces need to own a car, I think 10 days in a month of rental car will suffice for me in future”
- “I need both taxi and rental car for longer trips in my work”
- “Cost efficient and flexible”
So Why Is it So Hard?
It's an ecosystem **NOT** an egosystem
It’s the little things

• It’s all about willingness.
• Tech is not just tech, remember the physical part.
• Service guarantees become an issue.
• Active measures from cities are crucial (it’s also a mindset thing)
• Single tickets vs. subsidized vs. capped.
• Buffet has the best chance chance to spin the modal wheel
• Roaming has hidden value.
• Access to cars needs to be guaranteed.
• 5/6 is not enough to make a bundle
• What is the value of a MaaS operator?
Will there be anything for the society in MaaS?
40% of carbon emissions are from traffic by 2030

38% would give up their car if they only could

70 000 000 cars off European roads
Sustainable freedom of mobility by MaaS Global to remove 1 million cars by 2030

Changing the future
Transport emissions projected to count 40% of all emissions by 2030. Over 60% of this by passenger cars. Globally nearly 80 million passenger cars are sold annually. There are more households having two or more cars than no car. However, 37% of drivers are ready for an alternative.

Making the sustainable choice has to be competitive
Whim not only offers freedom of mobility but is the most sustainable true alternative to car ownership. MaaS Global will become the first in the industry to quantify its carbon handprint* in 2020.

MaaS crucial for greening transport
MaaS holds particular potential for shifting two fundamentals; the ownership of private transport and “scheduling” of public transport. MaaS services integrated with optimised shared mobility and public transport, can result in -24% by 2030, and over -50% by 2050 in vehicle km travelled.

Transforming mobility value chains through sustainable business

Profit-making and sustainability goals hand-in-hand
Nudging customers from expensive modes to more cost effective sustainable modes increases MaaS operators’ margins

Eco, not ego trips
Can substantially increase the mechanisms how to do this whilst increasing customer satisfaction and retention by introducing innovative product features.

Leading circular economy
A prime example of circular economy, using existing infrastructure and services more efficiently, while strengthening the new mobility offering. Business model built on sustainable growth instead of being dependent on volatile manufacturing, or selling ever more resource-intensive products.

* An indicator of climate change mitigation potential. Describes the GHG emission reduction in a customer’s activities that occurs when the customer replaces a baseline solution with a handprint solution.
"After 40 years of driving I have started to consider giving up my car that, for the last 20 years, has been an executive class automobile..."
Thank you!
DISCUSSION & CONCLUSIONS
What are the three biggest needs towards a MaaS regulatory framework?
Regulatory strategies for innovation and uncertainty

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   Shift from "regulate and forget" to a responsive, iterative approach

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   Focus on results and performance rather than form

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   Shift from one-size-fits-all regulation to a data-driven, segmented approach

5. **Collaborative regulation**
   Align regulation nationally and internationally by engaging a broader set of players across the ecosystem
THANK YOU!

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ITS.BE PROGRAM 2020

• We 29.1 10.00-12.00 Digital identity management & MaaS
• Th 6.2 Vakbeurs mobiliteit
• We 12.2 Next steps for the exploitation of autonomous shuttles
• We 19.2 MaaS All-hands Antwerp
• We 18.3 State-of-the-art RUC
• We 25.3 ITS.be GA Liège
• We 1.4 10.00-12.00 Third-party payment systems for MaaS
• Tu 28.4 MaaS technical visit - Lessons learnt from the Finnish Transport Act
• Th 7.5 Multimodal hubs technical visit -> concall
• We 13.5 10.00-12.00 ITS for pedestrians and cyclists -> concall
• Mon 18 - We 20.05 European ITS congress (Lisbon) -> probably cancelled
• Th 28.05 MaaS All-hands -> concall
• We 10.6 10.00-12.00 Interoperable ticketing & payment for public transport -> concall
• We 24.6 10.00-12.00 The market for (personalised) mobility advisors + sharing end user experiences -> concall
• Th 24.9 ITS.be congress Brussels
• Su 4 - Th 8.10 World ITS congress (LA)
• We 21.10 Regional C-ITS profiles
• We 18.11 Electromobility payment and information
• Th 3.12 MaaS All-hands MOW
• We 16.12 10.00-12.00 Towards common MaaS APIs - Need for a competence centre