

## Møtereferat

Dato: 13.11.2018  
Tid: 0900 - 1300  
Sted: DOGA, Hausmannsgate 16  
Deltagere: Se vedlegg  
84 deltakere

## Dialogue conference 13th November kl 0900 - 1300

### Innovating for the future

Sak nr.	Beslutning/tiltak	Ansvar
	<b>Welcome</b> – Sindre Østgård Presentation of the participants.	
	<b>The purpose and focus of the dialogue conference</b> <b>Focus areas</b> <b>Platform and service development</b> – how can this be used to get more people to use more public transport? <b>Combined mobility</b> – how can we increase walking and biking and reduce the use of cars? <b>Sustainable future</b> – How can we measure our contribution to the UN Sustainable Development Goals? <ul style="list-style-type: none"><li>• based on Ruter data and/or other data?</li><li>• how can this accelerate the journey towards offering sustainable freedom of movement?</li></ul>	
	<b>Innovating for the future</b> Ruter, Bernt Reitan Jenssen  We want to create services that take care of people and their daily needs.  Digitalization will create new needs and opportunities for marked development  We know less about the future than ever before. When will the dam break and what happens then?  We need your help!	



## **Ruters Digital Platform**

Ruter, Terje Storhaug

### **From “systems” to “data”**

Our current systems mainly do not support our vision for the future.

We are launching 470 new buses next summer and they do not have any of the old technology on board, but a new platform.

We need to operate in real time. A completely different way of operating to the old systems and a more personalized service.

We have not found a system to buy so we have started to develop our own platform. Everything that is happening is an event. We are using open source software.

### **Ruter’s Digital Platform – key characteristics**

- EVERYONE and EVERYTHING is on-line
- Datacentric and event driven architecture
- Open source technologies
- Cloud-based
- Real-time processing

Our customers are already on-line, and we have network onboard. 89 % of the population have a smartphone (97 % of our customers).

We need to utilize the data we have in a better way. We have a lot of enterprise data.

### **New architecture**

We have been co-operating with ITxPT for a fully integrated system based on standards – and standardization works. We are far beyond the point of no return. Today the buses transfer the data that have been collected during the day in the evening when they return to the depot, but in the future, we will operate in real time. Using data science and machine learning/AI we will eventually be able to predict what is likely to happen.

It will take some years to migrate from the existing platform to the new. How can we use this platform to develop services in the future?



	<p>Ruter collaborates with Entur that provides national common solutions that we plug into our own platform. We have no plan to develop a separate tourist app. We collaborate with several counties in the rest of the Norway.</p> <p>If you travel across regional borders, you should be able to use the app you normally use for planning the journey and to book it and eventually pay for it.</p> <p>Ticket machines – represent less than four percent of our ticketing revenue today. They are approaching technical end-of-life and we are working on addressing the customer needs in order to provide alternatives. Our mobile app represent close to 70 %.</p>	
	<p><b>Combined mobility</b> Ruter, Endre Angelvik Ruter has grown 80 % in the last 10 years. However, we have also had an increase in car use of 10 % in Akershus.</p> <p>How are people travelling? 16 % of people are using a car in the centre of Oslo. We do not want this to grow. 40 % of the journey is done by walking. Car usage in Oslo is basically flat. However, the mix is very different outside the centre. 57 % are using the car in the North East of Oslo. This is a challenge!</p> <p><b>Where do people travel?</b> For instance, 78 % of the journeys in the North East start and end within the same region. How do we make the car use flatten?</p> <p>Why is the structure so local and why do people use the car? In the south of Oslo 10 % of the journeys are work related. 44 % of the journeys have multiple purposes. This is the challenge. We need to create a structure for people who do multiple journeys and to widen our perspective. We need help! 87 % in the southern region have free parking at work. What do the population value? Can we create alternatives to the private cars?</p> <p>Tailor made solutions to your life. How can we compete?</p> <p>Not just individuals – also targeting organizations.</p> <p>How do we get more people to walk? Any good ideas? All cities need people to walk. How much do I have to walk to get a weekly pass? The Ruter pilot was shown.</p>	



	<p><b>How to measure on UNs Sustainable Development Goals?</b> Ruter, Frode Hvattum</p> <p><b>Our key questions</b> How can we measure our contribution to the UN Sustainable Development Goals? ...based on Ruter data and/or other data? ... and how can this accelerate the journey towards offering sustainable freedom of movement?</p> <p><b>Key drivers for mobility</b> Urbanization, digitalization, individualization, sustainability.</p> <p>Ruter have selected 8 of the UN Sustainable Development Goals: Good health, decent work and economic growth, Industry, innovation and infrastructure, reduced inequalities, Sustainable cities and communities, responsible consumption and production, climate action and partnerships for the goals.</p> <p>We have structured them into a context that is relevant for Ruter and public transportation.</p> <p><b>Vision and objectives</b> Sustainable freedom of movement.</p> <p>We want to use it to navigate and accelerate the developments in mobility.</p> <p>Can we develop a digital, simple and effective way to measure and steer towards sustainability?</p>	
	<p><b>We need ideas to put into an accelerator</b> <b>Fairtiq AG, Søren Sørensen</b> <b>Service and transport</b> It is easy to get people to use more public transport in the city, for instance roaming. The NSB cars should be integrated in the Ruter app.</p> <p>I do not need a car – I have available cars, buses and trams nearby.</p> <p>Nabobil, Christian Hager, agrees with Søren Sørensen.</p>	



People need the possibility of using a car when they need it.  
People need incentives, trust and access.

**Sopra Steria, Ingrid Tofte**

How can we resolve convenience? Where are we? We need to focus on the pin points? Where does it hurt?

**Accenture, Morten?**

Focus on electric cars.

**Ruter, Endre Angelvik**

My question focused on walking and biking. The hardest part of mobility is to get people to walk and bike. How do we work with that landscape?

**Chris Kristiansen, Atea?**

How do we make it fun to walk and ride the buses? The young people do it all the time.

**Fairtiq, Søren Sørensen**

Go from your own car to a shared car means that people will use more public transport, cycling and walking. Creates more mobility.

**Ruter, Frode Hvattum**

How to measure the UN sustainable goals? We are trying to have focus on the customer. Shared solutions are part of this. Again, it is relevant to navigate and compass towards the eight goals.

**Urban Sharing, Johann Høgåsen-Hallesby**

Walking and biking are part of the full chain and the idea of MaaS. We should look at the behavior of the customer, pricing, willingness to change between modes etc. We have to analyze the data. It is difficult to get people to completely change habits, but easier to get them to choose cycling instead of driving sometimes. Cyclists are also positive to walking.

**Sopra Steria, Ingrid Tofte**

Prioritization and criteria. One initiative doesn't fulfill everything but is a part of the whole concept.

**Ruter, Sindre Østgård**

How does it make sense to work with an accelerator program or with start-up labs?



	<p><b>Procurement process</b> <b>The enabling model</b> For instance, you enable visibility to private biking schemes etc. Then Ruter should enable others to use our platform. Go from a closed to an open platform. If we let others sell our tickets we could sell more.</p> <p><b>Bertel O. Steen, Are Knutsen</b> Get away from purchasing. Other companies should be able to integrate their services into Ruter's platform. Do the full end-to-end service. We need to avoid all the different IT companies. We need to work together with all service providers as a broker or in a way we can play!</p> <p><b>Urban Sharing, Johann Høgåsen-Hallesby</b> Pilots – Claes pilots are interesting. We can make transport easy.</p>	
	<p><b>Presentations</b> <b>Init – The Future of Mobility</b> Supplier dialogue conference, Oslo</p> <ul style="list-style-type: none"><li>• Init's Nordic Approach</li><li>• New standardized products and focus fields.</li><li>• Incorporate electrical fleets into existing fleets.</li><li>• Are looking for new alliances/partnerships with local partners.</li><li>• Open systems/Open interfaces.</li><li>• ITxPT compliant.</li><li>• Modular/scalable.</li><li>• MaaS contributor.</li></ul>	
	<p><b>Decisive</b> Decisive AS delivers three inputs to the dialogue conference. These inputs are compiled in co-operation with SINTEF, dep for Mobility and Social Economics.</p> <p><b>Inputs</b></p> <ul style="list-style-type: none"><li>• Integrated optimization of effective speed, time spent on bus stop with real time data.</li><li>• Bus bunching management</li><li>• Optimal localization of bus facilities for electric buses</li></ul> <p><b>Fairtiq v/Søren Sørensen</b> <b>Check-in/assisted check-out with no hardware</b> <b>Ticketing as a service</b></p>	



	<p>Using open systems. Can we sell your tickets? Eventually we want to sell tickets in the whole of Norway. Probably the easiest way to sell tickets.</p> <p><b>Fairtiq disrupts traditional ticketing for public transit</b></p> <ul style="list-style-type: none"><li>✓ FAIRTIQ act as a ticketing agent for public transit administrators</li><li>✓ APP and GPS based solution, 0 infrastructure cost</li><li>✓ No system procurement and project risk</li><li>✓ Check-in, assisted check-out technology limits customer service costs</li><li>✓ Eliminates zone and fare structure complexity for the customer</li><li>✓ Best-price policies, daily, weekly, monthly caps options</li></ul>	
	<p><b>FourC v/Tor Rune Skoglund</b></p> <p>Main service: «Open service platform».</p> <ul style="list-style-type: none"><li>● An <i>open service platform</i> makes it possible to install and use software from various vendors on the same hardware device, in the vehicle</li><li>● Breaks the hardware-software lock-in which is still present even with today's most prominent solutions</li><li>● Runs on any x86 vehicle computer</li><li>● Encourages cooperation and compatibility</li><li>● ITxPT compatible</li><li>● Easy to test new innovations</li></ul> <p>Several 3rd party service providers, e.g:</p> <ul style="list-style-type: none"><li>● LiveScreen digital signage (Dogu AS)</li><li>● Passenger Wi-Fi (Okeanos.net AS)</li><li>● Real-time information integrations (Mattersoft Oy)</li><li>● Public transport infotainment solution (yet undisclosed)</li><li>● FMS2IP (yet undisclosed)</li><li>● We are looking for more partners</li></ul> <p>At present, FourC is involved in 3 innovation projects with a total of 4 public transport authorities.</p>	
	<p><b>Closing of conference</b></p> <p><b>By Ruter, Bernt Reitan Jenssen</b></p> <p>Thanking for participating in the conference.</p> <p>We have to find a timeframe we are able to work within. We look forward to keeping up this dialogue and we will find ways of doing this.</p>	



	We have to open up for more players. We understand that we are not competing against the car but owning the car.	
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