

Autonomous public transport on demand - Invitation to supplier conference

People need smarter mobility to meet their individual needs today and build a sustainable future for tomorrow. They want to move around freely and easily, and be sure they are doing good for the environment around them. We need to make this easy.

Aim of the conference

Ruter is keen to explore the potential a system of autonomous vehicles can have. We are investigating the possibilities for deploying a small fleet (10-50?) of autonomous minibuses to deliver an on-demand service fully integrated with the rest of our public transport network. Our customers would use it as a normal part of their everyday travel.

We want to expose such a service to different customer groups and different usage scenarios over a period of 2-3 years. The service could be operated for periods of 3-6 months in different locations and for different purposes. Some possible scenarios could be:

- Last mile, both densely populated and sparsely populated areas.
- Local services in a city district
- City centre
- Winter operations

Our current theory is to procure this as a service from the market, in a similar fashion as Ruter procures other transportation services today.

Ruter wants to gather insight and input from the market and its suppliers in relation to the above described exploration, and hereby invites interested parties to a supplier conference.

Target audience are primarily all operators interested in delivering autonomous, on-demand transportation services, but also suppliers of all related products and services to support such operations and service deliveries.

Supplier Conference

Date and time: 12th January, 2017, 10:30- 16:00 (GMT+1, end time to be considered indicative)

Place: Dronningens gate 40 (4th floor), 0154 Oslo, Norway

Structure and tentative agenda

The conference will be carried out according to the agenda below. In order to get market insight and stimulate discussions and sharing of ideas, Ruter expects all participating organisations to prepare a 10-minute presentation, giving their views on the questions outlined in the 'focus areas' chapter.¹ The

¹ Participants at Ruter's conferences shall not enter into discussions, actions or behavior that violate competition laws. Participants shall not discuss or exchange confidential information or any other information that may be sensitive to competition, including non-public information



presentation must be submitted to anbud@ruter.no at least three workdays in advance of the conference. Further information and detailed agenda will be made available to registered attendees at a later point.

Time	Topic	
1030	Registration	
1100	Welcome and introduction	Ruter
	Information about Ruter and exploration	Ruter
	Information about legal and regulatory status	Ministry of transportation
	Supplier presentations: input and insights	5-10 minutes each supplier
	Open dialogue including Q&A	Everyone
	Summary	

Following the conference, all information put forward at the conference will be made available on Ruter's website, including minutes from the meeting as well as any presentations. This is to ensure that the same information is available to all suppliers, including those unable to attend. The conference will be conducted in English. This applies to all supplier presentations as well.

Focus areas – basis for supplier presentations

Based on the given background information and aim of the conference, Ruter seeks insight and ideas regarding further development to reach desired objectives. All participating suppliers are expected to contribute with a brief presentation presenting their input. The presentation should be based on one or more of the questions below, where emphasis is chosen by the supplier based on own capabilities.

- What experiences does the supplier have in the area of autonomous vehicles or similar/related technology or services?
- What are the most important elements that needs to be in place before Ruter can deploy an autonomous, on-demand service to our customers as an integrated part of our complete public transportation system?
- How soon can do you think the market can have such a service ready for operation in Oslo and Akershus?
- What should Ruter do to make this an appealing business opportunity for your company?
- Any other advice or insights to Ruter in moving forwards with this

Registration

As meeting room capacity is limited, attendance will be restricted to registered participants. For registration, please contact Eirik Løvoll, email: anbud@ruter.no no later than January 6th 2017. We ask you to provide names and contact information for participating representatives. There will be a limit of two attendees from each organisation.

Expected process following the conference

The supplier conference is part of Ruter's continuous and structured processes for gaining market knowledge and insight on how to cover future needs, and will not necessarily lead directly to a procurement process.

regarding prices, discounts, marketing strategy, terms of sales or delivery and so on. This applies to formal discussions during the conference, but also to informal discussions or conversations before, during or after the conference.



Ruter reserve the right to publish additional questions after the conference. Ruter will eventually do so **shortly after the conference**, and to suppliers participating at the conference only. These suppliers will be given the opportunity to submit written feedback.² Deadline for submission of any written input after the conference will be explicitly communicated if/when questions are distributed. Suppliers who in turn choose to submit written feedback will be given the chance to have a one-on-one meeting with Ruter. Meetings will be held at Ruter's premises according to a fixed schedule, alternatively arranged as a conference call. The individual supplier will be allocated a time slot after written feedback is submitted. Duration of these meetings will not exceed one hour. Ruter reserves the right to contact the individual supplier for clarifications beyond agreed meetings if necessary.

Ideas appearing during the conference and/or the following process may be utilised as input in preparation of requirement specifications for future tenders.

About Ruter

Ruter AS is the Public Transport Authority (PTA) of Oslo and Akershus, owned by Oslo municipality (60 %) and Akershus County Council (40 %). Ruter plans, commissions and markets public transport services. Operators run transport services on contracts with Ruter. The Metro and the tram services are permanent contract partners, whereas competitive tendering is basis for awarding operation of buses, ferries and boats. Currently more than 1.300 vehicles are under Ruter's administration.

Oslo and Akershus – an ambitious region

Public transport is a key service to the citizens of Oslo and Akershus, and instrumental in creating a sustainable and inclusive region that is attractive to both potential new citizens and new businesses. The Oslo and Akershus region has very ambitious goals both on sustainability and regional development, and the city of Oslo was the first in the world to present a climate budget this fall.

Innovation, simplification, digitization and increased perceived availability along with customer centric solutions are important enablers in order to achieve these ambitions. The importance of these measures are described in Ruter's strategy document [M2016](#).³

Background – digitalization is changing public transport

As identified in M2016, both digitalization and individualisation are important drivers of developments in the area of mobility services for people. These drivers are also closely interconnected.

We are currently working on our next generation digital platform for mobility services, enabling better capabilities for delivering individual services to our customers. Automated ticketing, predictive capabilities and broader service portfolio are some key elements in this work.

During the fall of 2016 Ruter participated in a consortium demonstrating an autonomous minibus in our region. This was done with a single autonomous vehicle for a very limited time. During 2016 several other similar demonstrations have been carried out throughout Norway.

Ruter is now looking into how to proceed with autonomous vehicles as an integrated part of our offering to our customers. The "Shared Mobility – Innovation for Liveable Cities" report⁴ from OECD illustrates some of the possible impacts shared, autonomous, on-demand services can have in a city.

² Suppliers providing written information are asked to specify whether submitted documents contain trade secrets which Ruter is obliged to except from public disclosure in accordance with offentleglova §13 (Act relating to public access to documents in the public administration - Freedom of Information Act), confer forvaltningslova §13, first part, 2 (the Public Administration Act).

³ Refer chapter 6 at <http://m2016.ruter.no/en> on how technology is expected to contribute to simpler and more flexible journeys

⁴ <http://www.itf-oecd.org/sites/default/files/docs/shared-mobility-liveable-cities.pdf>