New technology platforms for fare collection, payment and other on board customer experiences - Invitation to supplier conference

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. Transport services are run by operating companies on contracts with Ruter. The Metro and the Oslo tram 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.

Background – continuous simplification

Simplifying the process of buying a ticket from a customer point of view has been an ongoing effort for decades and a key objective for Ruter in recent years. In December 2012, Ruter launched its own mobile ticketing app ("RuterBillett"[1]), which has proven to be very popular amongst customers: Every second ticket in Ruter's area is now sold through the mobile app, comprising almost 50 % of total ticket revenues. Furthermore, customer surveys point out that most customers now believe Ruter's ticketing system is easy to use and that tickets are easily available. Although some user groups still prefer traditional (e.g. card based and paper) ticketing, Ruter expects the majority of its customers to use mobile based ticketing shortly. The fact that 87 % of Norway's population has access to a smart phone, mobile data coverage in Oslo and Akershus is superb and that mobile data usage no longer represent a significant cost for consumers, underlines these expectations.

One of Ruter's main strategic objectives is to make sure public transportation, along with cycling and walking, handles the growth in need for motorised transport in the fastest growing metropolitan area of Europe (i.e. Oslo!). 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.[2] Driving innovation has proven to be far easier and flexible on mobile-based ticketing platforms, facilitating a rate of change in accordance with customer expectations and Ruter's ambitions.

As part of the continuous work to increase customer satisfaction and convert users to RuterBillett, a pilot project has been carried out during the spring of 2016. The aim of the pilot was to learn more about the set of opportunities opened up to fare collection, payment and other on board customer experiences by new technology. Furthermore, to explore how new technology possibly can support customer-oriented check-in/check-out solutions with a bare minimum of physical infrastructure. Ten buses operating a specific line were installed with beacons, while an own app was developed and used by nearly 100 users during the pilot. A proof of concept architecture in line with Ruter's ambitions on working actively towards standardisation and open source solutions (e.g. member of

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[1] More information about RuterBillett can be found at https://ruter.no/en/buying-tickets/mobile-ticket-app/

[2] Refer chapter 6 on how technology is expected to contribute to simpler and more flexible journeys

ITxPT) was also set up. Automatic travel registration and travel log generation as basis for new fare concepts proved to function with surprisingly high precision. The user feedback proved equivalent positive.

Aim of the conference

As Ruter continue to examine innovative, customer-oriented, cost efficient ways of arranging fare collection, payment and (anonymous) passenger data collection for public transport, insight and input from the market will help fuel further development. As an important measure of gaining increased understanding of technologies enabling the desired development, and what to expect from the market, Ruter hereby invites to a supplier conference.

Target audience are technology and middleware manufacturers and providers able to support the direction in which Ruter seeks to move, enabling hands free (automatic) customer-oriented check-in/check-out / "be-in/be-out"-solutions, payment, fare collection and (anonymous) passenger data collection based on

- Absence of physical barriers (i.e. gates)
- As little physical hardware as possible
- As little decentralised business logic as possible
- Centralised services based on Ruter's own backend (no proprietary services)
- Proximity based technologies, e.g. Bluetooth beacons, Wi-Fi-aware and similar

Furthermore, we would like organisations in other industries having experience using close proximity technology and other relevant technology platforms to participate and elaborate on their experiences.

> **Supplier Conference**
> **Date and time:** 12th Sept. 2016, 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 tentative agenda below. In order to get market insight and stimulate discussions and sharing of ideas, Ruter expects all participating organisations to prepare a 5-10-minute presentation, giving their views on the questions outlined in the 'focus areas' chapter.[3] The presentation must be submitted to anbud@ruter.no at least two working days 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 future ambitions	Ruter
	Supplier presentations: input and insights	Everyone, 5-10-minute per supplier
	Open dialogue including Q&A	Everyone
	Summary	

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[3] *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 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.*

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 goals. All participating suppliers are expected to contribute with a brief presentation presenting their input. The presentation should be based on the questions below, where emphasis is chosen by the supplier based on own capabilities.

- Does the vendor have experience with applying new technology platforms (e.g. Bluetooth beacons, Wi-Fi aware and similar) in similar pilots as Ruter or for other areas of application/in other industries, and what experiences are relevant for Ruter? What technologies are available today or in the near future that can enable Ruter's needs?
- How are precision levels of positioning services expected to mature and what possibilities arise as a result of the development?
- How should an in-vehicle infrastructure consisting new technology (e.g. Bluetooth beacons, Wi-Fi-aware and similar) be set up in order to prepare for efficient administration, monitoring and maintenance?

Registration

As meeting room capacity is limited, attendance will be restricted to registered participants. For registration, please contact Rolf Korneliussen, email: anbud@ruter.no, within 5th September. 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 directly lead to a procurement process.

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.[4] 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.

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[4] *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).*