Entur AS

"Entur makes it easy to choose public transport"



Commission 2016

«The government has decided to establish a company with sectoral policy objectives for providing sales and ticketing solutions for the railway as well as a national multimodal journey planner.

In addition it will facilitate the adaptation of electronic ticketing for all public transport in Norway.»



Company objectives – short term (2017/18)

Entur will adapt and modernize its IT systems and services in order to strengthen the competitiveness of existing and future train operators.

Entur will provide services regarding route and schedule data, journey planning, real time information and electronic ticketing for all public transport operators.

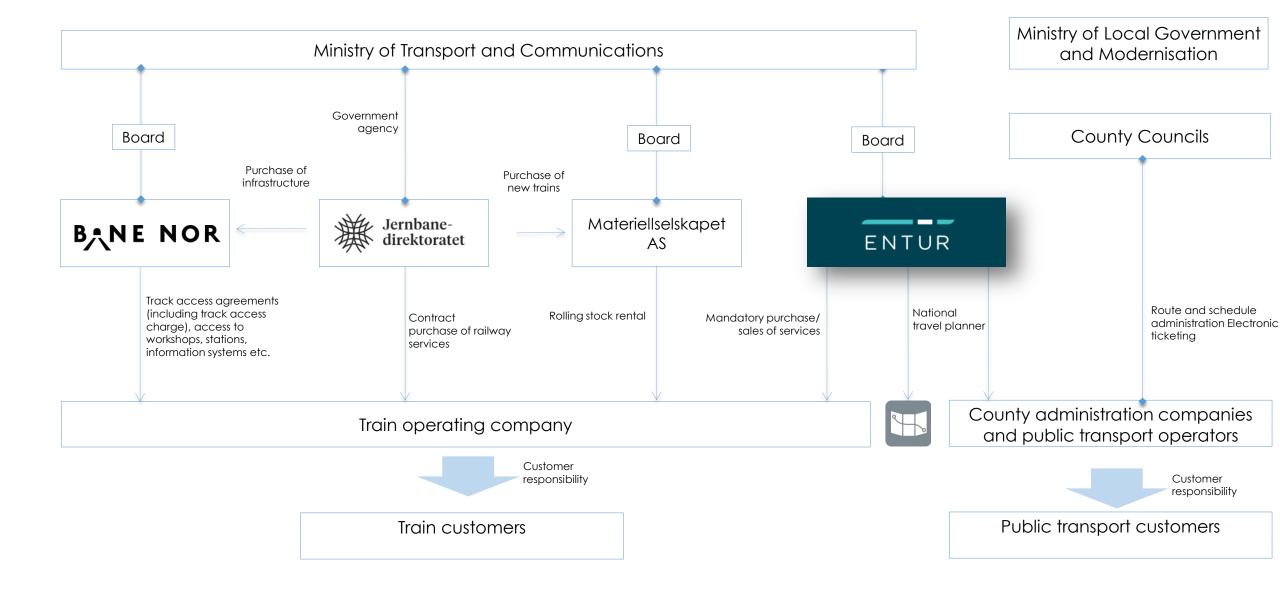
Entur will launch a national travel planner in 2017, and an unbiased sales and ticketing solution for trains in Norway within the first half of 2018.

Company goal – long term

Entur provides solutions that will enable the travelers to plan and buy all journeys in one operation, completely independent of transportation modes or numbers of transfers.



Entur's position in the public transport and railway landscape



The services Entur provides for train operators

The company's services Category Ticket machine **Neutral sales channel** API Station sales Customer and validator service center Channels Handheld conductor **Technical platform Payment** terminals **Technical services** Lost and found International sales Sales transaction **Handling and Transaction processing** Data management processing preventing fraud of conductor sales (quality assurance) **Transaction services** including lost and found Operator training **Customer support for** Operator specific **Data management** (product, price, schedule, etc) the operator's sales development and channel management **Optional services**

Modules and frontend

Travel planners, timetable exchange, real time and locations



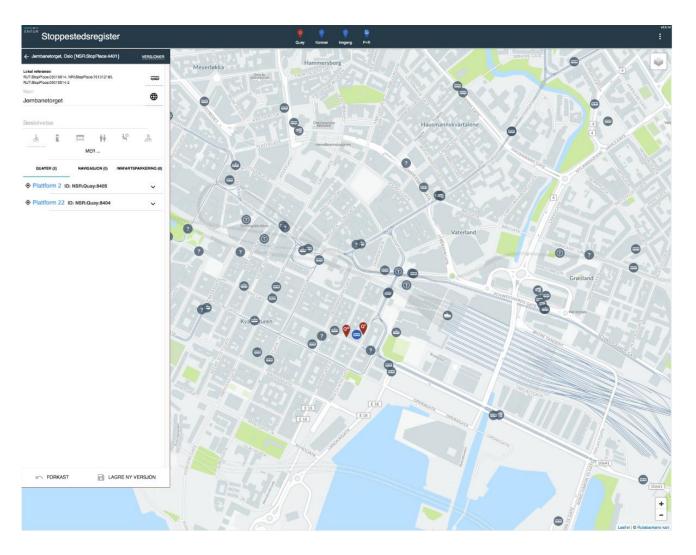
NSR National stop registry

- NeTEx format
- GUI editor
- API and exports

The NSR should be the standard for all stop places, ensuring that every operator uses existing locations and preventing multiple entries. This database should also deliver enhanced information about the location.



NSR National stop registry





Data collection Unified format

- NeTEx format
- Delivery portal
- Data sets open to the public

Operators of public transport have been imposed to deliver they're timetable data in a unified format. Timetable data is considered public information and will be distributed in NeTEx and GTFS format

Fares should also be delivered in NeTEx format in the future



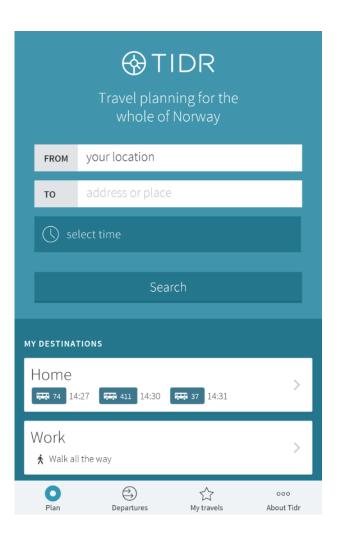
Real time Unified format

- SIRI 2.0 format
- SX, VM, ET, PT

Delivering real time data is not mandatory. We will collect data streams for every operator that have it available and encourage operators to implement real time on they're services

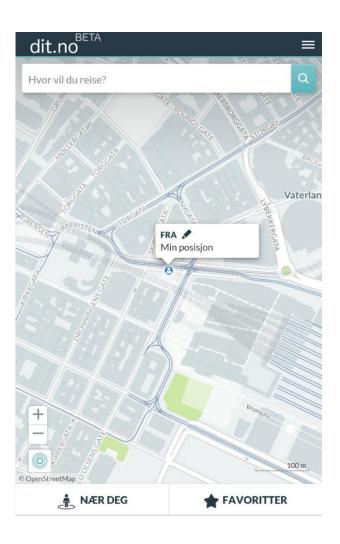


Tidr Started by NSB Focus on frontend and usability. No ticketing





Dit Started by NRP Focus on backend No ticketing





Entur

Started by Entur
In prototyping
Merging Tidr and Dit and adding
sales and ticketing









14:00 Nesoddtangen

Ta båten til Aker brygge Reisen tar 23 min

→ 2 stopp



14:23 Aker brygge

Gå 9 min til Nationaltheatret



14:41 Nationaltheatret

Ta toget til Larvik Reisen tar 1 t 50 min

→ 21 stopp



16:31 Larvik

Gå 1 min til Larvik stasjon



16:42 Larvik stasjon

Ta bussen til Batteritomta Reisen tar 1 min

∧ 148 stopp



16:45 Batteritomta

Gå 7 min til Stavernsveien 65A, Larvik

16:52 Stavernsveien 65A, Larvik

Du er fremme!

- Demanding country for public transport
 - Islands, fjords and mountains
- Many are dependent on they're car
- Focus on real time
 - Reducing waiting time and enhancing information
- Commuter parking
 - Information about available space
 - Buying parking tickets
 - Discounts with season tickets



Questions? Thank you!

Håkon Fjelstad

hakon.fjelstad@entur.org

