



NEMU: Nordic Ecosystem Mobility Unlimited
Seamless, integrated and people-centric mobility in the Nordics
and beyond

Powered by open mobility data – EU regulation compliant

Søren Sørensen, Project manager nemu
sos@sfmcon.com



Nordic
Innovation



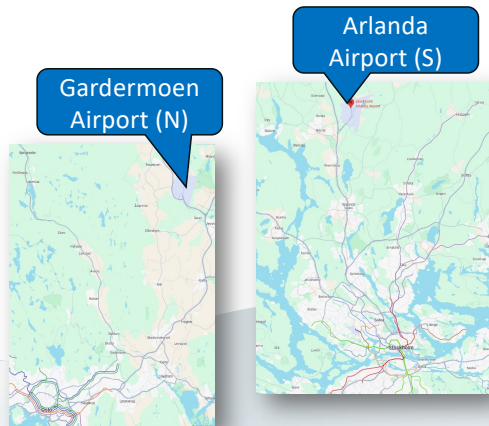
nordic+

Cross border travel case: From Arlanda, (Stockholm) airport to Gardermoen (Oslo) airport

I need to attend a physical meeting at a hotel at Oslo Airport within walking distance from airport

Arrival **October 15** in the evening in time for a dinner with colleagues **19.30**

1. Air travel: Departure Arlanda, Arrival Gardermoen, cost of ticket with one carry on luggage and one personal item.
2. Car travel: Km? Duration. When to start trip?
3. Train travel: travel plan and best price incl seat reservation where possible (adult standard)



Nordic Ecosystem for Mobility Unlimited

NEMU Project Consortium



Budget 5000 TNOK (431 TEUR) 50%

Project start: June 2024

Project duration: 36 months

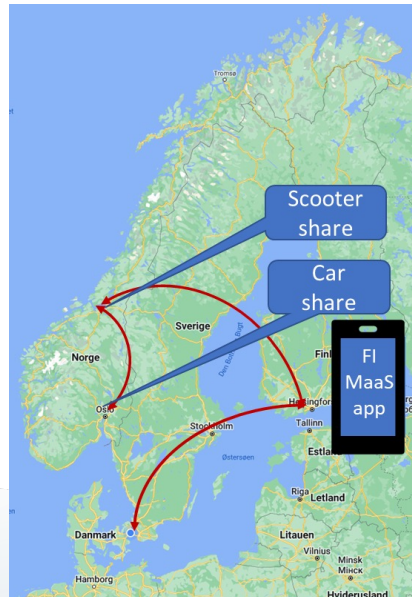


Vision: MaaS Roaming 2030

Roam like home for MaaS

Plan, book and pay for mobility services for any journey in and between the Nordic countries – in one go - using your “home” Mobility services app - your language – your currency

We encourage other countries and actors to join and take advantage of open mobility data as mandated



Ground and sea mobility borderless in one go

MaaS emerging on National level in the Nordics

Next step: **Roam like home** on journeys outside direct reach of each MaaS agent.

Use your favourite app – your language – your currency anywhere in the Nordics

Scalable to European level.....



Open Trip Planner for the Nordics

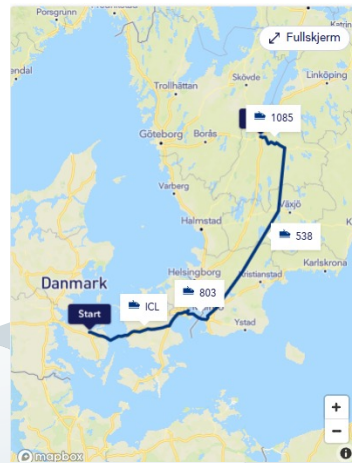
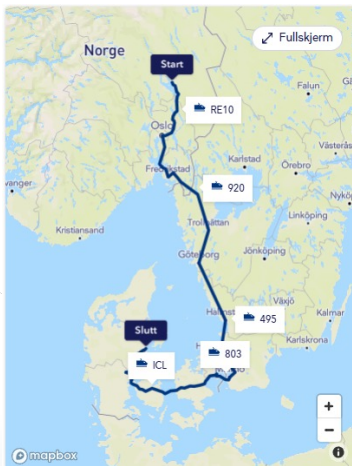
Travel plan suggestions including pricing between any two addresses in the Nordics – in one go

Consolidates NeTEx and SIRI open mobility data from National access points in Norway, Sweden, Denmark and Finland

An open source service for Mobility as a service actors in the Nordics powered by **OpenTripPlanner**

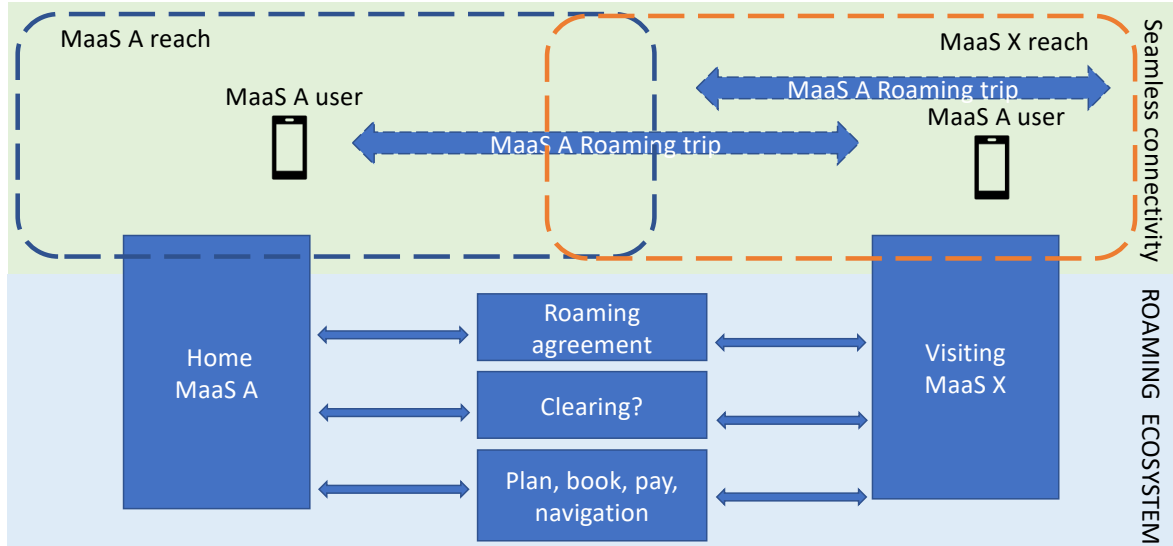


Cross Border travel plans using open mobility data and NEMU Open Trip Planner



MaaS roaming

NOMAD



Oslo – Copenhagen in one go

Discover – plan – book – pay – validate – after trip services

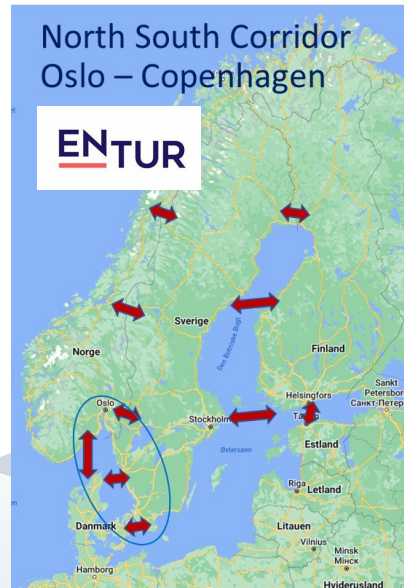
MaaS service actor: Entur

NAP services used: Norwegian, Swedish and Danish

Roam like home: Primary language: Norwegian. Currency: NOK

Entur right to sell on behalf from Sweden and Denmark

Acceptance and validation of Entur issued multimodal ticket for the corridor: VY, SJ, Öresundstoget, DOT, Skånetrafiken, Ruter



North South Corridor in operation Q2 2025

ENTUR

← Back to travel search

Itinerary details

Monday, 8 September
Travel time: 7 h 15 min

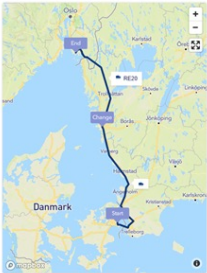
Next travel →

11:30 København H
Track 6
Train with Öresundståg
Göteborg C
17 stops
Earlier departures

15:20 Göteborg Centralstation
Track 14
Walk 3 minutes (257 m)
Train transfer: Please make sure you have enough time.
Rules for train transfers

16:13 Göteborg Centralstation
Track 4
Train with Vy
RE20 Oslo S
4 stops
Next departures

18:45 Fredrikstad stasjon
Track 2



Close map
Add to calendar
Send to email

Tickets

1 senior 0 add-ons Change

København H Fredrikstad stasjon

Departure Mon, 8 Sep 11:30-18:45

Non flexible From 805 kr	Flexible From 882 kr
Standard 805 kr Lowfare	Flexible 870 kr Lowfare
Show details	Details

Standard + Choose Seat 870 kr
Lowfare

Hide details Details

København H-Göteborg Centralstation
2nd class non-refundable

- 2nd class
- Cannot be changed or refunded
- Free seating
- More info at Öresundståg

Göteborg Centralstation-Fredrikstad stasjon
Lowfare

- Cannot be changed or refunded
- Free seating
- More info at Vy

Seat reservation
Seat reservation



Helsinki – Oslo in one go

Discover – plan – book – pay – validate – after trip services

MaaS service actor: Matkahuolto

NAP services used: Norwegian, Swedish and Finnish

Roam like home: Primary language: Finnish. Currency: EUR

Matkahuolto right to sell on behalf from Sweden and Norway + international ferries

Acceptance and validation of Matkahuolto issued multimodal ticket for the corridor: VY, SJ, Öresundstog, Ruter, SL, VR, HSL others?



Including cross border Ferries

Service path for travel chain user experience



- How do the customers find the option to book the whole chain from Trips and Tickets?

- The cabin reservation is obligatory!
- Onboard services will not be included because of the Act on Travel Service Combinations. Will this discourage customers to book the ferry as part of the travel chain?

- How do we ensure sufficient transfer time at the terminal? Configuration of the OTP?



How the Baltics could join in 4 easy steps

1. National stop register and static and dynamic mobility data in NeTEx / SIRI on national level - Use Nordic profile

2. Use open source tools to create MaaS services (copy Entur approach)

3. Nordic (joint) OpenTripplanner sources data from Participating NAPs

4. Make roaming agreements with participating MaaS agents



For more

Follow the NEMU project
here: [NEMU - ITS Nordic Plus](#)



For more on the project:

Søren Sørensen,
NEMU project manager:
sos@sfmcon.com