



TMS – Traffic Management System

How to perform a heart surgery, while the patient is still awake

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About Movia

Movia is owned by 45 municipalities and 2 regions

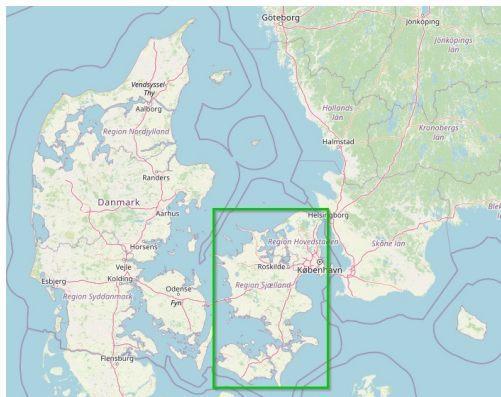
We cooperates with other PTA:

- DSB (trains, S-tog)
- Metro
- Light rail

We own:

- Lokaltog (local trains)

	Movia
Daily number of ServiceJourneys	20.000
Arrivals on a workday	700.000
Number of concurrent ServiceJourneys	Up to 1.000
Number of active stops (JPPs aka Quays)	17.000
Number of passengers pr. year	180. Mio
Number of operators (aka contractors)	Around 10





The TMS-project

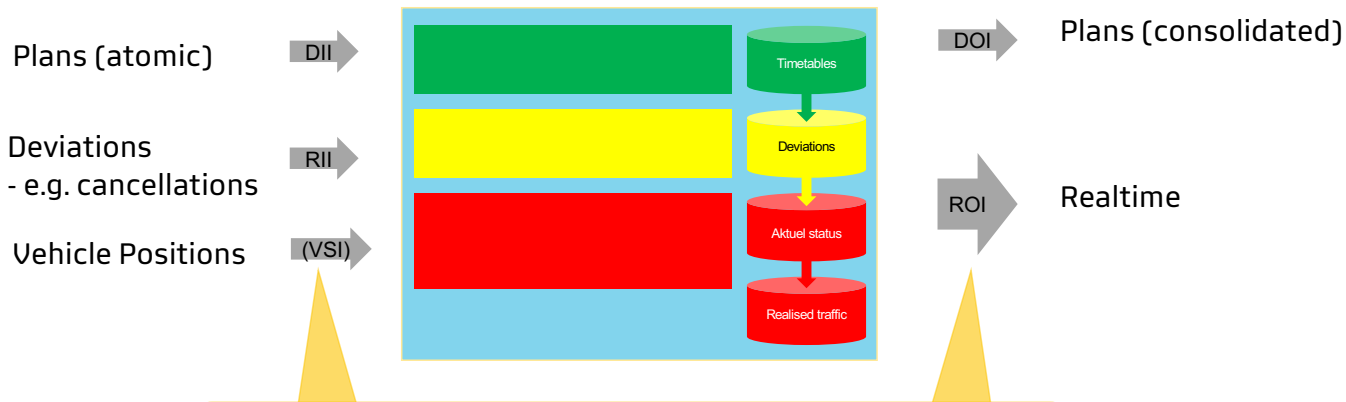
Purpose:

- To perform EU-tender for a new **Transport Management System (TMS)** as a replacement for PubTrans and Hogia Transit Cloud.

The journey

- 1999: HUR (Greater Copenhagen) implements PubTrans
- 2007: HUR, STS (Southern Zealand) and VT (Western Zealand) are merged to Movia
- 2008: PubTrans upgrade to version 5
- 2015: New Hogia real time tracking system (Transit Cloud)
- 2018: Movia recognise: PubTrans must be subject to competitive tendering. Project is established
- 2020: RFI and meetings with potential suppliers in the market
- 2022:
 - RFI with publication of "90% complete" requirement specification and tendering conditions
 - Comments and suggested improvements from 7 companies
 - Publication of tender
 - Prequalification of 4 suppliers
- 2023
 - 3 offers - All technically good and well suited. Prices were very different.
 - Contract with FARA AS
 - Clarification phase, establishing of test environment, etc.
- 2024-2026: Development, subsequent accept tests
- 2025-2026: Adaption of data consumers
- Summer 2026: Start of operation – decommissioning of PubTrans

Existing TMS – NOPTIS interfaces

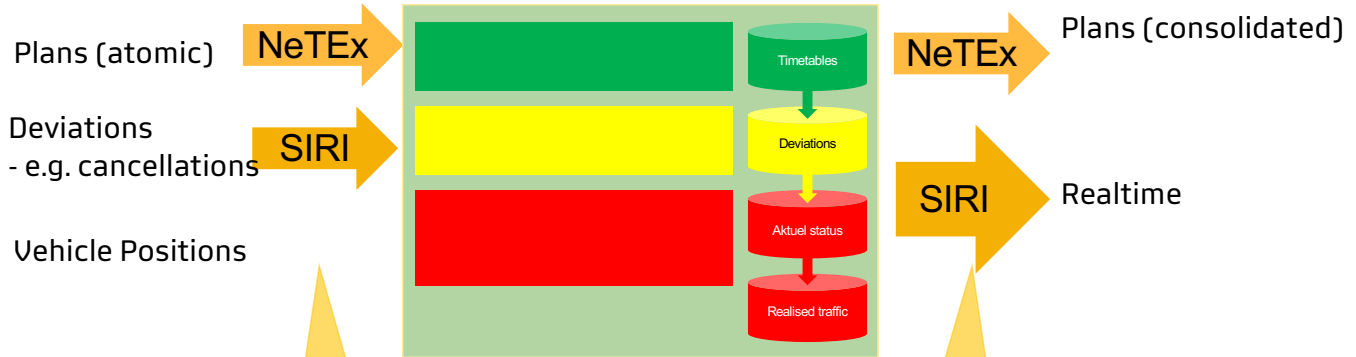


NOPTIS (www.noptis.com) is brilliant ☺ and very well suited to Movias world.

But NOPTIS is only fully implemented by one supplier.

To get real competition, we needed to do something!

New TMS – change of interface formats



With the implementation of TMS, the NOPTIS interfaces are replaced by the EU standards NeTEx and SIRI.

Almost all systems in Movia are affected!

NOPTIS

- Tailormade to the Scandinavian way of doing line based Public Transport
- Only one full implementation: Hogia PubTrans
- Allow for separation of responsibility – to some extend

NOPTIS
vs
NeTeX / SIRI

Both are:

- Based on Transmodel (EN 12896)
 - Almost same vocabulary



NeTeX / SIRI

- Can do the same + a lot more
- CEN-standard
- Allow for separation of responsibility
- Allow for other (non-Scandinavian) ways to organise and operate
- Support fares, alternative modes all sorts of train-stuff
- With EPIP, required for provision of data to the NAP's
- ..but
 - flexibility comes with complexity ☹
 - not as easy as NOPTIS DII for non-consolidated data from planning system to TMS ☹



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- Implement a new TMS as a cloud based standard solution with EU-standardised interfaces.

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Ask the market, and listen to their suggestions !

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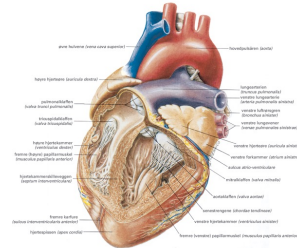
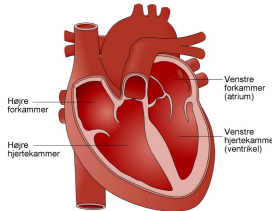
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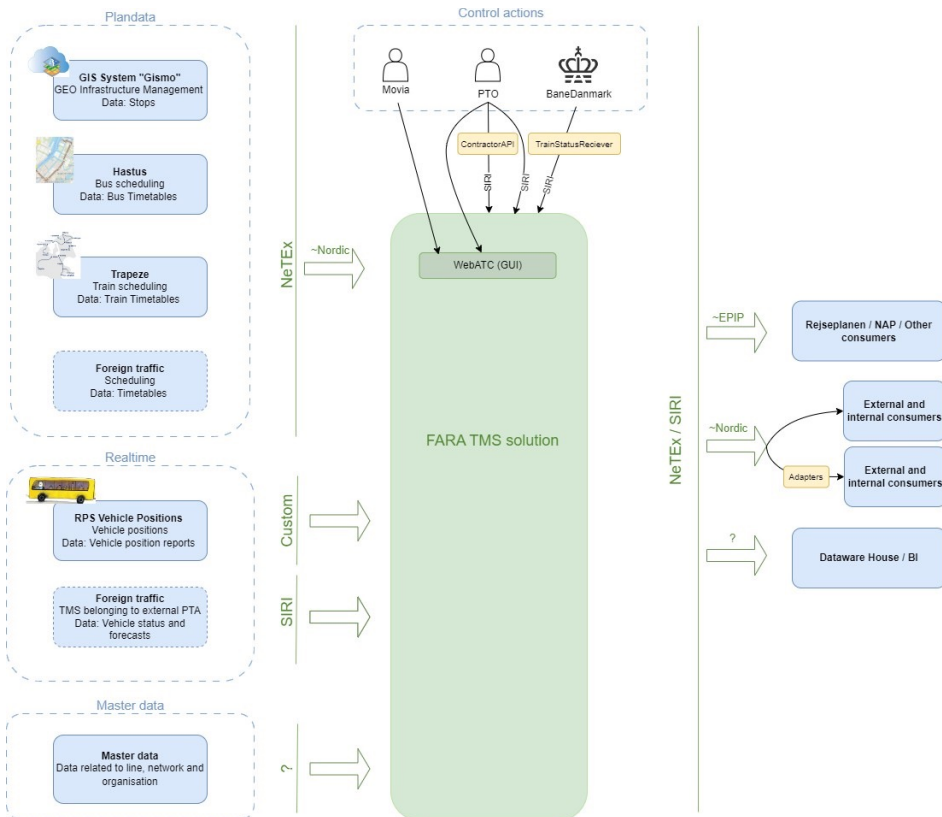


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- Despite being a 1:1 replacement, it can be seen as an advanced heart surgery. The majority (close to all) Movia's systems will be affected.





Movia/FARA profile

- Based on the [Nordic Profile facilitated by Entur](#)
- Few extensions and adaptations to suit special Movia needs

EPIP = European Passenger Information Profile

- EN 16614-4
- Targeted open data and trip planners
- Master data
 - Will be a part of the system
 - Inspired by DMA, but simpler (hopefully)
 - Data will be merged into the NetEx-exports

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