

Visit Danish Parliament

October 30th, 2023 – Utrecht Central Station

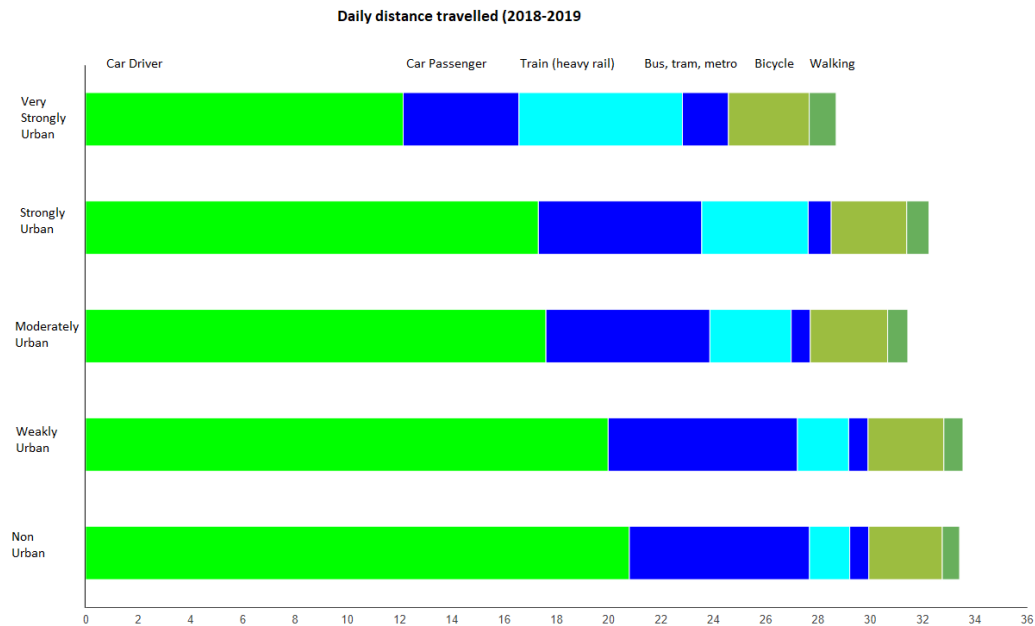


Roel Okhuijsen

Director New Rolling Stock & ERTMS



Dutch mobility - overview



Public transport is more important in stronger urbanised areas

- Rail transport is strong in concentrated transport
- Road congestion and parking problems in/around cities
- Concentration of “white collar” jobs in large cities

Bicycle is an important transport mode

- Around 40% of rail passengers come to the station by bicycle
- From station: walking / bike sharing (OV-Fiets)
- Stations bicycle parking is more important than car parking
- Increasing use of e-bikes ⇒ longer distances; competes mainly with bus



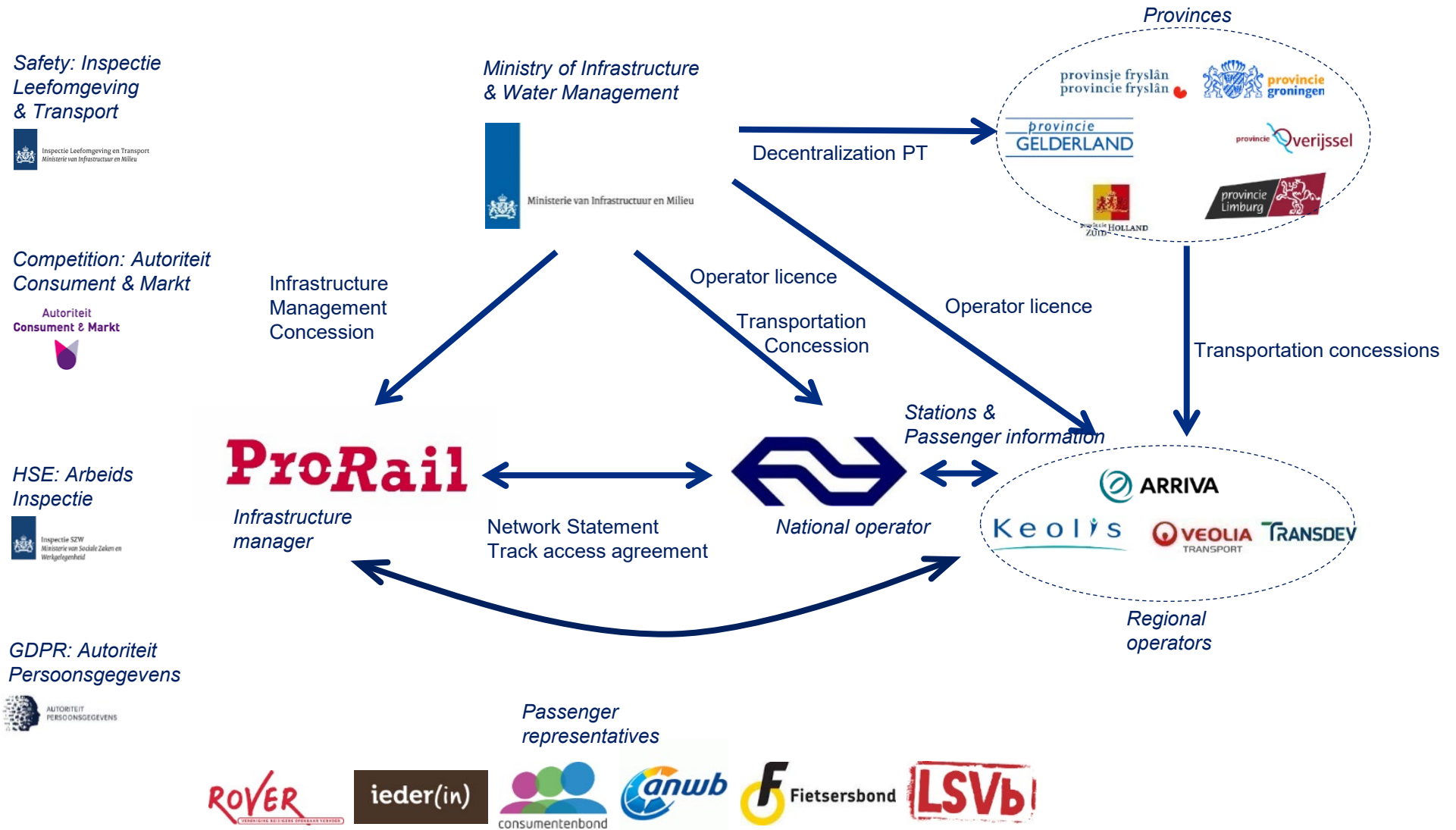
Railways in the Netherlands



- NS was founded in 1837, operation started in 1839
- Since 1995, split between operations and infrastructure manager ProRail
- NS operates concession for passenger operations on core network (IC + high density commuter transport)
- 4 other passenger operators for regional concessions (Arriva, Keolis, TransDev, Veolia)
- 20+ freight operators (NS sold NS Cargo to Railion – now DB Schenker Rail – in 2000)
- Railway Network:
 - 3,075 routekm (2200 operated only by NS)
 - 7,097 trackkm due to double and four tracks
 - 175 mln trainkm per year



Stakeholders of passenger rail transport



Netherlands Railways (NS) - key facts and figures



Mission: “Together we make the Netherlands accessible for everyone, in a sustainable way.”

Ambition: “Together with our partners, we deliver world class mobility, responsible to our surroundings. Always close, always affordable, always sustainable.”

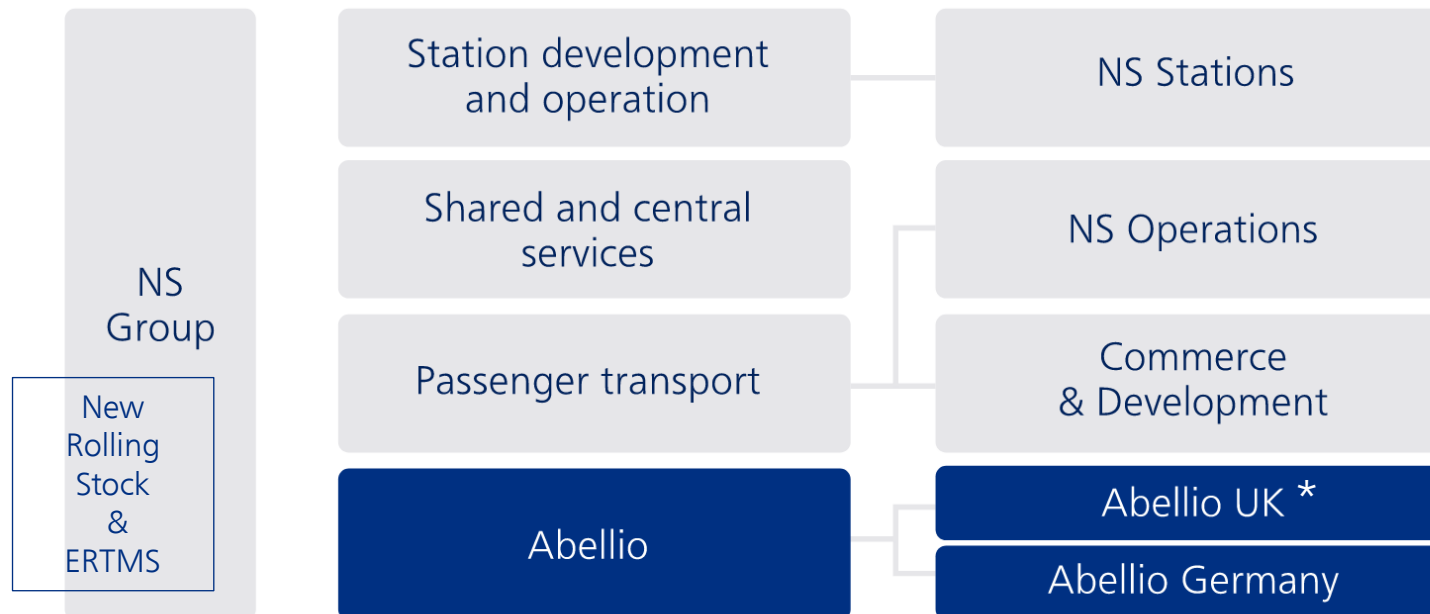
Netherlands: 17.5 mln inhabitants

- NS (2022): ~ 9 mln regular customers
- ~ 0.96 mln trips average per working day
- ~ 13.3 bln passengerkm (18.9 bln in 2019)
- 92.4% customer satisfaction (2021)
- 91.6% passenger punctuality (5 min)
- 96.6% seating probability in peak hours
- € 2.4 bln passenger transport ticket revenues
- € 449 mln station development and operation



NS Organisation

Organisation chart



* As per 2022/23 Abellio withdrew its activities in the UK



NS Rolling stock

- 760 trains (EMU or loco / coach) \approx 3,500 vehicles
- 100% electric traction
- Significant proportion is double deck (31% of total fleet, 55% of IC fleet)



Our trains

Sprinter trains:		Number of train units	Number of sections/coaches	Seating capacity
SLT		131	648	34,412
SNG		205	703	35,089
FLIRT (excl. TAG)		58	199	11,990
Intercity trains:		Number of train units	Number of sections/coaches	Seating capacity
ICRmh (Traxx)		35	273	22,075
VIRM		176	860	88,683
ICMm		118	397	29,882
DDZ		49	238	23,135
ICNG (inflow in 2023)		12* (National) 1 (International)	0 0	79 trains ordered 20 trains ordered (Belgium)
New double-decker (CAF) (inflow in 2028)		0	0	60 trains ordered
Total		780	3,318	245,266

*acceptance of first train units has started



Short video ICNG



InterCity Next Generation (ICNG)

Coradia Stream Platform – Alstom



Contract signed **June 2016**

- Base order of 79 Train Sets (5- and 8 cars) suitable for Dutch National Network and High Speed Line
- Additional order **(2019)** of 20 Trains Sets (8 cars) able to run also to Belgium
- Conversion **(2021)** of two Base order Train Sets (8 cars) into Train Sets also able to run to Germany



Characteristics

5-car 110 meter / 8-car 160 meter

- 5 car Train Set **258** seats, 8 car Train Set **417** seats (Belgium: **410** seats)
- Dutch National Network **160 km/h** (1500V) on High Speed Line **200 km/h** (25kV 50Hz)
- Pressure resistance (due to running on High Speed Line), single 1300 mm doorleaf
- ERTMS, ATB-EG, TBL 1+ (Belgium)
- Level access at 760mm, sliding steps at all doors



InterCity Next Generation (ICNG)

Livery



InterCity Next Generation (ICNG)

Interior



InterCity Next Generation (ICNG)

Impression

