

### **Concept research programme**

Session: Digitalisation and Emerging Technologies Presentation: Innovation in the Railway Sector by Pål Midtlien Danielsen

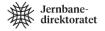
23<sup>rd</sup> of September 2022

## Key figures for the Norwegian rail network (2020)

Route-km	Km double track	Bridges
4 196 (Electrified 2 459)	296	2638

Tunnels	Level crossings	Stations
740	3 409	334





# Innovation gives society more rail for the money!

#### National Transport Plan (2022–2033)

#### AN EFFICIENT, ENVIRONMENTAL-FRIENDLY AND SAFE TRANSPORT SYSTEM IN 2050



More value for money



Efficient use of new technologies



Contribute to Norway's fulfilment of its climate and environmental goals



Vision Zero for road

traffic fatalities and

serious injuries

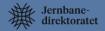


Make travelling easier and increase the competitiveness of business and industry

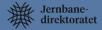


## «The Norwegian Railway Directorate shall ensure that the railway sector is operated as efficiently, safely and environment friendly as possible for the good of passengers, freight transport and society in

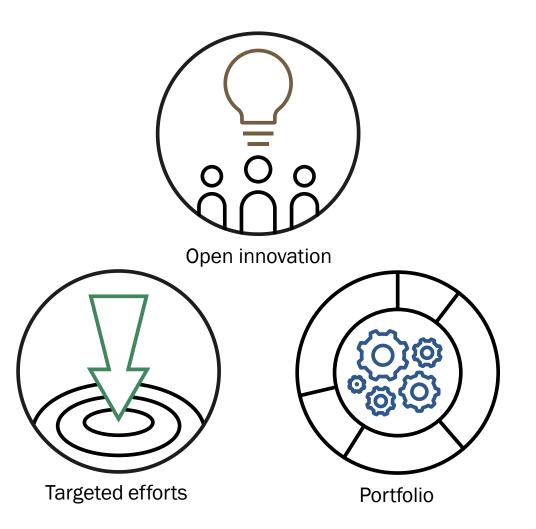
general»



«To initiate, develop and present proposals concerning the development of the railway and public transport system in light of the transport needs identified by the Directorate»

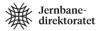


#### How we work with innovation?

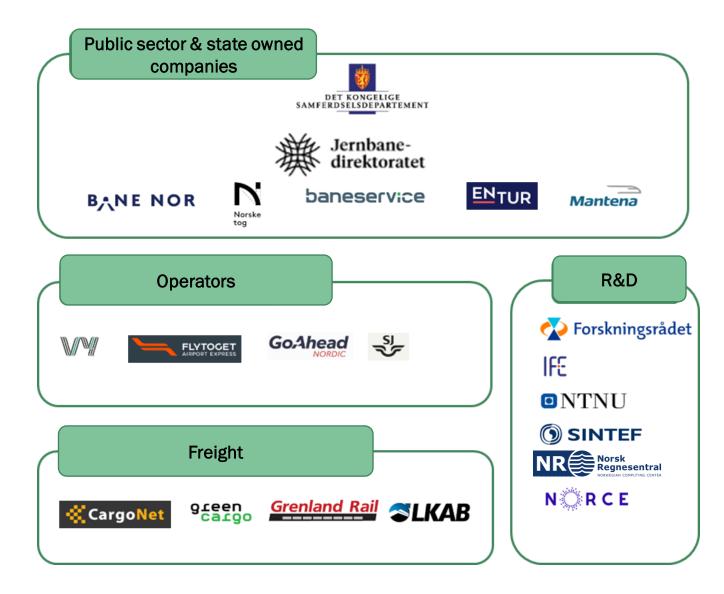


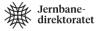






#### The Norwegian Europe's Rail initiative

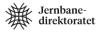




#### **Europe's Rail Joint Undertaking**

- Operators, infrastructure owners/managers, supply industry, public sector
- Large innovation project, three major calls
- Duration 2021 2029
- High technological readiness level
- 25 founding member medlemmer







#### **Objectives of Europe's Rail**



Meeting evolving customer requirements



More sustainable and resilient transport



Reduced costs



Reinforced role for rail in European transport and mobility



Harmonised approach to evolution and greater adaptability

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Improved EU rail supply industry competitiveness



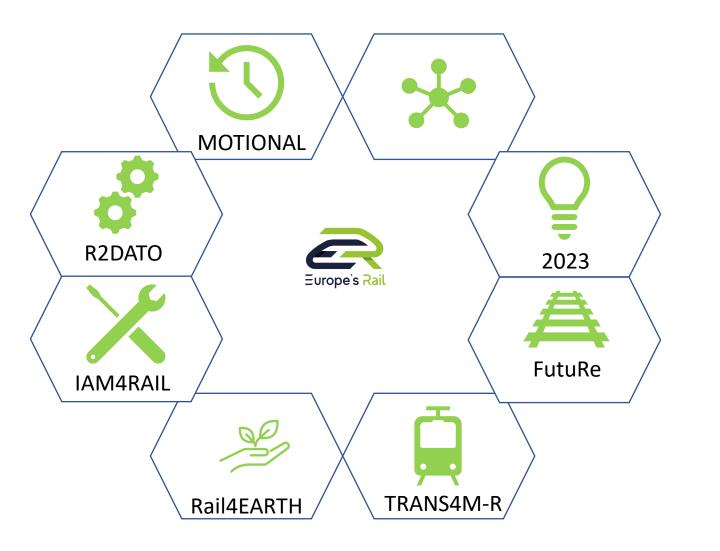
Improved performance and capacity



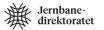
#### **Main topics**



#### **Innovation projects 2022-2026**



- More than 200 partners from 14 countries
- 568 millioner euro



#### Thank you!

