

# Focusing on change to transform rail in Nordic countries

The railways across the Nordic region are already some of the world's most efficient and forward-thinking networks. But with increased passenger and freight demand, plus industry requirements to be more sustainable, the region's railways must continue to invest and adapt to safeguard its future. This Leaders' Debate gives key industry personnel the chance to showcase their thoughts on industry transformation and the emerging opportunities that will shape the future of rail across the Nordic region.

WITH PARTICIPANTS  
FROM:



VR GROUP

## PARTICIPANTS:



**Crister Fritzson**  
CEO, SJ AB



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CEO, VR Group



Digitalisation is transforming the rail sector in many ways – how is the uptake of innovative technology playing a key part in how your country's railway will operate in the future?



**FRITZSON:** Broadly speaking, digitalisation is affecting the railways along at least five dimensions: Customers (booking, sales, distribution, traffic information), train staff (using VR in education and IT-supported tools onboard), rolling stock (more intelligent vehicles providing information on maintenance needs – also regarding the tracks), infrastructure assets (digital systems giving data on status of infrastructure), and traffic (monitoring systems providing all kinds of data and new tools for processing of data). In addition, there is of course the benefits of digitalisation of internal systems for administration etc.

Specifically, for SJ, we have established a form of start-up within the company called SJ Labs, through

which we develop and test new services jointly with our customers. We practice 'design thinking' in our digitalisation work, starting with people as end-users, innovating from the bottom-up. There is an openness to continuously test new techniques such as VR and AR and see what they can bring to the company.

**JANSSON:** We believe in digitalisation and new technologies when pursuing new growth, efficiency and better customer experience. We are currently reforming all our digital services in passenger traffic. Key opportunities for the future are to offer seamless travel experiences and more comprehensive logistics solutions which require digital development and innovation.

## How can the rail freight network across the Nordic region be improved and what standout initiatives are your organisation implementing to ensure rail can steal market share from road freight?



**JANSSON:** Rail logistics keep the wheels of Finnish industry turning. However, the single-track railway network and the accumulated maintenance backlog is a bottleneck. It is essential to electrify important track sections and make it possible to run heavier loads. At the end of the day it is all about meeting customer expectations, being flexible and adapting to changes.



## How can the Nordic region's railways improve the passenger ticketing structure to facilitate easier and cheaper rail travel across the region?



**FRITZSON:** Sweden is a front-runner in breaking up the monopoly structures in the railway sector and introducing competition for most functions and services. Operators are now competing to provide the best travelling experience to the customers, including ticket offerings and price competition as important ingredients, leading to more options and lower prices. At the same time, the Swedish actors have also, without need for regulation, managed to create a system where it is easy to combine long-distance journeys with local public transport services, even across multiple modes, with the purchase of a single ticket. We see a need to expand ticket cooperation beyond the national borders but think that open markets and competition are important prerequisites. Moreover, solutions should be based on voluntary business-oriented decisions rather than new regulation, since the latter could really stifle a lot of the on-going innovation in this field.



**JENSEN:** Train travel across the Nordic countries, or internationally in general, must be just as simple as domestic travel by bus or train. The demand for international train travel has seen a significant increase, but the railway companies across Europe have found it difficult to live up to the customers' expectations and the standard to which they have become accustomed from other sector – for example, air travel.

For the customer, buying an international train journey is like travelling 10-20 years back in time. The

reality is often long waits in a telephone queue or at a ticket office.

We need to make it simpler for the customers to search for and purchase international tickets across countries and companies. It must be just as easy to find an attractive train ticket as it is to find a flight ticket. That is not a simple task. The fare and ticket systems vary greatly between countries, and it is impossible to solve the challenges all at once.

To begin with, DSB focuses on the digital solutions in large traffic corridors, for example in the Øresund region where 35-40,000 people cross the Øresund Bridge each day. For example, it must be possible to use Rejsekort from stations in Malmö to Denmark and it should be simpler to purchase the journeys via DSB's app. Another core area is the connection of the Nordics to the rest of Europe via a good direct service to Hamburg.

We focus on international co-operation and the solutions that may be created through this.

**JANSSON:** Compelling pricing is one of the key reasons why the number of passengers is growing significantly in Finland. We decreased ticket prices for long-distance traffic a few years ago and simultaneously simplified our product assortment. Also, development of our digital services has helped to ensure easy and seamless customer experience. We are working to analyse customer behaviour in different segments to facilitate growth, develop new targeted services and pricing. ➤



## What sustainable initiatives is your organisation involved with and how are these contributing in meeting the target of decarbonising the Nordic region's railways?



**FRITZSON:** In Sweden, almost all passenger trains use electric power, coming from fossil-free sources as well, with a limited number of exceptions of local lines where only diesel traction is available. The target to decarbonise the railways is therefore almost fulfilled. However, SJ still has a strong focus on improving energy efficiency and on other important environmental matters, such as the use of less harmful chemicals, for example in maintenance and cleaning. Perhaps the most important things that we can and are doing for sustainability is to make sure that the company is delivering frequent and high-quality train services which remains financially sound. This means that more and more people will be given the opportunity – and be attracted to – travel by rail. Thereby, passengers and market shares can be gained from other, less sustainable modes.



**JENSEN:** Today, the train is already the most climate-friendly mode of transportation. The planned electrification of the railways and the purchase of new electric trains will strengthen this position, but DSB's ambitions extend even further. DSB has just established four ambitious targets to contribute significantly to a greener, uncrowded Denmark. We have formulated DSB's four sustainability targets towards 2030: We want to be completely CO<sub>2</sub> neutral, we will reduce our energy consumption by 50 per cent, we will not emit particles from the train engines, and we will reuse 90 per cent of our waste.



DSB's four environmental targets must be supported by a procurement and construction policy where sustainability is an important parameter for the selection of procurement and co-operation partners.

Furthermore, all four business areas are in the process of identifying the initiatives with which they want to contribute to reach the targets.

In the spring, we conducted a competition among Danes, which we hoped would give us specific green ideas to support our work. We received more than 1,700 ideas, which are being reviewed and will form part of our further work.

Moreover, we must not forget that getting more people to take the train is, in itself, an important activity that promotes society's goals of reducing our common carbon footprint. A major part of the work therefore also involves offering attractive tickets to all customer groups.

**JANSSON:** Regarding our environmental responsibility, it is essential to curb climate change by increasing the use of renewable energy and by improving the energy efficiency of rail traffic. Increasing the share of electrically-driven traffic is an important measure in this work. The electricity used by VR Group is produced from hydropower. We have also invested in new locomotives that are more environmentally-friendly. Recently, we launched new electric buses in Helsinki's urban traffic.



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## What will be your organisation's biggest challenge to overcome in the next 10 years?

**FRITZSON:** The lack of track infrastructure capacity on more and more parts of the network is probably the biggest challenge for the whole sector. We need to be able to simultaneously invest in new railway capacity and be better at maintaining the current, sometimes very degraded, infrastructure. For SJ as a company there is also a challenge to invest in even more rolling stock capacity. If we manage to accomplish all this, we can take the railways to the next level, both in terms of market share and reliability.

**JENSEN:** The Danish railway can be considered as one big construction site – both now and in the coming years. The government has invested billions in a new signal system, track work and electrification towards 2030. They are necessary upgrades that will ensure a modernised railway infrastructure and create the basis for a more efficient and punctual railway operation to the benefit of the customers.

DSB has concurrently initiated the purchase of new electric locomotives, new coaches and new electric trainsets to replace the ageing diesel fleet. In a 10-year perspective, the Danish rail customers really have something to look forward to.

However, in the next three or four years, the comprehensive infrastructure work will mean significantly fewer trains for the customers for extended periods of time. DSB will provide rail

replacement buses during periods with no or reduced trains, but we will not be able to maintain the same number of seats or travel time as normal. Our focus is to help customers in the best possible way through traffic information and various compensation models when the daily journey becomes too long or more difficult.

The railway is in fierce competition with cheap cars and discount bus companies – and it will be a great challenge to retain customers during periods of track work and to regain lost customers after completion of such work.

Things will get better though. The first new electric locomotives will be commissioned in two years and from 2025 we will have a better railway with new electric trainsets in line with the completion of the infrastructure work.

**JANSSON:** Our aim is to take customer orientation to the next level and seek new growth. This means that we must organise our operations in a customer-orientated manner and fulfil customers' needs and expectations with constant service development and offering of new, innovative solutions. At the same time our business environment is evolving. We, as everyone within the industry, are seeing economic turmoil, tightening competition and increasing customer expectations. ▶





## What more must be done to ensure rail remains a vital mode of public transport in the future across the entire Nordic region?



**JENSEN:** We are facing a challenge that needs to be solved: Congestion on the roads, especially in and around the major cities. In Denmark, we are facing a 150 per cent increase in congestion by 2030. The problem cannot be solved without well-developed and functional public transport.

There is a great need for comprehensive public modes of transportation that are capable of moving hundreds of thousands of people effectively and comfortably without increasing congestion, especially in the large urban areas and between large cities. That is the strength and possibility of the railway in the future. However, results do not materialise spontaneously.

If the railway is to remain competitive, the core product and the sales systems must be developed constantly with the customers and their needs at heart. The industry must ensure that the customers

see the train as the intelligent choice. This means that it must be easy to take the train. We must ensure that rail customers have a level of comfort onboard trains that enables them to relax but also giving them the possibilities to work during their train journey. In addition to a faster travel time, the train must give you more time for whatever you want to do.

Finally, we must be competitive and deliver train journeys at a price that our customers can afford. These movements are happening across most of Europe. If the railway is to be part of the future, we must keep pace – the future is not waiting for the railway.

**JANSSON:** The growth of rail traffic is necessary in the fight against climate change. Long-term investments in the railway network are essential for the competitiveness of rail traffic. 

