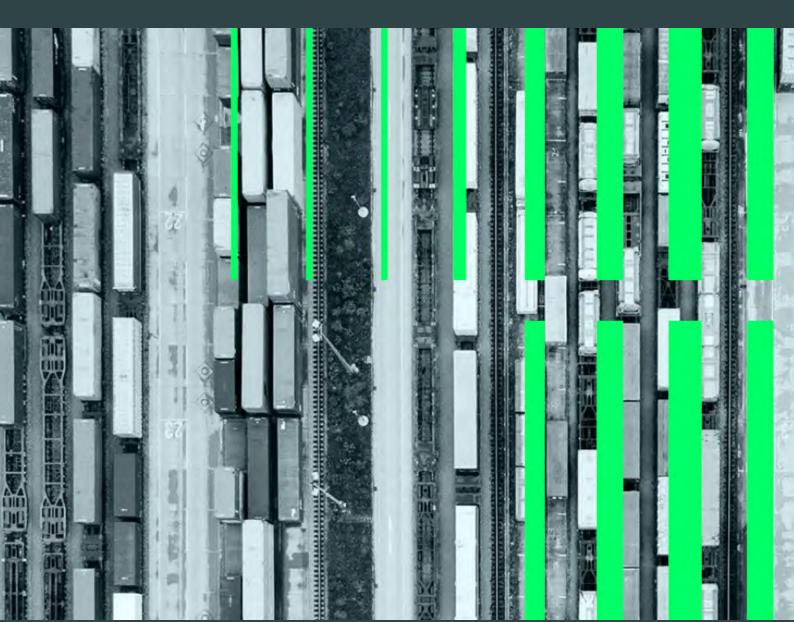
MFD RAIL MARKET

SURVEY 2022

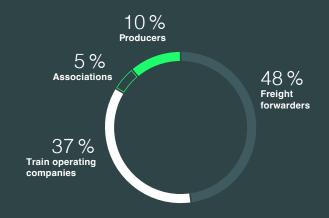




In December 2021, MFD Rail commissioned an agency to conduct a survey of business partners and market participants in intermodal transport. The aim of the market survey was to compare the current mood in Europe with prospects for the future with regard to the development of combined transport.

We thank all participants for their cooperation and support. We are happy to share the results here.

The market participants surveyed are:

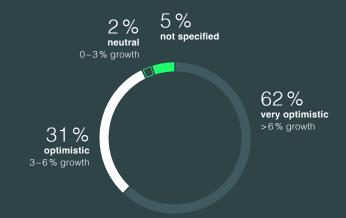


Combined rail/road transport has made history in Europe in recent decades. Now a whole new challenge awaits it: everyone wants to go by rail. 2022 will be a key year in this regard. All market participants, train operating companies, operators, infrastructure managers, rolling stock suppliers and, last but not least, politicians have recognised this and have begun to create the necessary conditions. Investments in new and modern rolling stock are at record levels. The locomotive and wagon manufacturers are working to capacity, the train operating companies are optimising their processes, improving single wagon traic, and the infrastructure operators are modernising and expanding the infrastructure.

Politicians have also recognised that the current framework conditions need to be improved in order to achieve a modal shift that guarantees the achievement of the set climate targets and CO2 neutrality, while, at the same time, bringing the modal split in rail freight transport to 25 % in 2030. Both the new German government and its coalition partners as well as the EU have formulated ambitious goals for this:

- Massive investments in the modernisation and expansion of rail infrastructure
- Greater investment funds for rail compared to road
- Expansion of railway tunnels so that it is possible to run the P400 profile
- The Trans-European Networks TEN-T will be reorganised and extended
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- More sidings are to be funded
- Exempt pre/post-carriage to terminals up to 50 kilometres from tolls

The new German federal government and the survey participants view the market development in the next two to three years for rail freight transport as follows:



It is striking that two-thirds of train operating companies and even three-quarters of producers are optimistic about the future, while only about half of the haulage companies are. The current market situation is viewed as very positive, especially for combined transport. Revenues have since returned to the level of 2019 or are slightly above, the modal shift from road to rail is easiest to achieve in combined transport, and the political framework conditions are being adapted. Considerations for the introduction of legal crane-assisted handling of semi-trailers support the trend.

Assessment of the current market situation in combined transport:



For seaport-hinterland traffic, train operating companies and freight forwarders expect greater growth rates again from 2023. It is assumed that – by then and starting as early as this summer – the container shipping companies' globally imbalanced turnarounds will return to normal. Following this, the congestion at seaport terminals should ease and the imbalance between import and export flows should be equalised again.

Development of seaport hinterland traffic:



The topic of ESG plays a central role for all respondents, which also includes the decision on the type of transport to be chosen. In order to achieve self-imposed or set climate targets, ESG is actively promoted throughout the supply chain. However, cost awareness is not lost sight of in the process. This dynamic is increasingly leading to specifications and demand for environmentally friendly transport options.

of train operating companies actively promote ESG

of freight forwarders are willing to accept higher costs for the modal shift to rail to some extent 66%

55%

of freight forwarders are planning to shift more traffic to rail

Are you actively encouraged by your clients to produce in an ESG-compliant manner?



For all manufacturers (100%), ESG is one of the most important criteria when making business decisions, including which means of transport to use. The increased use of combined transport plays a significant role in this regard.

Quote from a manufacturer:

For us, ESG means, when deciding on our transport mode, first and foremost reducing our ecological footprint and, in particular, our CO₂ emissions.

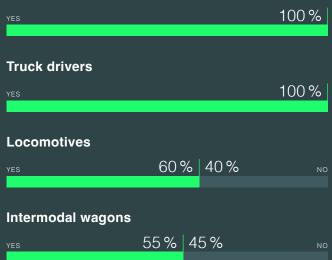
All market participants are currently expecting rising transport prices as well as rising prices for rolling stock. This is driven by

- high inflation
- Increased procurement costs for rolling stock (raw material and energy prices)
- Scarce availability of locomotives and intermodal wagons
- Shortage of train drivers and truck drivers

At the same time, there is confidence for the most part that price increases can be passed on to the market to a large extent.

Do you expect resource scarcity with regard to

Train drivers



Overall, there is a trend towards rental or leasing solutions and away from in-house procurement. This is justified by a desire for greater flexibility in assets (partly as a result of experiences during the COVID pandemic), the risks associated with taking over the keeper and ECM function as well as from an accounting law perspective. Another reason is the expected increase in financing costs.

The demands of the manufacturers to shift more goods onto the railways are very consistent. In unison, these are:

- Greater reliability
- · Greater punctuality
- · Easier access to rail infrastructure
- Shorter transport times
- Equal prioritisation of passenger and freight traffic
- Unification of the "national patchwork" in Europe

With high production quality, innovative technologies and digitalisation, the industry will increase the attractiveness of rail freight transport as well as its reliability and productivity. At the same time, to ensure a successful modal shift, new transport policy framework conditions must be created that promote and support rail freight transport. Similarly, the infrastructure of the routes and the access infrastructure/terminals need to be adapted to the planned increase in services.

Digitalisation plays a very important role for all market participants, as rail freight transport still has huge catch-up potential. This is why 85% of train operating companies also regard digitalisation as particularly important. However, it was also emphasised that the importance of infrastructure development (terminals and rail network) is considerably more important. After all, "what use is optimum digitalisation if the infrastructure is not sufficient to handle the volumes".

Significant productivity increases are expected through the digitalisation of the rail network as well as freight transport with digital control and digital monitoring.

- Introduction of ,Digital Automatic Coupling' by 2030
- Comprehensive introduction of ETCS, accompanied by digital interlocking
- Digitalisation of marshalling yards with automated dispatching
- Creation of a digital offer platform

All the companies surveyed agree that in order to achieve transport policy and climate policy goals, politics must create the appropriate framework conditions. The most frequently mentioned policy goals are as follows:

- Creating a competitive environment for rail freight transport
- Intensification of LKW controls
- Introduction of a transfer premium
- Permanent reduction of infrastructure charges
- Quickly make investment funds available for infrastructure expansion
- Lower VAT on traction current

These goals have been recognised by politicians and are currently being translated into concrete measures. The new cross-party government has enshrined this in its coalition agreement, and the EU is also pursuing this with its current climate policy and the target of 30 % rail share in 2030. The signs give confidence that all the goals and measures mentioned will be implemented.

In conclusion, it can be said that market participants have a positive outlook on the future of rail freight transport in general and combined transport in particular. The market is ready to support the transport watershed.



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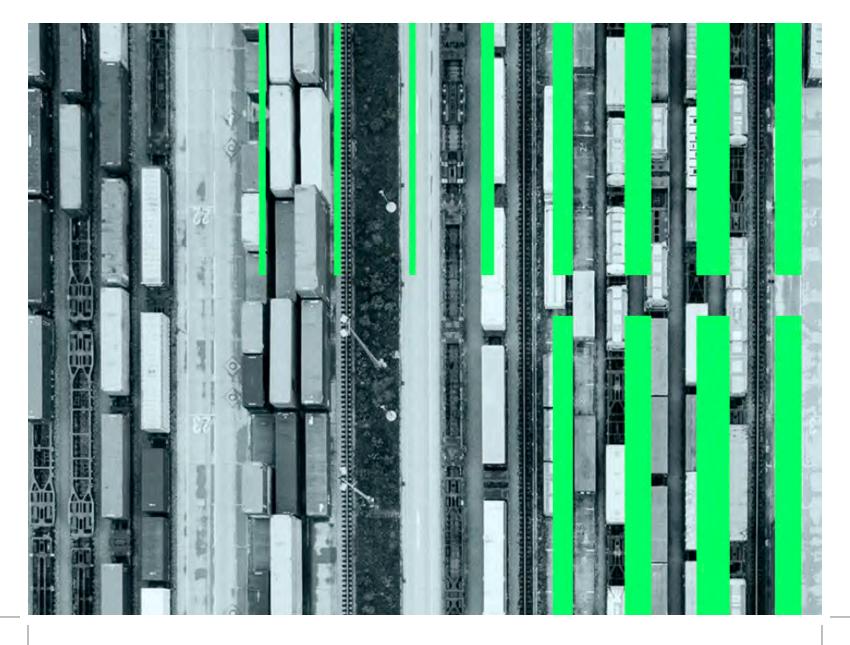
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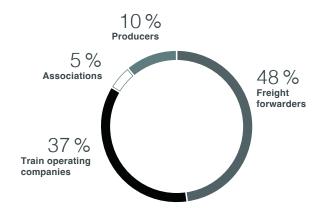




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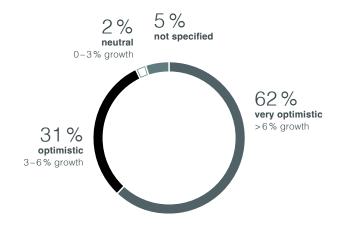


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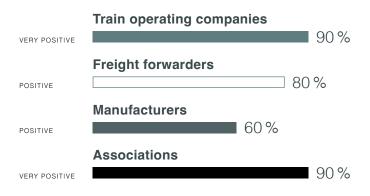
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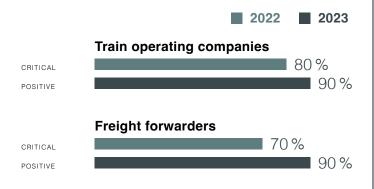
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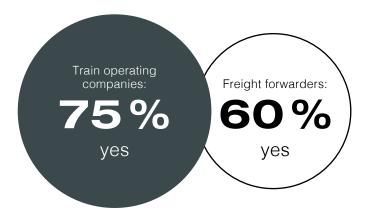
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Train drivers

Truck drivers

YES

100 %

Locomotives

YES

60 % 40 % NO

Intermodal wagons

YES 55 % 45 % NO

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