Reducing rail freight noise



Noise is a side effect of all major modes of transport and is one of the key concerns for people living near transport infrastructure.

Noise from rail is considerably less annoying than noise from road transport and affects just 4% of Europeans. Nevertheless, rail freight noise is the last remaining environmental challenge for the European rail sector, therefore it is a **priority topic**. A large number of wagons run across borders emitting noise not only in their country of origin but across Europe.

25% of Europeans are exposed to noise, just 4% to rail noise

Compared to road traffic, railway and aviation have a much lower impact in terms of overall population noise exposure and annoyance but both remain important sources of localised noise pollution.









19 million



Source: European Environment Agency, 2017

EU

508

Population:

million

Solutions to the problem

The railway sector promotes a freight noise strategy that pursues noise reduction efforts on 3 fronts, depending on the situation.

MEASURES AT SOURCE

MEASURES AT INFRASTRUCTURE LEVEL



Retrofit wagons on condition that sufficient funding is available to maintain the sector's competitiveness.



Construct noise barriers from retrofitting of existing wagons are insufficient.



Retrofitting is the most effective measure

Retrofitting cast-iron brakes with disc brakes or composite brake blocks cuts the noise perceived by half. Besides achieving the best noise reduction, tackling the problem at the source is also the most cost-effective approach.

Cast-iron brakes

Wheel surface roughness

Rolling noise

Perceived noise













Composite brakes Wheel surface roughness

Rolling noise

Perceived noise

















Reducing rail freight noise

Funding for retrofitting of wagons must be addressed now

About one third of the EU's wagon fleet is already either retrofitted or replaced with new vehicles. The remaining 65% have cast-iron brakes. That's 360,000 noisy wagons, a quarter of which are special wagons requiring more complex and costly retrofitting.

Status of EU wagon fleet in 2017 Noisy wagons 360,000



In total, wagon owners and keepers need to pay at least €700 million to retrofit their wagons with composite brake blocks.

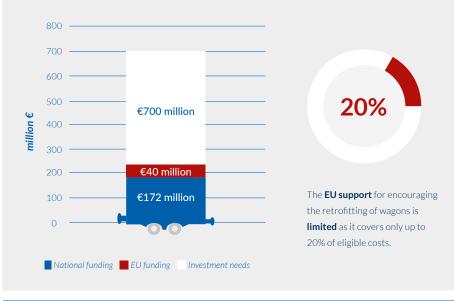


Fixed cost (per wagon)

Fixed cost (EU estimate)

Life-cycle cost

The available public funding corresponds to only one third of the investment costs and the scope of funding is limited.



The way forward

- CER advocates a **pragmatic European solution** to deal with rail freight noise that offers flexibility for both the Member States that are most affected and the Member States where rail noise does not significantly affect the population.
- CER requests that the availability of **public funding** should be consistent with the policy goals set by decision makers.
- CER **opposes all operational restrictions** such as night bans, speed limits or rerouting as they could lead to intermodal as well as intramodal distortion of competition.
- CER calls on policymakers to proceed with internalising noise costs for all transport modes based on the polluter-pays principle.