Effective reduction of noise generated by rail freight wagons in the European Union

Information about the respondent

In what capacity are you filling out this questionnaire? -single choice reply-(compulsory)	Association
Could you specify what kind of organisation you represent? -single choice reply-(compulsory)	Association of rail operators
What is the name of the authority/association/company/organisation you represent? -open reply-(compulsory)	ERFA European Rail Freight Association - gathering other actors supporting the ERFA target of full opening of the rail market
How many members does you association or organisation represent? -open reply-(optional)	30 (companies + national associations)
Is your association/organisation registered in the Transparency Register of the European Commission (**http://europa.eu/transparency-register/index_en.htm**)? -single choice reply-(compulsory)	No
Please specify your countries of operation or residence? -multiple choices reply-(compulsory)	AT – Austria - BE – Belgium - CZ - Czech Republic - DE - Germany - DK - Denmark - ES - Spain - FR – France - HU – Hungary - IT - Italy - LT - Lithuania - LU – Luxembourg - NL - Netherlands - PL - Poland - RO - Romania - SE – Sweden - UK - United Kingdom - NO - Norway - CH – Switzerland - Other
Please specify "Other" -open reply-(compulsory)	ERFA represents the interest of 30 members operating all over Europe including Ukraine - Belgium is the residence of ERFA

Please indicate your contact details (name, email and telephone) -open reply-(compulsory)

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Do you consent to the publication of your response by the European Commission? *Contributions received may be published on the Internet, together with the identity of the contributor unless the contributor objects to publication of the personal data on the grounds that such publication would harm his or her legitimate interests. In this case the contribution could be published in anonymous form.* -single choice reply-(compulsory)	Yes

Data Sources

If you know any reports, studies, surveys, or data that are important for this impact assessment, please give a reference. If possible include a URL to the source, or upload the file(s). -open reply-(optional)

We have access to main published studies like other associations

Extent of the problem

Local pollution (e.g. particulates, nitrogen oxide) -single choice reply-(compulsory)	7
Greenhouse gas / CO_2 emissions and climate change -single choice reply-(compulsory)	3
Dependence on imported oil -single choice reply-(compulsory)	6
Safety / prevention of accidents -single choice reply-(compulsory)	1
Prices of goods as delivered to shops -single choice reply-(compulsory)	2
Competitiveness of industry supply chains -single choice reply-(compulsory)	4
Noise -single choice reply-(compulsory)	5
How do you rate the problem of rail noise in your area of residence or operation? -single choice reply-(compulsory)	Important

In your opinion and in general, what are the negative impacts of rail noise? -open reply-(optional)

Answering 3.2., I remember given the coverage of ERFA members, rail noise is often important The negative impacts - health problems - public acceptance of rail freight - delay/stop of infra projects (both upgrades and new build) - modal shift from rail to road

Freight trains -single choice reply-(compulsory)	3
Passenger trains -single choice reply-(compulsory)	5
Passenger cars -single choice reply-(compulsory)	4
Trucks -single choice reply-(compulsory)	1
Airplanes -single choice reply-(compulsory)	2

Are there any other important noise sources?
Where would you see these then compared to the sources listed above? -open reply-(optional)

How would you rate your level of knowledge about issues regarding rail noise or leading to rail noise? -single choice reply-(compulsory)	Very high
Quality of wheels -single choice reply-(compulsory)	Very important
Quality of rails -single choice reply-(compulsory)	Very important
Speed of trains -single choice reply-(compulsory)	Very important
Amount of traffic -single choice reply-(compulsory)	Important

Are there any other aspects contributing to the problem of rail noise? -open reply-(optional)

Yes, the topography (steep-sided valleys, slopes, ...)

Please describe how the rail noise issues affect your business, or the business of those your organisation represents -open reply-(optional)

- Risk of delaying/stopping infra projects (increasing capacity is necessary for some networks) - Risk of regulatory measures (speed limits, night bans, ban for noisy wagons) - wagons equipped with composite brake blocks (K or LL) or Disc brakes are meeting the requirements laid down in TSI noise - but usage of such brake technology goes along with higher prices for the assets (cost for retrofitting, higher cost in operation) > loss of competitiveness towards road transport - Lack of suitable wagons

Assessment of existing measures to reduce or limit rail freight noise

What measures have already been considered/implemented to tackle the problem of rail freight noise in your area/country/region of residence/operation? -multiple choices reply-(compulsory)	Noise barriers - Insulated windows - Measures on the track (dampers, stiff pads, bi-bloc sleepers, rail grinding) - Financial incentives for the retrofitting of freight wagons with quieter brakes - Noise-differentiated track access charges (i.e. measures for adjusting charges dependent on noise emission) - Public funding for noise abatement programmes - EU funding for research and development - Local funding for tackling specific noise problem - Information to stakeholders

If possible, please describe the most important measures already taken. Please indicate whether certain combinations of measures have been used effectively. -open reply-(optional)

- CH government reimburse 100% of retrofitting costs of freight and passenger wagons to the owners - CH implemented a quite pragmatic NDTAC (pure Bonus system) which covers the higher operational cost for retrofitted wagons. The bonus granted is funded 100% from government, i.e. track access charge are not increased - these measures could nevertheless induce discrimination in favor of swiss operators abroad

How effective were the measures taken so far in reducing rail noise? -single choice reply-(compulsory)	Effective to a certain extent

Please provide further comments on your answer about the effectiveness of measures so far. -open reply-(optional)

- passive measures (barriers, insulated windows) are efficient - active measures, i.e. addressing the wagons are more effective - but the related costs, if imposed to the rail system (i.e. without or insufficient funding) will not ensure quick action - Once wagons are "silent" the infra has to be smooth as well - only then noise will be significantly mitigated - the swiss model addressed only wagons registered in CH (which is reasonable); the NDTAC is open to all wagons operated in CH BUT even if the bonus is to be seen as a real incentive given thec rather small network of CH it does not attract foreign wagon owners to retrofit

Do the measures implemented at the national/local level restrict mobility of people and/or goods? -single choice reply-(compulsory)	Yes

In which manner? -open reply-(optional)

- not yet, but it is a potential risk that some measures will make rail freight less competitive resulting in modal shift rail to road - the foreseen ban of cast iron braked wagon in CH (2020/2022) will have negative impact on interoperability (if the amount of noise reduced wagons is not sufficient enough at this date)

How quickly is the retrofitting of quieter brakes for existing rail freight wagons implemented in your region of residence/operation? -single choice reply-(compulsory)	There is very little progress

Business as usual -single choice reply-(compulsory)	Don't know / No view
Reducing noise from rail freight traffic -single choice reply-(compulsory)	Important
Maintaining competitiveness of the rail freight sector -single choice reply-(compulsory)	Very important
Maintaining interoperability of the rail network, i.e. the ability of freight trains and wagons to move across internal EU-borders freely -single choice reply-(compulsory)	Very important

EU action

Are measures currently taken at national/local level sufficient to achieve a reduction of rail freight noise? -single choice reply-(compulsory)	No
Do you think that current unilateral measures have acted as barriers to railway interoperability or that future unilateral measures will act as barriers to interoperability? -single choice reply-(compulsory)	Strongly agree
Do you think that EU initiatives and policy would contribute to the broader take-up of effective measures across the EU? -single choice reply-(compulsory)	Strongly agree

How should the EU action be targeted as to ensure that it would not undermine the subsidiarity principle and would have the highest potential for EU value added? -open reply-(optional)

- Any measure addressing the wagon (which is operated in many cases cross border throughout Europe) must be harmonized on a European level - Any scheme (NDTAC, funding) must also be harmonized on EU level - No unilateral measures hampering interoperability may be allowed The EU should priovide for schemes which could be adopted in countries which do have problems with rail freight noise - this scheme then must be mandatory for those countries opting in.

Relevance of policy options

Subsidies approach

To what extent do you find the 'subsidies approach' appropriate to tackle the problem of rail freight noise? -single choice reply-(compulsory)	Very much appropriate
When will it be technically and administratively feasible to introduce this approach? -single choice reply-(compulsory)	It is possible already
Will subsidies for retrofitting distort competition between operators? -single choice reply-(compulsory)	Yes
What type of subsidy do you think is the most effective? *Pick your two favourites* -multiple choices reply-(compulsory)	Co-financing of retrofitting cost - Co-financing of increased operational costs
What is the minimum level of co-financing of retrofitting costs that would have to be provided to be effective (while still being feasible for public budget)? -single choice reply-(compulsory)	60 %

Please can you comment on why you believe this is the right level of co-financing? -open reply-(optional)
Rail freight is in strong competition with road transport and margins are already low; even with 60% funding (50% is deemed to be normal rate and additional 10% seem reasonable given the environmental effect) the remaining 40% must be covered by the market to avoid distorsion in competition. While existing wagons are addressed it must be taken into consideration that those wagons have been pruchased at a time where noise was not an issue - these investments must be somehow secured. To avoid inter-and intramodal distorsions even a 10% funding for retrofitted cars should betaken into account
Do you have further comments on the subsidies approach? We are interested in hearing any further comments as to the appropriateness of the policy measure and suggestions as to the implementation, e.g. the duration of an incentive program, on what money should be spent, and the monitoring aspects of this approach. -open reply-(optional)
- clear deadlines both in terms of "end date for subsidies" and provisions for the use of non retrofitted wagons after that date must be put in place - a reasonable deadline to stop funding and to de facto ban non retrofitted wagons could be 2022 if programs start quickly, in 2014/15; such ban must be limited to the countires having a noise problem - specialized wagons with very little mileage should be exempted from a ban

Noise Differentiated Track Access Charges (NDTAC) approach

To what extent do you find Noise-differentiated track access charges (NDTAC) appropriate to tackle the problem of rail freight noise? -single choice reply-(compulsory)	Not appropriate
When will it be technically and administratively feasible to introduce this approach? -single choice reply-(compulsory)	It is possible already
In your opinion what should be the basis for NDTAC? *Choose up to three* -multiple choices reply-(compulsory)	Number of axles - Wagon brake type
What form of NDTAC do you prefer? -single choice reply-(compulsory)	Bonus (i.e. reducing track charges for TSI-Noise compliant wagons)
To what extent should the track charges be differentiated for non-compliant and compliant wagons in order to establish a meaningful incentive to retrofit those wagons? -single choice reply-(compulsory)	Don't know / No view
Should there be any differentiation in NDTAC between day and night? -single choice reply-(compulsory)	No
Should NDTAC be dependent on the size and density of population exposed to rail freight noise? -single choice reply-(compulsory)	No
Measures such as 'Low emission zones' and 'Congestion charging zones' are partially targeted at bringing about a modal shift from road freight transport to rail freight transport. Do you think that NDTAC will create a modal shift from rail back to road? -single choice reply-(compulsory)	Yes, to a large degree

Do you think that introduction of the NDTAC schemes by some Member States only can have any positive spill-over effects for other Member States? In particular, could it constitute a sufficient incentive which will bring about the change also in those countries where NDTAC is not yet introduced, or will it encourage the other countries to introduce similar schemes? -open reply-(optional)

NDTAC implemented in Europe must be harmonized; CH model exists since a while and is feasible

Do you think that introduction of the NDTAC schemes by some Member States only can have negative effects for other Member States? In particular, could it negatively affect competitiveness of operators from those countries where NDTAC scheme is not introduced? -open reply-(optional)

Strongly agree, however NDTAC must be implemented only in countries where noise is a problem. That is why an EU funding approach would be much better

Do you have further comments on the NDTAC approach?
We are interested in hearing any further comments as to the appropriateness of the policy measure and suggestions as to the implementation, e.g. what elements should or should not be included in NDTAC, how can it be prevented that NDTAC negatively affects competition between Member States and how can monitoring be done? -open reply-(optional)

Technical Specification for Interoperability (TSI) Noise approach

To what extent do you find 'TSI noise approach' appropriate to tackle the problem of rail freight noise? -single choice reply-(compulsory)	Not appropriate
When will it be technically and administratively feasible to introduce this approach? -single choice reply-(compulsory)	In 10 years or after
Do you think that this policy measure could lead to negative consequences for rail operators, wagon keepers or other market players? -single choice reply-(compulsory)	Yes

Please specify the probable extent of these consequences. -open reply-(optional)

This approach would make it mandatory to retrofit existing wagons operated in countries which have no noise problem - this is far from being effective, efficient and reasonable.

Do you have further comments on the TSI-Noise approach? We are interested in hearing any further comments as to the appropriateness of the policy measure and suggestions as to the implementation, e.g. on how monitoring can be done. -open reply-(optional)

Monitoring could be made very easy through the netries in the NVR

TEN-T approach

To what extent do you find 'TEN-T approach' appropriate to tackle the problem of rail freight noise? -single choice reply-(compulsory)	Not appropriate
Should there be any differentiation in rail traffic restrictions between day and night? -single choice reply-(compulsory)	No
When will it be technically and administratively feasible to introduce this approach? -single choice reply-(compulsory)	In 10 years or after
Do you think that this policy measure could lead to negative consequences for rail operators, wagon keepers or other market players? -single choice reply-(compulsory)	Yes

Please specify the probable extent of these consequences. -open reply-(optional)

- RUs would need to plan well in advance the composition of their trains - In many cases they are not able to influence the type of wagon

("silent/noisy) brought into their trains - Limiting the noise issue to TEN would most probably end up in higher cvost for operation and transaction cost - If non TEN lines will be excluded there is a risk that such areas will have a noise problem in the future to the extent that trains are using non TEN lines instead of TEN ones

Do you have further comments on the TEN-T approach?
We are interested in hearing any further comments as to the appropriateness of the policy measure and suggestions as to the implementation, e.g. whether the TEN-T lines cover broadly enough, whether it is practically possible to only apply restrictions to limited freight corridors and how monitoring can be done. -open reply-(optional)

Density approach

To what extent do you find 'density approach' appropriate to tackle the problem of rail freight noise? -single choice reply-(compulsory)	Not appropriate
Should there be any differentiation in rail traffic restrictions between day and night? -single choice reply-(compulsory)	Yes
When will it be technically and administratively feasible to introduce this approach? -single choice reply-(optional)	In 10 years or after
Do you think that this policy measure could lead to negative consequences for rail operators, wagon keepers or other market players? -single choice reply-(compulsory)	Yes

Please specify the probable extent of these consequences. -open reply-(optional)

See answer to 6.5.5 - this approach is even more difficult to handle than the TEN approach and is most likely bears the same risk

Do you have further comments on the density approach? We are interested in hearing any further comments as to the appropriateness of the policy measure and suggestions as to the implementation, e.g. how monitoring could be done or what the technical barriers are. -open reply-(optional)

Maintenance approach

To what extent do you find the maintenance approach appropriate to tackle the problem of rail freight noise? -single choice reply-(compulsory)	Very much appropriate
When will it be technically and administratively feasible to introduce this approach? -single choice reply-(compulsory)	It is possible already
Do you think that this policy measure could lead to negative consequences for rail operators, wagon keepers or other market players? -single choice reply-(compulsory)	No

Do you have further comments on the maintenance approach? We are interested in hearing any further comments as to the appropriateness of the policy measure and suggestions as to the implementation -open reply-(optional)

The rail must be smooth anyway - only then it will be possible to benefit from the retrofitting of wagons "smooth wheel need smooth surface in order to be less noisy"

Environmental health approach

To what extent do you find environmental health approach appropriate to tackle the problem of rail freight noise? -single choice reply-(compulsory)	Not appropriate
When will it be technically and administratively feasible to introduce this approach? -single choice reply-(compulsory)	It will never be possible
Do you think that this policy measure could lead to negative consequences for rail operators, wagon keepers or other market players? -single choice reply-(compulsory)	Yes

Please specify the probable extent of these consequences. -open reply-(optional)

Do you have further comments on the environmental health approach? We are interested in hearing any further comments as to the appropriateness of the policy measure and suggestions as to the implementation, e.g. how monitoring can be done, what the technical barriers are, and who should carry the costs in this scenario? -open reply-(optional)

Do you have suggestions for any other policy measures that you would deem appropriate in contributing to substantial reductions of rail freight noise, without decreasing the competitive position of rail transport? -open reply-(optional)

Assessment of impacts of policy measures/options

Business as usual -single choice reply-(compulsory)	Negative
Subsidies approach -single choice reply-(compulsory)	Very positive
NDTAC approach -single choice reply-(compulsory)	Negative
TSI noise approach -single choice reply-(compulsory)	Very negative
TEN-T approach -single choice reply-(compulsory)	Very negative
Density approach -single choice reply-(compulsory)	Very negative
Maintenance approach -single choice reply-(compulsory)	Positive
Environmental health approach -single choice reply-(compulsory)	Very negative

Please provide the most important details regarding your assessments of impact -open reply-(optional)

All policy options will impact negatively rail freight competitiveness. Only a subsidies approach would have a positive effect (provided that a large portion of the costs (retrofitting and operational) are covered)

Business as usual -single choice reply-(compulsory)	Neutral
Subsidies approach -single choice reply-(compulsory)	Positive
NDTAC approach -single choice reply-(compulsory)	Negative

TSI noise approach -single choice reply-(compulsory)	Very negative
TEN-T approach -single choice reply-(compulsory)	Very negative
Density approach -single choice reply-(compulsory)	Very negative
Maintenance approach -single choice reply-(compulsory)	Very negative
Environmental health approach -single choice reply-(compulsory)	Very negative
Please provide the most important details regarding your assessments of impact -open reply-(optional)	
Density and environmental health approaches are too complex to be assessed. Any of the policy options will generate a higher administrative burden. Only business as usual is neutral. Any option must consider the related transaction cost - it would absolutely be not reasonable if they are disproportionate to the real objective to be achieved : "reduce noise"	
Business as usual -single choice reply-(compulsory)	Neutral
Subsidies approach -single choice reply-(compulsory)	Neutral
NDTAC approach -single choice reply-(compulsory)	Neutral
TSI noise approach -single choice reply-(compulsory)	Neutral
TEN-T approach -single choice reply-(compulsory)	Neutral
Density approach -single choice reply-(compulsory)	Neutral
Maintenance approach -single choice reply-(compulsory)	Neutral
Environmental health approach -single choice reply-(compulsory)	Neutral
Please provide the most important details regarding your assessments of impact -open reply-(optional)	
Business as usual -single choice reply-(compulsory)	Neutral
Subsidies approach -single choice reply-(compulsory)	Neutral
NDTAC approach -single choice reply-(compulsory)	Neutral
TSI noise approach -single choice reply-(compulsory)	Neutral
TEN-T approach -single choice reply-(compulsory)	Neutral
Density approach -single choice reply-(compulsory)	Neutral

Maintenance approach -single choice reply-(compulsory)	Neutral
Environmental health approach -single choice reply-(compulsory)	Neutral
Please provide the most important details regarding your assessments of impact -open reply-(optional)	
Business as usual -single choice reply-(compulsory)	Neutral
Subsidies approach -single choice reply-(compulsory)	Very negative
NDTAC approach -single choice reply-(compulsory)	Negative
TSI noise approach -single choice reply-(compulsory)	Neutral
TEN-T approach -single choice reply-(compulsory)	Neutral
Density approach -single choice reply-(compulsory)	Neutral
Maintenance approach -single choice reply-(compulsory)	Negative
Environmental health approach -single choice reply-(compulsory)	Don't know / No view
Please provide the most important details regarding your assessments of impact -open reply-(optional)	
Business as usual -single choice reply-(compulsory)	Very negative
Subsidies approach -single choice reply-(compulsory)	Very positive
NDTAC approach -single choice reply-(compulsory)	Positive
TSI noise approach -single choice reply-(compulsory)	Positive
TEN-T approach -single choice reply-(compulsory)	Neutral
Density approach -single choice reply-(compulsory)	Neutral
Maintenance approach -single choice reply-(compulsory)	Very positive
Environmental health approach -single choice reply-(compulsory)	No view / Don't know
Please provide the most important details regarding your assessments of impact -open reply-(optional)	
Business as usual -single choice reply-(compulsory)	Neutral

Subsidies approach -single choice reply-(compulsory)	Very positive
NDTAC approach -single choice reply-(compulsory)	Negative
TSI noise approach -single choice reply-(compulsory)	Negative
TEN-T approach -single choice reply-(compulsory)	Very negative
Density approach -single choice reply-(compulsory)	Very negative
Maintenance approach -single choice reply-(compulsory)	Very positive
Environmental health approach -single choice reply-(compulsory)	Don't know / No view

Please provide the most important details regarding your assessments of impact -open reply-(optional)

Business as usual -single choice reply-(compulsory)	Neutral
Subsidies approach -single choice reply-(compulsory)	Neutral
NDTAC approach -single choice reply-(compulsory)	Negative
TSI noise approach -single choice reply-(compulsory)	Very negative
TEN-T approach -single choice reply-(compulsory)	Very negative
Density approach -single choice reply-(compulsory)	Very negative
Maintenance approach -single choice reply-(compulsory)	Neutral
Environmental health approach -single choice reply-(compulsory)	Don't know / No view

Please provide the most important details regarding your assessments of impact -open reply-(optional)

Please identify any mitigating measures which can be taken to reduce negative impacts of EU rail noise related intervention could have on the competitiveness of rail freight transport vis-à-vis road freight. -open reply-(optional)

Please identify any impacts EU level rail noise related intervention could have specifically on SMEs and microenterprises -open reply-(optional)

Final Comments

If you have any further observations or comments on how the noise of rail freight could be tackled, please specify these

briefly: -open reply-(optional)