

## **Consultation on the draft of the limited revision of the TSI relating the subsystem rolling stock – Noise (TSI Noise)**

### **Comments of Deutsche Bahn AG**

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1. Today about 50% of rail freight transport is international and the current EU policies aim to increase its volumes further. This means that a large number of wagons run across the borders.
2. In order to maintain public acceptance of environmentally friendly freight transport and to secure its growth possibilities the reduction of rail freight noise is needed.
3. The perception of rail freight noise as a problem depends on the degree of affectedness (transport volume), average speed of the train, settlement structure (vicinity of residential areas to tracks + population density), dual use (passenger and freight transport through cities), and sociocultural aspects. This affectedness varies considerably within the EU. Also the freight operating section of Deutsche Bahn AG, DB Cargo Group, that is operating its own subsidiaries in 15 European countries, realizes this in its daily business. For this reason a one-size-fits-all approach over whole Europe is not constructive to solve the noise problem.
4. Instead, solutions have to be found that ensure on the one hand that rail freight transport can still run inside, into, out of and through countries with high public concern but on the other hand minimize the technical, administrative and financial burden of retrofitting and subsequently increased maintenance cost for those member states where the noise exposure and public concern is less.
5. The „quieter routes“ approach as defined in the current draft version is not a suitable solution to solve the rail freight noise problem in Europe. Also the updated results of the Impact Assessment show clearly that the quieter routes approach has only a low benefit/cost ratio while other approaches are quite more efficient. It will lead to further weakness of rail because of its disadvantages from an economic, political, technical, and operational point of view:
  - a) Noisy routes remain. Even in countries where the problem of noise has already been actively addressed and noise reduction is progressing strongly no pacification of the noise discussion will be reached because still noisy trains and corridors are remaining.
  - b) The current draft does not foresee grandfathering for quiet routes. The definition of silent and noisy routes will be reviewed periodically. This means that a route that has been defined as a quieter route (QR) could be re-defined as a noisy one when traffic maps are updated. This is incompatible with the noise reduction strategy of Deutsche Bahn AG which

requires predictability and legal certainty<sup>1</sup>. In addition, it cannot be communicated to affected residents that after updating the maps, noisy freight trains pass the affected houses again.

- c) The QR approach would result in a further complication of daily railway operations. The implementation of quieter routes leads to a duality of quiet and loud routes and wagons in all operational processes for all RUs and IMs in Europe: in the planning, daily disposition, empty wagon supply, train formation, main courses, worksite management as well as the management of severe weather and of temporary capacity bottlenecks etc. in the respective country and over several countries. This will also be the case for railway undertakings operating in less noise affected countries. For instance, these operational burdens will impact the intermodal competition of about 10 DB Cargo subsidiaries although there is no relevant noise issue in those member states.
  - d) If quieter routes will have to be implemented in all EU member states from the same implementing date on (e.g. end of 2024) this would require retrofitting also in less noise affected states until the end of 2024. On one side this will cause difficulties because of capacity restraints for the brake block industry as well as for workshop capacities. On the other hand this causes costs of retrofitting itself (ca. 1 700 €/ 4axle-wagon) and the costs after retrofitting like the increased maintenance costs of retrofitted wagons (ca. 600 €/4axle-wagon/30 000km). This would lead to further weakness of rail freight in intermodal competition although there is no relevant noise issue.
6. Therefore, Deutsche Bahn AG advocates to develop simple and problem-adequate solutions. This means, in particular, speeding up the issue of noise where there is a real problem and putting it in time where there is no real problem.
7. The updated results of the Impact Assessment show clearly that option IIb (wagon approach) and option IIIb (complete network instead of quieter routes) have the highest B/C rel ratio. DB therefore recommends a country-specific

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<sup>1</sup> Each project for changing or upgrading existing railway lines as well as for building new lines requires exhaustive noise impact studies during the environmental approval process. These noise impact studies are based on traffic forecasts, usually on a 15 years horizon base. For these, some basic information about the predicted traffic (types and length of trains, speed, etc.) is required. However, existing rail lines are also affected, as they will receive noise protection piece by piece as part of the programme "Lärmsanierungsprogramm". Here it is essential to know if the trains will be composed out of noisy or silent wagons in the future. If it wasn't explicitly legally binding that a QR would remain declared as a QR after an update of traffic maps, it would be necessary to assume all trains to be noisy ones. If not, the prediction within the noise and environmental impact studies would not be legally guaranteed and could come under attack from the concerned people during the planning approval process. This legal uncertainty would require that the benefit of silent compared to noisy wagons could not be taken into account in the impact studies and all other infrastructure based mitigation measures would have to be calculated and measured as for noisy trains emission. This would result not only in exhaustive additional investment in infrastructure installation e.g. noise barriers but also in the resulting maintenance costs. In addition, this can lead to very high noise barriers which are not actually necessary and which only meet with limited acceptance.

differentiated approach with the objective to define an implementation strategy and implementation date that takes into account the different degrees of noise affectedness within the EU. Also in other fields of European regulation for interoperability like ERTMS the national differences have been taken into account and solutions have been developed to drive down costs and maintain the sector's competitiveness.

8. There are different ways to achieve a differentiated implementation of the TSI noise:

- a) **A slight modification of the original Commission's proposal:** consideration of different degrees of noise affectedness in the EU states by a simple solution for heavily affected states however remaining economically feasible for less affected states. This could be reached by a slight modification of the original Commission's proposal<sup>2</sup> by a gradual application of the revised TSI. In a first step it should be applicable for those member states with a significant noise problem. For other member states a later application should be discussed:
  - i. **a short-term deadline like 2022** for domestic and international traffic of those (member) states that are facing a high noise problem (like Germany, Netherlands, AT and CH; other member states might follow). International means incoming, outgoing and transit freight traffic
  - ii. **a mid-term deadline like 2026** for international traffic of the remaining member states, with the possibility of bilateral exemptions between bordering member states.
  - iii. **a long-term-deadline** with a general application of the revised TSI for domestic and all international traffic as of **2030 or later**.
- b) **A slight modification of the „quieter routes- approach“:** implementation of quieter routes in all member states spread over time according to noise affectedness till 2035, combined with the possibility for the respective member states to declare all routes as silent as from 2022 on. If this approach is chosen grandfathering for QR is essential also after an update of traffic maps.
- c) **Quieter Networks instead of quieter routes:** implementation of quieter networks in especially noise affected states first with the possibility of successive expansion according to political sensitivity until about 2035.

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<sup>2</sup> At the beginning of the discussion the European Commission stated that they would like to have a two-step-approach to gradually extend NOI TSI to all wagons authorised to be operated on the EU's railways network: the deadline for the first stage to be 2022 and for the second stage 2026. Also possible opt-outs shall be discussed. As an example, an agreement between two bordering Member States to allow noisy wagons could be considered.

9. Also regarding the necessity of retrofitting for foreign wagon keepers or railway companies operating in noise sensitive member states such solutions would be manageable. Analyses of DB Cargo wagon flows in cooperative transports reveal that 90% of the transport is carried out with about 30,000 different wagons of state railways. Still without any pooling measures and frequency of use of only 1 -2 annual uses. Pooling of silent wagons and limited operational planning reduces this number and thus the necessity of retrofitting even further. As a result only a few thousand wagons remain per railway that had to be retrofitted.
10. Therefore, the interoperability of transport operations between (still) "noisy" and "quieter" countries can be ensured by a relatively small retrofitting and the "pooling" of retrofitted and new quiet wagons with limited effort.
11. In parallel retrofitting is funded by NDTAC systems in NL, in D, in AT and in CH. In Germany, in addition to the NDTAC system, there is direct state support, which is available to all domestic and foreign wagon keepers operating on the German network. In addition, public financing on the EU-level is provided via CEF and EFSI funding.