

CER position on the T&E input to the ERA WP TSI Noise

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Summary

CER welcomes T&E's paper on rail noise standards "Revision of EU rail noise standards (TSI) - *Input to the ERA Working Party TSI Noise*" as a positive contribution to the ERA Working Group on the revision of the Noise TSI.

However, some of the requests put forward by T&E are not suitable for TSI regulations as they go beyond their scope which deal with interoperability and provide specifications for rolling stock when placed on the market. Some issues mentioned by T&E, such as the exposure of people to traffic noise, and operating restrictions in noise sensitive areas, are currently dealt with local/national measures according to the EU subsidiarity principle. CER believes that such restrictions shall not be a source of discrimination and shall take into account the risk of modal transfer from rail to road which is already the major source of source of noise encountered by citizens.

This is in line with the EU policy on noise reduction where the EU is mostly responsible for noise creation aspects, while member states may additionally enact specific legislation for noise reception.

CER has long supported noise control measures and shares T&E's view that progress is needed in the next years to further tackle the effect of rail noise on the environment. The rail sector has taken several actions in noise control in the past years and is now looking, as the immediate challenges, at the completion of the homologation of the LL-brake block, at suitable incentive schemes as well as at appropriate funding for these without harming the rail sector as a whole.

This paper follows the same structure of the T&E's paper on rail noise standards "Revision of EU rail noise standards (TSI) - Input to the ERA Working Party TSI Noise", published in November 2011.

1. Time for the EU to act to cut rail noise

CER supports the need to further reduce rail noise. The rail sector is tackling the noise problem since several years and the EU has addressed the issue in interoperability directives and corresponding technical specifications. At the same time, the Environmental Noise Directive (END) 2002/49/EC requires member states to submit noise maps and actions plans. It should be stressed that, since 2006, the Noise TSI 2006/66/EC requires new or upgraded rolling stock to be silent as more stringent requirements in terms of noise emissions have to apply.

When it comes to the content of the revision of the TSI, it is important to clarify that TSI regulations aim at tackling emissions of a single train at its source while allowing the interoperability across the EU. This has of course a direct positive effect on reducing the number of people exposed to levels of noise. However, the noise TSI is not the appropriate instrument to address the issue of noise reception. Environmental noise issues, such as the exposure of people to traffic noise and noise maps are dealt, according to the subsidiarity principle, via national measures which better reflect the local dimension of traffic noise. The Environmental Noise Directive (2002/49/EC) is in fact the instrument which promotes action at local level, e.g. by means of noise maps to

assess people exposure to noise traffic. This Directive is currently being reviewed by the European Commission and a new proposal is expected by 2013.

Furthermore, it should be clarified that the retrofitting of the existing fleet does not fall under the scope of the Noise TSI. Noise emissions from existing vehicles are already dealt with in other areas of legislation with incentives such as noise related TACs. The recast of the first railway package is looking into the issue of TAC's at the moment.

2. Scope of the Rail Noise TSI revision

a) Phasing-out noisy freight wagons

The 2007 framework mandate to the European Railway Agency (ERA) calls on the agency to revise the first version of the Noise TSI, but no further details were provided on how to revise the text. ERA decided for a two steps approach.

The first one ended in 2010, with a limited revision of the Noise TSI mostly concentrated on the definition of the “reference track” to be used for RST tests. The second part started in 2011 and is expected to finish in mid-2012.

The second part is a complete revision of the Noise TSI, including new limit values. This revision also includes tasks listed in the 2010 “scope extension mandate” to the ERA, such as the extension of the scope beyond the trans-European rail network (TEN-T) and a merge of the provisions for High Speed Rail and Conventional Rail.

A study performed under the tasks of the 2010 mandate to ERA concluded that, at this stage, all TSI noise requirements should be put in one single TSI noise with a scope of application that should be expanded in the same way as for the other TSIs.

Against this background, CER would like to point out that the framework mandate to the ERA does not include any task to prepare a strategy to “phase-out noisy freight wagons”.

It should be noted that CER members encourage silent railways via many activities promoted by the rail sector (e.g. Europe train, studies having as an objective the completion of the homologation of LL-brake blocks and research about wheel and rail dampers). However, the TSI's provisions are aimed at single vehicles in order to allow interoperability across Europe. The promotion of silent railways is an issue dealt at national/local level via for example TACs, which is not in the scope of the TSI.

b) Issues to be dealt with under the revision of the Noise TSI

When it comes to T&E's list of aspects that the revision of the Noise TSI should tackle, CER would like to clarify that:

- The inclusion of maintenance requirements for the vehicles is not required in the section 7.2 of ERA mandate. What is required is “the inclusion of a monitoring scheme of wheel defects”, which is a different requirement. It should be noted

that the TSI already provides requirements for rolling stock/infrastructure when it is put in service and not requirements for permanent checking during operation.

- “The inclusion of additional noise types/sources such as brake and curve squeal shall be considered”, as stated by T&E, is not mentioned in section 7.2 of the mandate. While this issue is under discussion in the ERA Working Party, the current lack of data and knowledge of this 2nd order phenomenon suggests that it is premature and hardly feasible to include this topic in the revision of the TSI. In addition, it should be noted that curve squeal is an issue which occurs at local level (e.g. metro) but not on standard railway lines. Stringent TSI requirements on such a local issue are therefore inappropriate.

3. Revision of the Noise TSI for vehicles

3.1 Extend the scope to tackle all major rail noise problems

CER opposes T&E’s request to extend the scope of the revision of the TSI to provisions for operating restrictions in noise sensitive areas to ensure retrofitting is carried out.

In order to encourage retrofitting, the EU is already considering noise differentiated track access charges (NDTACs) as an incentive in the so-called “Recast” of the First Railway Package. Furthermore, the definition of noise sensitive areas and action plans to tackle noise are already dealt with under the END. Once again, CER would like to state that TSI regulations aims at allowing interoperability of train operation across Europe. Local issues such as operating restrictions in noise sensitive areas require national/local regulation which shall not be a source of discrimination and shall take into account the risk of modal transfer from rail to road which is already the major source of noise encountered by citizens. A ‘one size fits all’ measure would fail to take into account local characteristics.

Furthermore, when it comes to braking and curve squeal, the ERA Working Party concluded that these are issues only in identified locations and that such topics do not require a general regulation in the TSI. Technical solutions, for example ‘ring damper’, could allow to cope with this problem. Brake squeal is an issue for some high-speed trains especially during braking at very low speed (from 0 to 10 Km) for which technical solutions are prevented by safety requirements on brake performance. Because of the current lack of technical solution, the issue is considered as not mature enough by the ERA Working Party in order to be included in TSI regulation.

3.2 improve the test procedure

CER notes that T&E’s statement “up to 9 dB(A) below today’s limit”, in reference to the limit values in test procedures, is not correct as it is applicable to only a very limited number of wagons. The spread of 7dB mentioned by T&E is due to the spread of “quality” of the test tracks but probably not to the spread of the measurement process.

CER, EIM and UIC are currently building a complete database of wagons tested under the CR NOI TSI:2006. The complete data will help ERA to take informed decision on the basis of real and transparent data. The complete database will be presented during ERA Working Party.

In addition, CER considers that a strengthening of the track conditions would only highlight, with a high track cost, the good performances of a given performing rolling stock. This is however the case only for very performing trains which have a very low noise contribution compared to the one from the track. On the other hand, the CER/EIM/UIP database will provide such data which will contribute to the discussion about freight wagons on this issue within the ERA Working Group. The already existing data show that requesting a very good track is not worth for a majority of rolling stock series.

4. Merging the regulations for high speed and conventional railways

CER disagrees with T&E's statement that the merging of the different noise requirements into one single TSI should also integrate infrastructure requirements. These are in fact independent from the merging of TSIs, since the merging consists in given conditions (conditions given in the high-speed and in the conventional rail TSIs) to insure a consistent (indicators, test conditions) and continuous definition of the noise limits.

5. Approaches for the Noise TSI infrastructure

When it comes to T&E's request for regular polishing of rail and fitting of rail dampers, CER would like to point out that a general TSI regulation on this issue is not suitable as it would fail to take into account the local characteristics such as traffic levels and track designs. Decisions on maintenance procedures can vary greatly.

Moreover, the German concept of "specially monitored track" to ensure the maximum allowable rail roughness over time, proposed by T&E, may be justified on a German track design, with its specific roughness growth mechanisms, but may not apply in other countries in Europe.

Therefore, the TSI may define several levels of performances dealing with classes of tracks (depending on traffic for instance), but the means to reach this performance (maintenance) should not be in the TSI.

Furthermore, it should be noted that grinding (which is indicated as 'polishing rail' in the T&E paper) is used in Europe to maintain the life of rails because of mechanical surface defects that reduces their life time. It has also an induced beneficial impact on noise. Therefore, this maintenance policy can't be compared to the change of blocs on a train which is a one shot retrofit operation.
