

## **Communication from Train Horns Steering Group**

Issue 7

February 2008

The cross industry Train Horns Steering Group met on 11 January 2008 to review progress and consider further action.

### **1. Progress since sixth Communication (December 2006)**

- The Steering Group recommendations (published in December 2006) which included a significant change to the Rules on the sounding times for train horns, were progressively implemented during 2007, including changes to the rules for sounding horns and a change to the standard applying to all new trains, or new horns for trains that travel at up to 160kph.
- The Group and industry colleagues have monitored the effects of implementing the changes, including the number of enquiries about train horn noise. The group met in June 2006 and note progress on the implementation of recommendations, but considered that it was too early to draw any general conclusions at that stage.
- RSSB continues to progress relevant research and development on behalf of the industry in this area including further work on the risk from removing whistle boards on approaches to level crossings with good sighting in one direction, development of improved guidance on pedestrian use of crossings and into the potential for a broadband based horn. The first two pieces of research develop work already published in T668: *'Research into the safety benefits provided by train horns at level crossings'*.

### **2. Rule changes implementation**

- Following the recommendations of the cross industry Steering Group, published in December 2006, the industry considered the proposed changes in standards, and took the decision to implement them.
- There are three changes to the standards:
  - The introduction of a night time quiet period, between 2300 and 0700 when trains will no longer routinely sound their horns at whistle boards (they will always sound their horns when people are seen on the track)
  - That where the technology is available, drivers should only use the low tone from the two tone horn at 'whistle boards'
  - For all new or replacement train horns on trains capable of travelling up to 160kph a much lower minimum sound pressure

level has been established – and a maximum sound level has been introduced (min 101dB and max 106dB)

- The first two changes were implemented from 7 April 2007 through internal industry publications and the standard for new horns was made available with immediate effect. The formal standard change came into effect in June 2007. The Rule Book (GE/RT8000 module TW1) was updated.
- This followed an extensive consultation process involving the rail industry, members of the public, MPs and associations. The responses to the consultation were considered by standards committees in January (Rolling Stock) and February (Traffic Operation and Management), and taking account of the reports of the Steering Group, and all the material associated with the consultation, they decided to implement the proposed changes with only minor textual changes.
- Whilst the vast majority of responses to the consultation supported all of the changes, there were a significant number of respondents who said that the proposals did not go far enough, and that the new standard for train horns should require a retrospective change to all current horns. Both the Steering Group and the Rolling Stock Standards Committee considered these responses and concluded that it is not justified to impose a national change. This was because the recommendations, taken as a whole, were expected to make a significant improvement for a large majority of neighbours; a national change would cost very significant sums of money and not all train operators have sound problems. Accordingly it was decided to leave flexibility for train operators to make their own decisions at the local level.
- One significant pressure group opposed the proposals, suggesting that they are a 'smokescreen' to avoid changing all the horns, and also stating that they think that horns should be sounded at all times at relevant footpath crossings. This was not the view of most respondents to the consultation. The steering group considered very carefully the safety implications of a night time quiet period and came to the conclusion that, overall, the benefits of a quiet period significantly outweigh any increase in risk at crossings. However, Network Rail is carrying out a prioritised assessment to consider whether there are any reasonably practicable measures that may be needed at any crossings. The benefits of a night time quiet period are such that the industry concluded it should be introduced soon as possible. ORR Inspectors will be keeping Network Rail's progress in this area under review.
- The Steering Group agreed in December 2006 that, in light of the fact that the recommendations did not address all of the concerns, RSSB and industry colleagues would keep the implementation of the recommendations under review and meet again following the implementation to consider whether any other steps are needed.

- The overall effect of the implementation of the recommendations from the Train Horns Steering Group of December 2006, and hence the Rule change had been as expected, that is the bulk of the noise problem for lineside residents has been resolved but there remain some areas where complaints about train horn noise persist.
- A number of the remaining complaints that are now being received by the industry relate to the actual style of use of horns. Where these occur, they can be taken up with the relevant train operator and followed through with the appropriate drivers. A number of complaints are received relating to the sounding of horns in the vicinity of engineering works. Where these occur, the use of the horn relates to the safety of personnel on the track, and there are no plans to curtail their use, however, by its nature engineering works are temporary and move around, so these issues are relatively transient and do not affect any lineside residents on a permanent basis. A small number of complaints express views about the appropriateness of the changes in the rules (the use of a quiet period, times of day etc). The industry took the decision about the nature of the changes taking account of the balance between interests of line side residents and the users of crossings and the steering group does not consider that there is any evidence to suggest that the new arrangements should be changed. However, both the industry and the ORR will keep these under review as part of the routine monitoring of the industry safety performance.

### **3. Research into broadband horns**

- Work to develop a specification that could potentially be used to develop alternative technology for horns is proceeding. A report into the noise characteristics that need to be made by train horns (whatever technology they use) is due to be published shortly.
- In conjunction with the manufacturers of broadband Horns, it has been established that the broadband Horn is not capable of meeting the sound specification that has been developed in the work described above. Accordingly, the Steering Group accepted an offer to develop some sounds that may be considered for 'acceptability' to the rail industry, even though they do not sound like trains (the requirement to sound like trains is in the current group standard). These sounds consist of pure broadband and hybrid broadband.
- The steering group has received a report and listened to some of the sounds that are capable of being made through both broadband and hybrid horns, (hybrid noise includes some elements of broadband as well as conventional sounds). They considered that the pure broadband horn is not likely to be acceptable in any circumstances, while the hybrid form may have some potential. They felt however that it would be appropriate for RSSB to examine the use and application of

such technology in different environments before endorsing any further development work or trials in the railway operating environment. Accordingly the steering group asked RSSB to initiate some research into the availability of any data or material relating to uses of these horns, and also for RSSB to approach any existing users to see if there is any evidence that suggests their suitability in the railway operating environment.

#### **4. What we are now going to do**

- Continue to keep a watching brief on enquiries about train horn noise as part of the 'day job' of RSSB, Network Rail and train and freight operating companies. Train operators and Network Rail will continue to follow up local issues about respectively the use of horns and whistle boards.
- Progress the research on the risk from removing single whistle boards on approaches to level crossings with good sighting in one direction, and development of improved guidance on pedestrian use of crossings.
- Publish guidance as to the specification for what train horns can sound like for the benefit of all developers of future horns.
- Progress an evaluation of other users of hybrid broadband horn technology to consider their potential suitability in the rail sector.
- The steering group will meet again if there are any significant developments to consider, but will otherwise keep in touch through correspondence.

*The cross industry Steering Group consists of representatives from: Rail Safety and Standards Board (RSSB), Network Rail, Passenger Train Operators, Association of Train Operating Companies (ATOC), Freight Train Operators, ORR, and is supported by RSSB's technical and risk expertise. If you want to communicate directly with the steering group you can do so through the Chairman, Anson Jack, who is director, policy, research & risk at the Rail Safety and Standards Board at [anson.jack@rssb.co.uk](mailto:anson.jack@rssb.co.uk)*