

RSSB cross-industry Train Horns project

The Case for Change – Project output summary

Contents

Possible outcomes and necessary conditions	2
Summary of work streams supporting possible outcomes including timescales	3
Schedule of Steering Group Meetings and key recommendations	5

Throughout the project summary, the following are the outcomes referred to:

1. Broadband horns
2. Returning to the old 'standard'
3. Night time ban on the use of train horns
4. Reduce the number of whistle boards (all or some)

RSSB cross-industry Train Horns project

The Case for Change – Project output summary

A Possible outcomes from the Train Horns work

- Conditions that need to be fulfilled to introduce each outcome:

Leading to the following possible changes:

A1. Broadband horns can be used if:

- They meet the specification in the standard (that is no standard change)
- Trials are successful (they are recognisable as train warning)

Would lead to no change in standards but opportunity for Train Operators to introduce broadband horns where it is likely to deliver a benefit in terms of neighbours.

A2. Return to the 'old' de facto standard if:

- Risk work shows no significant evidence of reduction in risk to those on footpath crossings arising from new louder horns – this would be sufficient in its own right, but in case there is uncertainty, or some evidence of a reduction in risk, the second bullet point is also being developed.
- Estimate of impact of noise nuisance on neighbours – being the benefit that arises from reducing horn noise to neighbours.
- If conditions above are fulfilled, the case for '**allowing**' quieter horns is made. If however the quieter horns are to be **mandated**, it is also necessary to establish that the cost of the change in horns is justified. This would need to be justified by the reduction in the noise nuisance to neighbours and rely upon the work to estimate the value of the nuisance and to estimate the cost of a campaign change in train horns.

Would lead to change in Standard on audibility of trains

A3. Night time ban if:

- Risk work – safety benefit during night time hours is clearly exceeded by the noise nuisance to neighbours

Would lead to change in rules for when to sound horns in the Rule Book (may involve a limited number of locations where alternative controls are justified)

A4. Take away some or all whistle boards if:

- A4.a** Everywhere – i) total impact of noise nuisance is much greater than total safety benefit of horns
AND ii) local impact of nuisance is much greater than local safety benefit

Could lead to challenge/changes to Railway Safety Principles and Guidance. If both conditions i) and ii) are not fulfilled, then the only change would be where condition ii) applies

A4.b Individual Whistle Boards removed if:

local impact of nuisance is much greater than local safety benefit

Would lead to more sophisticated risk model for Network Rail assessment of footpath crossings

RSSB cross-industry Train Horns project

The Case for Change – Project output summary

B In support of the options evaluation the following work is being undertaken under the direction of the Train Horns Steering Group

B1. Broadband Horns

- a) Development of specification for the noise profile of a horn (for broadband manufacturers) (work being tendered – contract award July 2006)
- b) Development of a horn to meet the specification (dependent on manufacturers)
- c) Trials of developed horns to confirm conformance with standard requirements (Depends on time needed for b))

B2. Return to the old 'de facto' standard

- a) Desk top research to define what the 'old' standard was (AEA Technology – End of July 2006)
- b) Measuring current examples of old trains (RSSB – July / August 2006)
- c) Establishing cost and availability of horns that can meet the standard (AEA Technology – July 2006)
- d) Risk work to support change in standard (AD Little – October 2006)
- e) Building the case for the revised standard (RSSB – now to October 2006)
- f) Formally going through the standards change process (RSSB / Industry - tba)

B3. Night Time Ban

- a) Risk work to evaluate the safety impact of train horns at night (AD Little – October 2006)
- b) Research to understand and value the noise nuisance
 - o Local stakeholder engagement at three locations (Faulkland Associates – July / August 2006)
 - o Local measurement of noise at three locations (RSSB – July / August 2006)
- c) Building the case for revision to the rule book (RSSB - now to November 2006)
- d) Explore any potential changes to guidance with Office of Rail Regulation (ongoing)
- d) Formally going through the standards change process (RSSB / Industry)

RSSB cross-industry Train Horns project

The Case for Change – Project output summary

B4. Take away some/all whistle boards

- a) Risk work to evaluate safety benefit of whistle boards (AD Little – October 2006)
- b) Research to understand and value the noise nuisance (RSSB and Faulkland Associates – July / August 2006)
- c) Building the case for revision to the rule book (RSSB - now to November)
- d) Formally going through the standards change process (RSSB / Industry - tba)

When and if the industry decides on a standards change, the means of introduction will be by the quickest available route. If there are no adverse safety implications, the change can be made almost immediately. Where there are safety implications there may be a period of consultation / briefing of appropriate affected parties.

If standards are changed to allow quieter horns, it will be a matter for each Train Operator individually whether they make changes to their own trains. As part of the current review, we will consider whether it is justified to mandate changes to existing train horns.

RSSB cross-industry Train Horns project

The Case for Change – Project output summary

Steering Group Meetings

July

- Review of outline case for change based on estimated values
- Reports on progress with work streams
- Prepare for meeting with All Party MPs Group

September

- Consider whether to recommend rapid change to standard to 'allow' quieter horns. **Outcome 2 – first decision point.**
- Consider results of stakeholder engagement and impact on initial estimates of impact on neighbours
- Review outline case for change to Standard on Minimum Noise and Rule Book requirements for sounding train horns

October

- Review initial report from ADL on risk
- Review refined case for change to standards
- Review overall project and plan

November

- Review AD Little work- impact of noise, and consider option 3
- Review AD Little work- impact of noise, and consider option 4

December

- Review possible implementation of outcomes 2, 3 and 4. **Final recommendation.**
- Decide whether to recommend mandating any changes to existing train horns

2007 Broadband horn development continues into 2007 (outcome 1)

RSSB 30 June 2006