**PACTS Response to the ORR Consultation on Level Crossing Guidance**

**February 2021**

**Introduction**

1. The Parliamentary Advisory Council for Transport Safety (PACTS) is a registered charity. It supports the All-Party Parliamentary Group for Transport Safety. Its charitable objective is “To protect human life through the promotion of transport safety for the public benefit”. Its aim is to advise and inform members of the House of Commons and of the House of Lords on air, rail and road safety issues. It brings together safety professionals and legislators to identify research-based solutions to transport safety problems having regard to cost, effectiveness, practicability and acceptability.

2. PACTS welcomes this consultation by ORR [Level Crossings](https://www.orr.gov.uk/search-consultations/consultation-new-orr-guidance-principles-level-crossing-safety). The following comments, whilst incorporating comments made by members of PACTS’ rail and road safety working parties, should not be read as representing the views of all the organisations that support PACTS.

**Over-arching comments**

3. In general PACTS supports the proposed document. PACTS is concerned about safety across all transport modes and as such welcomes the collaborative approach to level crossing safety which takes into account the knowledge, experience and needs of all users.

4. Whilst welcoming the principles espoused by this document and accepting the proposed document reflects current legislation, we believe that there are wider issues that nevertheless still need to be addressed through the long overdue modernisation of railway and highway level crossing legislation and regulation; noting the problems identified in the Law Commission’s Report are to a significant extent still at large. This would benefit the public and rail users by providing more flexibility for changing and closing level crossings where possible. We urge the ORR to pursue this. Can the ORR confirm what their intention and plan is to progress this?

5. In our opinion it is no longer tenable that safety of users of private crossings depends so much on the primary user instructing all other users and who may; individuals who may not be known to the primary user. This document makes no comments on this fundamental issue and we cannot agree with what might be seen as an implicit acceptance of this situation.

6. We support a more holistic evaluation of risk and this should include for example if it is or becomes difficult to use a crossing (or impossible due to closure) the risks of alternative routes must also be considered and taken into account. All changes to a specific crossing should consider the potential consequences of increased risk elsewhere.

7. The document is silent concerning the issues that may arise from different criteria as to what is reasonably practical as evaluated by the railways and others, in particular those concerned with highway safety. It is unclear how the ORR foresees this should be resolved.

8. In moving away from prescriptive standards, those who are responsible for level crossing safety must be sufficiently experienced and competent in order to properly exercise necessary judgements. PACTS recognises it was this need that gave rise to Network Rail’s appointment of Level Crossing Managers. The ORR and all rail operators who have level crossings on their network (i.e. not just Network Rail) need to ensure they have access to and maintain the necessary competencies and experience and that relevant learning is shared across the rail community. In other words, moving to a risk-based approach comes with additional responsibilities.

9. We were surprised the document does not refer to measures of enforcement of compliant use and ‘education’ of users; both of which can play an important part in the safety of level crossings. And in that context, we question why more level crossings are not fitted with surveillance cameras and prosecutions are not more prominent. It seems that others who should be consulted concerning mitigation of risk should be the police.

**10. Detailed Comments**

Page 5, para 1: what is meant by the term user-centred approach? Who are the users in the context of these principles?

Page 5 para 2: "Does not place additional burdens on duty holders".... but surely a meaningful duty to collaborate and follow through on commitments is new for both rail and highway duty holders. If not they duty collaborate is meaningless.

Page 5 para 5: is this risk management and collaborative obligation and role on highways duty holders sufficiently clear?

Page 6, para 11 states: ‘....you may also need to take account of other factors for level crossings where there are unusual circumstances’. The ORR might consider maintaining or requiring rail network operators to maintain a more comprehensive data base of solutions used on unusual circumstances so experience can be shared.

Page 7, para 13: this principle is welcomed but how it is going to be followed through into legislation, regulation, funding, budgets, etc. What is the Regulator’s responsibility for review, challenge and oversight?

Page 7, para 14: Consideration also will need to be given to foreseeable future developments taking

account for example of local development plans.

Page 8, para 22:

a) The documents do not make any distinction or give clarity about the absolute difference of acceptable levels of collective and individual risk and it should.

b) In terms of identifying hazards it should also mention consideration of the future hazards e.g. increased usage –see above comment re. page 7

Page 9, para 22: the document rightly mentions review of the effectiveness of controls but gives no

guidance. For example, this should be done at different times of day, lighting and weather conditions and known different usage (e.g. harvest time, when construction is taking place adjacent to the crossing etc.

Page 10, para 23: the example quoted is based on changing rail risk, however what about changing highway and road risk. Where is the onus to proactively identify such circumstances and then assess reasonable practicability? Also, what happens if the risk assessment objectively identifies that more cost-effective control measures should be applied to the highway/private road? What is the obligation to agree, fund and implement?

Page 10, para 24: user education/engagement and enforcement appear to be important foundation building principles that are missing. These are key to safe level crossing use; (see also our comment in over-arching comments above).

Page 10, para 26; this seems to imply the ORR does not support the reinstatement of Level Crossings on reopened railways with the implication that alternatives need to be specified and funded. However, the additional costs of such provisions could make a scheme non-viable and lead to a missed local societal safety, health and sustainability benefits. How would the ORR seek to address this issue?

Page 10, para 27: we believe it is important to mention also the multi-modal evaluation of risks to users presented by the alternative route they might take if the crossing is difficult to use or becomes closed.

Page 11, para 32: again, as per our comment at page 8 para 22 suggests there should be clarity concerning individual and collective risk.

Page 12, para 32: it is our understanding the ‘cost’ was all expressed in ‘currency or money... this para states:

..’ This should be weighed against the cost in money, time and trouble or effort of options to eliminate, reduce, or mitigate risk.’

Our understanding is that you have to value the ‘time and trouble or effort’ in money otherwise it is difficult to evaluate gross disproportion.

Page 12, para 35: mention is made here of the use in assessing health and safety benefits of the "value of preventing a fatality" (VPF). But since the objective must be to prevent or minimise all injuries, not only fatalities, we wonder if reference should also be made here to the use of the value of preventing "fatalities and weighted injuries" (FWIs) in risk assessment?

Page 12 para 35; the savings of the CBA should also mention saving in whole life costs.

Page 13, user principle 1: we propose this needs to recognise users with no/limited understanding of English language.

Page 13, user principle 1(c): other "users with particular characteristics which impact on their safe use of the level crossing" who may be worth mentioning include people walking in groups or processions, and runners in competitive races (both of which are categories of people which have been shown in real incidents to be less sensitive to Level Crossing risks).

Page 13, user principle 1(e): all slow vehicles are likely to be at greater risk, irrespective of whether they are accompanying livestock.

Page 13, user principle 1(g): the safety of private crossings being dependant on a party being having to brief all users on its safe use may no longer be credible and we urge the ORR and railway operators to recognise this and consider other (technical) solutions (see our over-arching comments above).

Page 14, user principle 2: we suggest you somehow identify all terms that are in the Glossary in italics and say so in the introduction e.g. ‘second train coming’.

Also we believe this section should include persons ‘misreading; or misunderstanding what they see or hear due to other physical factors eg lighting, misinterpretation of other physical features eg lights unassociated with the railway, and at the Beech Hill crossing (incident investigated by RAIB) an adjacent telegraph pole looked like a raised crossing boom.

Page 14, user principle 3: how does the ORR expect c) to be properly considered since this is a

complex matter and subject of research?

Page 15, user principle 4: The guidance does not mention the hazard of vehicles with a long distance between its front bumper and driver position and it should. The guidance does not mention the impact of nature of the waiting area on the users ability to hear any audio prompts.

Page 16, user principle 6; (c) should also mention the impact on audio eg train whistle at whistle-boards.

Page 17, user principle 8: (a) reasonable expectation should also be included here e.g. how

reasonable is it to assume/expect that users of a private crossing will always close a gate behind them when they know they will be crossing in the opposite direction after a short time?

Page 21 railway principle 6: consider adding ‘detection of a stranded vehicle’.

Page 21 railway principle 7: use of the phrase "livestock and other large animals, such as horses" invites debate as to whether or not the term livestock embraces horses anyway. We assume it does, but presumably singling them out for special mention eliminates the possibility of doubt.

Page 22 railway principle 8 (d): should this include consideration of self-closing gates?

Page 22, railway principle 9(a) and page 24, highway principle 5(a): you might add snow (whether

falling or lying) to fog and ice in this context.

Page 23, highway principle: we propose the following arrangements might be considered (where the road layout permits):

a) moving the road traffic signals and stop line back from the railway (say 20m+) and creating a yellow box ‘junction ‘ space (this will no doubt require a change in standards) . The current layout creates a temptation for users to "nip through" whilst barriers drop.)

b) further introduce red light detection cameras (as per normal traffic signals) and publicising penalty for red light running to deter others.

Page 23, highway principle 1: should "how users are enabled to communicate with the railway controller in case of emergency" be in this list, or is that simply one of several things that signage can be assumed automatically to cover?

What about advice to consider the road speed limit on approach of crossings that are not easily detected on approach?

Page 23, Move to railway principle: - There should be consideration of the crossing surface and the hazards that creates e.g. uneven rubber units which could cause an accident leaving an abandoned vehicle or injured person obstructing the crossing.

Page 23, highway principle 1(c): even though it is listed later in a glossary, we suggest avoiding the use of technical terms such as OLE without explanation

Page 24, highway principle 5 b): glare needs to take into account sun glare from adjacent buildings

/glass and wet roads etc.

Page 25, highway principle 5: add a) distraction/misinterpretation of other adjacent physical features e.g. the telegraph pole at Beech Hill (see comment concerning p14 above) potentially being misread as the crossing boom and b) maintenance of the environment so that audio prompts are not degraded e.g. business of adjacent roads, buildings between the crossing and the whistle board etc.

Page 28, glossary: the term "second train coming" is better expressed as "another train coming", because on busy routes there can be more than two.

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