



Level crossings

1. Executive summary

Level crossing safety remains a priority risk area for ORR. It is the area where many members of the public interact with the railway and level crossing use gives rise to significant potential for injury and harm. Although Britain's mainline railway is among the safest in Europe, level crossings remain one of the greatest risks to public and passenger safety, and a single major incident could result in significant human and economic loss.

There are just under 5,500 level crossings on the mainline rail network and an estimated 1,500 on heritage and minor railways. Responsibility for managing level crossing risk rests primarily with railway infrastructure managers, working with train operators, local authorities, highways authorities and users. Effective cooperation between these parties is essential, as level crossings operate within a wider system beyond the railway and have both safety and economic impacts.

Level crossing risk is evolving as conditions change and must be actively managed. Trains are generally more frequent, quieter and operate at higher speeds than in the past; road traffic volumes have increased; farm machinery is larger and better soundproofed; and pedestrian behaviour has changed, including increased distraction from electronic devices. Level crossings operate within a system that goes beyond the railway and they have an economic as well as safety impact.

ORR's strategy for regulating level crossing safety is informed by analysis of current risk and our judgement of what needs to be achieved. Central to this approach is continued improvement in risk management through the consistent application of high-quality level crossing risk assessment. ORR expects its guidance to be embedded in risk assessments across all sectors, with assessments undertaken by competent people who understand level crossing risks, control measures, and user behaviour and perception of risk.

ORR encourages research, innovation and the use of new technologies to improve risk control and widen the range of reasonably practicable options available. We will target our regulatory activity on the highest-risk areas, particularly on the mainline railway, including passive footpath crossings, user-worked crossings and automatic half-barrier crossings, and will drive the consistent application of Network Rail's level crossing strategy for 2019 to 2029.

Closure of level crossings should be the first option considered in a risk-control strategy, in line with the principles of prevention. We recognise that closure decisions require careful consideration of alternative routes, legal rights of way and the potential transfer of risk, and that others are best placed to make these judgements. Where closure is not reasonably practicable, alternatives to level crossings and improved protection must be fully explored.

ORR does not support the creation of new level crossings where there is a reasonably practicable alternative, as new crossings introduce additional risk to the railway and its users. We will continue to provide assurance that dutyholders are managing level crossing risk effectively and will intervene where necessary to secure sustained improvements in safety.

ORR's strategic intent for level crossings



- ✓ Ensure continuous improvement in risk management
- ✓ Promote competent, behaviour-informed risk assessment to support decision-making
- ✓ Encourage research, innovation and new technologies to improve risk control
- ✓ Target ORR interventions on the highest risk areas
- ✓ Drive consistent application of Network Rail's level crossing strategy (2019–2029)
- ✓ Expect closure, or a reasonably practicable alternative, to be considered first in risk-control strategies
- ✓ Discourage new level crossings where a reasonably practicable alternative exists

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