



TRANSPORT AND WORKS ACT 1992

**TRANSPORT AND WORKS (INQUIRIES
PROCEDURE) RULES 2004**

**THE NETWORK RAIL
(CAMBRIDGESHIRE LEVEL CROSSING
REDUCTION)
ORDER**

SUMMARY

PROOF OF EVIDENCE

-OF-

ELIANE ALGAARD

Document Reference	NR28/3
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1. INTRODUCTION

1.1 My name is Eliane Algaard. I am employed by Network Rail as the Director Route Safety and Asset Management (DRSAM) on the Anglia Route ¹, responsible for overseeing all safety and asset management activities throughout the region. I am a Chartered Civil Engineer with over 20 years' experience in strategic planning and infrastructure asset management in the Water and the Rail sectors.

1.2 It is my role to actively drive the project to deliver the safety, maintenance and efficiency savings that the project set out to deliver.

1.3 The Network Rail national strategy for risk reduction is set out in the evidence of national strategic evidence of Mark Brunnen.

1.4 I will focus on the Anglia region and provide evidence on the following topics:

- Level crossings in Anglia
- Management of level crossings in Anglia
- Safety impacts
- Operational impacts
- Capacity and network development
- Anglia level crossing strategy
- General approach to selection of level crossings for closure
- GRIP process and consultation
- "In principle" objections
- Statement of Truth

1.5 Separate witnesses will provide more detail behind the site specific considerations for each level crossing and the diversion routes proposed. Andrew Kenning's evidence addresses the detail of the selection process of crossings for closure in this Order.

2. EVIDENCE

2.1 Level crossings in Anglia

¹ Network Rail has devolved day-to-day responsibility for railway businesses to eight strategic geographical routes. Anglia Route covers five main corridors through Greater London, Cambridgeshire, Essex, Norfolk and Suffolk

- 2.1.1 Anglia Route currently has 771 level crossings,² where the public, landowners, contractors, passengers and/or statutory undertakers cross, or could cross, the railway on the level. There are 233 level crossings in the highway authority area of Cambridgeshire, covered by this Order.
- 2.1.2 This Order includes 10 User Worked Crossings, 16 public footpath or bridleway crossings, 4 public road crossing and 25 passive crossings requiring the user to decide for themselves if it is safe to cross.

2.2 Management of Level Crossings

- 2.2.1 The management of level crossings represents a significant staffing cost. Anglia route is divided into 14 Level Crossing Manager (LCM) zones. Each zone has between 50 and 76 level crossings with about 61 on average.³
- 2.2.2 The frequency of inspection varies by the type of level crossing, from a maximum inspection interval of 7 weeks for controlled crossings, to 6 months for footpath and bridleway crossings.
- 2.2.3 The reduction in the number of level crossings that needs to be managed will result in a reduction in headcount from 14 to 13 Level Crossing Managers. This would represent a saving of approx. £40,000 per annum for the removal of one Band 4 role.⁴
- 2.2.4 In addition to the LCM staffing costs, the assets themselves represent a significant ongoing cost to maintain the status quo.
- 2.2.5 If the Cambridgeshire Order is implemented, it would represent a like for like renewals cost saving of £3,311,150 over a 30 year period.
- 2.2.6 In addition to the renewals costs in the Cambridgeshire Order, the implementation of the Transforming Level Crossings strategy (NR17), with the elimination of passive level crossings, would result in a minimum capital saving of £15,063,675 over a 30 year period. These estimates are based on the costs contained in the CP6 cost model (NR26, Appendix D).
- 2.2.7 Further, the Cambridgeshire Order would also provide a saving of £5,801,760 in asset inspections and general maintenance over a 30 year period. This is based on the frequency of inspections outlined in NR21.

2.3 Safety impacts

- 2.3.1 Risks are not equally distributed amongst level crossings. The risk at each crossing is quantified using the All Level Crossing Risk

² As at 02/08/2017. This includes the following recent amendments: reclassification of Tip Sidings (MAH) as Internal Railway, recognition of Haltermann Carless as a level crossing, and closure of Northumberland Park.

³ Note that this figure counts hybrid crossings, such as a UWC with a footpath through separate wicket gates, as 2 crossings.

⁴ Level Crossing Manager minimum salary: £32,256 (transparent pay grade 4B) + employer's pension contributions, NI, expenses etc.

Model (ALCRM), explained in more detail in Mark Brunnen's evidence.

- 2.3.2 The Cambridgeshire Order provides a risk reduction (FWI) saving of 0.030. When considered with the Essex and Suffolk Orders, the cumulative risk reduction is 0.168.
- 2.3.3 Across Anglia route in the financial year of 2016/2017, there were 567 recorded incidents of deliberate misuse/user human error, 79 near misses and 29 incidents of users not calling the signaller back when requested.

2.4 Operational impacts

- 2.4.1 In the event that a level crossing inspection identifies a defect or a non-compliance Network Rail staff will work together to complete any repair works required to bring the level crossing back up to a safe standard.
- 2.4.2 In the event of reported incidents it may be necessary to caution or stop trains, which has an impact on performance and reliability.
- 2.4.3 When certain track maintenance operations are performed, it is necessary to arrange a temporary closure of the level crossing. Diversion to grade-separated routes eliminates many of the occasions when temporary closure is required.
- 2.4.4 In addition to the asset inspections, the Level Crossings Managers have to carry out risk assessments.
- 2.4.5 There are a number of level crossings where Network Rail has eliminated the risk by closing them temporarily due to the crossing having non-compliant sighting, or because the furniture at the level crossing does not allow safe ascent and descent of the embankment or cutting necessary to reach the crossing.
- 2.4.6 Within the Cambridgeshire Order there are 2 level crossings that are temporarily closed. In all cases Network Rail is seeking to extend the closures until such time that the level crossings can be closed through powers granted as part of the Order.
- 2.4.7 Network Rail has a statutory duty, as outlined in the proof of Mark Brunnen, to run an efficient railway. Level crossings are a significant risk to timetable resilience, where any asset failures or incidents can lead to train delays. Only by removing these interface points through the rationalisation of the level crossing network can we entirely remove this risk to the efficient and effective timetabled service.

2.5 Capacity and Network Development

- 2.5.1 Outside London, Anglia has the fastest growing employment in England, and in effect our services connect millions of people to city, town and country in a fast-growing region, vital to the City of London, and a gateway to three major UK ports and airports in

London and the South East. The investment we are making as part of our current Railway Upgrade Plan seeks to improve passenger services and help deliver economic growth, reduce environmental impact and regeneration of communities.

- 2.5.2 Level crossings act as a constraint to any future enhancement scheme.
- 2.5.3 Fewer level crossings on a stretch of line means fewer sites requiring risk assessments, and fewer crossings requiring potential upgrades or closures to accommodate enhancements to the railway service.
- 2.5.4 At Appendix TAB 1 (NR28/2), I set out prospective network enhancement schemes which are linked to the crossings in the Order. I note that none of these schemes are at present funded through to completion, and the details of the schemes may change. It will also be noted that at present, some of the crossings cannot be linked to an identified enhancement scheme. However, the table is indicative of the benefits of closure for future network enhancement.

2.6 Approach to the selection of level crossings for closure

- 2.6.1 On the commencement of Control Period 5 (CP5), in addition to the focus on the highest risk level crossings, Anglia Route also sought to obtain powers to rationalise the number of level crossings across the region through the closure / downgrade of multiple crossings, which is documented in the Anglia Crossing Reduction CRD (NR18).
- 2.6.2 This Order progresses level crossings that fall within phases 1, 2 and 4 of that CRD. These phases are being progressed first due to the minimal infrastructure investment required.
- 2.6.3 Network Rail identified this opportunity to rationalise level crossings, improving the resilience of the network, improving user safety and delivering better value for money through identifying where existing infrastructure could be utilised in the first instance for alternative diversionary routes.
- 2.6.4 In these cases the installation of costly new infrastructure, including bridges and underpasses, cannot be justified, when existing infrastructure can be utilised to deliver the same benefits at a fraction of the construction cost.
- 2.6.5 Network Rail will continue to progress schemes that utilise new technology to improve safety at level crossings, but this approach does not remove the safety risk or constraint on future growth on the network. It also requires a cost outlay for installation and an ongoing maintenance burden.
- 2.6.6 I consider that Network Rail's approach is consistent with the National Planning Policy Framework and with Cambridgeshire County Council's relevant plans, strategies and policies.

- 2.6.7 I consider that Network Rail's approach is consistent with the recommendations of the House of Commons Transport Select Committee in their report "Safety at level crossings"⁵.

2.7 GRIP process and consultation

- 2.7.1 Governance for Railway Investment Projects (GRIP) is Network Rail's project management and control process for delivering projects on the operational railway. It is mandatory for all projects. The approach is based on industry-wide best practice.
- 2.7.2 At GRIP stage 1 in 2015, Network Rail, with the support of design consultants Mott MacDonald, assessed the suitability of each of the level crossings that were initially placed in phases 1, 2 and 4.
- 2.7.3 In April 2016 Network Rail and our selected design consultants continued the development of the level crossing proposals.
- 2.7.4 The proof of evidence of Andy Kenning will go into more detail on the development works.
- 2.7.5 Network Rail recognises the importance of engagement and carried out 3 rounds of public consultation.
- 2.7.6 Consultation with private landowners affected directly or indirectly by the plans continued through to deposition.
- 2.7.7 The Statement of Consultation (NR05) contains further details on the consultation undertaken.

2.8 Address "in principle" objections

- 2.8.1 Cambridgeshire County Council (OBJ/12) the Ramblers (OBJ/26) and the Cambridgeshire Local Access Forum, CLAF (OBJ/52) make a number of general objections to the Order. Network Rail's case for closure of the crossings is set out in the Statement of Case (NR26). Furthermore, the need for closure is not just centred on safety.
- 2.8.2 The question of whether the Transport and Works Act 1992 is the appropriate process for securing the powers in the Order is primarily a matter of law. However, I note that the strategic case for pursuing the Order is based both on the operational efficiency of the network, and its overall safety.
- 2.8.3 Network Rail fully appreciates the benefits of Public Rights of Way (PRoW) for health and wellbeing. Network Rail has sought to maintain the local network, which is demonstrated by the volume of new paths and ways being proposed for creation in the Order.
- 2.8.4 Under the Order, Network Rail will not be closing any level crossings until the alternative routes are open and available for use.

⁵ House of Commons Transport Select Committee Report (March 2014):
<https://publications.parliament.uk/pa/cm201314/cmselect/cmtran/680/680.pdf>

- 2.8.5 Cambridgeshire County Council (OBJ/12) also makes a general objection to all proposals included in the Order until commuted sums are agreed with the Council. Network Rail will continue to work with the Council and seeks to agree principles on commuted sums to cover the increased maintenance burden on the Highways Authority. The Council is further protected by the provision in the Order that no new PRow can come into effect until it has been completed to the reasonable satisfaction of the Highways Authority.
- 2.8.6 The National Farmers' Union (OBJ/43) make a general objection in terms of potential impacts on access to land, implications for farming businesses and adequacy of consultation. Network Rail's consultation complied with the legislative requirements of the 2006 Rules. Where Network Rail is proposing an alternative route on farmland, it is considered that the route is required, suitable and convenient.
- 2.8.7 The Environment Agency (OBJ/31) was concerned about the content and scope of the protective provisions in the draft Order for the protection of the Environment Agency. Network Rail is in discussions with the Environment Agency regarding the form of the proposed protective provisions.
- 2.8.8 The Royal Mail Group (OBJ/44) make a general objection on the grounds that their operational and statutory duties to collect and deliver mail may be adversely affected. The street works in the Order are very limited in extent and expected to be of short duration, which will only have a limited impact on Royal Mail.