



**TRANSPORT AND WORKS ACT 1992**

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

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

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**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, responsible for overseeing all safety and asset management activities throughout the region.

**1.2** I am the client for the Network Rail (Suffolk Level Crossing Reduction) Order. This means that I agree the scope of works to be progressed and make key decisions throughout the course of the project's development. 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 to the Order

**1.5** Andrew Kenning, Susan Tilbrook and John Prest 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**

**2.1.1** Anglia Route currently has 771 level crossings, where the public, landowners, contractors, passengers and/or statutory undertakers cross, or could cross, the railway on the level. There are 188 level crossings in the highway authority area of Suffolk, of which 23 are included in this Order.

- 2.1.2 This Order includes 22 public footpath, bridleway or byway crossings and 1 permissive footpath level crossing. All of the crossings in this Order are 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.
- 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 Suffolk Order would provide a saving of £4,777,920 in asset inspections and general maintenance over a 30 year period.
- 2.2.4 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.
- 2.2.5 If a complete renewal of the assets were required, this would represent a renewals cost saving of £1,960,200 over a 30 year period.
- 2.2.6 In addition to the renewals costs for crossings contained in the Suffolk 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 £8,884,000 over a 30 year period. These estimates are based on the costs contained in the CP6 cost model (NR26, Appendix D).

## **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 Model (ALCRM), explained in more detail in Mark Brunnen's evidence.
- 2.3.2 The Suffolk Order, if approved, would provide a risk reduction (FWI) saving of 0.018. When considered with the crossings contained in the draft Essex and Cambridgeshire Orders, the cumulative risk reduction would be 0.167.
- 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 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.
- 2.4.5 Within the Suffolk order there are 2 level crossing that is temporarily closed due to safety concerns.<sup>1</sup> In this case Network Rail is seeking to extend the closure until such time that the level crossing can be closed through powers granted as part of the Order.
- 2.4.6 Network Rail has a statutory duty, as outlined in the Proof of Evidence 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 and the strategic business plan we are developing for 2019-2023 as part of the Periodic Review 2018 process 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 and lower the resilience of the railway line.
- 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. The significant costs associated with these assessments and upgrades are detailed in Section 2.2 of my proof.

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<sup>1</sup> S02 Brantham High Bridge and S23 Higham. S29 Hawks End is also closed under TTRO but not as a result of an application by Network Rail

- 2.5.4 I set out prospective network enhancement schemes which are linked to the crossings in the Order in Tab 1 of my Appendices (NR28/2). I note that none of these schemes are at present funded through to completion, and the details of the schemes may change. The table is indicative of the benefits of closure for future network enhancement. The details of the schemes referred to are set out in the Statement of Case (NR26).

## **2.6 Approach to the selection of level crossings for closure**

- 2.6.1 The detailed evolution of the proposals in the Order is explained in the evidence of Andrew Kenning and Susan Tilbrook. I provide a high level overview only
- 2.6.2 Historically level crossings with the highest risk ratings and FWI were selected for closure. This would typically involve construction of bridges and/or significant levels of compensation to third parties.
- 2.6.3 On the commencement of Control Period 5 (CP5) and with a renewed focus on trying to achieve further risk reduction at level crossings, Anglia Route considered a new approach to reducing risk across its level crossing portfolio: targeting a large number of level crossings, where a solution could be implemented at a lower cost than would be involved in the construction of new infrastructure. This is documented in the Anglia Crossing Reduction CRD (NR18).
- 2.6.4 This Order progresses level crossings that fall within phase 1 of that strategy. This phase is being progressed first due to the minimal infrastructure investment required.
- 2.6.5 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.
- 2.6.6 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.
- 2.6.7 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.
- 2.6.8 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.

## **2.7 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 The detail of the GRIP process and consultation is addressed in detail the evidence of Andrew Kenning. I provide a high level overview in section 7 of my Proof.
- 2.7.3 Network Rail recognises the importance of engagement and carried out a series of public exhibitions to gather and review feedback that was considered in developing the proposals contained in the draft Order.
- 2.7.4 Consultation with private landowners affected directly or indirectly by the plans continued through to deposition and again informed the development of the proposals contained in the draft Order.
- 2.7.5 The Statement of Consultation (NR05) contains further details on the consultation undertaken.

## **2.8 “In principle” objections to the Order**

- 2.8.1 Suffolk County Council (OBJ/29) the Ramblers (OBJ/36) and the Suffolk Local Access Forum, SLAF (OBJ/23) raise 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), my evidence and that of Mark Brunnen. I emphasise that case for closure is not just centred on safety, but on a number of benefits to operational efficiency, including reliability, cost savings and resilience, and to development of network capacity and enhancement.
- 2.8.2 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.
- 2.8.3 Suffolk County Council (OBJ/29) also raises a general concern in regards to the increased maintenance burden on the Highway Authority and the need for new routes to meet appropriate standards. 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..
- 2.8.4 The Environment Agency (OBJ/51) has expressed concerns 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.
- 2.8.5 The Royal Mail Group (OBJ/52) 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.

## **2.9 Conclusion**

- 2.9.1 As I set out in my proof, the case for pursuing this Order is not limited to improvements in level crossing safety alone. Through the application for the Order, Network Rail seeks to rationalise the level crossing estate within Suffolk, thereby proactively enabling improvements to the operational and financial efficiency of the railway. In this way, the Order will allow available resources to be concentrated onto those crossings that are most in need of enhancement, whilst also removing constraints from the network for further capacity and line speed developments. It will therefore assist Network Rail in fulfilling its Licence conditions and meeting the objectives set out in Government, ORR and internal Network Rail policy, as well as supporting the aims set out in Suffolk County Council's own policies for the region.