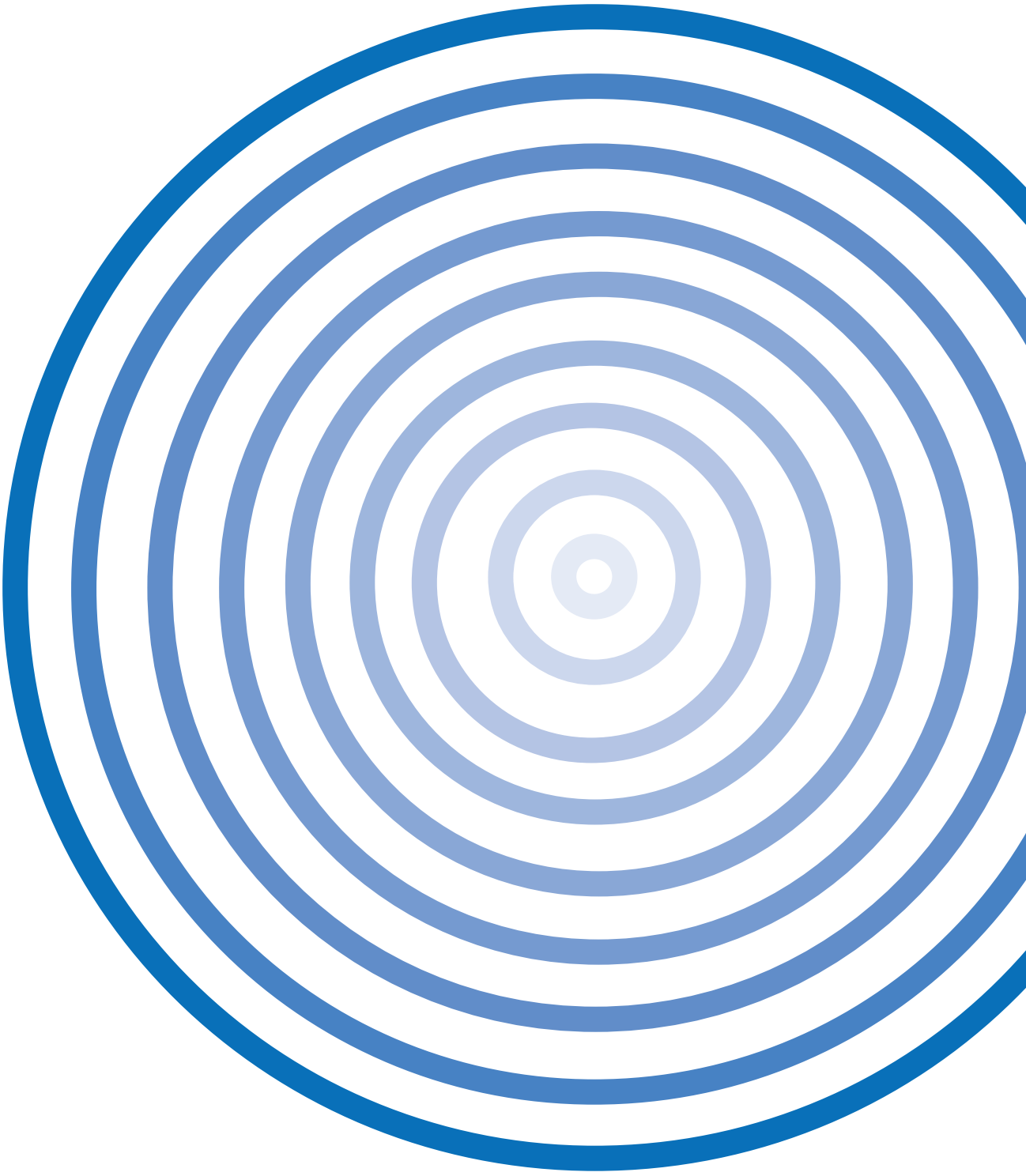
Office of Rail Regulation

Independent Reporter Services (Part C)

Quality Review of Glasgow-Kilmarnock Line

Executive Summary



Part C Reporter Mandate Ref CN/003 26 November 2009

NICHOLS

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Introduction

During September – October 2009, the Independent Reporter (Part C) (the Reporter) undertook a review of the Glasgow-Kilmarnock Line under Part C Reporter Mandate Ref CN/003 'Quality Review of Glasgow-Kilmarnock Line' (issued by the ORR on 7 August 2009). The Glasgow-Kilmarnock Line is a generic term used to describe the project in the Network Rail CP4 Delivery Plan (June 2009 update) under '32.04 Project definition - Glasgow to Kilmarnock enhancement'. The Glasgow-Kilmarnock Line project aims to deliver a half-hourly passenger service between Glasgow Central and Kilmarnock Stations by December 2009.

The objectives of this mandate were to conduct a review of the quality assurance processes for this project relevant to developing high quality engineering solutions that consider life cycle costs, and to consider whether the final engineering solution is in line with accepted good practice relevant to delivering low life cycle costs. This technical review was undertaken for civil engineering and permanent way assets.

Approach

Following a 'kick-off' meeting with Network Rail and the Glasgow-Kilmarnock Line Project Team on 10 September 2009, the Reporter's team reviewed Network Rail's available documents and met selected members of Network Rail in Scotland and representatives from Transport Scotland and First ScotRail. Information was gathered, analysed and assessed in a review team workshop. The initial findings and recommendations were presented to the ORR and Network Rail on 19 October 2009. A draft report was submitted to the ORR and Network Rail on 22 October 2009 and their comments have been incorporated, as appropriate, in this final report.

The Glasgow-Kilmarnock Line

To provide future passenger capacity on the Glasgow-Kilmarnock Line, the principal objectives of the project are to deliver a half-hourly service between Glasgow and Kilmarnock and to provide associated infrastructure enhancements to enable 6-car stopping on the route. The present timetable affords a half-hourly service from Glasgow to Barrhead, and a one-hourly service from Glasgow to Kilmarnock.

The core objectives of the scheme are to deliver:

- a twin-tracked section of railway between Lugton (13 miles 1120 yards) and south of Stewarton (19 miles 338 yards) capable of supporting operation of half-hourly passenger services between Kilmarnock and Glasgow
- completion of the infrastructure works to enable the improved train service to be commenced in the December 2009 timetable update.

The full scope of works is set out in 'Network Rail CP4 Delivery Plan 2009 Enhancement programme: statement of scope, outputs and milestones June 2009' (the CP4 Delivery Plan) under '32.04 Project definition - Glasgow to Kilmarnock enhancement'.

Findings

Network Rail's processes for capturing, analysing and testing requirements are suitable for a project of this nature.

Design development has been subject to a suitable level of review, assessment and interdisciplinary checking.

It was observed that the governance arrangements in place between Transport Scotland and Network Rail prior to the project's transfer to the RAB were not formally concluded. The change control mechanism provided by Network Rail to reflect the arrangements in the CP4 Delivery Plan do not appear to align fully with the draft change control arrangements presented as existing between Network Rail and Transport Scotland. It is understood that Network Rail is currently undertaking work to clarify the change control mechanism for CP4 schemes.

Requirements definition and acceptance processes consider future impact on maintenance and performance, but do not provide guidelines for the financial assessment of whole life cost impact.

Value management and change control processes do not provide guidance as to the assessment of impact upon whole life cost.

The completed civil engineering works are entirely conventional in construction and should require no special maintenance or operational processes.

Network Rail is able to exercise most influence over the assets' whole life costs during the project lifecycle up to the conclusion of single option development (the end of GRIP Stage 4). Therefore the contractor's and its designer's ability to influence the whole life cost of the asset after this, during the detailed design phase, is limited.

Significant changes to permanent way formation and drainage design, and Stewarton Station civil engineering design resulted from a full ground investigation and topographical survey during the detailed design phase.

Recommendations

The quality review's recommendations reflect the works undertaken during the project's development and will not now impact upon the output of the scheme itself. They are provided as guidance for future schemes across Network Rail. The review team's principal recommendations are that:

- Network Rail should develop a framework for the assessment of whole life costs, which should be balanced against the GRIP stages
- Network Rail should give consideration to developing positive controls processes to ensure that value management and change events give consideration to the potential impact on whole life costs
- consideration be given to provision of greater detail within topographical and site investigation surveys prior to or during the tender process for design and build works
- Network Rail considers potential options to introduce a commercial incentive mechanism to its fixed-price contracts, which would allow contract savings to be achieved as a result of the contractor undertaking value engineering
- the development of governance arrangements for future projects in Scotland should consider the respective roles of Network Rail, Transport Scotland and the ORR in relation to change control.

Conclusions

Overall, we found that the project has been successfully delivered within tight timescales and has overcome significant challenges. One such challenge being the disruption to the project caused following the unrelated freight derailment incident on the route. The new timetable services are programmed to commence in December 2009 in line with the project schedule and it is our opinion that Network Rail has delivered the CP4 commitments made for the Glasgow-Kilmarnock Line.

We could not, however, find evidence of a structured approach to achieving minimum whole life costs. The opportunity exists to provide additional project controls within the GRIP process to guide project teams in the assessment of whole life costs and in taking decisions associated with them. In addition, there is an opportunity to enhance the project governance

arrangements in Scotland, to define better the respective inputs from Transport Scotland, Network Rail and the ORR.