



# **Esk Valley Railway Development Company**

## **WHERE'S THE PLAN?**

**A report on the current status of the Section 106 funding available to improve the infrastructure of the Esk Valley line.**

**December 2020**

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### **A Review of the current status of the Section 106 funding available to improve the infrastructure of the Esk Valley line.**

It is widely assumed that the poor rail service on the Esk Valley Line is a legacy of the Beeching era. Not so. The service survived the Beeching Report intact and was then recommended for development, but along with others in the north east was instead summarily reduced by half to just four trains a day without any consultation in 1991, just prior to rail privatisation.

With major developments in tourism and industry since then, and backed by two Parliamentary Select Committee reports identifying the service as the worst in the country and as a barrier to social and economic regeneration, it has been a major objective of the Esk Valley Community Rail Partnership (EVRDC) to campaign for the restoration of the service level to at least eight trains a day, or roughly two-hourly.

#### **York Potash**

As part of this, EVRDC lobbied for inclusion of improvements to the rail service to be included in the Section 106 funding provisions in the then York Potash planning application to North York Moors National Park in 2014 for a mine near Whitby. The Partnership worked with York Potash to develop and produce a detailed proposal that would improve the capacity of the line to allow the required eight trains a day. This involved the introduction of a passing loop, possibly in the Sleights area, to split the long signalling section between Glaisdale and Whitby, and the automation of points at Grosmont and Whitby. York Potash were supportive and in 2015 commissioned ARUP to review and confirm the technical and operational feasibility of the EVRDC proposals. ARUP reported that from both perspectives the EVRDC proposals were feasible, with some challenges, at an indicative cost of £4.2 million.

In 2015 York Potash gained planning permission for the proposed new mine. As the relevant transport authority, the Section 106 agreement with North Yorkshire County Council included provision of £3.75 million to provide the infrastructure necessary to accommodate eight trains a day in each direction between Whitby and Middlesbrough without adversely affecting up to five existing North Yorkshire Moors Railway services a day, plus a £0.75 million contribution to the design and development of these works, a total of £4.5

The proposed improvements were widely supported by local interests, as a means of ameliorating the expected adverse effects of increased road traffic on the A171, as improving the tourist attractions of both the National Park and Whitby itself, and to begin to address the problem of Whitby as “an isolated urban environment in a rural setting” identified in two House of Commons Select Committee Reports.

There was therefore a widespread expectation that, with an agreed outline proposal and funding in place, there would be an immediate progression to detailed planning leading to construction.

## **Enter NYCC**

Instead NYCC, against EVRDC advice, commissioned their consultants WSP to undertake a further feasibility study “to identify what constraints exist on the current infrastructure and operations that limit the number of trains per day and what infrastructure investment options are available to remove those constraints or minimise their impact” at an estimated cost of £50,000. This seemed to many in the community to be ‘going round the houses again’ unnecessarily, creating further delay and incurring additional cost. Nevertheless, EVRDC reluctantly agreed but at its request, specific additional objectives included ‘Achieving end to end journey time improvements’ and to ‘seek innovative solutions to allow access to further funding’.

EVRDC was also concerned that in its letter of 10 February 2017 to NYCC, WSP stated:

*“Due to the nature of the signalling on the line (No Signalman Token Remote), we believe that any significant alterations to the signalling to achieve improved capacity will be cost prohibitive”.*

This appeared to grossly prejudge the possibility of signalling innovation without any supporting evidence, and EVRDC raised the issue at the subsequent Stakeholders Workshop on 9 March 2017. The record of that meeting states:

*2.4: There is potentially additional funding available from elsewhere to top up the £3.75m S106 allocation; e.g. from Northern Innovation Fund, Coastal Communities Fund. Therefore, options should be developed that are fit for purpose, rather than restricted to a limited budget. Options may also take a phased approach, whereby the S106 buys the initial intervention, with additional funding ‘buying’ another incremental step.*

*2.5: It was noted that Journey Time Improvement was not a stated objective. This is the highest priority COS objective, and is likely to be necessary to achieve the primary objectives anyway.*

And further:

3.18: *Signalling solutions are to be considered, particularly on the Grosmont to Whitby Section....*

3.19: *It would be an option to have following trains through the single line section. Digital Railway/RETB solutions to be considered.*

### **The need for modern signalling**

The reason for these requests was that, from the outset, EVRDC wanted to ensure that any upgrade of the line included improvements to the method of signalling. At present, the 'No Signaller Key Token (NSKT) system relies on tokens issued by the signaller at Nunthorpe to drivers there and remotely from machines at Battersby, Glaisdale and Whitby to Northern drivers and at Grosmont and Whitby to NYMR drivers. The system has been in use unchanged since Victorian times and the Esk Valley line is one of the very few on Network Rail on which it still remains in use. It is safe but operationally inflexible and time consuming. Each token exchange takes an average of between 3 and 4 minutes, adding at least 8 minutes to the overall journey time. In addition, if trains need to pass at Battersby, there is a further delay of around 13.5 minutes to one of the two trains. The system is not popular with drivers, particularly in inclement weather, because of the need to leave their cabs to use the token machines on platforms, nor with passengers who perceive unnecessary delays to their journey. It is also, because of its age, subject to failure and inevitably exposes Northern and NYMR operating staff to greater risk than modern systems.

EVRDC was also concerned that, by adding further token machines at Grosmont as was being proposed, an outdated system would be perpetuated and extended and far from reducing the overall journey time, a further 3-4 minutes would be added to all services, even in the winter months when no NYMR services operate.

The present era of multiple aspect colour light signalling common throughout most of the national rail network has not touched the Esk Valley line and is now proving increasingly expensive to maintain or renew. Conventional thinking in the railway industry therefore is that future resignalling will be radio based with either the European Train Control System (ETCS) or, on lesser used lines, the simpler and cheaper Radio Electronic Token Block system (RETB) as already in use in Scotland.

Both systems rely on 'distance to go' information transmitted direct to the driver and do away with virtually all lineside equipment and are therefore expected to be cheaper to operate and maintain than systems currently in use.

Both are already in use on NR and, because of the ability to vary the ‘distance to go’ according to prevailing operating requirements, would embrace the proposed track alterations and could be expected to reduce journey times even without any increase in line speed. Such increased flexibility also enables much greater access to the line by Network Rail and its contractors for maintenance and offers opportunities for upgrading some of the many level crossings on the line. Of the two systems, ETCS is more complicated as it is intended for higher speed, more intensively used lines, and is therefore relatively more expensive. The current NR resignalling programme runs to 2060 and may in the event exclude the bottom 30 percent of lines by use, so on both counts is unlikely to reach rural lines like the Esk Valley anytime soon, if ever. That is why Scotrail recently opted instead for the latest version of RETB for installation on its rural lines in Western and Northern Scotland which have very similar operating characteristics to the Esk Valley Line.

### **First draft report**

Following a series of meetings of a working group including Tees Valley Combined Authority, Network Rail, Northern Rail, North Yorkshire County Council, North Yorkshire Moors Railway and EVRDC, after some delay WSP produced a first draft Feasibility Report in July 2017.

It again supported the original EVRDC proposals of 2014 to divide the Glaisdale-Whitby block section and to motorise points at both Whitby and Grosmont, but because it had become clear Northern were proposing to work the Whitby service as an extension of the Nunthorpe – Newcastle service rather than a stand-alone Whitby – Middlesbrough shuttle as previously, timetable work had shown Battersby to be the most acceptable passing place rather than a loop in the Sleights area. EVRDC supported this change as it had already identified Battersby as an option and the original Sleights proposal was dropped.

But the draft was disappointing in that it did not therefore consider similar provisions at Battersby, thus implying retention of the unacceptably long dwell time for one train when passing another there. More importantly, it did not respond to the request to seek innovative solutions to the signalling system, instead dismissing the option with:

*‘the NSTR signalling system is inconvenient and time consuming. However, it is acknowledged that upgrading to a modern signalling system is cost prohibitive’*  
No evidence was advanced to substantiate this clearly subjective view, with which EVRDC, based on advice both from the signalling profession and Scotrail, disagreed.

Instead, the Report proposed the installation of additional token instruments at Grosmont, incorrectly stating:

*'main line (presumably Northern) train crew have no additional duties to perform.'*

In fact, as EVRDC stressed again, because there would be additional token instruments there, the driver of every train would need to perform a token exchange, with an additional time penalty of 3-4 minutes, even in the five months of the year when no NYMR services operate. Far from accelerating journey times, together with the extended dwell time at Battersby, this would lengthen the current overall journey time by 3-4 minutes for all trains at Grosmont and by a further 10 minutes at Battersby for half the trains, thus extending the overall currently 90 minute journey time by up to 14 minutes.

EVRDC therefore rejected these proposals as clearly unacceptable, especially as, ironically, in contrast to this disbenefit, NYMR services would appear to benefit by around 8 minutes as a result of the motorisation of the points, almost the exact opposite of the intention of the Section 106 funding.

EVRDC referred to the Minutes of the 9 March 2017 meeting and again requested that costed options of a modern, possibly RETB, signalling system, which would provide reduced running times for both Northern and NYMR services be investigated. It was noted that adoption of RETB would potentially provide operational and maintenance savings for Network Rail.

The draft also included several other factual errors which EVRDC asked to be corrected.

## **Second draft report**

A second draft report was produced by WSP in November 2017. It was immediately clear that no action had been taken in response to the EVRDC requests.

The paragraph referred to above was merely changed to:

*'whilst it is acknowledged that upgrading to a modern signalling system is cost prohibitive, there may be innovative solutions that are lower cost and provide a suitable solution.'*

But again, no evidence was advanced to support the original statement, nor that the innovative solutions EVRDC had suggested 'may be suitable' had been or should be explored. Likewise, the incorrect statement that the installation of an additional token instrument at Grosmont would not require any additional duties for Northern train crew to perform remained, although in direct contradiction the

3-4 minute time penalty due to drivers having to leave their cabs and work the additional token machine in each direction was now acknowledged as:  
*'the potential detriment to Northern Services should be noted and mitigated against if possible'!*

No proposal was advanced as to how this might be achieved. NYCC subsequently proposed that unidentified time savings from linespeed improvements should be used to offset this detriment. EVRDC opposed this on the grounds both that the time savings had not been identified and that any linespeed improvements should in any case contribute to shortening the overall journey time as identified as the 'highest priority' in the original brief, not merely to offset a disbenefit to Esk Valley services simply to benefit NYMR services, which was clearly not the intention of the Section 106 funding.

Puzzlingly, this draft also did not take forward the proposals for infrastructure improvements at Battersby in the earlier version, even though it had identified this location in its timetable work as the preferred place for trains to pass and had acknowledged that otherwise:

*'the long duration of now 9 minutes delay would remain for one of every two trains passing there.'*

Following publication of the second draft, EVRDC expressed concern that, while it still supported the original concept of motorising the points at Whitby and Grosmont, the benefit of the passing loop element of this proposal (now, as a result of timetable planning, potentially Battersby) had been lost, and that as framed the proposals would disbenefit rather than improve Esk Valley Services. It also noted that the costs to Northern and Network Rail of these disbenefits appeared not to have been calculated.

Meanwhile, EVRDC, at the invitation of contacts within the signalling industry and with Scotrail, had explored RETB in greater detail and were satisfied that the system was a real option both operationally and financially. The North Yorkshire Moors Railway has since also accepted this invitation and reports that it is highly impressed with the latest version of RETB, some aspects of which would reduce their costs. Specifically, it was also able to allay fears that RETB equipment could not be fitted to steam locomotives

EVRDC yet again requested that the potential of the RETB system as in use on lines in Scotland, and which could potentially address all the issues identified, as well as replacing the present outdated token block system, be properly addressed, including indicative costing. It urged that NYCC and NR representatives respond to the invitation to attend an initial presentation of RETB at Park Signalling in Harrogate. However, it appears they have not done so.

EVRDC has also been keen to explore other sources of funding, including now the DfT ‘Restoring your Railway’ scheme but in response, NYCC officials stated that it was not possible to use the Section 106 funding as part of a possibly larger project, although no evidence was advanced to support this claim, which is at odds both with the original funding agreement, which specifically allows for it, and with the views expressed by both DfT and the Chief Executive NR. Instead, the objective was to ‘get the existing money spent as soon as possible’ – a strange priority for spending on a project which could have a profound effect on the operation of the Esk Valley line for many years ahead.

### **Still not listening**

Sadly since then it appears that, despite EVRDC being the DfT designated Partnership for the line and having been the progenitors of the scheme and contributed much effort and expertise to its development, NYCC has chosen to exclude both EVRDC and NYMR from any further discussions on these issues. EVRDC is not therefore aware of the final recommendations of the WSP Report, which NYCC decline to publish, or whether any of the issues identified have subsequently been addressed, although worryingly the proposals outlined at a public meeting in Lealholm called by NYCC in September 2019 showed no acknowledgement of EVRDC’s concerns or sign of any amendment and there has been no response to requests for updates since.

EVRDC understands from third parties that Rail North has belatedly become involved, although it appears its views and concerns have been communicated to them.

### **The true cost of a modern signalling system**

Concerned at the continued delay and NYCC’s constant refusal to consider other options, EVRDC conducted its own research among signalling contractors, including Park Signalling and Comms Design who provided the equipment for the lines in Scotland. As a result, EVRDC understands that ‘the Esk Valley line could be equipped with RETB at a cost of between £3.5 to £4million subject to detailed survey’. So in itself well within the £4.5 million funding currently available. However there would be other associated costs which might take the overall cost a little above this figure but it is not unreasonable to expect both Network Rail and Northern to contribute to the overall scheme, given that the former would avoid the ongoing maintenance and eventual replacement cost of the present token system, and that both would inherit a much more flexible, easier to operate modern digital signalling system.

## **Conclusions**

It is now clear that from the outset NYCC was not properly equipped to manage a rail infrastructure project and that the chosen consultants were either not prepared or not sufficiently informed to explore innovative solutions as repeatedly requested and as required in the brief. Nevertheless NYCC relied for advice on this report from consultants to the exclusion of all other advice or expert opinion. As a result:

- There has been a five year delay with still no agreed proposal.
- The repeated failure to respond to the agreed objective to explore innovative solutions including RETB and thus allow access to further funding if necessary means that possible opportunities for route modernisation, including specifically the Government's present 'Restoring your Railway' fund, have been and continue to be missed.
- NYCC's continued failure to recognise and respond to the concerns of both EVRDC as the Government's recognised representative of the Community and to NYMR as an operator on the line is widely seen as unacceptable.
- The ongoing failure to publish the final WSP Report which cost £50,000, or to at least provide copies to interested parties, requires justification.
- NYCC's current proposals have not addressed any options for modern signalling, including RETB as repeatedly requested by EVRDC, and appear to disbenefit Northern services and benefit NYMR services disproportionately. They clearly do not meet the criteria for the Section 106 funding and therefore cannot be supported by EVRDC.

## **Recommendations**

NYCC should immediately halt further work or expenditure on this project until:

- NYCC accept that the funding is not public money, having been obtained from the private sector specifically for the benefit of the community and that therefore EVRDC and NYMR should rejoin the project and be fully consulted
- the final WSP Report is published
- it is recognised that the present proposals do not adequately respond to the original brief and are not fit for purpose, and
- the option of installing a modern signalling system, including RETB and if necessary using presently available funding as part of a larger project, has been independently fully explored with indicative costings.