

Exeter to Plymouth via Okehampton and Tavistock Railway Re-instatement

Report of the Executive Director of Environment, Economy and Culture

Please note that the following recommendation is subject to consideration and determination by the Committee before taking effect.

Recommendation: It is recommended that the Committee notes the content of the Report

1. Summary

This report has been prepared to inform Members of the issues surrounding the potential re-instatement of the former Southern Region rail route linking Exeter to Plymouth via Okehampton and Tavistock. It sets out resilience issues along the alignment of the Great Western railway on its current alignment, specifically around Dawlish. The ongoing work to address these issues is summarised. The long-term future of the route is then considered. The issues surrounding the re-instatement of the former Southern Region rail route are then discussed, with specific regard to deliverability and funding constraints.

2. Introduction

Up until the mid-twentieth century, the Southern Region railway operated a rail service between Exeter and Plymouth via Okehampton, Tavistock and Bere Alston. The service was closed in 1968 except for a passenger service on the section from Plymouth to Bere Alston, which continues on the branch line to Gunnislake, this continues to operate today. The section of track between Okehampton and Exeter also still remains, but has been reduced to single track and is operated by a private rail company.

Since then, the alignment of the route between Okehampton and Tavistock has been utilised for other purposes. Areas of land of the previous track alignment have been sold off, with the development of West Devon Borough Council Offices, other property and National Cycle Network (NCN) routes.

The Great Western railway, which is the only remaining national railway linking to Cornwall through Devon travels south out of Exeter, via the western edge of the Exe Estuary, through Newton Abbot, Totnes and Ivybridge before reaching Plymouth. However, with concerns about climate change and consequent sea level rise, as well as more recent service disruption events, questions have been asked about the vulnerability of the main railway line in South Devon, and particularly the sea wall at Dawlish.

3. Resilience of the Great Western Mainline

This report now intends to set out the issues relating to the existing Great Western mainline route. These issues were also discussed in Parliament on Wednesday 10 November 2010.

The potential vulnerability of the railway between Exeter and Teignmouth, and more particularly the 4.2 miles between Dawlish and Teignmouth, became apparent soon after the opening of the railway, in 1846, when a storm destroyed part of the sea wall and led to temporary closure of the railway. Further cliff falls and sea damage were experienced in the

1850s and 1860s, and were followed by more serious breaches in 1916, and in the 1920s and 1930s. At that stage there was active consideration of an inland diversion around the rear of Dawlish. Further problems were experienced in 1986, and the 1990s.

Furthermore, in the early years of the last decade there were a number of occasions when adverse weather resulted in major disruption to train services. This was partly due to the susceptibility of the Voyager trains to spray, when the waves were so fierce that they broke over the roof of the train (where electrical equipment is sited). Particularly adverse weather conditions tend to occur on a 20-year cycle, caused by a combination of low pressure, high spring tides and South easterly gales. Track circuits can get shorted and cables damaged, disrupting train detection and signalling systems. Breaches of the sea wall can also result in a washing away of ballast resulting in its temporary closure.

Because of these issues, significant engineering work has been carried out over the last decade by Railtrack and then Network Rail, to strengthen the sea wall and make it less susceptible to damage. There are four types of damage:

1. Damage to the toe of the sea wall – this has been resolved by reconstruction with mass concrete, and the addition of rock armour.
2. Damage to the face of the wall – the block construction of the wall is vulnerable to wave action punching out individual blocks. Subsequent wave action removes adjacent blocks. The sea wall is now subject to an enhanced inspection regime, in order to identify maintenance requirements early.
3. Wash-out of ballast from the track – this was reduced through use of “glued ballast”.
4. Cliff collapse from above – this has been resolved using netting and catch fences on the cliff side of the railway.

In addition to these engineering works, Network Rail also employ a proactive inspection and management regime. A dedicated team is based at Dawlish and the sea walls are inspected under an enhanced regime that includes post-storm monitoring. These measures are supported by ongoing monitoring of weather forecasts and tidal predictions, which result in additional inspections if the appropriate combination of events is predicted. Furthermore, if events are predicted which may affect services, then a staged protocol to continue the operation of the line is put in place, involving speed restrictions; closure of the down (seaward) line; or total suspension of services, according to prevailing sea conditions.

Due to the works undertaken, mentioned above, and ongoing monitoring and maintenance regime, Network Rail are confident that the railway sea defences around Dawlish will not fail in the foreseeable future. The costs of maintaining the sea walls and the Estuary are approximately £500,000 a year. Network Rail consider that this regime of continuing maintenance, monitoring and route management will continue to be adequate until about 2025, after which an increased level of funding is likely to be required to maintain rail services along this route all day every day.

4. Long Term Future of the Great Western Mainline

The Department for Transport, with Network Rail, are currently undertaking a major research project to assess the implications of climate change on the rail network, to more accurately evaluate the interventions that are likely to be necessary post 2025, and therefore assess the potential cost from this period.

The potential longer term interventions need to be considered in the wider context of shoreline management, which is to be set out in the Shoreline Management Plan for the south coast between Durlstone near Swanage and Rame Head near Plymouth, prepared by Teignbridge District Council. This plan considers the overall strategy for the coast between these two points, and will need to be informed by the appropriate rail evidence. The plan is updated every five years to ensure that the latest information is taken into account. The first of these updates is to be completed shortly.

These projects and processes are ongoing, and as such the outcomes remain to be seen. However it is Devon County Council's current position, that the railway on its current route is extremely important for the settlements it serves, providing links to work opportunities, connections for residents of the south west to destinations throughout the country, and vice-versa providing significant benefits to the south-west economy from the tourism it brings.

The impact of re-routing the Great Western mainline on settlements within Devon needs to be considered. There would be disbenefits to Newton Abbot (removing its direct connectivity to London) and potentially Torbay, Totnes and Ivybridge - not to mention the other settlements such as Dawlish, Dawlish Warren, Starcross and Teignmouth which would be cut off from the mainline. There would still need to be a local service from Plymouth (serving Newton Abbot, Totnes, Ivybridge and Torbay). Re-routing the main rail line away from these settlements would be an unpopular proposal, and therefore serious consideration over the merits of its implementation would be required. Indeed, it is likely to be unacceptable.

This position is the same as the UK Government, as discussed in Parliament on Wednesday 10 November 2010 when the Transport Minister stated that this alignment will remain as the main line to Cornwall for the indefinite future. As such, it is important to note that the construction of an inland route, linking Exeter to Plymouth via Okehampton and Tavistock on the previous rail alignment should not be viewed as an alternative to the existing Great Western mainline route.

Having said this, the re-instatement of this route would be welcome, and may indeed be considered in the very long term. However, there are some significant factors which affect the deliverability of this scheme. These are discussed below.

5. Issues Relating to the Potential Re-instatement of the Rail Line between Exeter and Plymouth via Okehampton and Tavistock

As mentioned above, the Southern Region railway operated a rail service between Exeter and Plymouth via Okehampton, Tavistock and Bere Alston which closed in 1968; except for a passenger service on the section from Plymouth to Bere Alston and continuing on the branch line to Gunnislake, which continues to operate today.

The section of track between Okehampton and Exeter also still remains, but has been reduced to single track and is operated by a private rail company. Furthermore, the alignment of the route between Okehampton and Tavistock has been utilised for other purposes. Areas of land with previous track alignments have been sold off, with the development of West Devon Borough Council Offices, other property, and National Cycle Network (NCN) routes.

In the 1890s there was a double express track, reinstating this to modern standards is likely to be extremely expensive, and may require greater land take than the original alignment to meet modern railway standards. Other issues include the need to improve the track to overcome potential weight issues on the Meldon viaduct, which is a Scheduled Monument. As such, the costs are likely to be extremely prohibitive. There are further issues/constraints at Shillamill Viaduct and Tunnel.

Further to the engineering requirements, there are also private land ownership issues, such as those in Tavistock where the West Devon Borough Council Offices have been constructed.

A House of Commons enquiry reported in February 2009 that the likely cost of re-instating this railway would be some £100 million. Considering that the Government are committed to preserving the current alignment of the Great Western mainline, it is extremely unlikely that such funding will come forward for this project in the near future.

Having said this, and as stated above, the re-instatement of this route should not be prohibited by further development of the previous route for other uses. The NCN already acts to informally safeguard the route and it is the County Councils intention that no further development (such as, of property) occurs on it.

Whilst the re-instatement of the full alignment between Exeter and Plymouth via Okehampton and Tavistock is unlikely to occur in the short term, it is also important to recognise ongoing developments which seek to introduce local services along some parts of this route. These are discussed below.

6. Enhanced Rail Connectivity between Okehampton and Exeter

As mentioned above, although the railway was abandoned in 1968, there remains a single track section linking Okehampton to Exeter which is currently in private ownership. The owners of the railway are currently negotiating various processes with Network Rail which will enable passenger services to be run every day between Okehampton and Exeter. This new service would be matched with the provision of a new station to the east of Okehampton, and enhancement of the existing Okehampton station.

The owners of the railway anticipate that this service will be in place by approximately May 2011, with the new station to the east likely to follow soon after.

7. Enhanced Rail Connectivity between Tavistock and Plymouth

The re-instatement of the railway between Tavistock and Bere Alston, thus connecting to the branch line into Plymouth, is being promoted in conjunction with development plans for Tavistock. This would be a single track route, providing a non-road based access for residents of Tavistock accessing Plymouth for work, leisure, healthcare, transport, and other opportunities available there, as well as improving access to Tavistock for those from Plymouth and other destinations along the branch line. The provision of this route will help to significantly address issues on the A386, providing an alternative route to this road, which due to the surrounding environmental constraints, will be extremely difficult to relieve in terms of additional traffic demand.

The re-instatement of this section of the former Southern Region route would be funded by development proposals in Tavistock as it helps to address the impacts of this, as well as providing substantial and significant opportunities for the rest of the town. This scheme does not obstruct the potential for reinstating the entire route, should this ever be deemed achievable - although as discussed above, this is unlikely in the foreseeable future.

8. Conclusion

Due to concerns over the resilience of the Great Western Mainline between Exeter and Plymouth, specifically the seawall between Dawlish and Teignmouth, there has been debate about the re-instatement of the former Southern Region rail route linking Exeter to Plymouth via Okehampton and Tavistock.

This report sets out the challenges faced on the existing Great Western Mainline route and how these are being addressed by the relevant authorities. The impact of re-routing the railway would have significant, and potentially unacceptable, implications for settlements located on it and as such, the Government has clarified that this will remain the alignment of the mainline into Cornwall for the indefinite future.

Having said this, the re-instatement of the former southern region rail route would still be welcome if it could be delivered. However, unfortunately due to engineering and historic constraints, the cost of this is considered to be prohibitive. Whilst this is the case for the foreseeable future, it is still intended to safeguard the route should circumstances change.

In the meantime, local rail enhancements between Okehampton and Exeter, and between Tavistock and Plymouth are being pursued at present. These will provide significant local benefit, and would not prevent the re-instatement of the longer route if this were eventually progressed.

It is hoped that the County Committee will note the contents of this report.

9. Financial Considerations

There are no financial considerations for the County Council at the current time. However as discussed there is a continuing funding implication for Network Rail.

10. Sustainability Considerations

The longer term sustainability of the Great Western Mainline is currently being investigated by the Department for Transport and Network Rail. However, the Government are committed to the current alignment of the railway remaining in place in the future.

The re-instatement of the former Southern Region route will have environmental impacts which will need to be mitigated against. Work has not been undertaken to assess whether appropriate mitigation can actually be achieved. Furthermore, its cost is considered to be prohibitive.

Planned local rail improvements will greatly reduce car dependency of residents of Okehampton and Tavistock and will also help to increase the sustainability of the transport system in West Devon.

11. Carbon Impact Considerations

The carbon emissions of building a project of such scale would be substantial, and would need to be balanced against any potential saving.

12. Equality Considerations

As discussed above, the re-instatement of the former Southern Region railway would help to reduce car dependency in West Devon, but at the same time it would increase it in Teignbridge, Torbay and the South Hams.

The report itself contains no implications for equality.

13. Legal Considerations

There are no specific legal considerations for the County Council at this time.

14. Risk Management Considerations

No risks to the County Council have been identified at this time.

15. Discussion

The report sets out the reasons why the re-instatement of the former Southern Region rail route has been considered, and the measures taken to address those reasons. The report goes on to explain the County Council and Government position on the proposed scheme and issues relating to its deliverability. As a result of this, the conclusion is that the scheme would be welcome if it could be achieved, although at this time, this is considered to be extremely unlikely.

16. Options/Alternatives

The focus of this report is the re-instatement of the railway between Exeter and Plymouth via Okehampton and Tavistock. It has been shown that this is not a viable scheme at present. Regrettably, there is nothing in the current economic climate that suggests the scheme would be viable, and as such it must remain a very long term aspiration.

17. Reason for Recommendation/Conclusion

The Members are only required to note the contents of the report, as it provides information for discussion. No decision is necessary.

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Local Government Act 1972: List of Background Papers

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Background Paper	Date	File Ref.
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