

Subject/Title: Programmatic Approach to Utility Diversions

PCF Stage: 5

Project/Programme: M4 Junction 3-12, A30 Chiverton to Carland Cross, A303 Sparkford to Ilchester, A358 Taunton to Southfields and A303 Stonehenge.

Introduction

Century Link own 8 telecommunication companies and are responsible for 80% of all global transatlantic fibre crossings, these sub-sea cables traverse across Great Britain linking the UK with the USA and Europe. The impact of any outages affecting these networks are commercially significant and a matter of national security.

Existing Century Link apparatus interacts with the M4 Junction 3-12 and proposed A30 Chiverton to Carland Cross, A303 Sparkford to Ilchester, A358 Taunton to Southfields and A303 Stonehenge.

What was the situation?

Century Link advised Highways England that they must ensure no more than one planned outage associated with the diversion of their sub-sea network occurs per calendar year, including a minimum of six months between outages planned in consecutive years across the South West schemes. Although outages can be shared by multiple schemes if aligned, however each outage has a maximum duration of 8 hours.

A feasibility study undertaken by Instalcom, Century Link’s appointed agent, identified both online and/or offline diversion options for each scheme at the early design stage. Following buildability advice and independent outages being scheduled by each scheme it became clear that a programmatic approach was required to avoid severe project/programme delay and failure to meet open to traffic target dates due to Highways England’s outage requirements exceeding Century Link’s outage availability.

Programme A: Highways England South West scheme’s Century Link outage windows/requests



Programme B: Potential delay to Highways England South West scheme’s due to Century Link outage restriction

Key: X = earliest delayed outage date. Black colouring = potential delay

Following a successful outcome Highways England has been challenged to replicate this approach across the business. The SU Team has identified a number of lessons learned which Project Teams can follow to gain successful outcomes in the future.

1. **Programme Approach:** Avoid silo working and the risk of clashes by engaging with the SU Team and SU's to better understand Highways England's Major Project's programmes/schemes.
2. **SU Network Restrictions:** Understand the demands faced by an affected SU as result of internal and external schemes such as HS2, new developments etc. as well as an SU's own operational and maintenance programmes.
3. **Collaboration:** Engage regularly and from an early stage with stakeholders not always directly involved with the scheme, including SU's affected by the scheme by building relationships and sharing key information. Through early engagement a scheme can benefit from gaining a better understanding of design, restrictions, costs, programme, risk and opportunities.
4. **Risk escalation:** Be open, honest and record risks within Xactium to ensure high risk items are escalated to the appropriate level resulting in the best possible outcome for the business and available support to the Project Team.
5. **Efficiency:** Seek efficient delivery of works by carrying out C4 detailed design early where appropriately identified in collaboration with the SU Team, enabling the opportunity to deliver diversion works in advance, share outages, reduce programme delay risks and improve health and safety during main construction works.

If you would like any further information on the topic or support from the SU Team, please contact us via email StatutoryUndertakerTeam@HighwaysEngland.co.uk.

Author

Statutory Undertakers Team

Further information

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