

PORTISHEAD BRANCH LINE PRELIMINARY
ENVIRONMENTAL INFORMATION REPORT
VOLUME 2

CHAPTER 18

In-combination and Cumulative Effects Assessment



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CHAPTER 18

In-combination and Cumulative Effects Assessment

18.1 Introduction

18.1.1 This chapter assesses the in-combination and the cumulative effects associated with the construction and operation of the Portishead Branch Line (MetroWest Phase 1) Development Consent Order Scheme (“the DCO Scheme”).

18.1.2 The in-combination and the cumulative effects are defined by the Institute of Environmental Management and Assessment (“IEMA”) (IEMA, 2011, page 63) as follows.

- In-combination effects: *“These effects occur between different environmental topics within the same proposal, as a result of that development’s direct effects.”*
- Cumulative effects: *“This form of cumulative effect occurs as a result of the likely impacts of the proposed development interacting with the impacts of other developments in the vicinity.”*

18.2 In-combination Effects

18.2.1 To determine whether there are in-combination effects on receptors, all residual effects from the construction and operation phases of the DCO Scheme on receptors will be identified from the technical topic chapters 7 to 17. The receptors comprise:

- Residential premises
- Schools and other public buildings
- Cultural heritage features – archaeological sites, conservation areas, listed buildings, and parks and gardens
- Landscape features – character areas and conservation areas
- Ecological features – designated site, habitat types, and protected flora and fauna.
- Surface water and groundwater features
- Soils and agricultural land
- Other assets

18.2.2 During construction, the effects include loss of vegetation during land preparation works, activities at the construction sites and compounds, emissions such as noise, lighting and dust, risk of construction accidents, discharge to receiving waters and flood risk. The receptors most likely to be affected by in-combination effects adjoin or are located close to the proposed construction sites, construction compounds and haulage routes.

18.2.3 During operation, the effects include the visual impact of the new station and other physical features, operational noise, night-time lighting, and activity at the stations due to traffic and travellers. The receptors most likely to be affected by in-combination effects adjoin or are located close to the new stations and car parks and along the railway line.

18.2.4 The classification of effects takes into account the measures incorporated into the project design, any further mitigation identified within the technical chapters, and the draft Code of Construction Practice (“CoCP”), which is currently being developed for inclusion in the

Environmental Statement. Professional judgement will be used to assess the overall level of significance of the in-combination effect for the receptors, whether any likely significant in-combination effects are predicted and, if so, the availability of mitigation.

18.3 Cumulative Effects

- 18.3.1 The assessment of cumulative effects with other projects has been undertaken in line with the guidance set out in the Advice Note 17: *Cumulative Effects Assessment* (The Planning Inspectorate, 2015).
- 18.3.2 Consideration of cumulative effects as a result of the likely impacts of the DCO Scheme interacting with other developments in the vicinity is undertaken within the technical topic chapters, as appropriate to the level of information available on any relevant proposals. The approach and findings are summarised below.

Approach to the Identification of Cumulative Developments

- 18.3.3 To enable a reasonable and proportionate assessment, a set of criteria has been used to identify developments which could result in potential cumulative effects with the DCO Scheme. The approach taken follows the four-stage approach set out in the Advice Note.

First, a long list of relevant developments was created (Stage 1). The Advice Note recommends the ‘other development’ types that should be considered in the assessment; these types are categorised into ‘Tiers’, which relate to the level of certainty and quantity of information available. The Tiers were modified for this assessment to differentiate between each development type (Table 18-1).

Table 18-1: ‘Other Development’ for inclusion in the Cumulative Effects Assessment

Tier 1	a) Under construction	Decreasing level of detail likely to be available
	b) Permitted application(s), whether under the PA2008 or other regimes, but not yet determined	
	c) Submitted application(s) whether under the PA2008 or other regimes, but not yet determined	
Tier 2	Projects on the Planning Inspectorate’s Programme of Projects where a scoping report has been submitted	↓
Tier 3	a) Projects on the Planning Inspectorate’s Programme of Projects where a scoping report has not been submitted	
	b) Identified in the relevant Development Plan (and emerging Development Plans – with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited	
	c) Identified in other plans and programmes (as appropriate) which set the framework for future development consents/approvals, where such development is reasonably likely to come forward	

Source: The Planning Inspectorate (2015)

18.3.4 The project's Zone of Influence ("ZOI") for each scoped-in environmental topic was used in conjunction with the above guidance on development types to define the following criteria for identifying the long list of developments to be considered in the Cumulative Effects Assessment ("CEA"). These criteria have been discussed with North Somerset District Council ("NSDC") and Bristol City Council ("BCC") and are as follows:

- Other Nationally Significant Infrastructure Projects ("NSIPs") within 10 km of the railway line;
- Planning applications submitted to NSDC and BCC within 500 m of the railway line;
- Schemes included in the NSDC Site Allocations Plan (NSDC, 2016), BCC Site Allocations and Development Management Policies (part of the Local Plan) (BCC, 2014) and West of England Joint Spatial Plan and Transport Study Draft Strategy (2016) which will help deliver key local authority policies and development;
- Network Rail and Highways England schemes in the Bristol Area; and
- Other major schemes in the Bristol Area, such as Bristol Temple Quarter developments.

18.3.5 Figure 6-2 Sheets 1 to 5 in the PEI Report Volume 3 Book of Figures shows developments that meet the criteria above up to 25th October 2016. These developments are described in Matrix 1 (Appendix 18.1 in the PEI Report Volume 4 Appendices). The developments to be included in the final cumulative effects assessment will be revised following the statutory consultation this autumn and the results included in the Environmental Statement next year. Developments were progressed to the short list if they met the following additional criteria (Stage 2):

- Overlap in temporal scope with the DCO Scheme in construction and/or operation phase
- Scale and nature of development may cause it to have a significant effect on a receptor which lies within the ZOI for the DCO Scheme.

18.3.6 The short list of developments was taken forward to the CEA. Developments that are likely to be completed before the start of the construction of the DCO Scheme in late 2019 or spring 2020 have been considered to form part of the future baseline for the DCO Scheme within the construction and operational assessments of the technical topic chapters and have therefore not been considered in the CEA.

Cumulative Effects Assessment

18.3.7 Matrix 2 (Appendix 18.2 in the PEI Report Volume 4 Appendices) shows the results of the CEA. Each development is described and the significance of any cumulative effects, mitigation measures proposed, and residual cumulative effects are documented. The level of detail in the assessment is proportionate to the level of information and certainty that could be gained for each development, as shown by the 'Tier' classification system and additional explanation.

Summary of cumulative effects

18.3.8 Developments with the potential to have likely significant cumulative effects with the DCO Scheme are discussed in the technical topic chapters and shown in Matrix 2 (Appendix 18.2 in the PEI Report Volume 4 Appendices). The main receptor that is likely to experience cumulative effects is the local road network where construction of developments in close proximity to the DCO Scheme is undertaken simultaneously with the DCO Scheme and the same haulage routes are used.

- 18.3.9 Five developments have been identified as having the potential to give rise to likely significant cumulative effects with the DCO Scheme.
- 18.3.10 Firstly, the Bristol Port Company's proposal for hardstanding for cargo storage and a bridge over the railway line at Court House Farm (16/P/1987/F) together with the DCO Scheme may result in a **moderate adverse** cumulative effect on ecology and biodiversity due to habitat loss or disturbance, Great Crested Newts and bats, a **slight adverse** cumulative effect on cultural heritage relating to the setting of Court House Farm (Grade II listed), and a **moderate adverse** cumulative effect on traffic and transport during construction as the same local roads would be used by both schemes. It is also likely to have an **adverse** effect on the landscape and views, as the schemes will change the character of this area to a more open commercial landscape, with vegetation loss, new hardstanding and new lighting. The Port's development was granted planning permission on 21 December 2016 and is currently under construction. If the works are completed before the start of construction for the Portishead Branch Line DCO Scheme, including the proposed new bridge over the railway line, cumulative effects due to construction, including traffic, would be avoided.
- 18.3.11 Secondly, a planning application was granted in August 2017 for the construction of 93 residential apartments and office floor space with associated car parking, landscaping and servicing at Harbour Crescent, Serbert Road (16/P/2066/F). This site is in close proximity to the proposed Portishead Station. Together the two schemes may result in a **moderate adverse** effect on traffic and transport if construction phases coincide, and there is potential for **adverse** effects on ecology, landscape and views due to habitat loss and vegetation clearance. The construction programme for this project is currently unknown; further assessment of cumulative effects will be required if it is to be constructed at the same time as the DCO Scheme. The DCO Scheme will consider this project, for example through the Construction Traffic Management Plan ("CTMP") and ecological mitigation.
- 18.3.12 A third major development that may interact with the DCO Scheme is included within the BCC Site Allocations and Development Management Policies document as part of the Local Plan (Site Allocation BSA1001) for redevelopment of part of Alderman Moore's Allotments. A request for a Screening Opinion has been submitted to BCC and an EIA is not required (16/01991/SCR). This proposed development consists of approximately 131 dwellings with associated private gardens, car parking, open space and access roads, the dwellings to include a mix of bungalows, flats and two and three storey properties. Due to lack of environmental documentation relating to the proposal, it has not been possible to assess the significance of any adverse cumulative effects. However, there is potential for **adverse** traffic and transport, landscape and visual and ecology effects. Once more information becomes available on this proposal, further assessment of cumulative effects will be carried out.
- 18.3.13 Another scheme of interest is the National Grid Hinkley Point C Connection DCO scheme. The alignment of the transmission lines crosses the Portishead Branch Line DCO Scheme on the eastern outskirts of Portishead near Sheepway, crossing the proposed railway line and passing through the Portbury Wharf Nature Reserve. The programme for the construction phase for the National Grid DCO Scheme is reported to be between 2015 and 2022. Assuming the National Grid Scheme goes ahead, there could be likely significant cumulative impacts with the Portishead Branch Line DCO Scheme, particularly around the location of construction compounds, construction traffic and the cumulative impact on the Portbury Wharf Nature Reserve. The proposed construction compounds for the Portishead Branch Line have been selected avoiding the sites preferred by National Grid and the development of off site mitigation in the Nature Reserve will take into consideration the

potential impact of the construction of the National Grid scheme. The cumulative effect of the National Grid project with the Portishead Branch Line on traffic would be **moderate adverse** for traffic, potentially **adverse** for landscape and views and **neutral** for other topics.

- 18.3.14 The West of England Joint Spatial Plan and Transport Study Draft Strategy includes several proposals that may result in adverse cumulative effects on multiple receptors when combined with the DCO Scheme. However, as these proposals are in the early stages of development, the significance of potential effects are uncertain at this point. In addition, the Strategy's plans for highways improvements may result in **adverse** cumulative effects on ecology, landscape and views, and also an adverse cumulative effect on traffic and transport if the schemes are constructed at the same time as the DCO Scheme. However, once all schemes are in operation, there would be a **beneficial** cumulative effect on traffic and transport and socio-economics and economic regeneration due to capacity for higher traffic volumes and increased connectivity between residential and employment areas. As more information becomes available on these plans, cumulative effects will be reassessed.

18.4 Limitations Encountered in Compiling the PEI Report

- 18.4.1 The main limitation in undertaking the cumulative effects assessment is the lack of available information about other developments, particularly in relation to their construction programme and activities. Not all the projects were supported by environmental documentation, in which case the potential for significant effects arising was based on the consultants' professional judgement.

18.5 Conclusions

- 18.5.1 The assessment of in-combination effects resulting from in combination impacts on the same receptors during construction and operation is on-going. The receptors most likely to be affected are those lying close to the construction sites and the operational DCO Scheme.
- 18.5.2 In terms of cumulative effects resulting from the interaction of other developments with the DCO Scheme, potential cumulative effects relating to ecology, traffic and transport, landscape and views and cultural heritage were identified for five other projects. This assessment was based on the most up-to-date information available; however, many developments were lacking in information such as mitigation measures (to mitigate their own environmental impacts) and construction schedules. The cumulative impacts assessment will be revised for the Environmental Statement with the latest information about the DCO Scheme and other projects.

18.6 References

Bristol City Council, 2014. Site Allocations and Development Management Policies. Part of the Local Plan, adopted July 2014. Bristol City Council, Bristol.

IEMA, 2011. *The State of Environmental Impact Assessment Practice in the UK*.

North Somerset Council, 2016. Site Allocations Plan. Consultation Draft, March 2016. North Somerset Council, Weston-super-Mare.

The Planning Inspectorate, 2015. *Cumulative Effects Assessment Relevant to Nationally Significant Infrastructure Projects*. Advice Note 17. Version 1.

<http://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/12/Advice-note-17V4.pdf>

18.7 Abbreviations

BCC	Bristol City Council
CEA	Cumulative Effects Assessment
CoCP	Code of Construction Practice
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
GCN	Great Crested Newts
IEMA	Institute of Environmental Management and Assessment
NSC	North Somerset Council
NSIP	Nationally Significant Infrastructure Projects
ZOI	Zone of Influence