# Welsh Government

# **M4 Corridor around Newport**

Environmental Statement Volume 1 Chapter 5: Approach to Environmental Assessment

M4CaN-DJV-EGN-ZG\_GEN-RP-EN-0010 At Issue | March 2016

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# 5 Approach to Environmental Assessment

# 5.1 Introduction

5.1.1 This chapter of the Environmental Statement (ES) sets out the approach taken to the Environmental Impact Assessment (EIA) of the Scheme. The chapter sets out the overall approach to the assessment of the likely effects of the Scheme and includes details of the consultation undertaken. Further details of topic specific methodologies, such as survey methods, are provided in each topic chapter of this ES.

# 5.2 Legislative Framework

- The legislative framework for EIA is set by the EIA Directive (European Directive 2011/92/EU, as amended). As set out in Chapter 1 of this ES, the requirements of the EIA Directive for highways schemes are transposed by the Highways Act 1980, as amended by The Highways (Assessment of Environmental Effects) Regulations 1999 and The Highways (Environmental Impact Assessment) Regulations 2007. The provisions of the Marine Works (Environmental Impact Assessment) Regulations 2007, as amended by the Marine Works (Environmental Impact Assessment) (Amendment) Regulations 2011, also apply to the Scheme.
- As set out in Chapter 1 of this ES, there is no statutory provision as to the form of an ES. Section 105A of the Highways Act states that the ES must contain the information referred to in Annex IV of the EIA Directive. That information must include at least:
  - '(a) a description of the project (comprising information on the site, design and size of the project);
  - (b) a description of the measures envisaged in order to avoid, reduce, and, if possible, remedy significant adverse effects;
  - (c) the data required to identify and assess the main effects which the project is likely to have on the environment;
  - (d) an outline of the main alternatives studied by the Secretary of State and an indication of the main reasons for his choice (taking into account the environmental effects);
  - (e) a non-technical summary of the information mentioned in paragraphs (a) to (d).'

(Highways Act 1980, as amended, Section 105A)

The 2014 amendments to Directive 2011/92/EU updates Annex IV of the Directive, within which the EIA requirements are set out. As set out in Chapter 1 of this ES, measures are in place for a transitional period from the regime laid down by Directive 2011/92/EU. For schemes such as M4CaN (for which the EIA process commenced and the ES has been submitted before adoption of the requirements of the amended Directive within national law), Annex IV of Directive 2011/92/EU remains the relevant consideration. However, as a matter of good practice, the measures required by the amended Directive (for example,

- consideration of effects in relation to health and climate change) have been considered where appropriate within this ES.
- 5.2.4 For marine works, Schedule 3 of the Marine Works (Environmental Impact Assessment) Regulations 2007, as amended, sets out the information to be included within an ES.
- In accordance with Regulation 61 of the Conservation of Habitats and Species Regulations 2010 and the Habitats Directive (92/43/EEC), an Assessment of Implications on European Sites (AIES) has also been prepared to consider the possible effects of the Scheme on European sites. The findings of the AIES are reported separately.
- 5.2.6 In accordance with the Water Framework Directive, an assessment of effects on Water Framework Directive watercourses has been undertaken and is provided in Appendix 16.4 of this ES.

# 5.3 Scoping

- 5.3.1 EIA is a means of identifying and collating information to inform an assessment of the likely significant environmental effects of a project. The process requires consideration of the likely changes to the environment, where these arise as a consequence of the proposed development, through comparison with the existing and likely future baseline conditions in the absence of the proposed development.
- 5.3.2 The process of identifying the issues to consider within the EIA process (establishing the scope of the assessment) is known as scoping. Although not a statutory requirement, scoping is an important preliminary procedure, which sets the context for the EIA.
- 5.3.3 A Scoping Report was issued to statutory consultees in August 2015 and is provided at Appendix 5.1 of this ES. The purpose of the Scoping Report was to identify the proposed scope of the EIA process and to set out the proposed assessment methodologies for comment. It also identified areas proposed to be scoped out of the assessment.
- **5.3.4** Comments on the Scoping Report have been received from the following consultees.
  - Newport City Council.
  - Natural Resources Wales.
  - Cadw.
- 5.3.5 Appendix 5.2 of this ES provides an overview of the key points raised by consultees during the scoping process, together with details of how these have been addressed within this ES. Chapters 7-16 of this ES also provide a summary of the key points raised during consultation with both statutory and non-statutory consultees.
- 5.3.6 The scope of this ES has taken into account the legislative requirements, the nature, size and location of the Scheme and the consultation responses provided.

Table 5.1: Scope of ES

Structure of ES			
Non-Technical	Summary of the ES using non-technical terminology		
Summary			
Volume 1: Text			
	Glossary		
Chapter 1	Introduction		
Chapter 2	Scheme Description		
Chapter 3	Scheme Construction		
Chapter 4	Scheme Development and Alternatives Considered		
Chapter 5	Approach to Environmental Assessment		
Chapter 6	Legislative and Policy Context		
Chapter 7	Air Quality		
Chapter 8	Cultural Heritage		
Chapter 9	Landscape and Visual Effects		
Chapter 10	Ecology and Nature Conservation		
Chapter 11	Geology and Soils		
Chapter 12	Materials		
Chapter 13	Noise and Vibration		
Chapter 14	All Travellers		
Chapter 15	Community and Private Assets		
Chapter 16	Road Drainage and the Water Environment		
Chapter 17	Assessment of Cumulative Effects and Inter-relationships		
Chapter 18	Environmental Management		
Chapter 19	Conclusion		
Chapter 20	References		
Volume 2: Figures			
Including all figures and drawings to accompany the text.			
Volume 3: Appendices			
Including specialist reports forming technical appendices to the main text.			

5.3.7 This ES provides the information required by the Highways Act 1980, as amended, together with other relevant information listed in the EIA Directive (as amended) and the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended). Together, the information supplied within this ES is considered to provide a clear understanding of the main or likely significant effects of the Scheme on the environment. Appendix 5.3 sets out the relevant legislative requirements, together with details of where the information can be found within this ES.

#### **Climate Change**

5.3.8 The 2014 amendments to the EIA Directive place an emphasis on climate change. Although the provisions of Directive 2011/92/EU remain the relevant consideration for the Scheme, as a matter of best practice, the requirements of the amended Directive in relation to climate change have been taken into account. Therefore, the following aspects of climate change have been considered within this ES.

#### Climate Change Resilience

5.3.9 Climate change has been considered during the Scheme design process. The design has taken into account, for example, future flood risk and resilience to extreme weather events. The resilience of the Scheme to climate change has been reported within Chapter 2 of this ES.

### Changes to Future Environmental Conditions

- 5.3.10 Consideration of predicted changes in baseline environmental conditions, including changes resulting from climate change, is set out within each ES topic chapter (Chapters 7 to 16), where robust information is available at the time of writing. Sources of information have included the Climate Change Risk Assessment for Wales (Welsh Government and Defra, 2012) and information provided within the UK Climate Impacts Programme (UK CIP) UK Climate Projection (UKCP09). In addition, topic specific studies have been considered, where relevant.
- **5.3.11** The assessment of effects for each topic has taken into account identified trends or changes predicted to arise as a result of climate change.

### Effects of the Scheme on Climate

- **5.3.12** Atmospheric emissions associated with use of the Scheme are assessed within Chapter 7 of the ES.
- 5.3.13 In addition, a carbon assessment has been undertaken and is reported in Appendix 2.2. This report sets out carbon emissions associated with the construction and operation of the Scheme.

#### Health

5.3.14 The 2014 amendments to the EIA Directive state that an EIA should consider the effects of a project on human health. An assessment of the health impacts associated with the Scheme has been undertaken. This report is provided at Appendix 5.4 of the ES. Key findings are reported within topic chapters within this ES, where relevant.

#### **Material Assets**

5.3.15 It is noted that Annex IV of the EIA Directive includes reference to 'material assets'. The phrase 'material assets' has a broad scope, which may include assets of human or natural origin, valued for socio-economic/community or heritage reasons. Material assets are in practice considered across a range of topic areas within an ES, in particular the cultural heritage and community topic areas. These topics are included within Chapters 8 and 15 of this ES (see above). Therefore, no separate consideration of material assets is considered necessary.

#### **Radiation and Heat**

**5.3.16** Given the nature of the Scheme, no significant radiation or heat effects are anticipated and these effects have been scoped out of the assessment.

## **Planning Policy**

5.3.17 The ES provides an overview of legislative and planning policy context in Chapter 6 and within each topic chapter. The assessment has had regard to local policy documents, where relevant. However, it should be noted that the Scheme falls under the provisions of the Highways Act, as amended and therefore whilst these documents provide context, they are not determinative.

# 5.4 Environmental Assessment Methodology

## Relevant EIA Guidance

- 5.4.1 The EIA process has taken into account relevant guidance, including the following.
  - Design Manual for Roads and Bridges (DMRB) Volume 11, Section 1 Aims and Objectives of Environmental Assessment HA 200/08 (Highways Agency et al., 2008a, as amended).
  - DMRB Volume 11, Section 2 General Principles of Environmental Assessment, including HA 201/08, HA 202/08, HA 204/08, HA 205/08 and HD 48/08 (Highways Agency et al., 2008 b, c, d, e, f).
  - Interim Advice Note 125/09(W) Supplementary Guidance for Users of DMRB Volume 11 'Environmental Assessment'. Wales Only (Welsh Assembly Government, 2010).
  - Guidelines for Environmental Impact Assessment (Institute of Environmental Management and Assessment, 2004 - updated 2006).
  - The State of Environmental Impact Assessment Practice in the UK. Special Report (Institute of Environmental Management and Assessment, 2011).
- **5.4.2** Other topic specific legislation and good practice guidance has been considered and details of these can be found in the topic chapters within this ES.

# Key Elements of the General Approach

- 5.4.3 The assessment of each environmental topic forms a separate section of this ES. For each environmental topic chapter within this ES, the following has been addressed.
  - Legislation and policy context.
  - Assessment methodology.
  - Description of the baseline environmental conditions.
  - Identification of potential effects (including effects arising during the construction and operational phases).
  - Identification of mitigation and monitoring measures, where appropriate.
  - Evaluation and assessment of the significance of identified effects.
- 5.4.4 Each topic chapter provides details of the methodology for baseline data collection and the approach to the assessment of effects. Each environmental topic has been considered by a specialist in that area. The identification and evaluation of effects has been based on the information set out in the Scheme description and construction details contained within Chapters 2 and 3 of this ES, EIA good practice guidance documents and relevant topic specific guidance where available.
- 5.4.5 Cumulative effects with other proposed developments and inter-relationships between topic areas are assessed within Chapter 17 of this ES.

#### **Identification of Baseline Conditions**

- An ES requires sufficient data to form the basis of the assessment. Each topic chapter includes a description of the current (baseline) environmental conditions. This is based on the study area identified for each topic chapter. Where appropriate, study areas have been agreed in consultation with statutory consultees (for example, the study areas for ecology survey have been developed in consultation with Natural Resources Wales). In some instances, more than one study area has been defined in accordance with relevant standards and guidance for that topic.
- 5.4.7 The following baseline scenarios have been considered (without the Scheme), where relevant, for comparison against the situation with the Scheme in place.
  - The existing baseline conditions at the time of survey/writing (2014-2016), depending on the availability of existing data and new surveys.
  - The start of construction Spring 2018.
  - A future year when the new M4 corridor would be open to traffic and the reclassification of the existing motorway is complete – Spring 2022.
  - The design year, 15 years after opening Spring 2037.
- Baseline data have been obtained from existing sources (including desk study and previous surveys), from surveys commissioned specifically for the Scheme, or both. The identification of existing baseline conditions has been informed by data from these sources. Future baseline scenarios have been informed by extrapolation of the currently available data by reference to, for example, Government policy, other planning applications, climate change and expert judgement of the individual topic specialists. Clearly the more distant a future baseline is, the greater the uncertainty is in relation to the conditions that would pertain at that time.
- **5.4.9** Each topic chapter identifies the limitations of the assessment and whether there were any difficulties encountered in compiling the information that is presented in this ES.

### **Assessment of Effects**

- 5.4.10 The EIA process requires the identification of the likely significant environmental effects of the Scheme. This includes consideration of the likely effects during the construction and operational phases of the Scheme.
- **5.4.11** Volume 11, Section 2 of the DMRB (HA 205/08) (Highways Agency *et al.*, 2008e) provides guidance on the determination of significance of environmental effects for highway schemes. This includes consideration of the following.
  - Environmental value (or sensitivity) of a resource or receptor.
  - The level of impact.
  - The level of significance of an effect.
- **5.4.12** These aspects are discussed in the following sections.

### Sensitivity or Value of Receptors

- Receptors are defined as individual environmental features that have the potential to be affected by a scheme (Highways Agency *et al.*, 2008g). For each topic, baseline studies have informed the identification of potential environmental receptors. Some receptors will be more sensitive to certain environmental effects than others. The sensitivity or value of a receptor may depend, for example, on its frequency, extent of occurrence or conservation status at an international, national, regional or local level.
- **5.4.14** Sensitivity is defined within each ES topic chapter and takes into account factors including the following.
  - Vulnerability of the receptor to change.
  - Recoverability of the receptor (ability to recover from a temporary impact).
  - Importance of the receptor.
- As a general guide, the definitions set out in Table 2.1 of HA205/08 have been taken into account (except where topic guidance requires otherwise). This includes a five-point scale for assigning environmental sensitivity as shown in Table 5.2 below.

Table 5.2: Criteria and DMRB Definitions of Sensitivity (or value)

Sensitivity/value	Typical Descriptors
Very High	Very high importance and rarity, international scale and very limited potential for substitution.
High	High importance and rarity, national scale, and limited potential for substitution.
Medium	High or medium importance and rarity, regional scale, limited potential for substitution.
Low (or Lower)	Low or medium importance and rarity, local scale.
Negligible	Very low importance and rarity, local scale.

Based on Table 2.1 of HA205/08 (Highways Agency et al., 2008e)

#### Magnitude of Impact

**5.4.16** The DMRB defines an 'impact' as:

'Change that is caused by an action; for example land clearing (action) during construction which results in habitat loss (impact)' (Highways Agency et al., 2008g)

- 5.4.17 For each topic, the likely environmental impacts have been identified. The likely environmental change arising from the Scheme has been identified and compared with the baseline (the situation without the Scheme). Impacts are divided into those occurring during the construction and operation phases.
- **5.4.18** The categorisation of the magnitude of impact is topic specific but generally takes into account factors such as the following.
  - Extent.
  - Duration.
  - Frequency.
  - Reversibility.

- When undertaking an EIA, environmental impacts are classified as either permanent or temporary, as appropriate. Permanent changes are those which are irreversible (e.g. permanent land take) or will last for the foreseeable future (e.g. noise from generated road traffic). With respect to temporary impacts, the following has been used as a guide within this assessment, unless defined separately within the topic assessments.
  - Short-term: one to three years.
  - Medium-term: four to nine years.
  - Long-term: greater than nine years.
- **5.4.20** Where environmental impacts are episodic, the frequency of the events has been predicted.
- **5.4.21** Impacts are also defined as either adverse or beneficial. Depending on discipline, they may also be described as follows.
  - Direct: Arise from activities associated with the Scheme. These tend to be either spatially or temporally concurrent.
  - Indirect: Impacts on the environment that are not a direct result of the Scheme, often produced away from the Scheme or as a result of a complex pathway.
- As a general guide, the definitions set out in Table 2.2 of HA205/08 have been taken into account (except where topic guidance requires otherwise). This includes a five-point scale for assigning impact magnitude as shown in Table 5.3 below.

Table 5.3: Criteria and DMRB Definitions of Impact Magnitude

Magnitude of Impact	Typical Descriptors
Major	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements (adverse).
	Large scale or major improvement of resource quality; extensive restoration or enhancement; major improvement of attribute quality (beneficial).
Moderate	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements (adverse).
	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality (beneficial).
Minor	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements (adverse).
	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute/a reduced risk of negative impact occurring (beneficial).
Negligible	Very minor loss or detrimental alteration to one or more characteristics, features or elements (adverse).
	Very minor benefit to or positive addition of one or more characteristics, features or elements (beneficial).
No Change	No loss or alteration of characteristics, features or elements; no observable impact in either direction.

Based on Table 2.2 of HA205/08 (Highways Agency et al., 2008e)

### Significance of Effects

**5.4.23** The DMRB defines an 'effect' as:

'Term used to express the consequence of an impact (expressed as 'significance of effect'), which is determined by correlating the magnitude of the impact to the importance, or sensitivity, of the receptor or resource in accordance with defined significance criteria. For example, land clearing during construction results in habitat loss (impact), the effect of which is the significance of the habitat loss on the ecological resource' (Highways Agency et al., 2008g).

- 5.4.24 The term 'effect' is therefore used to express the consequence of an impact (expressed as the 'significance of effect'). This is identified by considering the magnitude of the impact and the sensitivity or value of the receptor.
- The magnitude of an impact does not directly translate into significance of effect. For example, a significant effect may arise as a result of a relatively modest impact on a resource of national value/sensitivity, or a large impact on a resource of local value/sensitivity. In broad terms, therefore, the significance of the effect can depend on both the impact magnitude and the value or sensitivity or importance of the receptor.
- 5.4.26 Each chapter defines the approach taken to the assessment of significance. Where appropriate, topic chapters have adopted the general approach set out in DMRB HA 205/08 (see Table 5.4 below). The evaluation of significance takes into account industry and professional guidance; codes of practice; policy objectives regulations or standards; advice from statutory consultees and other stakeholders, as well as expert judgement of the EIA practitioners, based on specialist experience. For some topics, a simplified or quantitative approach is considered appropriate.

Table 5.4: Approach to Evaluating Significance of Effect

Sensitivity (or	Magnitude o	f Impact			
Value)	No Change	Negligible	Minor	Moderate	Major
Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight
Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or Moderate
Medium	Neutral	Neutral or slight	Slight	Moderate	Moderate or Large
High	Neutral	Slight	Slight or moderate	Moderate or Large	Large or Very large
Very High	Neutral	Slight	Moderate or large	Large or Very large	Very large

Based on Table 2.4 of HA205/08 (Highways Agency et al., 2008e)

- Where more than one significance level is provided, professional judgement has been used to determine the significance of effect. Slight, moderate, large or very large effects may be beneficial or adverse.
- **5.4.28** Except where guidance requires otherwise, the significance of effect is described using the terms very large, large, moderate, slight and neutral. The broad definitions of these terms are provided in Table 5.5.

Table 5.5: DMRB Descriptors of Significance of Effect Categories

Significance Category	Typical Descriptors of Effect
Very Large	Only adverse effects are normally assigned this level of significance. They represent key factors in the decision-making process. These effects are generally, but not exclusively, associated with sites or features of international, national or regional importance that are likely to suffer a most damaging impact and loss of resource integrity. However, a major change in a site or feature of local importance may also enter this category.
Large	These beneficial or adverse effects are considered to be very important considerations and are likely to be material in the decision-making process.
Moderate	These beneficial or adverse effects may be important, but are not likely to be key decision-making factors. The cumulative effects of such factors may influence decision-making if they lead to an increase in the overall adverse effect on a particular resource or receptor.
Slight	These beneficial or adverse effects may be raised as local factors.  They are unlikely to be critical in the decision-making process, but are important in enhancing the subsequent design of the project.
Neutral	No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

Based on Table 2.3 of HA205/08 (Highways Agency et al., 2008e)

In terms of the EIA Regulations, significant effects are generally those where the significance of the effect is 'moderate' or greater. It should be noted however that, as described in Table 5.5 above, a significant effect in EIA terms simply means that the effect should be given careful consideration in the decision making process.

### **Mitigation and Monitoring Measures**

- 5.4.30 The development of mitigation and monitoring measures is part of an iterative EIA process. Therefore, measures have been developed throughout the EIA process in response to the findings of initial assessments.
- **5.4.31** Mitigation measures can include the following.
  - Measures included as part of the Scheme design, such as those measures shown on the Environmental Masterplans at Figure 2.4. This is sometimes referred to as 'embedded mitigation'.
  - Normal good practice measures to be adopted during construction to avoid and minimise environmental effects, such as pollution control measures.
  - Additional measures identified during the EIA process to further prevent, reduce and, where possible, offset any adverse effects on the environment.
- 5.4.32 In some cases, these measures may result in enhancement of environmental conditions.
- 5.4.33 In Wales, HA 205/08 recommends assignment of significance before and after the consideration of mitigation measures is undertaken to allow for the case or reason for, and effectiveness of mitigation to be described (Highways Agency *et al.*, 2008e).

- 5.4.34 Each topic chapter of this ES therefore first considers the potential effects 'without mitigation' and then with mitigation in place. For the purposes of the assessment, certain measures are considered to be an integral part of the Scheme and are therefore included in the 'without mitigation' assessment. Those measures forming part of the Scheme design are summarised within Chapter 2 and are set out within each topic chapter of this ES.
- In some cases, the EIA process has identified mitigation that could further prevent, reduce and, where possible, offset any adverse effects on the environment. Where such measures are identified, these have been referred to as 'additional mitigation' and are set out within each topic chapter, together with an assessment of the effects with these measures in place.
- 5.4.36 In addition, the requirement for monitoring during construction or following completion of construction has been considered during the EIA process. A description of proposed monitoring measures is provided within each topic chapter of this ES
- 5.4.37 Mitigation and monitoring measures proposed during the construction phase are set out in the Pre-Construction Environmental Management Plan (Appendix 3.2). In addition, the Commitments Register at Appendix 18.1 provides an overview of the key mitigation and monitoring proposed for the Scheme.

### **Assessment of Cumulative Effects**

- 5.4.38 EIA Directive 2011/92/EU, as amended, requires the EIA to consider cumulative effects. Cumulative effects result from multiple actions on receptors and resources over time and are generally additive or interactive (synergistic) in nature. Cumulative impacts can also be considered as:
  - "...impacts resulting from incremental changes caused by other past, present or reasonably foreseeable actions together with the project." (European Commission, 1999)
- **5.4.39** Major developments for consideration within the cumulative effects assessment were identified within the following categories.
  - Development under construction.
  - Application(s) permitted but which are not yet implemented.
  - Submitted applications not yet determined, and which, if permitted, would affect the proposed development in the scoping request.
  - Development identified in the adopted and emerging development plan (with appropriate weight being given as they move closer to adoption), recognising that information on any relevant proposals will be limited.
- **5.4.40** A review of the following sources was undertaken.
  - Local planning authority websites, with particular emphasis on proposed developments (including transport or minerals related developments) in closest proximity to the site located within the administrative boundaries of Newport City Council, Monmouthshire County Council and Cardiff City Council.
  - Adopted and emerging Local Plans.

- The Planning Inspectorate website, in order to identify any Nationally Significant Infrastructure Projects in the vicinity of the Scheme.
- An initial list of developments to be considered was included within the Scoping Report. Comments received from stakeholders in response to the Scoping Report have been taken into account in refining this list.
- Advice and guidance on the assessment of cumulative effects is given in HA 205/08 and HD 48/08 (Highways Agency et al., 2008e and 2008f). Additionally, IAN 125/09(W) acknowledges that 'as yet there is no industry standardised approach' to the assessment of cumulative effects. However, the cumulative assessment should nevertheless 'differentiate between permanent, temporary, direct, indirect and secondary effects, positive and negative' (Welsh Assembly Government, 2010).
- **5.4.43** Relevant guidance taken into account in the assessment of cumulative effects is as follows.
  - HA205/08 Principles of Environmental Assessment Assessment and Management of Environmental Effects (Highways Agency et al., 2008).
  - Welsh Assembly Government (2010) Interim Advice Note 125/09(W) Supplementary Guidance for Users of DMRB Volume 11 'Environmental Assessment' Wales Only.
  - Advice Note 17: Cumulative effects assessment relevant to nationally significant infrastructure projects (Planning Inspectorate, 2015).
  - Advice Note 9: Rochdale Envelope (Planning Inspectorate, 2012).
- 5.4.44 The cumulative effects of the Scheme in conjunction with other proposed developments have been assessed and the findings are presented within Chapter 17 of this ES.

#### Inter-relationships

- 5.4.45 Consideration of inter-relationships is a requirement of the EIA Directive. Interrelationships refer to the combined effect on individual (or groups of) receptors or resources from more than one source or type of environmental effect (e.g. noise, loss of amenity, visual impact on a dwelling).
- **5.4.46** Inter-relationships are considered within Chapter 17 of this ES.

## 5.5 Consultation

- 5.5.1 This section summarises the consultation undertaken with stakeholders at key stages during the development of the Scheme. Further details of the comments received (where relevant to the EIA process) are set out within each topic chapter of this ES.
- 5.5.2 During development of the Scheme, consultation has been undertaken with, or information requested from, a number of organisations including (but not limited to) the following.
  - Statutory consultees.
  - Non-statutory consultees.

- Interest groups.
- Commercial, industrial and business operators.
- Recreational groups.
- The general public.
- **5.5.3** An overview of the consultation undertaken to date is set out below.

### Consultation Undertaken Prior to Route Selection

- A route to the south of Newport has been protected for planning purposes since April 2006. The alignment of the proposed new section of motorway was developed following extensive consultation, investigation and analysis.
- 5.5.5 Chapter 4 of this ES sets out the evolution of the Scheme, which incorporated consultation at key points. These included the following.
  - April and May 2006 (including public exhibitions) in relation to the TR111 notice.
  - March July 2012 (including public consultation and engagement with internal and external specialists and expert stakeholders) in relation to the M4 Corridor Enhancement Measures Programme.
  - September December 2013 (including public and stakeholder consultation on Stage 2, including associated environmental, health and equality assessments).
- A large scale public consultation exercise was undertaken on the M4 Corridor around Newport draft Plan. This asked participants to comment on the draft Plan, its Reasonable Alternatives and the Do-minimum Scenario (which considered the consequences of doing nothing above what is already planned) and ran for 12 weeks between September and December 2013.
- 5.5.7 Ten public drop-in exhibitions were held between October and November 2013. Exhibition boards were displayed and members of the project team, including technical experts, were available to answer any questions and explain how the public could express their opinions formally.
- 5.5.8 The process also centred on engagement with key stakeholders in order to establish the proposed scope and level of detail required for the draft Plan's associated environmental, health and equality assessments. Key stakeholders included statutory consultees and those with a particular stake or significant interest in transport issues relevant to the economy, environment and society in South Wales and beyond.
- **5.5.9** Key statutory stakeholders included the following.
  - Cadw.
  - Natural England.
  - Natural Resources Wales.
  - Cardiff Council.
  - Monmouthshire County Council.
  - Newport City Council.

- Torfaen County Borough Council.
- **5.5.10** Other key stakeholders included the following.
  - Goldcliff, Magor with Undy, Marshfield, and Nash Community Councils.
  - Statutory undertakers, including Associated British Ports (ABP) South Wales.
  - Other public sector and community organisations, such as the Association of Police Officers Cymru, Health and Safety Executive.
  - Voluntary sector environmental and civil society organisations such as Wildlife Trust Wales (WTW), Gwent Wildlife Trust (GWT), Royal Society for the Protection of Birds (RSPB) and Friends of the Earth.
  - Private sector (business and regeneration) e.g. Tata Steel.
  - Transport organisations e.g. Network Rail, South Wales Trunk Road Agency.
  - Political organisations/individuals.
  - Members of Parliament and Assembly Members.
- **5.5.11** In addition, Environmental Liaison Group meetings were held with key consultees during the Scheme evolution.

# Consultation Undertaken During the EIA Process

- 5.5.12 The Scoping Report provided the basis for consultation regarding the scope of the EIA and the proposed assessment methodologies. However, specialist topic advice has also been sought from the relevant statutory consultees and specialist groups throughout the EIA process.
- The approach to consultation during the EIA process has built on the consultation undertaken at previous stages. Statutory bodies have been consulted throughout the development of the Scheme. A series of meetings has been undertaken with key consultees. Environmental Liaison Group meetings and/or Technical Working Groups have been held regularly with the following organisations.
  - Newport City Council.
  - Monmouthshire County Council.
  - · Cardiff City Council.
  - Natural Resources Wales.
  - Cadw.
- 5.5.14 Meetings were held early in the EIA process to discuss the scope of ecology survey work required with Natural Resources Wales. Landowners have been informally consulted throughout the process, including completion of a questionnaire relating to existing land uses.
- 5.5.15 Public Information Exhibitions were undertaken during September 2015 and were held at the locations shown in Table 5.6. Those marked with an asterisk were smaller one day pop up events in public areas.
- 5.5.16 The exhibitions were advertised through delivery of bilingual leaflets, posters at motorway services and adverts in local newspapers and on local radio. A total of 2,624 people signed the attendance registers across the five two day events.

Attendance at the four one day pop up events was not recorded but it has been estimated that more than 2,500 summary brochures were taken by visitors.

**Table 5.6: Locations of Public Information Exhibitions 2015** 

Date	Location
7 <sup>th</sup> and 8 <sup>th</sup>	Castleton Village Hall
September 2015	
9 <sup>th</sup> September 2015	Swansea Bus Station*
10 <sup>th</sup> and 11 <sup>th</sup>	Caerleon Town Hall
September 2015	
14 <sup>th</sup> and 15 <sup>th</sup>	Nash Community Centre
September	
16 <sup>th</sup> and 17 <sup>th</sup>	Magor Baptist Church
September	
18 <sup>th</sup> September	Cardiff St David's Shopping Centre*
21 <sup>st</sup> September	Newport Kingsway Shopping Centre*
23 <sup>rd</sup> September	Carmarthen Market*
25 <sup>th</sup> and 26 <sup>th</sup>	Newport Lysaght Institute
September	

**5.5.17** The Welsh Government has developed and continues to manage a project website:

#### www.gov.wales/m4newport

- **5.5.18** The Welsh Government also uploaded multimedia material, including a three dimensional fly through video, to its YouTube channel.
- 5.5.19 Feedback was provided through an exit survey and enquiry forms at the Public Information Exhibitions. Details are provided in the Public Information Exhibitions Report (Welsh Government, 2015).
- 5.5.20 Comments in relation to EIA matters have been taken into account in the preparation of this ES. Each topic chapter provides a summary of key responses received, together with details of where the relevant information can be found.