

Chapter 1

Introduction

1.1 General

Kildare County Council has commissioned Roughan & O'Donovan – AECOM Alliance Consulting Engineers to compile the Environmental Impact Statement for the M7 Naas to Newbridge Bypass Upgrade Scheme which proposes the widening of the M7 between Great Connell and Johnstown in County Kildare and the replacement of the Newhall Interchange with an enhanced interchange with the R445. A location plan for the proposed scheme is presented in **Figure 1.1, EIS Volume 3**.

This Environmental Impact Statement (EIS) is a statement of the likely significant effects on the environment of the proposed road development. The EIS, as presented, has been prepared by Roughan & O'Donovan – AECOM Alliance Consulting Engineers and a team of specialist sub-consultants in conjunction with Kildare National Roads Office.

The EIS is presented in three volumes; the standalone Non-Technical Summary is Volume 1; this Volume, Volume 2, contains the main text including the Non-Technical Summary, while Volume 3 contains the associated Figures. The following text describes in detail the layout of this EIS with the following sections.

Volume 1: Non-Technical Summary

Volume 2: Main Text

Part I “Background Information and General Description”

There are five chapters to this part of the document.

Chapter	1:	Introduction
Chapter	2:	Planning and Policy Context
Chapter	3:	Need for the Proposed Road Development
Chapter	4:	Description of the Proposed Road Development
Chapter	5:	Alternatives Considered
Chapter	6:	Traffic Analysis

Part II “Significant Environmental Effects and Proposed Ameliorative Measures”

This part of the document sets out the likely significant environmental effects of the scheme under the headings:

Chapter	7:	Ecology
Chapter	8:	Hydrogeology
Chapter	9:	Hydrology
Chapter	10:	Soils and Geology
Chapter	11:	Material Assets
Chapter	12:	Human Beings
Chapter	13:	Archaeology, Architecture and Cultural Heritage
Chapter	14:	Landscape and Visual Impact
Chapter	15:	Noise and Vibration
Chapter	16:	Air Quality and Climate

Chapter	17:	Resource and Waste Management
Chapter	18:	Assessment of Potential Cumulative Impacts
Chapter	19:	Interrelationships and Interactions
Chapter	20:	Mitigation Measures

Volume 3: Figures

1.2 EIS Study Team

This EIS has been compiled by Roughan & O'Donovan – AECOM Alliance Consulting Engineers with the assistance of specialist environmental studies undertaken by sub-consultants as follows:

Table 1.1 EIS Contributors

Topic	Independent Specialist
Landscape and Visual	Cunnane Stratton Reynolds
Noise and Vibration	AWN Consulting Ltd.
Air Quality and Climate	AWN Consulting Ltd.
Ecology	EirEco Environmental Consultants
Hydrogeology	Minerex Environmental Ltd.
Archaeology, Architecture and Cultural Heritage	Irish Archaeological Consultancy Ltd
Material Assets (Newhall Interchange)	John Bligh and Associates

1.3 Requirement for Environmental Impact Assessment

1.3.1 Definition

The National Roads Authority Guidance document Environmental Impact Assessment of National Road Schemes - A Practical Guide, Revision 1, November 2008 defines Environmental Impact Assessment (EIA) as:

the process of examining the environmental effects of the development – from consideration of the environmental aspects at design stage, through to the preparation of an Environmental Impact Statement, evaluation of the EIS by a competent authority and the subsequent decision as to whether the development should be permitted to proceed, also encompassing public response to that decision.

The Environmental Impact Statement (EIS) is defined as “a statement of the effects, if any, which the proposed development, if carried out, would have on the environment” (Environmental Protection Agency, 2002).

1.3.2 Legislative and Planning Procedure

The legal requirements for Environmental Impact Assessment of a road development are set out in the Roads Acts (1993 - 2007) and by the Planning and Development Acts (2000 - 2011), and by Regulations made under the European Communities Act, 1972 including, the European Communities (Environmental Impact Assessment) (Amendment) Regulations 1989 – 2001 as well as the European Communities (Birds and Natural Habitats Regulations, 2011 (S.I. 477/2011), the Roads Regulations, 1994 (SI 119/1994) and the EC Directives 85/337/EC and 97/11/EC. Section 50 of the Roads Act (1993), (as amended by Regulation 14 of the European Communities

(Environmental Impact Assessment) (Amendment) Regulations 1999) as amended by Section 9 of the Roads Act (2007) and as amended by Regulation 56 of the European Communities (Birds and Natural Habitats) Regulations, 2011, sets out provisions for the preparation of an Environmental Impact Statement (EIS) by a Road Authority.

Environmental Impact Statement (EIS) Section 50 of the Roads Act (1993) (as amended) states:

“A road authority or the Authority shall prepare a statement of the likely effects on the environment (‘environmental impact statement’) of any proposed road development consisting of:

- (i.) the construction of a motorway,*
- (ii.) the construction of a bus way,*
- (iii.) any prescribed type of proposed road development consisting of the construction of a proposed public road or the improvement of an existing public road.”*

The prescribed type of proposed road development is defined as:

- “(a) the construction of a new road of four or more lanes, or the realignment or **widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in length in an urban area,**”*
- “(b) the construction of a new bridge or tunnel which would be 100 metres or more in length.”*
- “(c) Where a road authority considers that any proposed road development (other than development to which paragraph (a) applies) consisting of the construction of a public road or the improvement of an existing public road would be likely to have significant effects on the environment, it shall inform the Board in writing and where the board concurs with the road authority it shall give a direction to the road authority under paragraph (b).”*

Section 50(2) of the Road Act 1993 (as substituted by regulation 14 of the European Communities (Environmental Impact Assessment) (Amendment) Regulations 1999) stipulates that an EIS is required to contain the following information:

- (a) “a description of the proposed road development comprising information on the site, design and size of the proposed road development,
- (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 proposed road development is likely to have on the environment;
- (d) an outline of the main alternatives studied by the road authority concerned and an indication of the main reasons for its choice, taking into account the environmental effects;
- (e) a summary in non-technical language of the above information.”

Subsection (3) (as substituted) goes on to elaborate that an EIS shall, in addition to and by way of explanation or amplification of the specified information referred to in subsection (2), contain further information on the following matters:

- “(a) (i) a description of the physical characteristics of the whole proposed road development and the land-use requirements during the construction and operational phases,
- (ii) an estimate, by type and quantity, of expected residues and emissions (including water, air and soil pollution, noise, vibration, light, heat and radiation) resulting from the operation of the proposed road development;
- (b) a description of the aspects of the environment likely to be significantly affected by the proposed road development, including in particular:
- human beings, fauna and flora,
 - soil, water, air, climatic factors and the landscape,
 - material assets, including the architectural and archaeological heritage, and the cultural heritage,
 - the inter-relationship between the above factors;
- (c) a description of the likely significant effects (including direct, indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative) of the proposed road development on the environment resulting from:
- the existence of the proposed road development,
 - the use of natural resources,
 - the emission of pollutants, the creation of nuisances and the elimination of waste,
- and a description of the forecasting methods used to assess the effects on the environment;
- (d) an indication of any difficulties (technical deficiencies or lack of know-how) encountered by the road authority concerned in compiling the required information;
- (e) a summary in non-technical language of the above information;

to the extent that such information is relevant to a given stage of the consent procedure and to the specific characteristics of the proposed road development or type of proposed road development concerned, and of the environmental features likely to be affected, and the road authority preparing the environmental impact statement may reasonably be required to compile such information having regard, inter alia, to current knowledge and methods of assessment.

An application for a Motorway Order is being made pursuant to Section 47 of the Roads Act 1993 – 2007 and approval for the scheme and Motorway Order is being submitted to An Bord Pleanála under Section 49 and Section 51 respectively of the Roads Act 1993 – 2007.

As the proposed scheme is Strategic Infrastructure Development pursuant to the definitions contained in Section 2 of the Planning and Development Acts 2000 – 2011 and the application for approval is to the Strategic Infrastructural Division of An Bord Pleanála.

1.3.3 Screening and Scoping for Environmental Impact Assessment

EIA Screening Report

An EIA Screening Report was completed by Arup Consulting Engineers for the Scheme in October 2011. This report concludes that the proposed M7 Naas to Newbridge Bypass Upgrade Scheme exceeds the thresholds outlined in the Roads Regulations, as detailed above, and as such an Environmental Impact Statement is required.

EIA Scoping Report

Scoping is an early stage in the EIA Process and is designed to ensure that the environmental studies provide all the relevant information on the potential impacts of the project. An EIA Scoping Report was completed in June 2013 and issued for comment to statutory and non-statutory consultees (refer Section 1.5). The purpose of this scoping report was to identify the likely significant environmental effects of the proposed development and to scope the level of detail and the information to be used in the EIA. The recommendations of this Scoping Report have been incorporated into this Environmental Impact Statement.

1.4 EIA Guidelines

The Environmental Protection Agency (EPA) and the National Roads Authority (NRA) Guidelines recognise that public infrastructure such as national road schemes arise on account of plans, strategies and policies that have been previously developed at governmental level.

The preparation of the EIS is a systematic and iterative process which is essentially linked to the Design of the proposed road development. This Design is assessed in this Environmental Impact Statement. The Design has been the subject of ongoing development as described in Chapter 4 and Chapter 5.

Environmental Protection Agency (EPA) Guidelines

The following EPA guidelines are adhered and referred to during the EIA process:

- EPA, Guidelines on the Information to be contained in Environmental Impact Statements, 2002;
- EPA, Advice notes on Current Practice (in the preparation of Environmental Impact Statements), 2003.

EC Guidelines

- Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions (May 1999).

National Roads Authority Environmental and Construction Guidelines

The following NRA planning guidelines are adhered and referred to during the EIA process:

- Environmental Impact Assessment of National Road Schemes - A Practical Guide, Revision 1, November 2008;
- A Guide to Landscape Treatments for National Road Schemes in Ireland;
- Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Scheme;
- Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes;

- Guidelines for Assessment of Ecological Impacts of National Road Schemes, Revised June 2009;
- Ecological Surveying Techniques for Protected Flora and Fauna;
- Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Scheme;
- Guidelines for the Treatment of Noise and Vibration in National Road Schemes - Revision 1, October 2004;
- Guidelines for the Assessment of Architectural Heritage and National Road Schemes;
- Guidelines for the Assessment of Archaeological Heritage Impact of National Road Schemes.

The following NRA construction guidelines are followed and referred to during the EIA process:

- Guidelines for the Management of Noxious Weeds and Non- Native Invasive Plant Species on National Roads, Revised December 2010;
- Guidelines for the Management of Waste from National Road Construction Project, November 2008;
- Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes, July 2008;
- Guidelines for the Protection and Preservation of Trees, Hedgerows and Scrub Prior to, during and Post Construction of National Road Schemes;
- Guidelines for the Treatment of Badgers Prior to the Construction of a National Road Scheme - Revised November 2006;
- Guidelines for the Treatment of Bats during the Construction of National Road Schemes;
- Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes, July 2008;
- Guidelines for the Testing and Mitigation of the Wetland Archaeological Heritage for National Road Schemes;
- Guidelines for the Creation and Maintenance of an Environmental Operating Plan.

1.5 Related Schemes

Kildare County Council, in conjunction with Osberstown Development Ltd, are currently progressing the planning and design of the proposed M7 Osberstown Interchange and R407 Sallins Bypass scheme, with support from ARUP Consulting Engineers. That scheme comprises the construction of a grade separated junction on the M7 at Osberstown, a new regional road comprising the Sallins Bypass and associated link roads.

As the M7 Osberstown Interchange would be located between the Maudlins and Newhall Interchanges there is a clear interface between the two proposed schemes. This interface has been fully considered by both design teams and no amendment to the design of the proposed M7 Naas to Newbridge Bypass Upgrade Scheme is required to accommodate the proposed Osberstown Interchange.

The separation and independence of the two schemes is clearly reflected in the differing context of the Need for each individual scheme:

The M7 Naas to Newbridge Bypass Upgrade Scheme is required from a national perspective, whereas, by contrast, the M7 Osberstown Interchange and R407 Sallins Bypass scheme is required from a regional and local perspective only.

The M7 motorway, from the interchange with the M9, towards Dublin and the M50, is one of the most important and busiest motorway routes in Ireland. It carries all the traffic from an extensive geographical area, covering origins/destinations as diverse as Waterford, Limerick and Cork, in a single corridor along this section of motorway to and from Dublin. The M7 Naas to Newbridge Bypass Upgrade Scheme is required to address a significant national need, that of traffic congestion and safety on the national motorway network, and is supported by National, Regional and County Planning Policy (refer Chapter 2 Planning & Policy Context and Chapter 3 Need for the Proposed Road Development for further information).

The M7 Osberstown Interchange and R407 Sallins Bypass scheme is being proposed to address current congestion and support future development along the regional and local road network.

The need to address existing capacity and safety issues on the M7 national road, including those associated with access to and from the existing Newhall junction, is wholly independent of the regional and local objectives of the proposed M7 Osberstown Interchange and R407 Sallins Bypass Scheme. However the existing congestion and safety issues experienced on the M7 are such that the introduction of additional merge and diverge movements together with the small but significant increase in traffic levels that would arise as a result of the provision of the proposed Osberstown Interchange cannot be safely accommodated in the absence of the M7 Naas to Newbridge Bypass Upgrade Scheme described in this Environmental Impact Statement.

Despite the clear separation and independence of the M7 Naas to Newbridge Bypass Upgrade Scheme there is, nevertheless, an interaction between this and the proposed M7 Osberstown Interchange. These potential interactions have been addressed throughout the compilation of this EIS and are addressed and reviewed in Chapter 18 'Assessment of Potential Cumulative Impacts.' This assessment confirms that the proposed M7 Osberstown Interchange is consistent with and complementary to the proposals contained in this Environmental Impact Statement, on the basis that the promoters of the M7 Osberstown Interchange and Sallins Bypass Scheme acknowledge the reliance of that proposal on the prior or contemporaneous delivery of this M7 Naas to Newbridge Bypass Upgrade Scheme.

1.6 Consultation

1.6.1 Informal Scoping

Roughan and O'Donovan – AECOM Alliance Consulting Engineers undertook an informal scoping exercise in June 2013. This consisted of written consultation with a number of both Statutory and Non-Statutory bodies who were deemed to have an interest in the scheme.

The purpose of the Scoping Document was to provide consultees with information on the scheme and on the proposed scope of the Environmental Impact Statement. This scoping exercise returned a significant number of responses. In general, the responses confirmed satisfaction with the studies being undertaken as part of the Environmental Impact Assessment.

Table 1.2: List of Consultees

Company
Minister for Communications, Energy & Natural Resources
Minister for Agriculture, Marine and Food
Minister for Environment, Community & Local Government
Minister for Arts, Heritage and the Gaeltacht
Minister for Jobs, Enterprise and Innovation
Minister for Transport, Tourism and Sport
The Office of Public Works
Fáilte Ireland
An Taisce - The National Trust of Ireland
The Arts Council - Planning Department
The Heritage Council - Planning Department
Inland Fisheries Ireland
Waterways Ireland
Waterways Ireland - Eastern Region Office
Environmental Protection Agency
The Inland Waterways Association of Ireland
The National Museum of Ireland
Birdwatch Ireland
Dublin Naturalists Field Club
Irish Wildlife Trust
Eastern River Basin District
Ordnance Survey Ireland
Geological Survey of Ireland
Dublin Regional Authority
Health & Safety Authority
Met Eireann
The National Roads Authority
Kildare County Council
Kildare County Enterprise Board
Naas Town Council
Newbridge Town Council

1.6.2 Public Consultation

A combined public consultation event, with the M7 Osberstown Interchange and R407 Sallins Bypass Scheme, was held on the 29th May 2013 in Áras Chill Dara, Naas, County Kildare. The event was advertised in the Leinster Leader on the 21st May 2013 and again in the Kildare Times on the 28th May 2013.

Over 100 members of the public attended the event. Common enquiries and issues raised included existing noise levels, potential impact on future commercial development, access to the new R445 interchange from Rathangan Road, flooding and the use of local roads by construction traffic.

1.7 Difficulties Encountered

For safety reasons access from the motorway, onto the motorway median or the motorway verges and embankments, was not permitted for site surveys. However, the independent environmental specialists were able to access the area from the local road network, motorway overbridges and adjacent lands. As such it is considered that all likely significant impacts have been considered and appropriate mitigation proposed.

1.8 What Happens Next

Construction of the scheme is dependent on approval from An Bord Pleanála. The application for permission has been advertised and written submissions relating to the environmental effects can be made to the Board. These advertisements will indicate where the application, Environmental Impact Statement and other supporting documents can be viewed. Any written submissions will be considered by the Board in making their decision on whether or not to approve the scheme with or without modifications.