

Chapter 1

Introduction

1.1. General

This Environmental Impact Assessment Report (EIAR) for the proposed N5 Ballaghaderreen to Scramoge Road Project is “A statement of the effects, if any, which proposed development, if carried out, would have on the environment” (EPA, Draft 2017) and has been prepared in respect of the construction and operation of the proposed new road. The EIAR, as presented has been prepared by Roughan & O'Donovan – AECOM Alliance (ROD-AECOM) and a team of specialist sub consultants, with the assistance of Roscommon National Roads Design Office.

The EIAR is presented in four volumes; the standalone Non-Technical Summary is Volume 1, this Volume 2 contains the main text, Volume 3 contains the associated Figures and Volume 4 is the Route Corridor Selection Report. A separate Natura Impact Statement (NIS) which complements the EIAR and vice versa has also been prepared. The following text describes the volume and chapter layout of this EIAR:

Volume 1: Non – Technical Summary

Volume 2: Main Text

Chapter	1:	Introduction
Chapter	2:	Need for the Proposed Road Development
Chapter	3:	Alternatives Considered
Chapter	4:	Description of the Proposed Road Development
Chapter	5:	Traffic Analysis
Chapter	6:	Population & Human Health
Chapter	7:	Biodiversity
Chapter	8:	Soils & Geology
Chapter	9:	Hydrogeology
Chapter	10:	Hydrology
Chapter	11:	Landscape & Visual Analysis
Chapter	12:	Noise & Vibration
Chapter	13:	Air Quality & Climate
Chapter	14:	Archaeological & Cultural Heritage
Chapter	15:	Architectural Heritage
Chapter	16:	Material Assets & Land - Agriculture
Chapter	17:	Material Assets & Land - Non Agriculture
Chapter	18:	Interrelationships & Cumulative Effects
Chapter	19:	Mitigation Measures

Volume 3 Figures

Volume 4 Route Corridor Selection Report

1.2. Overview

1.2.1 Proposed Road Development

The proposed road has been designed as a Type 1 Single Carriageway Cross section with two 3.65m lanes and associated hard shoulders, road verges and drainage ditches. The paved width is generally 12.3m with local widening to accommodate specific road features such as junctions, etc. The total width of the road including verges and associated features will be approximately 19 – 20m as a minimum where it is at grade with the local topography. However, over much of the route, the local topography is such that significant cut and fill will inevitably be required. This will extend the width of the road footprint considerably in some sections.

The principal elements of or associated with the proposed road development include the following:

- Approximately 33.4km of National Primary Road to Type 1 Single Carriageway standard;
- Approximately 15.4km of realignment of existing roads;
- Five roundabouts (and associated public road lighting);
 - Frenchpark Roundabout (R361 south of Frenchpark);
 - N61 Roundabout (between Tulsk and Elphin);
 - Shankill Roundabout (N61/R369);
 - Strokestown Roundabout (LP-1405);
 - Kildallogge Roundabout (R368/LP-1405);
- At grade mainline T junctions;
 - 16 'T' Junctions, of which 5 are staggered;
- Reconfiguration of a crossroads between the existing N5 and R361 in Frenchpark;
- 3 road under bridges and 1 overbridge;
- 4 River bridges and 14 culverts;
- Approximately 290m of retaining walls at three locations;
- Provision of 9 accommodation underpasses, access roads and accesses;
- Associated earthworks including excavation of peat and unacceptable material, excavation and processing of rock and other material, provision of material deposition areas, and deposition and recovery of unacceptable material for use in the works;
- Temporary site compounds;
- Drainage works;
- Landscaping works;
- Utilities and Services Diversion Works including the diversion of high voltage electricity lines at 3 locations and the provision of associated support towers/ poles;
- Safety Barrier, Public Lighting, Fencing and Accommodation Works; and
- Environmental measures and all other Ancillary Works.

1.2.2 Client and Design Team

Roughan & O'Donovan in alliance with AECOM (ROD-AECOM) were commissioned by Roscommon County Council in May 2014 to undertake Engineering Consultancy Services including the Design and environmental assessment and preparation of the EIAR for the N5 Ballaghaderreen to Scramoge Road Project.

1.2.3 EIAR Study Team

Roughan & O'Donovan-AECOM Alliance have led the preparation of this EIAR with the assistance of specialist environmental consultants, who have undertaken the following studies.. The table below outlines the experience and qualifications of the contributors

Topic	Specialist Contributors	Company	Qualifications	Experience (Years)
Chapters 1-4	Jim Thorpe	ROD-AECOM	BSc Hons Dip, C.Eng	31
	Barry Corrigan	ROD-AECOM	BSc Hons, Dip EIA	17
	Richard Spencer	ROD-AECOM	B.Eng. (Civil), C.Eng.	20
Traffic Analysis	Philip Shiels	ROD-AECOM	B.Eng (Hons), CEng MIEI	11
Population	Craig Bullock	Optimize Consultants	MSc Env.Econ.; PhD Env Economics	32
Human Health	Dr Martin Hogan	Corporate Health Ireland	MB. BCh BAO, Dip Child Health, Dip Obstetrics.	30
Biodiversity	Pat Roberts	McCarthy Keville O'Sullivan / ROD-AECOM	BSc Env.Sc, Dip. Countryside Management	12
Soils and Geology	Fintan Buggy	ROD / AECOM	MSc Soil Mechanics; P.E.	36
Hydrology and Hydrogeology	Tony Cawley	Hydro Environmental	BE(Civil), MSc.Eng Hydrology;	27
	Dr Patrick Morrissey	Ltd / ROD-AECOM	MSc Env Eng; Dip Statistics; PhD Groundwater Hydrology	10
Landscape and Visual	Thomas Burns	Brady Shipman Martin	B.Agr.Sc (Land.), Dip.EIA.Mgmt.	27
Photomontages	Nik Hennessy	MacroWorks	BAgrSc, MAgr	18
Noise and Vibration	Dr Stephen Smyth	AWN Consulting Ltd.	BA BAI MIEI MIOA	14
	Ronan Murphy	AWN Consulting Ltd.	BSc Env Management, Dip. Acoustics & Noise Control	10
Air Quality and Climate	Dr Ed Porter	AWN Consulting Ltd.	BSc, PhD Chem, MRSC	
	Dr Avril Challoner	AWN Consulting Ltd.	BEng Env.Eng. HDip Statistics, PhD Env Chemistry	6
Archaeology and Cultural Heritage	Lisa Courtney	Courtney Deery	BA Archaeology & Economics; MSc	21

Topic	Specialist Contributors	Company	Qualifications	Experience (Years)
		Heritage Consultants	Environmental Resource Management; Dip Management in Organisational Behaviour	
Architectural Heritage	Rob Goodbody	Historic Building Consultants	BA(Mod); Dip Environmental Planning; MA Local History; Masters in Urban and Building Conservation; Dip Applied Building Repair & Conservation	43
Impacts on Land & Property including Agricultural Impacts	John Bligh	John Bligh & Associates	MSc Environmental Systems; BAgrSc	20
Cumulative Impacts	Barry Corrigan	ROD–AECOM	BSc Hons, Dip EIA	17
Mitigation Measures	Barry Corrigan	ROD–AECOM	BSc Hons, Dip EIA	17

1.2.4 Previous Reports; Constraints and Route Options

A Constraints Study was carried out to identify features in the study area which are likely to affect the design of the proposed road development and the Constraints Study Report was published in December 2006. Following the Constraints Study, a Route Corridor Selection Study commenced which led to the identification of an Emerging Preferred Route Corridor which was presented to the public in March 2010. These studies are summarised in Chapter 3 – Alternatives Considered and the Route Corridor Selection Report is included in Volume 4 of this EIAR.

1.3. EIA Legislation

1.3.1 Introduction

Environmental Impact Assessment (EIA) is defined in Directive 2011/92/EU (as amended by Directive 2014/52/EU) as follows:

“Environmental Impact Assessment” means a process consisting of:

- (i) *the preparation of an environmental impact assessment report by the developer, as referred to in Article 5(1) and (2);*
- (ii) *the carrying out of consultations as referred to in Article 6 and, where relevant, Article 7;*
- (iii) *the examination by the competent authority of the information presented in the environmental impact assessment report and any supplementary information provided, where necessary, by the developer in accordance with Article 5(3), and any relevant information received through the consultations under Articles 6 and 7;*
- (iv) *the reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (iii) and, where appropriate, its own supplementary examination; and*
- (v) *the integration of the competent authority's reasoned conclusion into any of the decisions referred to in Article 8a.”*

1.3.2 Environmental Impact Assessment Report

EIA requirements derive from Council Directive 85/337/EEC (as amended by Directives 97/11/EC, 2003/35/EC and 2009/31/EC) and as codified and replaced by Directive 2011/92/EU of the European Parliament and the Council on the assessment of the effects of certain public and private projects on the environment. Directive 2011/92/EU has since been amended by Directive 2014/52/EU of the European Parliament and is in the process of being transposed into Irish law. Circular letter PL 1/2017 issued by the Department for Housing, Planning, Community & Local Government provides advice to Competent Authorities on the application of the Directive in advance of the transposition as they consider appropriate. The requirements of these directives have been transposed into Irish Law through the Roads Acts (1993 - 2015) as amended by the Planning and Development Acts (2000 – 2015), the Regulations made under the European Communities Act, 1972 including, The European Communities (Environmental Impact Assessment) Regulations 1989 – 2006, the European Union (Environmental Impact Assessment and Habitats) Regulations 2011, the European Communities (Birds and Natural Habitats Regulations, 2011. In addition to the above and as a result of the date for transposition of EU Directive 2014/52/EU having passed on the 16th of May, 2017 and in accordance with Circular letter PL 1/2017 having issued by the Department of Housing, Planning, Environment and Local Government, dated the 15th of May, 2017, the Council herein have applied the requirements as contained in EU Directive 2014/52/EU to the project herein and to the preparation of the EIAR in respect of same.

Section 50 of the Roads Act (1993), as amended, sets out provisions for the preparation of an Environmental Impact Statement (EIS) by a Road Authority (now to be called an Environmental Impact Assessment Report (EIAR)).

Section 50(1) of the Roads Act, 1993 - 2015 states (Note: The functions of the Minister have transferred to An Bord Pleanála under Section 215 of the Planning and Development Act 2000, as amended):

- “1 (a) *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 it proposes consisting of -*
- (i) the construction of a motorway,*
 - (ii) the construction of a busway,*
 - (iii) the construction of a service area, or*
 - (iv) any prescribed type of proposed road development consisting of the construction of a proposed public road or the improvement of an existing public road.”*
- (b) Where the Minister considers that any proposed road development (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment, he shall direct the road authority to prepare an environmental impact statement in respect of such proposed road development and the authority shall comply with such direction*
- (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 proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment, it shall inform the Minister in writing and where the Minister concurs with the*

road authority he shall give a direction to the road authority under paragraph (b).”

The prescribed type of proposed road development, as defined by paragraph 8 of the Roads Regulations (S.I. No.119 of 1994), for the purpose of subsection (1) (a) (iv) of Section 50 of the Act is as follows:

- “(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 100m or more in length.”*

None of the automatic triggers contained in Section 50 (1) (a) of the Roads Act 1993-2015 were met by virtue of the proposed road development but the Council went on to consider screening for an EIAR as dealt with in more detail in Section 1.3.2.1 below.

1.3.2.1 EIA Screening

In accordance with the above legislation if the Road Authority considers that significant environmental effects are likely, it shall inform An Bord Pleanála in accordance with Section 50(1)(c). In relation to the proposed road development, Roscommon County Council considered that it would be likely to have significant effects on the environment and in accordance with the provisions of Section 50(1)(c) of the Roads Act, as amended informed An Bord Pleanála of its determination in writing. An Bord Pleanála, having considered the matter exercised its powers under Section 50(1)(b) of the Roads Act and directed Roscommon County Council to prepare an Environmental Impact Assessment Report in respect of the proposed road development.

1.4. Scope of the EIAR

The preparation of a proposed road development is a systematic and iterative process in which the collation and assessment of environmental data and predicted impacts are essentially linked to the development of the Design. Chapter 3 of this EIAR summarises the processes that led to the development of the proposal that is described in Chapter 4. Once the Preferred Route had been identified the EIA Screening process noted in Section 1.3.2 above was undertaken which identified the need for the preparation of an EIS/EIAR. The process of Scoping this EIAR then followed with a Scoping Document issued in November 2015 requesting comments on the proposed content of the EIS (now EIAR) and NIS. The following is the list of Statutory Consultees consulted:

- Department of Arts, Heritage and the Gaeltacht;
- Fáilte Ireland;
- An Taisce;
- An Chomhairle Ealaíon;
- The Heritage Council;
- Inland Fisheries Ireland;
- Córas Iompair Éireann (CIE);
- Transport Infrastructure Ireland (TII) ;

- Minister for Arts, Heritage and the Gaeltacht;
- Udaras na Gaeltachta;
- Minister for Communications, Energy and Natural Resources;
- Environmental Protection Agency (EPA);
- Development Applications Unit, Minister for the Environment, Community and Local Government; and
- Commissioners of Public Works in Ireland.

1.4.1 Environmental Protection Agency (EPA) Guidelines

The following EPA guidelines have informed the EIA process:

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

The following Draft Guidance documents have also been consulted:

- Guidelines on the Information to be contained in Environmental Impact Assessment Reports, Draft May 2017; and
- Advice Notes for Preparing Environmental Impact Statements, Draft September 2015.

1.4.2 TII/NRA Environmental Assessment and Construction Guidelines

The following TII/NRA guidelines have informed the EIA process:

- Environmental Impact Assessment of National Road Schemes - A Practical Guide, Revision 1, 20 November 2008;
- A Guide to Landscape Treatments for National Road Schemes in Ireland, 2006;
- Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Scheme, Revision 1, May 2011;
- Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes, 2006;
- Guidelines for Assessment of Ecological Impacts of National Road Schemes, Revision 2, 1st June 2009;
- Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes, 2009;
- Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Scheme, 2008;
- Guidelines for the Treatment of Noise and Vibration in National Road Schemes - Revision 1, October 2004;
- Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes, March 2014;
- Guidelines for the Assessment of Architectural Heritage and National Road Schemes, 2005;
- Guidelines for the Assessment of Archaeological Heritage Impact of National Road Schemes, 2005.

The following TII/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, Revision 1, December 2010;
- Guidelines for the Management of Waste from National Road Construction Project, Revision 1, 12 November 2014;
- 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, 2006;
- Guidelines for the Treatment of Badgers Prior to the Construction of a National Road Scheme - Revised November 2006;
- Guidelines for the Treatment of Badgers during the Construction of National Road Schemes, 2005;
- Guidelines for the Treatment of Bats during the Construction of National Road Schemes, 2006;
- Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes, 2008;
- Guidelines for the Testing and Mitigation of the Wetland Archaeological Heritage for National Road Schemes, 2005; and
- Guidelines for the Creation and Maintenance of an Environmental Operating Plan, 2007.

1.5. Difficulties Encountered

There were no particular difficulties encountered in the development of the proposed road development and preparation of this EIAR.

It should be noted that surveys, assessments and information that form the basis of this Environmental Impact Assessment Report are based on the current design of the project which has been developed to a stage that permits a fully informed Environmental Impact Assessment and Natura Impact Assessment. While some developments and refinements of the current design may occur during the detailed design stage, any such iterations of the development, if approved, will not include any significant adverse impacts on the environment not dealt with within this EIAR and EIA process.