



**PRECIS OF EVIDENCE FOR ORAL HEARING
MEATH COUNTY COUNCIL
ROADS REPORT**

**STRATEGIC INFRASTRUCTURE DEVELOPMENT
PLANNING & DEVELOPMENT ACTS 2000 TO 2007**

Eirgird Proposed Meath Tyrone 400 KV Interconnector

AN BORD PLEANÁLA REF. NUMBER: 02.VA0006

I, Adrian Hobbs, have a Higher Diploma in Engineering, a Bachelor of Science Degree in Civil Engineering and a National Certificate in Civil Engineering. I have been employed as an engineer by Meath County Council since April 1998 and currently hold the position of Senior Executive Engineer in the Infrastructure department.

- The construction phase of the project will generate some minor increased level in traffic volumes but it is considered insignificant in terms of overall context regarding damage to the existing road network.
- In the EIS it is proposed as a mitigation measure that traffic management plans will be developed. These plans must be agreed with the local area engineer prior to construction taking place.
- Some existing field entrances may require to be widened and in some cases a temporary access along the road is proposed, these entrances will have to be agreed with the local area engineer and the temporary opening be reinstated to pre construction state as soon as practicable.
- Consideration must be made for drainage if the temporary entrance requires the filling of a roadside drain or ditch and must be agreed with the local area engineer.

Adrian Hobbs
Senior Executive Engineer
Meath County Council
Infrastructure.



**PRECIS OF EVIDENCE FOR ORAL HEARING
MEATH COUNTY COUNCIL
PLANNING REPORT**

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AN BORD PLEANÁLA REF. NUMBER: 02.VA0006

Qualifications

I, Fiona Redmond BA, MIPI, graduated in 1998 from the University of Newcastle upon Tyne with a BA Honours Degree in Town and Country Planning. I was employed as a Town Planner in Waterford County Council for the period 1998-2000 and in Sligo Local Authorities for over seven years. I have been employed as a Senior Executive Planner by Meath County Council since September 2008.

1.0 INTRODUCTION

Meath County Council submitted a report to An Bord Pleanála on 12th March 2010, in accordance with section 182A of the Planning and Development Act (Strategic Infrastructure) 2006, as amended. The report addressed the issues set out in the letter from An Bord Pleanála dated 31st December 2009. The proposed development the subject of the Strategic Infrastructure Application by Eirgrid relates to a new 400 KV overhead power line which will run from the existing substation at Woodland, County Meath to a proposed new substation at Moyhill, County Meath. It will cross the border with Northern Ireland at Lemgare, County Monaghan and connect to a proposed new substation at Turleenan, County Tyrone.

2.0 DEVELOPMENT PLAN PROVISIONS

The Meath County Development Plan 2007-2013

The Meath County Development Plan 2007-2013 Section 4.1 acknowledges that the availability of energy is of critical importance to the continued development and expansion of employment in Co. Meath. The Planning Authority recognises the essential requirements for electricity production and distribution. It is an objective of this Development Plan to encourage and facilitate the development of power generation facilities in the County, including the support of non renewable energy developments where it is consistent with the proper planning and sustainable development of the County. In this context the overall principle of expanding the existing electricity network within Meath is supported by the provisions of the Meath County Development Plan 2007-2013.

Meath County Council in conjunction with the Heritage Council and the Department of the Environment has prepared a 'Draft Tara Skryne Landscape Conservation Area Explanatory Document', which is currently on public display. The proposed 400 KV line is outside the boundaries of the Draft Tara Skryne Landscape Conservation Area. A copy of the draft 'Tara Skryne Landscape Conservation Area' explanatory document and map is provided for the Inspector.

3.0 ENVIRONMENTAL CARRYING CAPACITY AND LIKELY SIGNIFICANT IMPACT

3.1 Human Beings

EIRGRID is seeking, if possible a minimum of 50 metres setback from occupied dwellings. However the EIS does not specify if this 50 metre setback will be achieved in relation to the current proposed development. In relation to the proposed substation in Moyhill it appears that there is an existing inhabited dwelling house immediately adjacent to the site of the proposed substation. Section 5.0 of the EIS (Volume 2B) appears to make no specific reference to the impact on the residential amenity of the occupants of this dwelling house.

In considering this application the Board may consider it appropriate to seek Further Information in this regard.

3.2 Flora and Fauna

The Heritage Officer's précis will address issues regarding Flora and Fauna and habitats.

3.3 Soils and Geology

The Heritage Officer's précis will address this matter.

3.4 Water

The précis prepared by the Executive Engineer in the Environment Section addresses the water issues.

3.5 Noise

The Manager's report submitted to the Board addresses noise.

3.6 Landscape

The EIS states that areas and views experiencing most landscape and visual impact due to proximity to the route or sensitivity include:

- Immediate vicinity within 50m
- Roads and areas within 500m with low hedgerow or no hedgerow.

- Short stretch of walking and cycling route from Trim to Kilmessan.
- Views from bridge at Bective and Bective Abbey
- Short stretch N3 designated driving route.
- Short stretch proposed walkway and cycle path along the Blackwater
- Short stretch of the walkway and cycle route along road between Kells and Wilkinstown (Tain Trail)
- Parts of Robinstown and Dunderry
- Parts of Teltown arch. Complex
- The view from the estate house at Whitewood Lough
- Elevated areas within open views with in drumlin landscape within 500m of the line route.

The EIS accepts that the line is potentially visible from Tara. The EIS states that effects of distance, screening from hedgerow and vegetation and the fact that the towers would not be seen breaking the horizon line result in very low visibility that would be dependent on weather conditions.

3.7 Traffic

The précis of the SEE Infrastructure Section will address traffic issues.

3.8 Cultural Heritage

The précis of the Heritage Officer and the Conservation Architect will address issues of cultural heritage.

4.0 EUROPEAN DESIGNATIONS & NATIONAL HERITAGE AREAS

The précis of the Heritage Officer addresses designated sites.

5.0 PROTECTED STRUCTURES/ ACAs

The précis of the Conservation Architect addresses issues with regard to Protected Structures and ACAs.

6.0 DRAINAGE/ SERVICING

The précis of the SEE Infrastructure makes reference to drainage requirements at road accesses.

7.0 ASSESSMENT of LANDSCAPE STATUS and VISUAL IMPACT

Chapter 8 of the Meath County Development Plan 2007-2013 contains policies which refer to the landscape, the most relevant policies to this proposed development are:

HER POL 103 To protect areas of recognised landscape importance and significant views from construction of such large-scale visually intrusive energy transmission infrastructure.

HER POL 104 To avoid the location of Telecommunications Antennae & Support Structures, Wind farms, Large scale Enterprise, Extractive Industries and other such visually obtrusive structures or activities in fragile landscapes such as areas of Special Visual Quality or archaeological heritage, where views and / or prospects are to be preserved and in areas adjacent to national monuments, archaeological sites or listed buildings or structures.

Section 12.2.7 of volume 2 A states that the most sensitive areas of the sections within the Boyne Valley and Blackwater Valley are where the alignment would cross the rivers Boyne and Blackwater. The visual impact of the proposed development on these Conservation sites has been addressed in the précis of the Heritage Officer.

Landscape impacts on landmarks are considered under section 12.3.2. Reference is made to the Hill of Tara, it states that ‘while the proposed development is potentially visible from this landmark, as seen in the wire frame for Photomontage 11, the effects of distance and screening would result in negligible or low adverse landscape effects depending on weather conditions. No views towards the Hill of Tara have been identified that would be intruded on by the proposed development’.

The cumulative landscape effects were assessed under section 12.3.3. Section H The Teervurcher Uplands has two existing transmission lines that are visible, a further two short stretches of transmission line will be constructed. The result according to the EIS will be a landscape that contains a significant amount of transmission lines and associated structures within a relatively small area, with

resulting high adverse cumulative impact effects. *The Planning Authority would request that the Board note this in making its decision, consideration may be given to alternatives or site specific mitigation measures within this area.*

In relation to visual impacts on tourist routes and places advised in county development plan (Section 12.3.4.3), it is noted that the EIS specifically refers to the scenic route from Bective to Tara, the R161 where it states that there are opportunities for viewing the proposed development openly and intermittently. It is acknowledged that the visual impact on the view from the bridge at Bective Abbey would be substantial adverse. The Conservation Officer will address this in her précis.

In terms of visual impacts on way marked paths and cycle routes the walking and cycling route along the road between Kells and Wilkinstown the transmission line would be visible from this route openly and intermittently for approximately 3 km. The visual effects would be moderate adverse in the immediate vicinity. *Specific mitigation measures may need to be considered to address this.*

Visual Impact on Settlements and Public Sites section 12.3.6, acknowledges that there would be open and intermittent views from Robinstown and Dunderry and from public sites therein. The visual effect would be substantial adverse on available views due to the proximity to the line. *Specific mitigation measures may need to be considered to address this.*

Visual Impacts on Key Viewpoints, Scenic Viewpoints and View to/ from Landmarks (Section 12.3.8) VP 30 – no photomontage has been submitted to illustrate the ‘open views of the existing transmission line to the south or to illustrate that it may be possible to see some of the proposed development to the southwest with resulting slight adverse visual effects.

Mitigation

General mitigation measures are outline in section 12.4.1. The Conservation Officer raised concerns that the measures primarily relate to avoidance and the choice of the line route, there are no specific mitigation measures for the tower locations. Section 12.4.3 regarding tower location and removal of vegetation states that careful analysis will be undertaken of all tower positions in sensitive areas and where towers are likely to give rise to substantial adverse effects these locations will be reviewed to ensure optimum positioning is achieved with regard to landscape effects. This is a point of concern, in particular where it is acknowledged within the EIS that there will be adverse impacts. The Board in considering their decision are requested to have regard to this. *Consideration to requesting site specific mitigation measures where adverse impacts are indicated, or alternative designs or route adjustment may be requested through Further Information as may be deemed appropriate.*

Visual Impact at Moyhill Substation

Section 12.0 of Volume 2B relates to landscape. The analysis within the EIS states in relation to the 2 design options that ‘the upper portions of the support structures are visible above proposed screen planting and mounding’. It states that there will be a significant localised change of appearance and character. A mitigation measure for the visual effects of the substation site is the investigation of the technical and economic feasibility of using a GIS substation. It is suggested that this will considerably reduce the footprint and local visual effect of the substation if used. A screening design, consisting of minimising the level of the base substation site, developing screening mounds and the preparation of a planting scheme has been developed for the substation site as mitigation measures. Having regard to the layout and design proposed for the proposed substation at Moyhill, and the photomontages submitted, Meath County Council would raise some concern with regard to the scale and height of the proposed substations and in particular the overhead lines leading into it and the resultant visual impact. *It is suggested that the Board raise this issue in a request for Further Information.*

Visual Impact on Natural Conservation Designated Sites

The précis of the Heritage Officer addresses the visual impact on Natural Conservation designated Sites.

8.0 Planning Authority View in relation to the Decision to be made by the Board

8.1 Principle

The principle of the proposed development of the 400kv interconnector is considered to be consistent with the broader policy objectives at national, regional and local level. The Meath County Development Plan 2007-2013 sets out a policy framework which stresses the importance of the growth

of energy infrastructure in the continued development and expansion of employment in County Meath. Specific development plan policies INF POL 83 states that it is Development Plan policy to facilitate energy infrastructure provision, and INF POL 92 supports and facilitates the development of enhanced electricity supplies.

In relation to the nature and design of this proposed energy infrastructure Development Plan policies state in relation to transmission lines:

INF POL 98 To ensure that the development of high tension power lines will be restricted, and that new high tension lines will not be permitted adjoining existing dwellings, except where no other alternative can be shown to exist.

It is noted that the line is in close proximity/ traversing existing buildings/ houses at a number of locations, including:

- Between towers 78-79
- Drwg 2990-2036 B there is a building within the alignment.
- Drwg 2990-2035 B there is a corner of a building within the alignment.
- Drwg 2990-2054 B there is also a building within the alignment.
- Also the planning history suggests that a recently granted house is traversed by the alignment. TA70679.

Given the length of the line, it is accepted that the proposal is largely consistent with the above stated policy; however the Board in making its recommendation may seek to ensure that the applicant has made every effort to protect the residential amenities of existing dwellings. It is suggested that this matter may be raised in any request for Further Information.

INF POL 99 To locate services, including electricity, telephone and TV underground, where possible, and that existing overhead cables and associated equipment should progressively be located underground with future capacity considered and appropriate ducting put in place.

The EIS states in section 4.6.1 that EIRGRID has developed a long standing policy and practice for the use of UGC and OHL in Ireland. Section 4.6.4 states that the only technical alternative that is considered to provide an acceptable method for achieving the strategic and specific objectives of the interconnector development is Overhead Lines.

9.0 Development Assessment Criteria for energy networks are set out on page 189 of the Meath County Development Plan, it states as follows:

‘As outlined, it is the policy of Meath County Council to facilitate the provision of energy networks in principle. In the assessment of proposed energy network extensions, the following issues will be taken into account by the Planning Authority’:

• **The development is required in order to facilitate the provision or retention of significant economic or social infrastructure;**

In this instance the need for a second interconnector and expanded electricity infrastructure is acknowledged in national and regional policy. The link between the proposed development and the economic development of the north east region is also acknowledged within the established policy framework.

• **The route proposed has been identified with due consideration for social, environmental and cultural impacts;**

Issues with regard to the impact of the development due to its route in proximity to protected structures, demesne landscapes and designated sites for conservation have been raised in particular in the précis of the Heritage Officer and Conservation Architect. It is considered that the impact of the proposed development in particular in relation to environmental and cultural impacts needs to be further considered by the applicant.

• **The design is such that will achieve least environmental impact consistent with not incurring excessive cost;**

It has been acknowledged that given the scale and extent of the proposed development the route is reasonably effective in avoidance as a mitigation measure, as specified within the reports prepared by the Heritage Officer and Conservation Architect, however the visual impact needs to be further

considered in particular in relation to the visual impact on protected structures and demesnes as highlighted by the Conservation Architect and also the impact on the flora and fauna as specified by the Heritage Officer. This may be the subject of a Further Information Request if deemed appropriate by the Board.

• **Where impacts are inevitable, mitigation features have been included;**

Questions have been raised by the Heritage Officer about the lack of information regarding the potential impact as specified within her précis. This matter may be considered in a Further Information request if deemed appropriate by the Board. It is also noted that the mitigation measures in particular in relation to the visual impact primarily relate to avoidance, no site specific mitigation measures have been identified where the EIS acknowledges that there will be an adverse impact. This matter may be the subject of a Further Information request if the Board sees fit.

• **Protected and Designated Areas – proposed NHAs, SPAs and Candidate SACs, areas of archaeological potential, landscapes of exceptional or high value, international or national importance and high sensitivity, proximity to structures that are listed for preservation, national monuments, etc. have been taken into account.**

This matter has been addressed in the précis of the Heritage Officer and Conservation Architect.

10.0 Conclusion

It is acknowledged that the provision of electricity infrastructure is considered acceptable in principle and is facilitated by the policy provisions as set down at national, regional and local level. Furthermore the importance of the provision of electricity infrastructure in the future development of the North East Region and of County Meath in particular is also acknowledged. However there are a number of issues identified by Meath County Council in its report to the Board, which the Council considers would need to be addressed. The Board is respectfully requested to have regard to the said matters in the further processing of the strategic infrastructure application and seek Further Information in this regard.

The Planning Authority has facilitated the applicant in recent days regarding access to the planning register and planning applications such that they can provide updated mapping.

F. Redmond
Senior Executive Planner



**ARCHITECTURAL HERITAGE IMPACT REPORT ON
BEHALF OF**

MEATH COUNTY COUNCIL

STRATEGIC INFRASTRUCTURE DEVELOPMENT

PLANNING & DEVELOPMENT ACTS 2000 TO 2007

Eirgird Meath Tyrone 400 KV Interconnector

AN BORD PLEANÁLA REF. NUMBER: 02.VA0006

I, Jill Chadwick, am Conservation Officer for Meath County Council, a position I have held since October 2000. I am a registered architect and a member of the Royal Institute of Architects of Ireland having qualified in architecture with a B.Arch. degree from UCD in 1974. I hold a postgraduate qualification in building conservation. Prior to joining Meath County Council I worked in Dublin Corporation and in private practice in Meath, Louth, Dublin and Canada.

I wish to address the issues of the proposed Eirgrid Meath –Tyrone interconnector in relation to the Cultural and Architectural Heritage of County Meath, in particular, the structures listed on the Record of Protected Structure in the Meath County Development Plan.

Volume 2A, ch.14 table 14.4 pgs 278 to 283 of the EIS gives a list of sites of cultural heritage where the visual impact of the proposed development is considered to be negative.

Mitigation strategies have been formulated for dealing with direct physical impact on archaeological sites in general and the Teltown area in particular.

Paragraph 8.2, Indirect Effects - states “ Mitigating indirect effects is most effectively achieved through avoidance during the routing stage. Beyond this, potential setting effects may be mitigated through the placing of access tracks so as to minimise their visual impact and the micrositing of towers or consideration of tower heights on specific sections of the proposed line route.

Mitigation measures for visual impact on landscapes or the setting of structures where avoidance does not appear to have been possible have been suggested for a small number of sites in the Teltown area only. It is my opinion that the visual impact on the Teltown cultural landscape will still be considerable.

No mitigation has been suggested for other sites of cultural heritage where there is considered to be a negative visual impact.

In general, considering the length of the route, the avoidance strategy has been reasonably successful.

However, neither the Cultural Heritage impact assessment nor the Landscape impact assessment appear to have given adequate consideration to the impact on historic demesne landscapes except where these also involve protected views or significant archaeology.

The following is a list of Protected Structures, or structures of architectural heritage value, where in my judgement the setting of the structure would be negatively affected by the proposed development. There are a number of other structures where the line may be visible in the wider area but where the impact within the curtilage or in proximity to the structure would be less significant. I have highlighted structures where I believe the visual impact on the setting of the structure will be considerable. This is a value judgement based on the relative importance of the structure, the proximity of the line, quality of the landscape, and the openness of the setting or degree of screening already provided by woodland or topography.

Protected Structure Identity No. :

MH043-104 – Galtrim House - NIAH Reg No. 14404301, gardens survey : ME-42-N-863523

MH043-100 – Galtrim House – gate Lodge, NIAH Reg No. 14404303

MH031-107 – Bective Abbey – National Monument, ME031-026. The view west along the river is significantly affected.

MH031-105 – Bective Bridge Saw Mill, NIAH Reg No. 14403103

MH031-108 - Bective Bridge, RMP - ME031-019

MH030-107 – Philpotstown; NIAH Gardens survey, ME-42-N-823629 – line traverses the demesne to the front of the house.

MH017-130 – Donaghpatrick Bridge

MH017-131 – Donaghpatrick Church. NIAH Reg. No. 14401701

MH017-129 - Teltown House; NIAH gardens survey : ME-42-N-804728. Line crosses the access road, the Blackwater river, and the demesne area where the views are very open.

Rahood; NIAH Gardens survey. ME-35-N-814844.

MH012-100 - Mountainstown NIAH gardens survey : ME-42-N-829790

Proposed for addition to RPS : Dowdstown, NIAH gardens survey : ME-42-N-823783

MH005-105 – Brittas; NIAH gardens survey: - ME-35-N-806867. Line traverses the entrance driveway and crosses the demesne to the front of the house.

MH005-104 –Whitewood; NIAH Gardens survey ME-35-N-801886

Whitewood House is sited to take advantage of a long view across Whitewood lake. The pylon line would be visible on the skyline and would have a considerable impact on this designed vista.

MH002-100 – Moyhill Church of Ireland. The combinations of lines and substation will have a considerable visual impact on the landscape in the surrounding area.

I recommend that detailed consideration should be given to the mitigation of impacts on the setting of these structures. In some cases, micrositing of towers may be sufficient; in others it may be necessary to consider some local realignment of the route.

Jill Chadwick



**HERITAGE REPORT ON BEHALF OF
MEATH COUNTY COUNCIL**

**STRATEGIC INFRASTRUCTURE DEVELOPMENT
PLANNING & DEVELOPMENT ACTS 2000 TO 2007**

Eirgird Meath Tyrone 400 KV Interconnector

AN BORD PLEANÁLA REF. NUMBER: 02.VA0006

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Section 1.0 Qualifications

I, Mairéad Maguire am employed as an Acting Heritage Officer with Meath County Council in the Planning Department since December 2010. I was previously employed by Meath County Council in the Forward Planning Section of Meath County Council as a Graduate Planner since February 2008. I hold a BA (Honours) Degree in Heritage Studies and a Masters Degree in Environmental Planning.

Section 2.0 Introduction

This submission was prepared in response to the notification received from An Bord Pleánála to the Planning Authority, on the 17th December 2009 of the application lodged by EirGrid in respect of Strategic Infrastructure Development – Meath – Tyrone 400kv Interconnector. It contains a summary of a previous submission lodged on behalf of Meath Council Council to An Bord Pleanála on the 12th of March 2010 and should be read in conjunction with the original submission.

3.0 Heritage Report Summary

The report concludes that there are 11 designated areas of conservation value within the 10km boundary of Part A alignment, which was lodged in Co. Meath. It states that the proposed alignment will avoid EU designated SPAs and NHAs designated under the Irish Wildlife Act (2000). However the proposed alignment will require two crossings of the River Boyne and River Blackwater cSAC. These locations are between pylons 89 and 90 (Blackwater River) and between pylons 46 and 47 (Boyne River). The River Boyne and Blackwater cSAC is selected for alkaline fen and alluvial woodlands, both listed on Annex I of the EU Habitats Directive. This cSAC is also selected for Atlantic sammon, Otter and River/Brook Lamprey, all listed on Annex II of the EU Habitats Directive. A separate Appropriate Assessment report was carried out in July 2009 for the River Boyne and Blackwater cSAC which concluded that 'no detectable impacts are likely to the River Boyne and Blackwater cSAC'. The mitigation method incorporated into the project is mitigation by avoidance, additional mitigation measures are also outlined.

Mitigation measures have been outlined to lessen the visual impact, however it should be noted that the presence of the towers will have a negative impact on the visual landscape.

In some cases throughout the EIS, the ultimate impacts as a result of the proposed development remain unclear due to the absence of the following information:

- Environmental and Earthworks Management Plan.
- Preconstruction Otter surveys.
- Fragmentation, species population densities, water resource and water quality accounts (should form part of the Appropriate Assessment).
- Preconstruction field by field survey to determine linear woodland loss.
- Preconstruction check for protected flora species.
- Preconstruction bat roost check.
- Preconstruction check to establish badger setts activity.
- Preconstruction otter holt check.
- Potential indirect impacts through the disturbance of habitat from the positioning of construction equipment and noise are noted-no further detail submitted.
- Mitigation to prevent risks of animal cruelty.

It is recommended that all mitigation measures outlined in the EIS should be adhered to. It is also recommended that in order to assess the full impact the proposed development may have, it is necessary that the above detailed information regarding proposed mitigation measures is provided.



**ENVIRONMENT – WATER QUALITY REPORT ON
BEHALF OF**

MEATH COUNTY COUNCIL

STRATEGIC INFRASTRUCTURE DEVELOPMENT

PLANNING & DEVELOPMENT ACTS 2000 TO 2007

Eirgird Meath Tyrone 400 KV Interconnector

AN BORD PLEANÁLA REF. NUMBER: 02.VA0006

I, Emmet Conboy am employed as Executive Chemist with Meath County Council in the Environment Section since June 2003. I was previously employed by Meath County Council as Executive Chemist on the Three Rivers Project Catchment Management and Monitoring System from September 1999 to June 2003. I have previously been employed with Donegal County Council and Roscommon County Council on water quality projects from 1995 to 1999. I have a B.Sc (Hons) in Marine Science, specialism Marine Chemistry, awarded by University College Galway in 1994.

Summary of observations on EirGrid SID application to An Bord Pleanála – Ref 02.VA0006 and accompanying Environmental Impact Statement, Part A – Woodland to Moyhill.

Route: The route crosses the River Boyne and River Blackwater candidate Special Area of Conservation (cSAC) at 2 locations. The cSAC is designated for Salmon, Otter, Lamprey. This cSAC is included in the Register of Protected Areas pursuant to implementation of the Water Framework Directive.

An Appropriate Assessment as required by Article 6 of EU Habitats Directive has been conducted for the project in relation to this cSAC.

Among the mitigation measures outlined are:

Tower bases and all construction activity will be located a minimum of 100m from the cSAC boundary.

No vegetation clearance will take place within the cSAC.

The cSAC boundary will be highlighted by temporary fencing / markers warning personnel and machinery to avoid accessing these areas.

Pollution control measures, an environmental and earthworks management plan will be implemented at work areas within 50m of drains and rivers which drain into the cSAC and which may potentially be used by sensitive aquatic receptors and otter.

The AA concludes that the mitigation by avoidance and other mitigation measures outlined will avoid any significant negative impact to the cSAC.

Recommendation 1:

The proposed mitigation measures are considered appropriate, however the environmental and earthworks management plan should be set out in detail in advance of work commencement.

Apart from the 2 crossings of the River Boyne and River Blackwater cSAC, there are numerous crossings of other watercourses, minor tributaries and streams along the route. The route passes through catchments of Tolka, Boycetown, Boyne, Clady, Blackwater (Kells), Yellow, Moynalty, Dee and Kilmainham rivers.

The main potential impact from the project on water quality arises during the construction phase.

Construction of the tower base foundations will involve excavations of between 2.5 and 3.5m deep, depending on tower type.

There is potential for release of sediments into watercourses which could damage in-stream habitat by clogging or covering substrate, due to:

- Soil stripping, if necessary, to construct access roads and tower foundations,
- Run-off and erosion from soil stockpiles prior to reinstatement,
- Dewatering of excavations which encounter groundwater.

There is potential for accidental pollution from spillages of oils and fuels from construction machinery and concrete and cement at tower foundations.

Mitigation measures outlined:

- Environmental Management Plan.
- Adherence to guidelines set out in Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites, published by ERFB. (Section 7.5.2.3)
- Due regard to guidance in CIRIA C650 “Environmental Good Practice on Site”. (Section 9.4.1)
- Use of a buffer zone to protect riparian and aquatic zones from disturbance during construction.
- Buffer zones ranging in width from 10m to 25m on either side, depending on slope and soil erosion potential. (Section 9.4.1).
- Storage of fuels in bunded areas.
- Section 7.3.6.4 states that drainage ditches and ponds will be avoided.

Maps in Volume 3A, Figure 7.2.1 to 7.2.20 show the route alignment and tower locations.

Tower no.s 13, 19, 24, 44, 54, 56, 82, 96, 110 are indicated with locations close to watercourse or drainage channels.

Recommendation 2:

Clarification is required as to whether tower locations will avoid all drainage ditches and ponds and maintain minimum buffer distances in all cases.

Many of the watercourses which are crossed drain ultimately into the Boyne or Blackwater cSAC, so the mitigation measures outlined are necessary not only to protect the immediate water channels, but also to protect the receiving waters further downstream from the site activities which may themselves be sited outside the immediate cSAC boundary.

The Kilmainham River in the northern section of the route is not within a cSAC but water quality here is good (EPA Q values of Q 4 consistently) which is above average for Co. Meath, so the mitigation measures will be important here also.

The Water Framework Directive requires relevant authorities (including Meath CC) to take measures to ensure the protection of aquatic resources, to avoid any deterioration in the existing status of waterbodies and to achieve the improvements necessary to bring waterbodies currently below good status up to good status within the designated timeframes. In respect of this project, the mitigation measures must be effective in preventing any impact on waterbodies which could prevent achievement of the environmental objectives and related quality standards. Designated Salmonid waters such as Boyne main channel have an environmental quality standard for suspended solids of 25 mg/L annual average deriving from EU directive 78/659/EEC (quality of freshwaters needing protection or improvement in order to support fish life) and S.I. 293 of 1988 EC (Quality of Salmonid Waters) Regulations 1988.

A more over-arching environmental quality standard and one which applies to all waterbodies is the suite of biological quality elements contributing to Good Status in surface waters - fish, benthic invertebrates and flora, as set out in the Water Framework Directive and transposed by S.I. 272 of 2009 EC Environmental Objectives (Surface Waters) Regulations 2009. Pollution from sediment release can potentially impact fish and macroinvertebrate elements which are measured by EPA Q values and which contribute to overall WFD status.

The guidelines set out in Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites, published by ERFB should be followed at all locations which could impact on watercourses.

Recommendation 3:

Cognisance must be taken of the fact that many sites which are located beyond the immediate vicinity of cSAC areas will however drain to catchments which ultimately join the Boyne and Blackwater rivers. Measures to control pollution impacts to surface watercourses must apply in these cases. The objectives of the Water Framework Directive which apply to all waterbodies regarding protection of existing water status, improvement where necessary and the avoidance of deterioration in water status place responsibilities on public bodies to discharge their functions in a manner consistent with achievement of these objectives. Mitigation measures must be effective in protecting the waterbodies concerned from deterioration in status.

Emmet Conboy
Exec. Chemist