APPENDIX E

Chapter 2 of the Preferred Project Solution Report

The Final Re-evaluation Public Engagement Report

2 PUBLIC AND STAKEHOLDER ENGAGEMENT

2.1 INTRODUCTION

The overarching purpose of stakeholder consultation and engagement is to ensure that all people who are likely to be affected by a project, potentially affected by a project, or consider themselves to be affected by a project have an opportunity to meaningfully feed into its development, as appropriate.

EirGrid is committed to open and transparent engagement with stakeholders on all of its infrastructure development projects, including the North-South 400 kV Interconnection Development. EirGrid welcomes feedback from interested parties on any aspect of the project and all submissions received are recorded and considered by the project team.

Following the withdrawal of the previous application for approval in respect of the North-South 400 kV Interconnection Development Project in July 2010, EirGrid undertook a comprehensive re-evaluation of the project. The re-evaluation process included an eight week period of public consultation on the content and findings of a Preliminary Re-evaluation Report in May 2011. Having allowed sufficient time for the Independent Expert Commission (IEC) review on the cost of undergrounding all or part of the North-South 400 kV Interconnection Development and the associated Joint Oireachtas Committee hearing, EirGrid concluded this review process in April 2013 with the publication of the *Final Re-evaluation Report*. Submissions received during the public consultation on the *Preliminary Re-evaluation Report* and observations and submissions in respect of the previous application for approval, along with the findings of the IEC Review, the Government Energy Policy statement and the Joint Oireachtas Committee consultation, were considered by the project team as part of the re-evaluation process.

It was deemed appropriate to allow for an additional period of structured engagement on the content and findings of the *Final Re-evaluation Report* before moving to the next stage of the project having consideration for:

- i) The time lapse between the *Preliminary* and *Final Re-evaluation Report*,
- ii) The addition of new information to the *Final Re-evaluation Report* in light of the IEC Review; and
- iii) Request from a representative group for additional engagement on the findings of the reevaluation process.

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This project has a unique planning context and has been the subject of extensive and comprehensive public and stakeholder consultation activities since it launched in autumn 2007. Submissions received as part of earlier consultations, including those received on the *Preliminary Re-evaluation Report* and during the previous application for planning approval, contained specific issues relating to the line design, including potential localised modifications to, or siting of, the alignment. The essential elements of these submissions are set out in **Section 2.3**.

2.2 PUBLIC ENGAGEMENT ON THE FINAL RE-EVALUATION REPORT

Following the publication of the *Final Re-evaluation Report*, EirGrid held a six-week period of public engagement (between 16th April 2013 and 27th May 2013) on the contents of that report.

The terms of reference for this engagement were:

- Comment on the content and findings of the Final Re-evaluation Report.
- Has EirGrid considered all relevant issues as part of the re-evaluation process? If not what other issues do you think EirGrid should consider?
- Provide feedback on how best to adopt community gain within transmission project developments and the North-South 400 kV Interconnection Development.

EirGrid is grateful to the parties and persons who took time to provide submissions in writing, via the project information service or by attending one of the nine open days held during this period of engagement on the contents and findings of the *Final Re-evaluation Report*. These submissions have been considered by the project team.

2.2.1 Overview of Communications Activities

A range of communication tools were used to facilitate as wide an engagement as possible. Interested parties were invited to participate via the project information centre network and service, at one of nine project information events, or at a pre-arranged project briefing.

2.2.1.1 Information Centre Network & Service

A comprehensive project information service has been in operation since autumn 2007 and facilitates all interested parties in contacting the project team to provide feedback or obtain information about any aspect of the project. This service can currently be availed of through the project phone line which is open between 9am and 5pm, Monday to Friday (Lo-call 1890 25 26 90); online at <u>northsouth@eirgrid.com</u> or via traditional mail at: C/O EirGrid NS Project Manager, Block 2, Floor 2, West Pier Business Campus, Dun Laoghaire, Co. Dublin.

Since 2008, EirGrid has had two established information centres, one in Navan, County Meath and one in Carrickmacross, County Monaghan. As part of this most recent round of engagement, EirGrid has expanded the information centre network with the addition of a new information centre in Kingscourt, County Cavan.

The information centres are staffed by project team members who are available to meet with anyone who wishes to visit the centre during the advertised opening hours (see **Table 2.1**). If any stakeholder requires a meeting with the team outside of these hours, every effort is made to accommodate that request.

able 2.1 Information Centre Locations and Opening Hours

Centre	Address	Opening Hours
Navan Information Centre	10a Kennedy House, Kennedy Road, Navan, Co. Meath	Tuesday 12 noon to 7pm
Carrickmacross Information Centre	Carrickmacross Workhouse, Shercock Road, Carrickmacross, Co. Monaghan	Wednesday 12 noon to 7pm
Kingscourt Information Centre	Dún a Rí House Hotel, Station Road, Kingscourt, Co. Cavan	Thursday 12 noon to 7pm

2.2.1.2 Open Days

In order to provide all interested parties with an opportunity to obtain information about the project and meet with a variety of technical experts from the project team, a series of six open days, as detailed in **Table 2.2**, were planned and held during the engagement period. Following a request from Monaghan Anti-Pylon Committee an additional three open evening events were held in County Monaghan (detailed in **Table 2.2**).

Members of the project team were available at each open day to engage with members of the public and answer any queries or questions that might arise. As far as possible the project team endeavoured to capture the views and feedback provided by stakeholders during these events.

At each event technical experts were available to provide stakeholders with information on the following topics:

- Technology options;
- Electric and magnetic fields (EMF);
- Planning;
- Environmental matters including ecology and archaeology; Line design; and
- Landowner engagement including compensation, impact on land use and farming practices.

Tailored information displays were prepared by the project team for these events. The displays focused on providing information on the key findings of the *Final Re-evaluation Report*.

Technical experts used detailed mapping of the indicative line route, available at a 1:10,000 and 1:25,000, to provide stakeholders with specific information on the proximity of the line route to their particular areas of interest.

The details of the open days are outlined below in Table 2.2.

Venue	Date and Time
Town Hall, Cavan Town	Tuesday, April 23 ^{ra} 2013, 1pm – 8pm
Town Hall, Cavan Town	Wednesday, April 24 th 2013,1pm – 8pm
The Workhouse, Shercock Road, Carrickmacross	Thursday, April 25 th 2013, 1pm – 8pm
The Workhouse, Shercock Road, Carrickmacross	Friday, April 26 th 2013, 1pm – 8pm
Navan Education Centre, Athlumney, Navan	Monday, April 29 th 2013, 1pm – 8pm
Navan Education Centre, Athlumney, Navan	Wednesday, May 1 st 2013, 1pm – 8pm
Cremartin GAA Centre, Castleblayney	Tuesday, May 22 nd 2013, 4.30pm – 8.30pm
Aughnamullen GAA Social Centre, Carrickmacross	Wednesday, May 23 rd 2013, 4.30pm – 8.30pm
Corduff-Raferagh Community Centre, Carrickmacross	Thursday, May 24 th 2013, 4.30pm – 8.30pm

2.2.2 Public Engagement Approach

To facilitate members of the public and other parties participating in this round of engagement the following information was made available to all interested parties at the commencement of this round of engagement:

- A Community Update brochure, containing details of the IEC review, key findings of the project reevaluation process, terms of reference for this engagement period and contact and event details. This was issued at the commencement of this stage of engagement as detailed in Section 2.2.2.1 and was made available at the project open days, project website and information service;
- 1:25,000 mapping showing the indicative line route in the CMSA and MSA was made available on the project website, at the project information centre network, at the project information days and

upon request via the project information service. Bespoke maps were prepared and provided to stakeholders upon request;

- The *Final Re-evaluation Report* and associated appendices was available for inspection at the project information centre network and information days. The report was available on the project website and copies were provided upon request. In addition copies of the report were provided to the County Librarian in Meath, Cavan and Monaghan for display in their branches; and
- A frequently asked questions document was produced and made available on the project website. Copies of this document were also available from the project information service.

2.2.2.1 Proactive Engagement

A letter inviting participation in this stage of engagement and enclosing a community update brochure was sent to all the following groups of stakeholders:

- Elected members;
- Statutory and prescribed bodies;
- National representative groups;
- County representative groups;
- Local, business and community groups within 5km of the indicative line route;
- Members of the public including observers in respect of the 2009 application; and
- Landowners along the line route.

In addition, where contact details were available organisations and elected members were proactively contacted by phone or email.

2.2.2.2 Publicising the Engagement Process

Every effort was made to ensure that as many people as possible were made aware of the project and had an opportunity to participate, this was achieved through a combination of news releases to national and local print, broadcast and electronic media, placing seven advertisements in local press and 80 advertisements on local radio stations, and on-line on the EirGrid website.

2.2.3 Submissions Received

The submissions received have been reviewed and considered by the project team. The number and nature of submissions are detailed in **Table 2.3**.

Table 2.3	Number and Nature of Submissions Received on Final Re-evaluation Report
Table 2.5	Number and Nature of Submissions Received on Final Re-evaluation Report

Method of Stakeholder Feedback	Number of Submissions
Project Briefing	18
Information Centres & Telephone Line	22
Written submissions (including email)	58
Open Days (Series 1) ²	70
Open Evening Events (Monaghan) (Series 2) ³	500
Total	668

For the purposes of this report the issues raised by stakeholders have been grouped as listed below:

- Submissions received from prescribed bodies on the Final Re-evaluation Report,
- Submissions relevant to the Final Re-evaluation Report,
- Submissions relevant to the Preferred Project Solution Report and subsequent stages;
- Submissions on other issues; and
- Submissions on community gain.

A detailed summary of submissions received is included in **Appendix C** and the high level summary and EirGrid's response to these is included, as appropriate, in the following sections.

2.2.4 Submissions Received from Prescribed Bodies on the Final Re-evaluation Report

Submissions from engagement with prescribed bodies on the *Final Re-evaluation Report* were collated from written submissions and meetings. The key points raised in written submissions are summarised in **Table 2.4**. It should be noted that engagement with prescribed bodies is on-going.

² This number is based on the number of attendees who registered their presence at the events.

³ This number is based on the number of attendees who registered their presence at the events.

Table 2.4 Key Points Raised by Prescribed Bodies on the Final Re-evaluation Report

Prescribed Body	Key Points Raised	Response
National Roads Authority (NRA)	The indicative route traverses a number of national roads (M3 as well as the N2) and national secondary roads (N51 and N52). It also traverses the line of the Leinster Orbital Route (LOR) which is currently at feasibility stage. The LOR is supported in the Meath CDP, the GDA RPGs 2010-2022 and the NTA's GDA Draft Transport Strategy 2011-2030.	al relation to the preferred line route and possibl crossings of the M3, N2, N51 and N52, in additio to the Leinster Orbital Route which is currently a feasibility stage. Further consultation wa undertaken with the M3 Concession Company i
a p D tt b a re D tt n (^ tt n re p	The NRA acknowledged that the previous application examined the inter-relationship of the proposed North-South 400 kV Interconnection Development and the LOR. The NRA recommends that EirGrid re-examines the inter-relationship between the two infrastructure projects to take into account any alterations or modifications to the revised North-South 400 kV Interconnection Development for the LOR. The NRA also requests that EirGrid gives consideration to the following matters:	taken into consideration for the preferred line design and engagement with both bodies will continue during the process of finalising the line design and preparation of the EIS.
	 (1) Identify the methods/techniques employed in traversing the existing national road network to ensure that the safety and standards of the national road network is maintained through appropriate best practice construction methods. 	(1) The stringing of conductors across the national road network will be carried out in accordance with IEEE Std 524-1992 Guide to the Installation of Overhead Transmission Line Conductors incorporating a proven work methodology, which ensures that there is no significant effect on the safe passage of traffic on these roads.
	(2) Ensure that proposed works do not impinge on the M3 Motorway and the Concession Operator; the NRA recommends that both the NRA and the M3 Concession Company are consulted during the development of the project concerning works proposed to be undertaken in proximity to the M3.	(2) and (3) As noted above, consultation will be undertaken with both the NRA and M3 Concession Company representatives during the process of finalising the line design and preparation of the EIS. Such consultation will address the satisfactory clearances between the finished surface of the M2 and the surfaced
	(3) Ensure that the detailed scheme design provides sufficient clearance to facilitate the construction of the future LOR.	finished surface of the M3 and the overhead conductor, at the crossing point. As matters stand, the intersection point remains unchanged from that of the previous scheme.
Inland Fisheries Ireland	The Inland Fisheries Ireland (IFI) comment that the proposed powerline passes through a number of river catchments such as the River Tolka, Boyne, Dee, Glyde, Erne, Dromore, and Fane catchments	EirGrid confirms that river catchments were considered as part of the re-evaluation process, and will continue to be a consideration in the preparation of an EIS.
	many of which contain valuable fishery habitat with stock of salmonid and coarse fish; noting that a number are protected under the Habitats Directive including Salmon and Lamprey.	Chapter 6 of this report identifies, in general terms, the type of issues which will be considered in the EIS, the nature of the assessment of impacts in respect of those particular issues and
	The IFI observe that in the event that there will be works in or near watercourses that EirGrid is directed to the Guidelines entitled ' <i>Requirements for</i> <i>the Protection of Fisheries Habitat during</i>	the potential associated environmental effects. The potential impact on water quality and fisheries will be assessed as part of the EIS and the wider EIA process.

Prescribed Body	Key Points Raised	Response
	Construction and Development Works at River Sites.' [published by the Eastern Regional Fisheries Board]. The aim of which is to identify the likely impact on fisheries habitat in the course of construction and development work, and to outline practical measures for the avoidance and mitigation of damage. The IFI are seeking to be kept informed of the proposal and would welcome the opportunity to comment further when more details are available.	EirGrid and its consultants have endeavoured to identify a preferred alignment which avoids or minimises works in or near watercourses. However, in preparing the application for approval and EIS, EirGrid will incorporate the provisions of the guidance document ' <i>Requirements for the</i> <i>Protection of Fisheries Habitat during Construction</i> <i>and Development Works at River Sites</i> ' produced by the Eastern Fisheries Board. EirGrid will keep IFI informed at all stages of the project, and will consult with them prior to lodgement of the application.
Geological Survey of Ireland,	The Geological Survey of Ireland (GSI) notes some clarifications in relation to the designation of geological heritage sites: The GSI recommends the use of the term <i>'recommended for NHA designation'</i> as the GSI is in the process of compiling a list (which is not finalised) of sites proposed for designation as National Heritage Areas (NHAs). The GSI note that they have also determined a secondary list of County Geological Sites (CGS) listed in Appendix 13b of the Meath CDP 2013-2019 and related chapter 9.7.7 (policy NH POL 12 refers). Within the MSA the GSI identifies two CGS (Altmush stream CGS & Boyne River CGS) which Route 3B-MSA traverses. The GSI comments that the features of interest are unlikely to be affected by works. A further two sites of interest are noted (Galtrim Morraine CGS & Nobber CGS) by the GSI who consider that no impacts are anticipated. The GSI recommend that they be contacted during the line design phase for mitigation measures, if applicable.	EirGrid confirms that designation of geological heritage sites was considered as part of the re- evaluation process, and will continue to be a consideration in the preparation of an EIS. In this regard, Chapter 6 of this report identifies, in general terms, the type of issues which will be considered in the EIA, the nature of the assessment of impacts in respect of that particular issue and the potential associated environmental effects. The potential impact on soils, geology and hydrogeology will be comprehensively considered in the EIS and assessed as part of the EIA process, and this will include consideration and assessment of potential impacts on geological heritage sites (including those recommended for NHA designation). EirGrid will keep the GSI informed at all stages of the project.
Border Regional Authority	The Border Regional Authority draws the attention of EirGrid to Section 5.4.2.7 of the Regional Planning Guidelines and, in particular, the entire context and wording of policy INFP23, which states that Development Plans 'should facilitate the provision of energy networks in principle' subject to meeting a number of environmental and technical criteria. It is noted that the Sinn Fein members of the Border Regional Assembly also made a submission (dated the 20 th of May 2013). This is incorporated into the general feedback received in Appendix C .	It is noted that Policy INFP23 notes that Development Plans 'should facilitate the provision of energy networks in principle' subject to meeting a number of environmental and technical criteria. Chapter 6 of this report identifies, in general terms, that planning policy issues (including regional planning guidelines) will be considered in the EIS. Engagement with the regional authority will continue during the process of finalising the line design and preparation of the EIS.

2.2.5 Submissions from Other Stakeholders on the Final Re-evaluation Report

A number of submissions raised issues that were of relevance to, or in response to, the *Final Re-evaluation Report.* The issues are set out in **Appendix C** of this report and are grouped under three main headings as follows:

1. Project Need/Scope

A number of submissions made observations and provided feedback in respect of the need for the project. Examples of the issues raised are set out in **Appendix C (Section 2.1)**.

Response: Project need is adressed in Chapter 2 of *The Final Re-evaluation Report.* The chapter sets out why the proposed second north-south electricity interconnector (the "Scheme") is a critical and strategically urgent transmission reinforcement on the island of Ireland. The chapter provides a summary of the benefits the Scheme provides to consumers on the island of Ireland. Section 2.2 in particular describes these benefits with reference to security of supply, electricty market integration and facilitation of renewable energy. In addition, section 2.3 exclusively deals with the implication of the recent economic downturn on the need for the project. This section concludes that the key drivers for the project such as security of supply, electricty market integration and the longer term facilitation of renewable energy sources on the island are not signifiantly impacted by changes in short to medium term demand forecasts.

2. Alternatives (in particular Technical Alternatives)

Many of the submissions questioned the alternatives which have been considered for the project, in particular the technical options considered. The specific issues related to:

- Environmental and cost comparison of underground cables (UGC) versus overhead lines (OHL);
- Routing suggestions for UGC;
- Reference to international examples and advances in technology; and
- Other options to meet the needs of the project.

Examples of issues raised are set out in Appendix C (Section 2.2).

Response: Technology options are addressed in Chapter 3 of the *Final Re-evaluation Report*. The chapter reviews latest studies on technology options available to the project and includes a comprehensive review of the findings of the International Expert Commission (IEC). Section 3.3 in particular provides a comparative assessment of the use of High Voltage Direct Current (HVDC) technology as an alternative to High Voltage Alternating Current (HVAC) technology and includes consideration of the findings of the IEC report. The results of this comparative assessment are

summarised in section 3.3.1 and highlight that the HVAC option is the preferred solution based on a range of criteria including cost, transmission network expansion and international best practice. In relation to the cost difference between HVDC and HVAC technology options in particular, the *Final Re-evaluation Report* noted that the IEC had confirmed that a HVDC UGC option would cost at least €333 million more than a comparable HVAC OHL option.

Since the publication of the *Final Re-evaluation Report*, EirGrid has also recently published a new study into the cost of undergrounding the proposed North-South 400 kV Interconnection Development. The study⁴ by consultants Parsons Brinckerhoff follows from their recent study for the UK Government on *Electricity Transmission Costing*⁵ and provides the most up-to-date information on the cost of a HVDC UGC solution for the project. In summary, the report further confirms that the cost of a HVDC UGC option would be significantly higher than that of a HVAC OHL solution and indicates that the range of cost difference for the Scheme (excluding the intermediate substation near Kingscourt) would be in the region of €670 million euro.

3. Study Area, Corridor Identification and Corridor Evaluation

Many of the submissions made observations and comments on the project study area and the corridor identification and evaluation processes. Examples of issues raised are set out in **Appendix C** (Section 2.3).

Response: The re-evaluation of the proposed study area is addressed in Chapter 4 of the *Final Re-Evaluation Report.* As noted under section 4.3 of this report, the re-evaluation included consideration of previously published material on the study area including an assessment of using the eastern coast as a boundary for the study area⁶. The chapter concludes in section 4.5 by stating that no new constraints information has arisen which would require the introduction of additional study area within which to route the proposed North-South 400 kV Interconnection Development. Section 4.4 of the *Final Re-evaluation Report* also outlines the rationale for the use of two study areas for the project and Appendix B of this report includes a specific response to a submission on this matter. In this regard, submission FS-2 contended that the two study areas "*should have been unified into one study area from Woodland to the border*"⁷. EirGrid's response to this contention clarifies that the continued division of the study area into two sections is provided primarily to "*facilitate review by the public and other parties of that portion of the scheme which is of most importance to them...*".

The re-evaluation of route corridor identification and comparative assessment is adressed in Chapter 6 and Chapter 7 of the *Final Re-evaluation Report* respectively. The aim of the corridor

⁴ Cavan-Tyrone & Meath-Cavan 400 kV Transmission Circuits – Technology and Costs Update, available at http://www.eirgridprojects.com

⁵ Available at http://www.theiet.org/factfiles/transmission.cfm

⁶ Available at http://www.eirgridprojects.com

⁷ Refer to Final Re-Evaluation Report – Appendix B, page B18, available at http://www.eirgridprojects.com

identification process is to identify feasible route corridors within the study area. This re-evaluation takes into consideration updates to the detailed constraints assessments previously undertaken and Chapter 6 concludes that no new significant information has arisen which would give rise to alternative route corridors being identified. The comparative corridor evaluation outlined in Chapter 7 then identifies the least constrained corridor option across both study areas between Woodland and Turleenan. This preferred route corridor is described in Chapter 7 as route corridor option A (CMSA) and route corridor option 3B (MSA). As described under section 4.2, the general location of the proposed intermediate substation is determined by the point of intersection of this least constrained route and the existing Flagford-Louth 220 kV OHL. This intersection guides the future siting of a substation in the vicinity of Kingscourt when the need arises.

In conclusion, in response to feedback received, the aim of the above summary is to provide further clarity on relevant conclusions reached within the *Final Re-evaluation Report*. Although a number of issues were raised in relation to the report itself and the conclusions reached, no new issues were identified during public and stakeholder engagement on the *Final Re-evaluation Report* which would alter, or cause reason to review, the conclusions of EirGrid and its consultants in respect of the technical nature of the proposed North-South 400 kV Interconnection Development location of the preferred line route.

It should be noted however, that as part of the Environmental Imapct Assessment (EIA) process, a number of key items adressed in the re-evaluation process such as technology alternatives and project need will be further addressed in documents to be submitted with the application for planning approval, including the EIS.

2.2.6 Submissions Relevant to the Preferred Project Solution Report

A number of submissions raised specific concerns or enquiries in respect of the alignment of the planned circuit, including potential localised modifications to, or siting of, the alignment as well as access during the construction phase. The issues raised are summarised below and set out in **Appendix C (Section 3)** of this report under the following headings:

1. Modifications

A number of submissions received from stakeholders related to the modifications made to the indicative line route since the last phase of landowner engagement in July 2011 and suggestions for further modifications to be made to the line route. General concerns in relation to the rationale for the modifications made, and how the modifications would impact specific landholdings or dwellings and farming activities, were raised by a number of stakeholders. Other concerns were more site specific. Examples of specific requests and issues raised in relation to the modifications are set out in **Appendix C (Section 3.1.1)** of this report.

Response: The line design process and the consequent modifications made to the indicative line route are addressed in detail in **Chapter 3** of this report. The line design process involves consideration of a

range of environmental and technical matters relevant to OHL design generally and others more specific to the particular project (including landowner feedback), in order to determine what constitutes the most suitable line design. Specific requests for modifications are currently being considered as per the process set out in **Section 2.4** and include the following:

- Some stakeholders felt that the modifications in the vicinity of Doohamlet as set out in **Table 3.2**, has resulted in a greater impact on their landholding or dwelling house and requested additional options are considered to make the required diversion;
- Some landowners advised of locations within their land that would either be unsuitable for locating structures or would significantly impact upon their farming practices or woodlands and requests for minor adjustments to the proposed alignment through their lands; and
- Request that partial undergrounding be considered from the intersection with the existing Oldstreet-Moneypoint line into Woodland substation.

In addition, this currently preferred alignment will be the subject of further landowner engagement, other public and stakeholder consultation and input, as well as on-going technical and environmental assessment and analysis. The final line design for the North–South 400 kV Interconnection Development to be submitted to ABP will be assessed and included in the EIS which will accompany the planning application for approval.

2. Information on the Line Route and Design and Location of Towers

Many submissions raised concerns regarding the proposed line route and the design and location of the tower structures. Queries included the location and footprint of towers, the distance between towers and the required clearance from the ground. Other specific requests and issues raised are set out in **Appendix C (Section 3.1.2)**.

Response: The line design process including the approach to siting towers and tower design is described in detail in **Chapter 3** of this report. It is intended to carry out further technical, environmental and other surveys and studies to confirm the specific siting of structures and inform the preparation of the EIS. Landowners, will therefore, have a further opportunity to influence the fixing of those tower structure positions which may directly affect them. The final line design for the North–South 400 kV Interconnection Development to be submitted to ABP for approval will identify fixed tower structure positions. EirGrid will not be seeking permission in its application to move tower positions post-planning (previously referred to as "micro-siting").

3. Proximity to Dwellings and Other Receptors

Many submissions expressed concerns relating to the proximity of the line route to dwelling houses or other receptors, such as community facilities and schools. A large number of the attendees at the project information days also requested measurement of the exact distance of the indicative line route from their dwelling house or other receptors. The concerns were generally on the grounds of visual impact or health concerns. Specific requests and issues raised in relation to the proximity of the line route to dwelling houses or other receptors are set out in **Appendix C (Section 3.1.3)**.

Response: EirGrid acknowledges landowner and householder concerns in respect of the project's potential impact on specific landholdings and dwellings. EirGrid endeavours to provide stakeholders with appropriate and relevant information in respect of the project. The potential impact of the project on individual dwellings, landholdings and other receptors, such as community facilities and schools will be assessed and included in the EIS which will accompany the planning application for approval.

4. Construction, Access to Lands

Construction methodology and land access were raised in a number of submissions. During the project information days a number of stakeholders also requested additional information on these topics. Queries included what steps EirGrid can take in the event of consent for access not being given by landowners. Some stakeholders also enquired whether EirGrid's rights extend to stringing towers over land without landowner consent and asked what rights the landowner maintained. Specific issues raised in relation to the construction process, land access and operational phase of the development, are set out in **Appendix C (Section 3.2)**.

Response: Observations received in respect of the proposed construction process, including access to land (during construction and operation), have been considered in the preparation of **Chapter 5** of this report. In addition, EirGrid confirms that an agricultural advisor will be made available to all landowners should they wish to discuss the project and jointly explore ways of minimising the impact of the project on their farming practices. Landowners who wish to avail of this can find the relevant details in their landowner packs. The potential impact of the construction and operational phases of the North–South 400 kV Interconnection Development on landholdings will also be assessed and included in the land-use/agronomy section of the EIS.

2.2.7 Responses Relevant to the Environmental Impact Assessment Process

As part of this stage of public engagement, issues of relevance for the EIA were raised. Details of specific observations, constraints and considerations raised by stakeholders and of potential relevance for the EIA stage are set out in **Appendix C (Section 4)**.

1. Agronomy

A number of landowners raised concerns about potential farming restrictions that will apply to their land following the construction of the project. These stakeholders were concerned that the project would result in the sterilisation of farmland beneath and adjacent to the tower structures and the OHL circuit. Other concerns included the potential impact on animal health and the proximity of the indicative line route to farm buildings. Specific concerns raised by stakeholders in relation to these issues are outlined in **Appendix C (Section 4.1)**.

2. Community and Socio Economic Impact

A number of submissions raised concerns that the project will give rise to unrest within their communities with some advising that any landowner who allows a tower will be in opposition to their community and that the project will result in divisions amongst neighbours. A number of stakeholders felt that the receiving community would not benefit from the project. In addition they raised concerns that the project would negatively impact businesses in the vicinity of the line route and in particular those that depend on tourists. Specific concerns raised by stakeholders in relation to community and socio-economic impacts are outlined in **Appendix C (Section 4.2)**.

3. Cumulative Impact

A number of submissions raised concerns regarding the cumulative impact of future development in the vicinity of the project. In particular, the substation in Moyhill, the future development of lines in the area and the development and extension of wind farms in proximity to the line route. Specific concerns raised by stakeholders in relation to cumulative impact are outlined in **Appendix C (Section 4.3)**.

4. Cultural Heritage & Archaeology

Concerns were raised regarding the project's potential impact on cultural heritage and archaeological sites in proximity to the line route. Specific sites identified by stakeholders for consideration by the project team during the EIA process are listed in **Appendix C (Section 4.4)**. Other stakeholders queried the diversion around the site of the Battle of Clontibret, advising that as this does not attract tourists they felt that this diversion resulted in a greater environmental impact.

5. Ecology

Submissions outlined general concerns regarding wildlife in proximity to the line, in particular birds, bats and fisheries. Specific ecological sites and features identified by stakeholders for consideration by the project team during the EIA process are listed in **Appendix C (Section 4.5)**. Other concerns included noise impact on bats, the impact on a locally important brown trout fishery and spawning beds of Lough Mourne.

6. Health

A number of submissions outlined general concerns about perceived health impacts due to the presence of overhead powerlines, specifically in relation to Electric and Magnetic Fields (EMF) including cancer, childhood leukaemia, and the impact on mental health including stress and depression, and human fertility. These concerns were typically raised in the context of the proximity of the proposed line route to the stakeholder's dwelling house or other receptors such as community facilities and schools. Specific queries and concerns raised about the potential health impacts associated with the project are outlined in **Appendix C (Section 4.6)**.

7. Landscape & Visual Impact

General concerns regarding visual impact and how the project could impact upon the visual amenity of the landscape in proximity to the line were expressed by a number of stakeholders. Stakeholders feel the line and associated structures would be unsightly and impact on scenic views of the countryside. Specific concerns relating to landscape and visual impact are outlined in **Appendix C (Section 4.7)** of this report.

8. Noise

Some stakeholders expressed concerns regarding the potential noise impact of the interconnection development particularly in relation to areas in close proximity to the line route and associated structures. Specific concerns raised in relation to potential noise impact associated with the North–South 400 kV Interconnection Development are outlined in **Appendix C (section 4.8)**.

Response: These topics have been considered in the preparation of **Chapter 6** of this *Preferred Project Solution Report* and will be further considered by the relevant specialists in preparing the EIS to accompany the planning application to ABP for approval of the North–South 400 kV Interconnection Development.

As detailed in **Section 2.2.1.2** of this report, EirGrid had a range of technical experts including an EMF specialist available at the project information days to provide all interested parties with information and to answer any queries. As part of the consultation on this report, EirGrid will hold a further series of open days where various technical experts will again be available to meet with stakeholders and answer their queries.

In addition to this, stakeholders with specific enquiries can also contact the project information service to request information or set up an appointment to meet with relevant members of the project team.

Furthermore, with the identification of the preferred line design, the North-South 400 kV Project has now been developed to a level of detail considered sufficient to allow EirGrid and its consultants to consider where significant impacts are likely to arise and the issues which need to be addressed in the Environmental Impact Statement (EIS). Therefore, in **Chapter 6** of this report, EirGrid has identified, in general terms, the range of issues which are likely to be considered in the EIS, the nature of the assessment of impacts in respect of that particular issue and the potential associated environmental effects.

2.2.8 Feedback on Other Issues

As part of this stage of public engagement, a number of submissions raised general issues relating to the project. These are detailed in **Appendix C** and are grouped under the following headings:

- Public Engagement;
- Planning;
- Compensation; and
- Property.

2.2.8.1 Response

EirGrid endeavours to provide stakeholders with appropriate and relevant information in respect of the project. Specific maps detailing the requested information were provided in response to requests from stakeholders. EirGrid is also committed to ensuring that all stakeholders are aware of the opportunities to participate. The feedback received in relation to the promotion of this round of engagement has been considered and, where appropriate, incorporated into future project activities.

The potential impact of the project development on property will be addressed within the EIS which will be prepared for the application in accordance with existing guidelines. It is proposed that consideration of this issue will be included within the EIS chapter on Material Assets. **Section 6.2.4.8** of this report provides a summary outline of the proposed scope of this chapter for consultation. EirGrid also endorses the approach to loss of development rights set out in the ESB/IFA Code of Practice.

In the event that the proposed development receives planning approval and proceeds to construction, landowners of holdings which are directly affected by the routing of the alignment, either by way of having structures located on, or wayleaves across their lands, are entitled to statutory compensation. While agreement regarding compensation is always sought by EirGrid with landowners, there is also a process of independent arbitration, in the event agreement cannot be reached. The statutory entitlement to compensation is considered to offer an appropriate mitigation to landowners in respect of the impact, if any, upon property directly arising from the development of strategic transmission infrastructure on their lands.

2.2.9 Feedback on Community Gain

A number of stakeholders provided feedback relating to community gain, this is detailed in **Appendix C**. All feedback relating to community gain, has been collated and will be issued to the relevant parties (e.g., Department of Environment, Community and Local Government (DOECLG) and Department of Communications Energy and Natural Resources (DCENR)) for consideration as part of the decision making process for determining a suitable community gain model in respect of transmission projects. In this latter regard, it should be noted that any future policy in respect of Community Gain is likely to be in respect of major transmission projects in general, rather than specifically for the North-South 400 kV Interconnection Development Project.

2.3 PREVIOUS SUBMISSIONS RELEVANT TO TH IS STAGE OF PROJECT DEVELOPMENT

Due to the unique context of the North-South 400 kV Interconnection Development (in terms of the previous application for planning approval and feedback arising from the Preliminary and Final Re-evaluation Reports) there is a considerable volume of written and oral submissions by prescribed bodies, other stakeholders, landowners and the general public. These submissions contain information which was useful to EirGrid in undertaking its review of the nature and location of the new development as part of the re-evaluation process and, ultimately, in the identification of the preferred project solution. These submissions also included specific issues relating to line route, including potential localised modifications to the alignment or siting of structures. These were acknowledged in the *Final Re-evaluation Report* as matters more appropriately associated with, and thereby addressed by, the process of route confirmation and preparation of the EIS.

As part of the line design process, each issue was subject to detailed review and assessment in line with the approach outlined in **Section 2.4**. Where the recommendation or request to modify the line design was determined to be environmentally and technically feasible, modifications to the line design have resulted. A summary of the issues and specific modification requests is set out in **Table 3.1**, **Table 3.2** and **Table 3.3** of **Chapter 3**. In this regard, the report acknowledges issues and requests for modification of the line design by statutory bodies and other organisations that made submissions. However, in the context of EirGrid's legal obligations in respect of data protection, this report does not detail any requests which might reveal the identity of, or discussions or requests to modify the line route from, private individuals/landowners.

2.4 HOW SUBMISSIONS MAY INFORM THE LINE DESIGN PROCESS

It is EirGrid's experience of developing electricity transmission infrastructure, that individuals who live in close proximity to the line route, including landowners, will often make a request to maximise the distance from the proposed line to their dwelling. In addition, landowners will often express a preference as to where the line might cross their land; or request a change as to how or where a line is proposed to cross their land; and, in particular, where any structures might be located on their land (e.g. on field boundaries or in

hedgerows). In addition, other bodies and organisations (including prescribed bodies) often raise issues or concerns in respect of particular aspects of the proposed development, including tower positions.

Modification requests have and will continue to be dealt with as follows:

- From a technical perspective, the proposed tower position modification will be assessed using a Digital Terrain Model (DTM), Power Line Systems Computer Aided Design and Drafting (PLS CADD), aerial photography, aerial LiDAR⁸ and Ordnance Survey mapping to determine its feasibility. Implications for tower spans, tower heights, conductor clearance levels, separation distances to dwellings, etc. will also be assessed; and
- From an environmental perspective, the proposed modification is assessed by the relevant specialists

 including ecologists, archaeologists, hydrologists, geologists, landscape architects, planners, agronomists and wayleave agents. Initially, a desk based assessment is undertaken which includes a review of environmental constraints using aerial photography, LiDAR and other environmental datasets. Field, vantage point and other site specific surveys are also carried out where applicable and, if possible, surveys are carried out on the lands with the consent of the landowner;

The guidelines for dealing with modification requests are set out below:

- All reasonable design change requests will be technically and environmentally assessed in accordance with the approach outlined above.
- In order to be acceptable, suggested design changes:
 - must meet general line design requirements⁹ (this includes the environmental and technical considerations identified in Section 3.3.2);
 - must not result in an undue greater impact for nearby or adjoining dwellings/sensitive receptors;
 - should minimise the number of macro¹⁰ changes to the overall line design; and
 - proposed modifications should be confined, where possible, to the landowner's property, unless otherwise agreed with adjoining landowners.
- A balanced judgement will be made based on technical, environmental and other considerations.

⁸ LiDAR is a remote sensing technology that uses laser scanning to collect height and elevation data

⁹ Priority is given to modifications to ensure compliance with relevant legislation (Codified Environmental Impact Assessment (EIA) Directive 2011/92/EU) and Habitats Directive ((92/43/EEC)).

¹⁰ Representing a significant change over several hundred metres which has generally resulted in additional angle masts

The next phase of landowner engagement will provide a further opportunity for landowners to provide feedback on the proposed structure locations on their land. During this engagement, individual landowners may express a preference as to where structures might be relocated on their land. All reasonable design change requests will be technically and environmentally assessed (as detailed above). The appropriateness of further potential modifications to the line design will ultimately be confirmed in the application for approval in respect of the North-South 400 kV Interconnection Development. Where these can be accommodated, without creating additional impact, they will be further considered in dialogue with the landowner concerned, and may ultimately comprise part of the finalised proposal. Where it is assessed that they would create additional avoidable significant impact, it is likely that it will not be possible to include them as part of the final application for planning approval.