



**International**  
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# Clashavoon – Dunmanway 110kV Project

Phase 2 Lead Consultants Report

Route Corridor Evaluation and  
Indicative Line Route Selection Report

PE687-F0193-R193-003-000



**ESBI** Engineering



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# Chapter 1 Introduction

## 1.1 Report Context

EirGrid the statutory transmission system operator requires a new 110kV transmission circuit, to connect the existing 220/110kV station at Clashavoon (approximately 5km north east of Macroom Co. Cork) with the existing 110kV station at Dunmanway Co. Cork to meet the project objectives of improving quality and security of electricity supply to customers and connecting of renewable generation. This development must be sustainable in principle i.e. the development must support and encourage economic growth while having due regard for social and environmental issues.

To best achieve this objective the project has been broken into 4 distinct phases, as per the project roadmap shown in figure 1 below, each phase having its own principal objective.

It is not intended to reiterate the context of the phase 1 report in this Phase 2 report, other than its key conclusions. As such this Phase 2 Lead Consultants Report prepared by ESB International, should be read in conjunction with the previously published Phase 1 Lead Consultants Corridor Identification Report available on the EirGrid projects webpage:

[www.eirgrid.com/projects/clashavoondunmanway](http://www.eirgrid.com/projects/clashavoondunmanway)

This report outlines the process and decisions arising from and occurring since Phase 1.

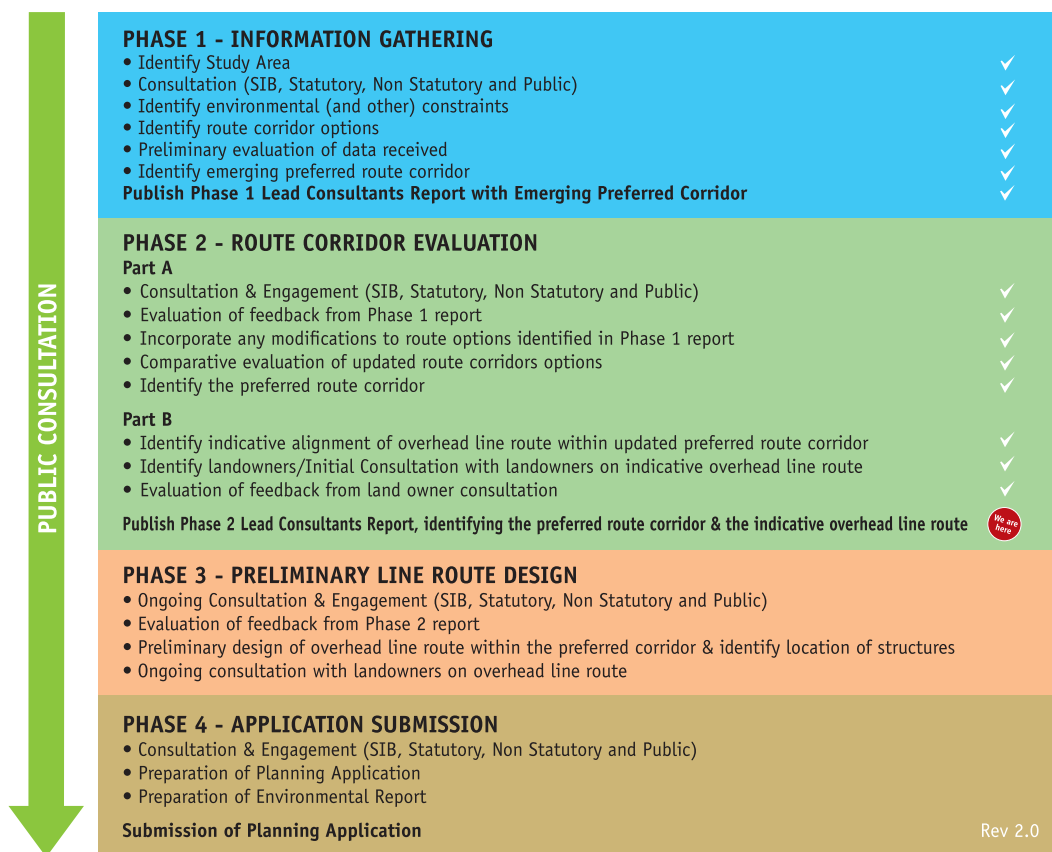


Figure 1 - Project Roadmap

## 1.2 The Purpose of this Report

From the EirGrid project roadmap in figure 1 above, it can be seen that Phase 2 of this project has been split into two parts A and B.

### Part A

The primary objective of Part A of this Phase 2 report is to detail the evaluation process that has been undertaken in order to confirm the emerging preferred route corridor for the project.

Essential to achieving this objective is the Phase 2 consultation process in which all interested parties (statutory, non statutory and the general public) were given the opportunity to review and comment on the project process, procedures and conclusions. The Phase 1 report referred to above, published on October 11th 2010, was the primary context within which this consultation took place.

Feedback from this process were reviewed and, where considered by EirGrid and its consultants to be appropriate, the indicative route corridors identified in the Phase 1 report were modified. All identified corridors were subsequently evaluated, and the emerging preferred route corridor identified. This is set out in more detail in this Phase 2 Report.

### Part B

The primary objective of Part B of this Phase 2 report is to present the modified indicative line route within the identified emerging preferred corridor as selected by the project team, and to outline the procedure by which landowner identification and engagement occurred in respect of the indicative line route. Further consultation with the wider community also took place. All feedback from this stage of the process was again reviewed by the project team and modifications, where considered appropriate, were made to the line route. The line route identified in Chapter 7 of this Phase 2 Report represents what the project team consider to be the most appropriate option, having regard to all technical, environmental and community criteria and to public and landowner consultation and engagement.

## 1.3 Summary of the Phase 1 Process

The Phase 1 process of Information Gathering as recorded in the Phase 1 Report:

- Presents the need for the project
- Establishes a study area for the project
- Identifies environmental and other constraints within the defined study area
- Identifies potential route corridor options for the project within the defined study area
- Evaluates the various corridor options, having regard to environmental and engineering constraints
- Identifies an emerging preferred corridor for the project within which to route the proposed 110 kV circuit
- Comprises the focus for public and stakeholder consultation

The conclusion of the Phase 1 Lead Consultants Corridor Identification Report is that the potential route corridor identified in Figure 2 overleaf comprised, at that stage, the emerging preferred corridor for the project.

In summary, any route corridor out of Clashavoon 220/110 kV substation would require to pass either to the east or west of Macroom and its environs. Environmental constraints, and in particular the significant concentration of the Whooper Swan, eliminated a large section of the study area for inclusion in the route corridor selection. The key options were to route west of this area over terrain that is largely undeveloped in terms of infrastructure, or to route east across land that is already highly constrained in terms of population but already containing a significant extent of infrastructural development, primarily due to the presence of both the existing Macroom 110kV substation

and the Carrigadrohid generating station. From the Phase 1 process above, it was considered that, having regard to all criteria, routing to the east of Macroom is the preferred option.

The area traversed by the identified emerging preferred route corridor in the southern portion of the corridor, to the south of Macroom, has a significantly lower population density, and the potential visual impact on individuals and local communities is therefore much lower than other potential route corridor options.

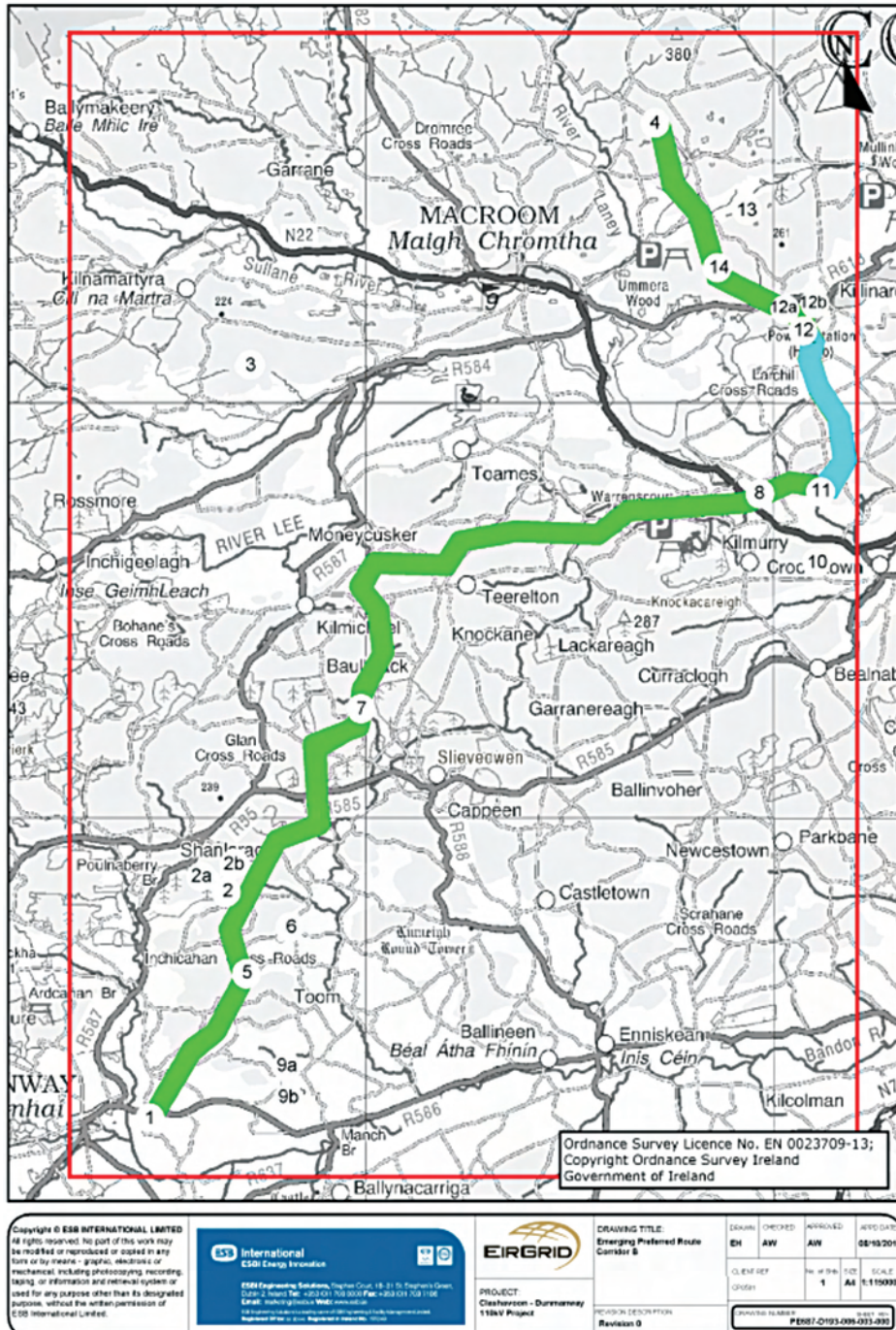


Figure 2: Emerging Preferred Route Corridor B (as presented in the Phase 1 Report)

## Chapter 2 Consultation on the Phase 1 Report

The consultation based on the Phase 1 report is a key element of the project, as it is vital to get as much feedback from all concerned parties to provide as much information as possible to inform subsequent decisions regarding route identification and confirmation.

The consultation can be broadly categorised as key stakeholders, agencies and the general public; however the principles behind the consultation remain the same for all groups i.e. to engage in open, honest and meaningful discussion and evaluating and incorporating where possible or appropriate, all suggestions and modifications brought to the attention of or indeed subsequently identified by the project team.

### 2.1 Key Stakeholders and Agencies

The project team endeavoured to work with key stakeholders and agencies with a view to ensuring that the process of identifying the preferred route corridor took into account their particular subject of responsibility.

Consultation letters, a project briefing document and a copy of the Phase 1 Lead Consultants report (with associated map) were issued on October 18th. These letters were followed up with phone calls, e-mails and meetings where requested.

A list of all those who received this documentation is available in Appendix A.

The feedback received is outlined in section 2.4.

### 2.2 Public

At all times the project team endeavours to engage with landowners and the general public in respectful, honest and open discussion. The local knowledge of landowners and local communities is invaluable to the project team, and therefore their input is vital. The project team must merge this local knowledge with technological and environmental survey and assessment, experience and expertise in line routing, to come up with an optimum solution.

The Phase 2 public consultation strategy for this project took the form of:

- **Briefing Document**

The production of a project specific briefing document (see Appendix B) which provided contact details of the project team.

- **Website**

The regular updating of the project specific Web Page facilitating widespread accessibility to project data and to facilitate the giving and receiving of information specific to the project. A dedicated email was established for the project and a telephone number was provided for people to contact the project team directly.

On the date of approval of this report, the viewing count on the webpage was approximately 6800 hits with the most time spent on the project overview page, the project activity page and viewing the Phase 1 Lead Consultants Report. This suggests a reasonable accessibility to project information.

- **Open Day**

A Public information day was held in the Castle Hotel in Macroom on Tuesday October 13th between 2.00pm and 8.00pm.

The public information day was advertised in the Southern Star, the Corkman and the Irish Examiner newspapers published on the Thursday 7th of October. A copy of these newspaper notices are contained in Appendix C. Hard copies of project reports and maps were available at this open day, and remain available on request.

To co-ordinate interaction with the general public throughout the project the project team implemented a process ensuring that general and individual concerns were directly addressed by the project team. This primarily occurs through:

- Contact made through e-mail, by letter or phone.
- All information received is made available to all members of the project team for review.
- The Lead consultant liaises with the EirGrid Project Manager to decide on the appropriate course of action.
- A member of the project team contacts the individual concerned and becomes their personal point of contact for the duration of the project.
- The project team are always available to meet on request.

## 2.4 Feedback Received

From the public open day in October 13th a period of one month was given for the public to make submissions to the project team, and within which the project team would seek to accumulate information from statutory and non-statutory consultees.

Important for the project team is the review and analysis of all feedback received throughout the consultation period. The project team must assess if any of the feedback causes:

- Withdrawal of project
- Need for alternatives to, or modification of the project;
- Evaluation of planned network i.e. minor deviations or the use of alternative routes submitted.

### 2.4.1 Key Stakeholders and Agencies

#### 2.4.1.1 An Bord Pleanála

At the request of EirGrid a second pre-application consultation meeting was held with An Bord Pleanála on January 18th 2011. This meeting was to discuss the progress of the project to date and to seek confirmation on the scope of the Environmental Assessment for the project.

#### 2.4.1.2 The Department of Communications, Energy and Natural Resources

The Department welcomed the proposal to develop the electricity infrastructure in order to deliver the government's energy policy priorities, which correlate to the project objectives of improving quality and security of electricity supply to customers and the connection of renewable generation.

#### 2.4.1.3 Cork County Council

Cork County Council Environment Directorate engaged with the project team in response to the consultation letter dated November 3rd 2010. The council made particular reference to:

- Ecology

The Council made reference to legislation to be referenced and addressed in the environmental assessment submitted with the planning application.



- Hydrology

The Council made reference to standards to be referenced and addressed in the environmental assessment submitted with the planning application.

- Waste management

The Council made reference to a Waste Management Plan and its inclusion in the application.

Submitted to the council was Section 12 of ESB Networks Contract Management Procedures which addresses the environmental management of construction projects of the type proposed. Details of this management procedure will be submitted with the completed environmental assessment submitted with the planning application.

- Noise

The Council made reference to potential noise levels associated with the project and the requirement to identify any problems that may arise with respect to noise sensitive locations.

### Construction

The issue of working hours will be addressed in the project specific preliminary safety and Health Plan.

### Operation

Operational noise (Corona noise) for dry or wet conditions on lines of this type is generally considerably below the internationally accepted limit value of 45 dBA. New equipment within both substations (Clashavoon and Dunmanway) will not exceed the noise of equipment already in place.

To directly address the above concerns of the Council, a noise level study has been undertaken, the results of which will be included with the planning application.

All comments received from the Environment Directorate have been forwarded to the project environmental consultants to make for a more robust future environmental assessment.

***N.B. No comments received from Cork County Council have caused the project to be withdrawn or modified.***

#### 2.4.1.4 Department of the Arts, Heritage and Gaeltacht

##### *The National Monuments Service (NMS)*

Correspondence from the NMS through the Development Applications Unit (DAU) was received in respect of Nature Conservation and Archaeology/Architectural impacts.

The NMS highlighted the requirement that the visual impact on over ground features is to be given due consideration by the project team. Mentioned specifically for this study area were ecclesiastical monuments and ring forts.

##### *National Parks and Wildlife Service (NPWS)*

The National Parks & Wildlife Service (NPWS) is part of the Department of the Arts, Heritage and Gaeltacht and is charged with the conservation of a range of habitats and species in Ireland. The input from the NPWS is an important aspect of this project to avoid conflict throughout the planning process. Ongoing consultations will be required to seek advice/guidance on key ecological issues.

***N.B. No comments received from the Department have caused the project to be withdrawn or modified.***

#### 2.4.1.5 An Taisce

An Taisce is Ireland's oldest environmental charity founded over 60 years ago to protect the environment and heritage of Ireland for the benefit of the people of Ireland and future generations. An Taisce have commented that they favour the route with the least impacts or potential negative impacts on wild flora and fauna and therefore would support the route combining of the northern part of the eastern corridor and the southern part of the central corridor as advised by the project environmental consultants.

***N.B. No comments received from An Taisce have caused the project to be withdrawn or modified.***

#### 2.4.1.6 Coillte

The emerging preferred route corridor crosses the Cork District Area of responsibility. From the Coillte data viewer there is no foreseeable issue with the proposed location of the emerging preferred route corridor from an environmental, ecological and archaeological perspective.

Compensation for loss of forestry land and its timber resource will be calculated based on the current agreement that exists between ESB and Coillte.

***N.B. No comments received from Coillte have caused the project to be withdrawn or modified.***

#### 2.4.3 Public

The response from the general public has been constant and has continued past the official consultation period end date of November 12th. Those who have been in contact regarding the project are dispersed over a wide geographical area, with the majority living along or in close proximity to the emerging preferred route.

Contact with the project team was in most cases initially made through the project e-mail, details of which were publicised on the project briefing document. Phone calls were the next preferred method of communication. Post was the least used method.

## Chapter 3 Modifications made to route corridors

Modifications to the route corridor at this stage of the project presented themselves either by:

1. On-site review by the Lead Consultant of route corridors selected in Phase 1 of the project.
2. Feedback received from key stakeholders and agencies or general public participation in the consultation processes.

These modifications were based on the corridors identified on the map in Figure 3 below. This map was displayed at the public open day October 13th 2010 in the Castle Hotel Macroom.

As mentioned above, as part of the consultation process the project team were open to engagement from local residents and landowners, regarding the routing of the corridor in their locality. It was, however, stated clearly in all discussions that no route corridor modification could take place if the move would have a greater negative effect on any other landholding i.e. no route corridor would be modified without the modification making a positive and beneficial contribution to the overall project.

Not all potential route modifications were possible. Two modifications that were possible are outlined below and the environmental consultant's opinion on these alternatives is contained in section 3.3.







### 3.1 Route Corridor Modification Number 1

This route corridor modification resulted from consultation with local residents and concerns the corridor section between Nodes 5 and 7 identified in Figure 4, in the vicinity of Behagullane. Separate submissions requested that the corridor be reviewed and if possible modified to have a considered lower impact on the local community. Potential alternative routes were also presented.

In this instance the project team first considered its original position and it concluded that:

- The presence of an existing 110kV transmission line in proximity to the identified corridor had a benefit in keeping such infrastructure together.
- The proximity of the indicated corridor to residential dwellings was not considered to be so close as to be visually/physically intrusive.

Having regard to the above the original route corridor is considered to be a technically viable option. The main issues of concern raised by local residents are outlined in Chapter 7. These concerns were addressed individually, and supporting documentation given where appropriate.

A proposal for a route modification was presented and a review undertaken by the project team.

In the context of the original route:

- The presence of the existing infrastructure and the routing principle of keeping transmission infrastructure together did not outweigh the concerns of the local residents in that an alternative was possible.

It was therefore concluded that the modification was viable, positive and beneficial to the project.

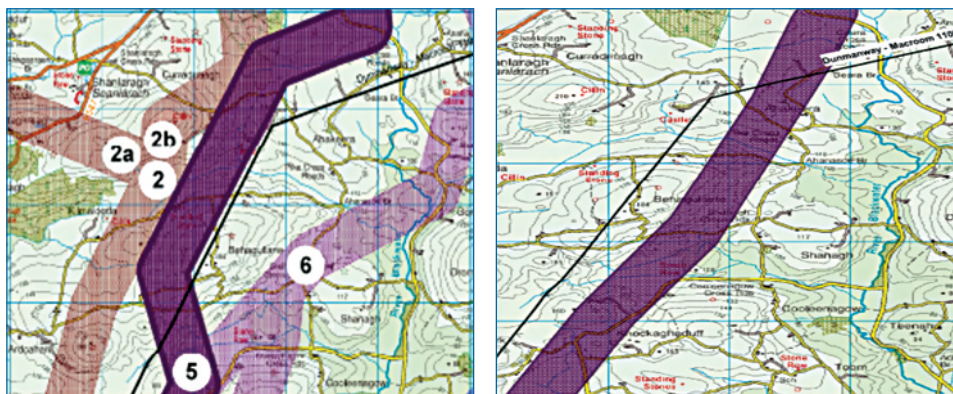


Figure 4: Illustration of route modification No.1

### 3.2 Route Corridor Modification Number 2

This route corridor modification resulted from the Lead Consultant's review of the phase 1 emerging preferred corridor, feedback from the second public open day and consultation with the cultural heritage consultants and the National Monuments Service. This modification located in the section of route corridor in the vicinity south of node 12 as identified in Figure 5 and was proposed because:

- A submission stated that the proximity to Canovee School might cause unnecessary concern to parents of attending students.
- The area south of node 12 is an area rich in mapped archaeological heritage and was of concern to the Lead Consultant that this may have potential implications for the planning and construction of the project.

Although the original route corridor is a more direct route, it was feasible to take an alternative route corridor of paralleling the existing Dunmanway – Macroom 110kV Line and thereby avoiding the area of concern.

It was concluded that the modification was viable, positive and beneficial to the project.

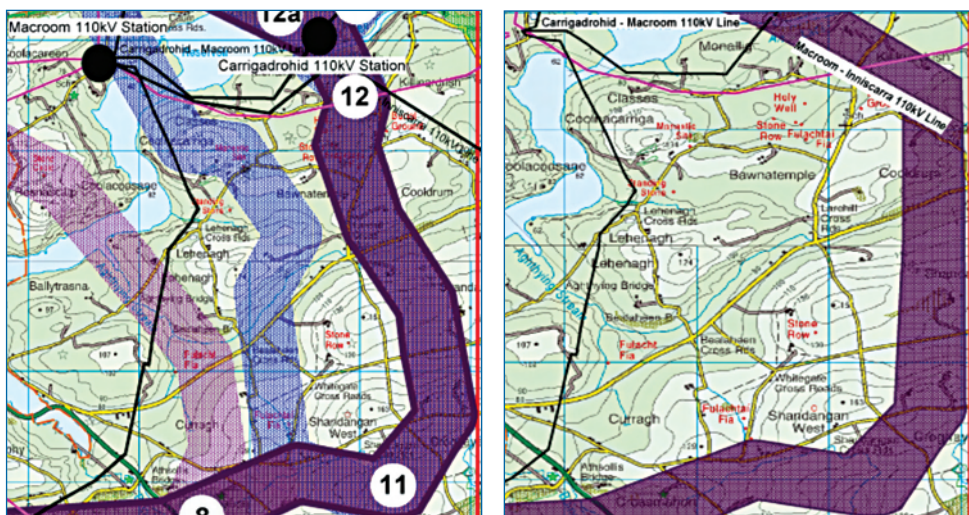


Figure 5: Illustration of route modification No.2



### **3.3 Environmental consultants' review of modifications**

#### **3.3.1 Cultural Heritage**

The cultural heritage consultants assessed both modifications and concluded that in terms of mapped cultural heritage, the alternatives would be preferable to the original as they do not encroach or span any recorded monuments.

#### **3.3.2 Ecology**

The ecology consultant assessed both modifications to the line route corridor and concluded that, from an ecological perspective, the modifications would have a neutral effect and no potential for increased ecological impacts can be foreseen.

#### **3.3.3 Soils/Geology**

The soils/geology consultant assessed both modifications and concluded that the modifications had a neutral effect.

#### **3.3.4 Water**

The water consultant assessed both modifications and concluded that the modifications had a neutral effect.

#### **3.3.5 Human Beings**

The human beings consultants assessed both alternatives and concluded that no changes to their submitted reports were required, as the potential impacts are marginally better at a local level, as the route corridor is slightly further away from clusters of dwellings.

#### **3.3.6 Landscape/Visual Impact**

The landscape consultant assessed both alternatives and concluded that both modifications are marginally better from a visual perspective due to the lower contour level.

### **3.4 Modified Emerging Preferred Route Corridor**

Figure 6 shows the modified emerging preferred route corridor, following the Phase 1 public and stakeholder consultation process.







## Chapter 4 Route Corridor Evaluation




### 4.1 Methodology

This Phase 2 route corridor evaluation process is a continuation of the Information Gathering process undertaken in Phase 1 as set out in the Phase 1 lead Consultants Corridor Identification Report.

Feedback from the consultation process (as outlined in Chapter 2 of this report) along with further investigation/review by the Lead Consultant on the localised impact of the route corridors has been accumulated and considered.

For ease of description and comparison the route corridor alternatives have been classified by node point described in 4.2 below. The following colour code is used to give a visual representation of the Lead Consultant's evaluated opinion on all route corridors. The results can be viewed in tabular format in Table 1.

The following colour code is used to give a visual representation to the lead consultant's evaluated option on all route corridors.

	<b>Preferred:</b> Route corridors in this group best avoid all constraints identified.
	<b>Less Preferred:</b> Route corridors in this group are somewhat less preferred, as some indirect effects on identified constraints may occur.
	<b>Least Preferred:</b> Route corridors in this group are the least preferred of the options, as some direct effects on identified constraints may occur.

### 4.2 Route Corridor Classification

#### Western Corridor A:

Referring to Figure 3, the Western Corridor A exits node 1 (Dunmanway 110kV Station) through nodes 2a and 3 and terminates at node 4 (Clashavoon 220/110 kV Station).

#### Western corridor B:

Referring in Figure 3, Western Corridor B exits node 1 (Dunmanway 110kV Station) through nodes 2b and 3 and terminates at node 4 (Clashavoon 220/110 kV Station).

#### Central Corridor

Referring Figure 3, the Central Corridor exits node 1 (Dunmanway 110kV Station) through nodes 5 - 6 - 7 - 8 and terminates at node 4 (Clashavoon 220/110 kV Station).

#### Modified Emerging Preferred Corridor (Figure 6)

Referring to Map in Figure 6, the Modified Emerging Preferred Corridor exits Dunmanway 110kV Station and terminates at Clashavoon 220/110 kV Station. This is essentially a combination of the southern section of the central corridor and the northern section of the eastern corridor.

#### Eastern Corridor A:

Referring to Figure 3, the Eastern Corridor A exits node 1 (Dunmanway 110kV Station) through nodes 9a - 10 - 11-14 and terminates at node 4 (Clashavoon 220/110 kV Station).

## **Eastern Corridor B:**

Referring to Figure 3, the Eastern Corridor B exits node 1 (Dunmanway 110kV Station) through nodes 9b - 10 - 11 - 12 - 13 and terminates at node 4 (Clashavoon 220/110 kV Station).

### **4.3 Evaluation Criteria**

All route corridors have been evaluated under the following criteria defined by planning and environmental legislation and also from feedback received throughout the consultation process.

#### **4.3.1 Human Beings**

##### **4.3.1.1 Safety**

This criterion of assessment will be the same for route corridors chosen. Some corridors may have more difficult access and civil works; however thorough risk assessment and implementation of control measures will make this difference negligible.

##### **4.3.1.2 Health effects due to electric and magnetic fields.**

This criterion of assessment will be the same for all route corridors identified.

##### **4.3.1.3 Localised impact (Lead Consultant Review)**

Some sections of route corridors upon review are deemed less preferable due greater impact.

These sections are as follows:

#### **Eastern Corridor B**

##### **Node 13 to node 4**

This route is less preferable due to its proximity to Rusheen, the presence of archaeological monuments and the requirement to cross localised high ground to avoid close proximity to Lough Gal pNHA.

##### **Node 12a to node 13**

This corridor is less preferable as it crosses an area of high ground, and would have a greater potential visual impact on local residents.

In this instance it was considered by the Lead Consultant that a preferable option existed i.e. paralleling the existing 110kV transmission line to the west. This restricts views of the line to areas already affected by infrastructure and has the lowest potential impact on local residents.

##### **Node 12b to node 13**

This corridor is less preferable primarily due to its proximity to Carrigadrohid village and the limited space for a route crossing the R618.

##### **4.3.1.4 Proximity to residential dwellings**

No differentiation between corridors is considered necessary as the potential impact is the same for all corridors.

##### **4.3.1.5 Noise**

No differentiation between corridors for either construction and operational noise is considered necessary as the potential impact is the same for all corridors.

##### **4.3.1.6 Interference with farming practice**

No differentiation between corridors is considered to occur as the potential impact is the same for all corridors.

## 4.3.2 Environment

### 4.3.2.1 Cultural Heritage

No new information regarding cultural heritage was identified; however review by the project team reinforced the Phase One conclusions that:

#### **Western Corridor A and B**

##### **Node 3 to node 4**

This section on the Western Corridor is considered to be least preferable due to the presence of Carrigaphooca Castle and stone circle (National Monuments). Any rerouting of the corridor in this vicinity would require crossing the visually sensitive landscape of the Sullane Delta.

The initial proposal to route a corridor in this area was influenced by the proposed Macroom Bypass (as submitted for planning permission) traversing this area and therefore altering the existing landscape. This new road has recently been granted statutory approval and therefore the corridor selection in this vicinity remains valid.

#### **Central Corridor /Emerging Preferred Corridor**

These route corridors can be classified as corridors with least impact on cultural heritage relative to other corridors identified.

#### **Eastern Corridor A**

##### **Node 11 to node 14**

Within this section of corridor is situated a large ecclesiastical enclosure. The avoidance of visual impact on this archaeological landscape was considered by the project team important enough to designate this corridor least preferred. Possible modifications of this corridor to avoid the site were considered but deemed unviable due to the presence of dwellings in the area.

#### **Eastern Corridor B**

##### **Node 13 to node 4**

This route is less preferable due the presence of a cluster of archaeological monuments.

### 4.3.2.2 Flora and Fauna

No new information regarding Flora and Fauna was identified however review by the project team reinforced the phase one conclusions that:

#### **Western Corridor A**

##### **Node 1 to 2/2a to 3**

This corridor crosses tributaries of the Bandon River, a designated Special Area of Conservation (SAC). It is considered by the Lead Consultant that mitigation measures at the design and construction stage will result in no adverse impact on the SAC.

### **Central Corridor**

#### **Node 8 to node 4**

This corridor crosses an area identified as an area to be avoided due to the possible presence of the Whooper Swan. This area was identified by the project ecologist following a review of all available data and a year long (2 season) whooper swan survey.

#### **Western Corridor B/Emerging Preferred Corridor**

These route corridors can be classified as corridors with least impact on ecology relative to other corridors identified.

### **Eastern Corridor B**

#### **Node 13 to node 4**

This corridor is considered least favourable due to its close proximity to the proposed Natural Heritage Area (pNHA) of Lough Gal.

#### **4.3.2.3 Landscape/Visual**

The landscape character of the study area (with reference to the Cork County Development Plan Landscape Character Assessment 2009) can be designated as Landscape Character Areas and further described in terms of landscape types which for the study area are:

- 13 – Valleyed Marginal Middleground;
- 15 – Ridged and peaked upland;
- 12 – Rolling Marginal Middleground; and
- 16 – Glaciated Cradle Valleys.

These are generally considered to be visually robust landscape types however careful and sensitive design and structure spotting will be used to minimise landscape impacts.

#### **4.3.2.4 Soils and Geology**

No differentiation between corridors is considered necessary.

#### **4.3.2.5 Hydrology and Hydrogeology**

No differentiation between corridors is considered necessary.



Criterion	Element	Western Corridor	Central Corridor	Eastern Corridor		Modified Emerging Preferred Corridor	
				A	B		A
Human Beings	Safety	Operational Safety					
		Construction Safety					
		Health effects due to electric and magnetic fields.					
	Localised visual impact				See 4.3.1.3		
	Proximity to dwellings						
Noise	Construction Noise						
	Operational Noise						
Interference with Agriculture							
Environment	Cultural Heritage	National Monuments	See 4.3.2.1 National Monument				
		Protected Structures		Crossmahon House Ardaneneen House		Crossmahon House Ardaneneen House	
		Sites and Monuments (SMR's)			Cluster of SMR		
		Archaeological Landscape	See 4.3.2.1 National Monument				
	Flora and Fauna	Rare and protected Species		Crosses and the area where the Whooper Swan may be present. Possible indirect effects on an SPA. See 4.3.2.2			
		Designated Sites (SPA,SAC,NHA, pNHA)	Pearl Mussel Indirect effect on SAC See 4.3.2.2		Possible indirect effects on pNHA See 4.3.2.2		
		Non Designated sites					
	Landscape/Visual	Fisheries					
		Landscape Character					
		Impact on Scenic Landscapes					
		Impact on Scenic Routes					
		Soft Ground and Blanket Peat					
		Areas of made ground					
		Operational Quarries					
	Hydrology and Hydrogeology	Surface bedrock					
		Physical constraints					
		Historical Flooding					
Groundwater supplies							
Existing Infrastructure	Roads						
	Transmission Lines						
	Bord Gais pipeline						
Economic	Length						
	Ground Conditions						
Forestry							

Table 2: Evaluation table for all route corridor options



## Chapter 5 Lead Consultants Phase 2 Report Conclusion (Part A)

From the above, and following full consideration of feedback from the Phase 1 process, as well as EirGrid's ongoing studies, it is the recommendation of the lead Consultant that the Emerging Preferred Route Corridor as identified in the Phase 1 report and slightly modified as detailed above, is the preferred route corridor for the project.

Further consultation with directly affected landowners and the wider community along with the completion of the field walking stage of environmental assessment may result in minor changes to this corridor to facilitate the process of identification of a feasible route within the emerging preferred corridor. These changes will be accommodated where possible.

## Chapter 6 Consultation and Landowner Engagement

### 6.1 Selection of an indicative line route

Based on the conclusions of Part A of this report, the route corridor as shown in Figure 6 best avoids all identified environmental, economic and design constraints within the study area. Selecting an overhead line route within this corridor therefore now focuses on further avoidance of residential dwellings and minimisation of the potential impact of the proposed development on local residents and landuse.

An initial indicative line overhead line route was identified by the Lead Consultant to satisfy the criteria outlined in Chapter 4 with the intention that it be used as a start point with which to liaise with landowners directly affected landowners. Where possible, landowner requests to move the line within their property boundary were accommodated; however, no move to the proposed indicative line route will be made, if the move has a greater negative impact on an adjacent landholding or local resident.

### 6.2 Public Consultation and Landowner Engagement

It was decided for this project that the public consultation on the proposed indicative line route would be approached in three distinct phases:

1. Directly concerned landowners to be notified of project developments. A dedicated wayleave coordinator was appointed to be a direct point of contact for this group.
2. The project team then to identified those people who are not landowners but who would have a view of the line, or would otherwise be considered to be potentially impacted by the line.
3. The wider general community will be kept informed of project development, with opportunity for feedback and consultation.

#### 6.2.1 Landowner identification process

Property Registration Authority (PRA) searches were conducted to identify all landowners along the indicative line route.

Any land parcels unidentified from the above process were subsequently identified through a search of the registry of deeds and by gathering information from other local residents and landowners.

All information gathered is confirmed with the identified landowner at the survey interview stage outlined in section 6.2.3 below.

#### 6.2.2 Survey Interview Stage - Survey Interview Documentation

A sample of the documentation issued to landowners can be seen in Appendix D. All landowners receive:

- *A Cover Letter* - This letter introduces EirGrid and the project, invites landowners to engage in the consultation process, makes reference to the survey letter including all attachments and introduces the lead project consultant. Contact details for the wayleave officer appointed for the project are also included on this letter. This gives every landowner a personal point of contact for the duration of the project.
- *EirGrid Survey Letter* - This more formal letter again outlines the proposed project, the Townland, Barony and County across which the initial indicative line route crosses and a general outline of the survey interview process. Importantly the letter contains information regarding EirGrid's policy towards landowners for access and survey of land along with details of EirGrid's statutory authority.

- *Landowner Survey Map* - This map accompanies each survey letter and shows the initial indicative line route (in red) as it crosses the landowner's property. The individual property boundary of each landowner is highlighted in blue.
- *Project briefing Document* - A further project briefing document (3rd in series) outlining the project need, benefits and timelines is included for information. This briefing document also includes contact details of the project team.
- A copy of the ESB/IFA code of Practice for the Survey, Construction and Maintenance of Overhead Lines
- A Booklet (on request) explaining Electric and Magnetic Fields (EMF's)

### **6.2.3 Survey Interview Stage - Survey Interview Process**

For this project it was decided that all documentation should be hand delivered to those directly affected by the proposed development. This ensured that all landowners had the opportunity to raise directly with the project team any concerns or suggestions regarding the proposed indicative route, and to establish a direct line of communication between landowners and the project team.

The vast majority of landowners were contacted by an initial call to the door by an EirGrid representative. All landowners at the time of contact were offered the opportunity to discuss the project and complete a standard pre survey interview form. If this time was not convenient to the landowner, a more suitable date and time was arranged.

This form is filled out by the EirGrid representative with the landowner. The purpose of this interview is to accumulate as much information as possible regarding the landholding for the purposes of routing and constructing the proposed overhead line. It is also an opportunity for the landowner to express a preference for where the line might be sited on the landholding. Finally, it is an important opportunity to discuss the overall project, and to address any queries or concerns that might arise in respect of the project. A copy of this interview record is left with the landowner.

### **6.2.4 Consultation with the wider community**

Following contact with landowners, the wider general community was informed of the project progress with a further open day. This open day was held in the Castle Hotel Macroom on May 9th 2011 between the hours of 10:30am to 8:00pm. The open day was advertised in the Irish Examiner, Southern Star and Corkman newspapers and radio announcement on C103 local radio. These notices can be seen in Appendix E. Additionally:

- All landowners received a personal letter of invitation to the open day.
- A leaflet drop of a Community Update Brochure (Appendix F) and open day details was made to those living in the wider area of the proposed route.

This open day enabled the project team to inform the wider community about the project type and process. Consultants specialising in route selection, environment, overhead line design and electric and magnetic fields (EMF) were in attendance to answer any specific queries raised.

Residents concerned about EMF were offered a home visit by an expert to take measurements of existing lines of this type and explain the results by comparison with everyday electrical appliances.

This open day also afforded the opportunity for the wider community to express their support, opinions, concerns, ask questions and in some cases express opposition to the proposed project. A local group -'Communities Before Pylons' submitted a letter within which questions were asked of the project team. The response to these questions and other queries raised at the open day are detailed in Section 7.

### 6.3 Modifications made to the Proposed Indicative Line Route

Following consultation with landowners and the general public a number of modifications to the original indicative line route were identified. All modifications identified were reviewed and assessed by the project team and where possible accommodated. Where any identified modification could not be accommodated, an explanation was given as to why this was the case.

Identified modifications can be categorised into two groups:

*Group 1* - These modifications to the initial indicative route are resulting from landowner requests, to best minimise the impact the proposed development would have on their land and farming practice. These modifications are numerous and have been generally identified during direct engagement with affected parties, and robustly reviewed by the project team.

*Group 2* - Two modifications were proposed and accommodated that deviated from the emerging preferred route corridor for the project.

- *Modification No. 1:* Whooper Swans were recorded feeding on grasslands site at Shanakill approximately 1-2km south of Clashavoon substation. There are no previous records of this site in published literature and project consultees had not reported Whooper Swans in this area.

It was the recommendation of the Ecological Consultant that the indicative line route be modified to avoid routing between feeding and roosting sites.



Original Route



Modified Route

- *Modification No. 2:* A local resident requested that a section of line route be re-examined in the area of Shandangan West, south of Carrigadrohid. It was acknowledged by the project team that there was an alternative route in the area but that it was deemed less preferable to the originally identified indicative route as it would require two additional steel masts to be used due to additional changes in direction to avoid other local constraints. The project team however undertook a thorough review of the area and requested the input of the project consultants, local residents and Cork County Council. At the date of publishing this review is still ongoing and will be decided upon in the next phase ‘Phase 3’ of this project.

## Chapter 7 Lead Consultants Phase 2 Report Conclusion (Part B)

The criteria of assessment and evaluation used in section 4 duly accounts for the concerns of key stakeholders, agencies and public parties.

The indicative line route as shown in Figure 7 below will therefore progress to Phase 3 (Design phase) of this project.

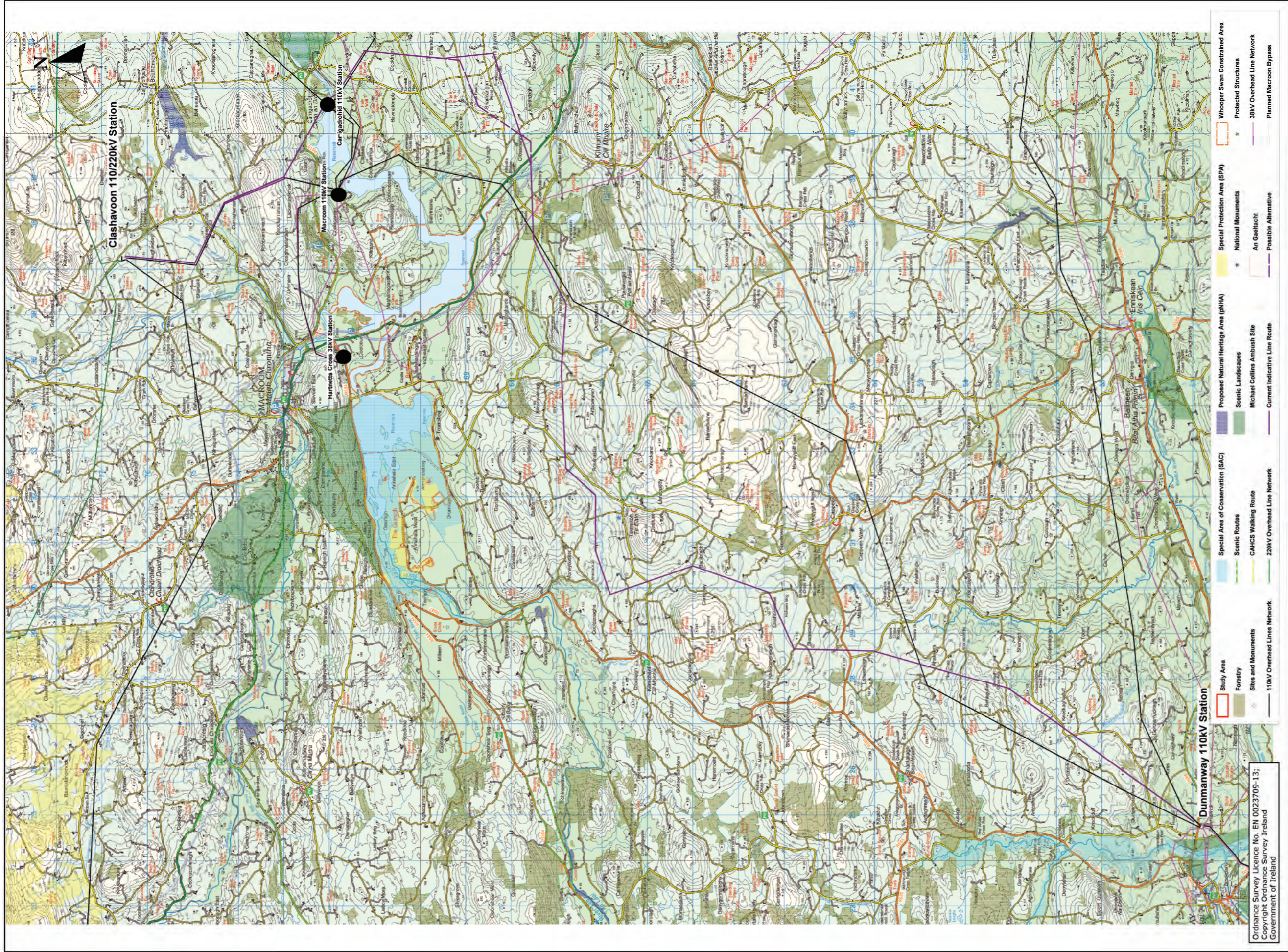
Next Steps:

Consultation with directly affected landowners and the wider community will continue for the duration of the project.

EirGrid propose to lodge the planning application to An Bord Pleanala in late October/early November 2011.







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- Study Area
- Foresty
- Sites and Monuments
- 110kV Overhead Lines Network
- Special Area of Conservation (SAC)
- Scenic Routes
- CAHCS Walking Route
- 220kV Overhead Line Network
- Proposed Natural Heritage Area (pNHA)
- Scenic Landscapes
- Michael Collins Ambush Site
- Current Indicative Line Route
- Special Protection Area (SPA)
- National Monuments
- An Gaeltacht
- Possible Alternative
- Whooper Swan Constrained Area
- Protected Structures
- 38kV Overhead Line Network
- Planned Macroom Bypass

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Registration Office: as shown Registered in Ireland No. 330218

**EIRGRID**

PROJECT:  
Clashavoon - Dunmanway 110kV Project

<b>DRAWING TITLE:</b> Current Indicative Line Route (including possible alternative)	<b>DRAWN:</b> EH	<b>CHECKED:</b> O'W	<b>APPROVED:</b> EH	<b>APPD DATE:</b> 19/07/2011
<b>REVISION DESCRIPTION:</b> Revision 1	<b>CLIENT REF:</b> CP0501	<b>No. of Sheets:</b> 1	<b>SCALE:</b> A1	<b>SHEET REV:</b> PE87-D-93-02-001-001

Figure 7: The Overhead Indicative Line Route



## Chapter 8 Queries, comments and submissions received

The following Frequently Asked Questions (FAQ's) and answers have been compiled by the project team as a result of the ongoing public consultation on the project. Many of the queries raised had been previously addressed by the project team in earlier phases of public consultation and in the Phase 1 Lead Consultants report. It is however acknowledged that landowners and local residents may not have read the Phase 1 report, or otherwise engaged in the ongoing consultation process in respect of the planned development until this point in time.

A copy of these FAQ has been sent to all those who have made a submission on the project. For ease of reference the question and answer are printed below.

### ***1) I am concerned about human & animal health and have heard that the proposed 110kV could affect my health and animal health. What studies have been carried out to examine these possible healths affects?***

EirGrid is a company owned by the State. EirGrid has the exclusive function to operate and ensure the maintenance of and, if necessary, develop a safe, secure, reliable, economical and efficient electricity transmission system with due regard for the environment in Ireland.

The World Health Organisation and ICNIRP (the International Commission on Non-Ionizing Radiation Protection) continually monitor the results of scientific studies into EMF, and all other EMF related studies. From the totality of these studies ICNIRP developed its 'Guidelines for limiting exposure to time-varying electric, magnetic and electromagnetic fields (up to300GHz)'. Both the World Health Organisation and the European Commission have endorsed these guidelines. They form the basis of EU Council Recommendation1999/519/EC which set out the relevant European Union Guidelines. EirGrid designs and operate the Irish transmission network in accordance with these EU Guidelines.

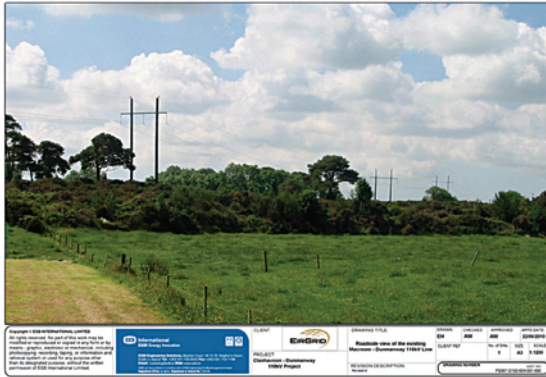
EirGrid are satisfied from the totality of studies and the views of international authoritative agencies, and international experience of best practice in transmission system development, that the balance of evidence is that overhead transmission lines proposed for use do not have any adverse effect on human health or animal health.

The proposed Clashavoon Dunmanway project will operate at all times (even standing directly under the line) well below the levels set by the International Commission on Non-Ionising Radiation Protection (ICNIRP) regarding EMF exposure and public health and endorsed by the World Health Organisation, the EU and the Irish Government.

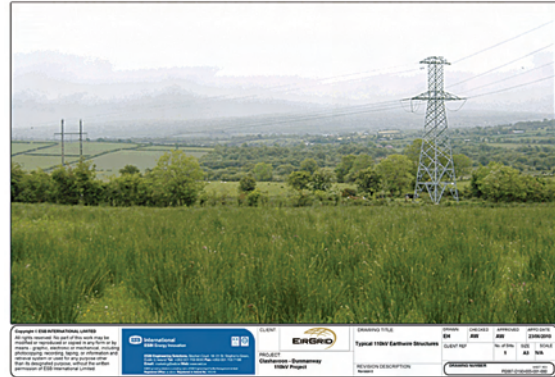
For more information about EMF's and overhead lines view EirGrid Booklet on EMF & Electricity on [www.eirgridprojects.com](http://www.eirgridprojects.com)

**2) I am concerned about the visual impact of the proposed line. How are EirGrid going to mitigate any potential visual impacts?**

The proposed 110 kV line will consist primarily of double wood poles. A lattice steel structure is used when changing direction or to strengthen the line in places. Picture 1 below is of the existing Dunmanway Macroom 110 kV line and picture 2 is of a typical lattice steel structure.



Picture 1

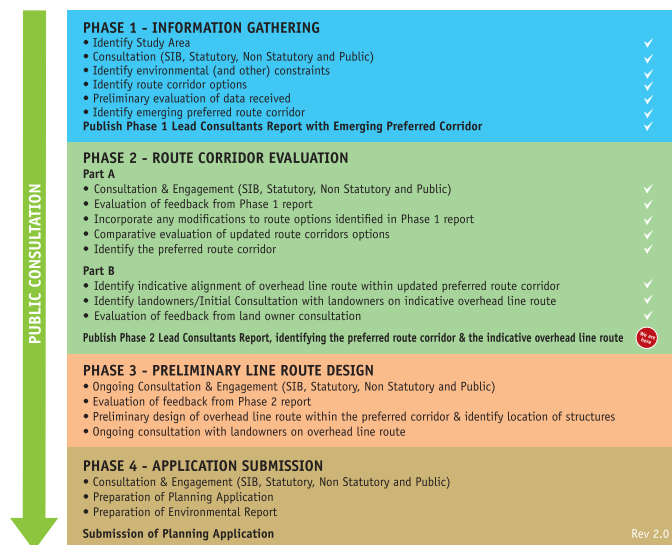


Picture 2

The process for submitting a planning application for the proposed Clashavoon Dunmanway Project has been divided into four key phases as follows:

- |         |                            |                           |
|---------|----------------------------|---------------------------|
| Phase 1 | Information Gathering      | Complete                  |
| Phase 2 | Route Corridor Evaluations | On-Going                  |
| Phase 3 | Route Design               | Estimated June- July 2011 |
| Phase 4 | Application Submission     | Estimated September 2011  |

## Planning Application Project Roadmap



As part of phase 1, EirGrid's Environmental consultants, AOS Planning have prepared two reports on visual/landscape impact. Both reports have been published on the project website [www.eirgridprojects.com](http://www.eirgridprojects.com). These reports set out the methodology and information sources used in the assessment of visual/landscape impact at phase 1.

Report 1 Constraint Report Landscape - Visual Impact (August 2010)

Report 2 Assessment of Corridors Report Landscape -Visual Impact (September 2010)

As part of phase 2 EirGrid's consultants, ESBI, will identify an indicative line route within the preferred corridor, again based upon an evaluation of the findings of the visual impact assessment, as well as impact assessment of other environmental topics. A Phase 2 report will be published once an indicative line route has been identified and verified.

At phase 3, when the detailed line siting and design is being undertaken, EirGrid's consultants will prepare detailed expert environmental assessment, that will address and identify any potential impacts, proposed mitigation measures and any residual impacts (if any) for all aspects of the environment.

One of these reports will be a visual/landscape assessment. This will be submitted as part of a comprehensive environmental report with the planning application and made publically available on the dedicated application website.

### ***3) Is there limitation to agricultural land use after Construction of the line?***

Normal agricultural activities can continue as usual after the construction of the proposed 110 kV overhead line.

EirGrid is the operator of the transmission system (Transmission System Operator) while ESB is the owner of the transmission system (Transmission Asset Owner), therefore ESB will own the overhead line. In its role as the TAO (Transmission Asset Owner) ESB produces an excellent booklet "Farm Well Farm Safely" which can be downloaded from the ESB Networks website at

**[www.esb.ie/esbnetworks](http://www.esb.ie/esbnetworks)**

Additionally the following guidance has been developed in partnership with the Health and Safety Authority for those working in close proximity to overhead powerlines:

- Code of Practice for Avoiding Danger from Overhead Electricity Lines
- Dangers from Power Lines on Farms - A safety video below was produced as part of the HSA/ESB Alliance to highlight danger of contact with overhead lines on Farms

### ***4) I am concerned as an adjacent householder whose land/property is not traversed that there will be a decrease in the value of my home. How are EirGrid going to compensate me for my loss?***

EirGrid operates over 4,000 kilometres of 110 kV lines throughout Ireland in a safe and secure manner. Much of this network has been in existence for over 40 years and EirGrid does not perceive that overhead power lines impact on property values. The development of the electricity grid is vital to provide us all with an essential and secure supply of energy.

### **5) My area is renowned for its archaeological and historic value? Will the proposed electricity circuit pose a threat to this heritage?**

EirGrid has developed a Code of Practice in conjunction with the Department of Environment Heritage & Local Government. This Code of Practice highlights that EirGrid is fully committed to ensuring that developments are carried out in an environmentally sensitive manner, protecting our cultural heritage.

Question 2 above details the project roadmap. As part of phase 1, EirGrid's consultants, AOS planning have prepared two reports on Cultural Heritage for the proposed Clashavoon Dunmanway project. The cultural heritage report included a historical report on the entire study area for the project. These expert environmental reports detail the constraints and expert environmental assessment of the proposed route corridors.

Both reports have been published on the project website ([www.eirgridproejcts.com](http://www.eirgridproejcts.com))

Report 1 Constraints Report – Cultural Heritage (August 2010)

Report 2 Assessment of Corridors Report - Cultural Heritage (September 2010)

At phase 3, when the detailed line siting and design is being undertaken, EirGrid's consultants will prepare detailed expert environmental assessment, that will address and identify any potential impacts, proposed mitigation measures and any residual impacts (if any) for all aspects of the environment.

One of these reports will be a Cultural Heritage assessment. This will be submitted as part of a comprehensive environmental report with the planning application and made publically available on the dedicated application website.

### **6) I am concerned the proposed new overhead line will affect wildlife such as bats and birds. What are EirGrid proposing to mitigate this impact?**

Question 2 above details the project roadmap. As part of phase 1, EirGrid's consultants, AOS planning have prepared two reports on Ecology for the proposed Clashavoon Dunmanway project. These expert environmental reports detail the constraints and expert environmental assessment of the proposed route corridors.

Both reports have been published on the project website ([www.eirgridproejcts.com](http://www.eirgridproejcts.com)).

Report 1 Constraints Report – Ecology (August 2010)

Report 2 Assessment of Corridors Report – Ecology(September 2010)

At phase 3, when the detailed line siting and design is being undertaken, EirGrid's consultants will prepare detailed expert environmental assessment, that will address and identify any potential impacts, proposed mitigation measures and any residual impacts (if any) for all aspects of the environment.

One of these reports will be an Ecology assessment. This will be submitted as part of a comprehensive environmental report with the planning application and made publically available on the dedicated application website.

### **7) Why is this project not going underground?**

EirGrid has the exclusive function to operate and ensure the maintenance of and, if necessary, develop a safe, secure, reliable, economical and efficient electricity transmission system with due regard for the environment. Whenever a new high voltage circuit is proposed, EirGrid's Policy on the use of Overhead Line and/or Underground Cable guides the decision on whether to use overhead line or underground cable.

As a result of EirGrid's policy, an underground cable will only be used if all of the following four conditions apply-

1. An overhead line is not environmentally feasible;
2. A technically and environmentally acceptable route for underground cable can be found;
3. The effect that the electrical characteristics of underground cable have on the transmission network is acceptable, and the relative 'availability' of the underground cable is tolerable; and;
4. The relative greater cost of the underground cable above that for overhead line can be justified;

In relation to condition (1) above, Chapters 3 & 4 of the Phase 1 Consultants Report (Available on [www.eirgridprojects.com](http://www.eirgridprojects.com)) confirms that there are three environmentally feasible corridors, within which to route an 110kV overhead line circuit, and that the predicted environmental impacts of such overhead development are sustainable. Therefore EirGrid proposes an overhead line solution for this project. As such condition (1) does not apply. Notwithstanding this, the use of underground cable has been considered for this project.

In relation to condition (2) above, EirGrid commissioned ESB International to carry out a feasibility study to investigate underground cable route options and environmental studies to assess the impact of installing underground cable on these routes. Technically feasible cable route options were identified and the environmental impacts are sustainable. As such condition (2) does apply.

In relation to condition (3) above, a project specific 110kV technical screening study has examined the electrical characteristics of using a cable for the proposed circuit. The electrical characteristics of cable are deemed tolerable based on the 110kV technical screening study.

The reliability of both the overhead line and underground cable has been assessed based on a combination of fault data from the Irish transmission system and CIGRE (The international council on large Electric Systems) data on 110kV faults. Over the lifetime of the proposed circuit, the overhead line has a better reliability and a significantly better repair time of faults. Therefore, it follows that the overhead line will provide a better availability than underground cables.

In relation to condition (4) above, EirGrid has estimated the costs associated with an overhead line and underground cable solution. Based on the emerging preferred overhead line corridor and the emerging preferred underground cable route, it is estimated that, the underground cable would cost approximately 100% more than the overhead line. As such the relative high cost of an underground cable cannot be justified for this project. As such condition (4) does not apply.

In summary, as a result of EirGrid's Policy on the use of Overhead Line and/or Underground all four of EirGrid's conditions should apply for an underground cable to be used within a proposed circuit.

As a number of these conditions do not apply EirGrid is proposing an overhead line solution for this project.

***8) I have heard that the proposed 110kV line, if granted permission, could be upgraded to a 220kV line without planning permission. Can EirGrid confirm this is true?***

It must be noted that the need for, and nature of, the project was identified initially by studies carried out by EirGrid's expert system planners, who forecasted the maximum carrying capacity that would be required for this project.

It is from such studies that it was concluded that the proposed 110 kV project would meet the identified need for the project. The proposed 110kV line if granted planning approval would be constructed using the pole structures described in Phase 1 Consultants Report (Available on [www.eirgridprojects.com](http://www.eirgridprojects.com)). Once constructed, the line can be operated at nominal voltage of 110kV. It would not be possible to upgrade the line to 220kV using the structures described in the Phase 1 Consultants Report. It should be also noted that Dunmanway transmission station is an 110kV station.

**9) Can EirGrid explain the rationale behind the route chosen and in particular the decision to avoid, in so far as possible, lake/river crossing?**

EirGrid's consultants, ESBI have prepared a "Phase One Lead Consultant Report" which details the methodology used to identify potential route corridors, and the conclusions that led the Consultants to identifying which route corridor, in its expert view, was the emerging preferred option. This report was made public on the 11/10/2010 and published on the project website ([www.eirgridproejcts.com](http://www.eirgridproejcts.com))

A public information day was then held in the Castle Hotel, Macroom on Wednesday 13th October between 2.00pm and 8.00pm. Members of the public were invited to provide submissions, comments, information or queries in relation to the "Phase One Lead Consultants Report" including the Consultants emerging preferred option. The open day was advertised in the Corkman, Southern Star and Irish Examiner Newspapers.

Public & statutory bodies had a period of 4 weeks to make submissions to EirGrid after which the project moved to phase 2. As part of this, EirGrid and its consultants have engaged in detailed discussions with the National Parks and Wildlife Service (NPWS) and an expert ornithologist (bird study). Both expressed concern that the planned development should avoid designated wetlands, and in particular The Gearagh complex, in order to minimise potential impact upon concentrations of bird species protected under European Legislation.

EirGrid's consultants, AOS planning prepared expert environmental reports which form part of the "Phase One Lead Consultant Reports". These expert environmental reports detail the lakes/river crossing constraints and expert environmental assessment of the proposed route corridors crossing lakes/ivers. In summary, following the advice of the NPWS and other experts, the preferred route corridor avoids identified key sensitive areas for birds. However, such route corridors also avoid, to the greatest extent possible, clusters and concentrations of settlement and dwellings.



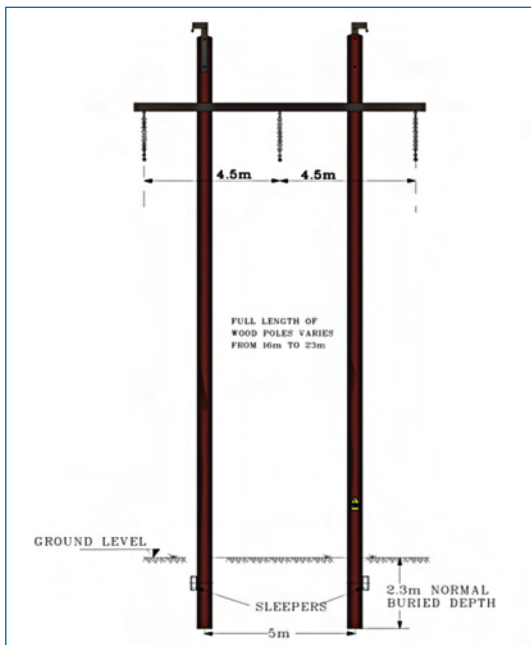
### 10) Can EirGrid explain the difference between 110 kV and 220 kV in the context of the erection of any power lines and pylons?

A summary explanation is detailed below but for more comprehensive information see Section 1.5.1 (pages 10 - 15) of the Phase 1 Lead Consultants Corridor Identification Report which describes the structures to be used on the proposed single circuit earthwire 110kV overhead line for this project.

Please note that Clashavoon Station is a 220 kV and 110kV station. This means that Clashavoon Station is connected to the 220kV transmission network via Clashavoon-Knockraha and Clashavoon-Tarbert 220 kV Lines. The new proposed line is going to connect to Clashavoon 110kV station.

#### Single Circuit 110kV Overhead Lines

A 110 kV single circuit overhead line will require that the overhead line conductors be supported on a combination of lattice steel masts and double wood polesets. The lattice steel masts are required where the line changes direction or terminates. The average span between these poles for a line of this type is approximately 250 metres, but the actual span achievable depends on local topography. The pictures below show both the wooden poleset and lattice steel mast structures to be used on this project.



110kV Wooden Poleset



110kV Steel Mast

Key design features:

Height range (double wood pole sets) = 16m to 23m

Height range (steel angle masts) = 18m to 24m

Average span = 250m

Concrete foundations required for all steel masts (base installation time approximately 1 week)

No concrete foundations required for pole sets (normal conditions) (installation time approximately 2 per day)

### **Single Circuit 220kV Overhead lines**

A 220kV line requires that the overhead line conductors be supported exclusively on lattice steel structures.



220/110 kV Steel Mast



220/110 kV Steel Mast

The average span on a line of this type is 320m but again the actual span achievable depends on local topography.

Key design features:

Height range = 21.1m to 37.1m

Average span = 320m

Concrete foundations required for all steel masts (base installation time approximately 2 weeks)

### **11) Is it standard procedure to have a back-up line to a back-up line? If so, can you please provide details of similar instances?**

EirGrid has the exclusive function to operate and ensure the maintenance of and, if necessary, develop a safe, secure, reliable, economical and efficient electricity transmission system with due regard for the environment. The electricity transmission network is designed to comply with a formal Transmission Planning Criterion (TPC) which is designed to ensure security of supply for all electricity consumers of Ireland, in line with international standard practice. The TPC requires that specific levels of transmission reliability be maintained.

In accordance with the TPC:

- Sufficient capacity must be available to supply existing or committed demand or generation
- Sufficient redundancy needs to be available to accommodate one circuit failing at peak demand
- Sufficient redundancy must exist to accommodate the loss of a circuit during maintenance, that is typically performed during the summer months of lower demand

As such, the proposed Clashavoon Dunmanway project is required for two reasons as follows:

**1) Security of electricity supply**

Currently the electricity supply in South West Cork is maintained by two 110kV transmission lines, the Dunmanway – Macroom 110kV line and the Bandon – Raffeen 110kV line. During routine maintenance of either line, the subsequent loss of the other line would mean that South West Cork would lose its electricity supply and leave the towns of Bandon, Ballylickey, Dunmanway and extended areas around them, without power.

**2) Connection of renewable generation**

There is a significant amount of renewable generation connected and seeking to connect in the South West Cork area. The current transmission network configuration and capacity is not capable of accommodating the connection of this amount of renewable generation. EirGrid is responsible for ensuring that the necessary grid infrastructure is in place to allow this renewable generation access to the transmission system to export power to where it is needed.

It is therefore the case that the planned development is not a back-up line as might be commonly understood such as an emergency generator; rather it is in fact, a vital element of the electricity system of the South-West region.

**12) Can EirGrid provide detailed structural plans of the proposed pylons to be erected?**

As part of the “Phase One Lead Consultant Report”, detailed typical structure descriptions and drawings were included in the report.

Section 1.5.1 of the “Phase One Lead Consultant Report”, describes the typical design of three structures (Intermediate wood poleset, braced wood poleset, steel angle structure) proposed for the Clashavoon Dunmanway project.

Detailed typical design drawings of the three structures were included in Appendix I of the “Phase One Lead Consultant Report”. All appendices were published on the project website ([www.eirgridprojects.com](http://www.eirgridprojects.com)).

**13) Is it not possible for the existing pylon infrastructure to be used to facilitate this project?**

EirGrid has considered upgrading the existing infrastructure to determine if this would address the networks problems identified above.

Utilising the existing electrical infrastructure would not solve the network problems as described above.

**14) What strategic factor influenced you to choose this route and when was this decision taken?**

EirGrid's consultants, ESBI have prepared a “Phase One Lead Consultant Report” which details the methodology used to select an emerging preferred corridor. This report has been published on the project website. The identification of various route corridor options, and the Consultants preferred option arises from an initial evaluation of a range of often competing technical, environmental, community criteria, and also from feedback arising during public and other consultation on this project. However, the eventual route of the planned development will be confirmed following consideration of ongoing consultation and feedback, ongoing environmental surveys, and other matters.

# APPENDICES

**Appendix A** – List of Statutory and Non Statutory Consultees

**Appendix B** – Phase 2 Briefing Document

**Appendix C** – Newspaper Notice for Open Day (October 13th 2010)

**Appendix D** – Sample of Documentation given to Landowners

Appendix D.1 – Cover Letter

Appendix D.2 – Survey Letter

Appendix D.3 – Landowner Map

Appendix D.4 – Project Briefing Document

Appendix D.5 – ESB/IFA Code of Practice

Appendix D.6 – Booklet on Electric and Magnetic Fields

**Appendix E** – Newspaper Notice for Open Day (May 9th 2010)

**Appendix F** – Community Update Brochure

## NOTES

## NOTES



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