



**Contestability on the
Distribution System –
ESB Networks position
paper 2009**

Status: For Consultation

**ESB Networks
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1.0 Introduction

The Dept of Communications, Energy and Natural Resources indicated in early 2008 that it was their intention to make provision for a contestability option for wind farms connecting to the Distribution System on the same basis and subject to similar conditions as are already in place for connections to the Transmission System. This provision was made into law by SI226 2009, which amends Section 34 of the Electricity Regulation Act of 1999, which SI was signed in June 2009.

The purpose of this paper is for ESB Networks Ltd. to put forward its proposals for how contestability will operate at the Distribution level.

SI226 2009 confers on wind farm developers the right to construct all or part of their connection to the Distribution System.

In putting forward these proposals ESB Networks Ltd. seeks to facilitate developers in constructing all or part of their connection to the Distribution System subject to the requirement that the Distribution System continues to be developed in a safe, secure, reliable and efficient manner.

Given that contestability at Transmission level has been operating successfully since 2000 and that guidelines have been published by EirGrid in October 2007 outlining the principles governing and procedures relating to contestability, ESB Networks Ltd. does not propose to deviate significantly from the guidelines relating to Transmission contestability in its proposals for connections to the Distribution System.

2.0 Key Principles

Recognising the need to balance the rights of developers to construct their own connection assets with the responsibility of ESB Networks Ltd. to the users of the Distribution System as a whole, the following key principles are proposed which are in line with those relating to contestability at Transmission level:

- The Distribution System Operator (DSO) will determine the connection method for any generation project. While a developer can request a modification to their connection method, the modification will only be allowable where it is technically acceptable and adheres to certain guidelines as set out in the Joint TSO/DSO Group Processing Approach Pricing principles Guidelines
- The developer will decide whether to request a contestable or a non-contestable connection offer. In the first instance a decision must be taken a minimum of 3 months prior to offer issue, or as advised by DSO
- ESB Networks Ltd. will have the option of taking ownership of any distribution assets built contestably.
- Where the distribution assets built contestably are required to connect other customers, or are shared by a number of developers such assets will be taken over by ESB Networks Ltd.. Contestably built assets which are exclusively connecting a single wind farm will generally not be taken over in the first instance.
- Where assets are taken over by ESB Networks Ltd., responsibility for fault and planned maintenance will be with ESB Networks Ltd.
- ESB Networks Ltd. will charge developers an annual Operations & Maintenance charge for this service. The current schedule for this charge is published on ESB Networks Ltd. website at www.esb.ie/esbnetworks
- Where assets are not taken over, responsibility for fault and planned maintenance and public safety liability in respect of the assets remains with the developer.
- All Distribution Assets (even where they are not taken over in the first instance) will be built to ESB Networks Ltd. Distribution Standards as provided to the party who is undertaking the contestable build.

- Only direct connections to a wind farm, or group of windfarms, will be contestable. Any associated reinforcements required elsewhere on the system will not be contestable.
- ESB Networks Ltd. will recover inspection and supervision costs incurred in ensuring that all Distribution Assets are built to ESB Networks Ltd. Distribution Standards.
- If ESB Networks Ltd. is not satisfied that distribution assets constructed contestably are up to Distribution Standards as previously provided to the developer, it reserves the right to refuse connection to the Distribution System. In these circumstances, the reasons will be discussed with the developer.
- For developers receiving connection offers to the Distribution system at the same time, and sharing and using contestable Distribution Assets, the present process for transmission contestability is that assets can be provided by one of the developers following written agreement between all the developers. Said agreement should also nominate the developer responsible for handling the contestable build. This principle is further discussed in Section 8 of this paper
- In complex groups, where numbers involved may make agreement between all connecting parties difficult, subsets of the group assets may be contestably built by the developers who share or use the asset subset. Where this arises, the boundary has to be agreed with DSO and the choice of boundary must be consistent with the topology involved. A sample of possible combinations [not meant to be exhaustive] is depicted in Appendix 1, for illustrative purposes.
- As a general rule, it is important to protect the DUoS customer in order to ensure that they are not underwriting risks associated with decisions by generators to reject offers, or to not proceed with their projects following offer acceptance. Therefore, should the Distribution System Operator believe or suspect that offer rejection(s) and/or decisions by generators to not proceed with their projects following offer acceptance, is being used to gain advantage over, or to the detriment of other generators and/or the DUoS customer, they may refer the issue to the Commission for further investigation.¹

3.0 Contestable Activities:

It is proposed that the following activities will be contestable but subject to approval by ESB Networks:

- Detailed design
- Route and site selection
- Site acquisition
- Planning permission
- Wayleaves
- Equipment purchasing
- Construction
- Pre-commissioning

4.0 Non Contestable Activities:

It is proposed that the following activities will not be contestable:

- The determination of the connection method¹
- Any associated system reinforcements.
- Works and assets that are required for system protection and communication

¹ Connection methods suggested by the developers would be evaluated per the current process in arriving at the determination.. In addition developers always have the right to request a modification to their connection method which will be studied and assessed in the usual manner.

- Works and assets that cannot be safely and efficiently separated from existing live system
- Work and assets within live stations
- Determination of assets to be transferred to ESB Networks
- Operational control
- Outline specification for requirements relating to sites, routes and wayleaves
- Functional specification of equipment to be used
- Commissioning
- Maintenance of assets transferred to ESB Networks

If the DSO considers it necessary for system security and stability reasons to make the shared Distribution Connection Asset of a subgroup non-contestable it shall notify the developer(s) as soon as practicable, pre-offer, advising a full explanation of their decision. In the event that the developer disagrees with the decision they are entitled to dispute the issue to CER under Section 34(6) of the 1999 Act.

5.0 Financial Arrangements

A developer undertaking a contestable build will be required to post a performance bond with the DSO in respect of the connection works. This bond may be drawn down where:

1. the developer fails to complete the works prior to a contractual longstop date
2. The developer is unable to complete the works

This bond is required to cover the scenario where

1. connection offers issued in a subsequent gate require access to the asset being built contestably
2. connection assets being built contestably are required for system development

In the event any of the conditions allowing draw down of the bond are met, the DSO will assess whether other parties are affected by the non-completion of the project (or delay in completion of same) and may decide not to draw down on the bond.

Where a developer is being connected via a non-LCTA connection, and opts to build their connection assets contestably, the incremental cost of the non-LCTA connection will be funded by the DSO and will be calculated as per DSO standard prices, the current version of which is available on ESB Networks Ltd. website

The arrangements for payment of connection costs for the shared Distribution Connection Asset shall be a matter for the parties within the Subgroup if the contestable option is chosen.

6.0 Connections eligible to be built contestably

6.1 Transition Period:

At present all connections to the Distribution System are non contestable, i.e. only ESB Networks Ltd. can build these connection assets. Once the legislation is published, a developer can opt for a contestable or non-contestable offer. In addition, ESB Networks proposes transition arrangements to facilitate this option for existing offers where feasible.

There are a number of live connection offers (as yet not accepted) issued to wind farms seeking connection to the Distribution System. In addition there are a number of connection agreements in place where the connection isn't energised. These agreements are at various stages of advancement. In some cases, the offer has been accepted, payment made and ESB Networks Ltd. has commenced the construction phase.

In order to facilitate pre-Gate 3 developers who wish to build their connection assets contestably, ESB Networks Ltd. proposes the following arrangements with regard to windfarms which have not yet been connected/energised:

1. Where a developer has accepted a connection offer, but where work² has not commenced, the developer may request a modification to a contestable offer from ESB Networks Ltd..
2. Where an offer has been made but not accepted, the Developer may seek a contestable offer from ESB Networks
3. Where ESB Networks has already started the construction phase of the project, has ordered material or has entered into an agreement with a contractor, the connection will be completed by ESB Networks.

6.2 Rules going forward

In general, DSO would propose the following process would apply to generators who may wish to build their connection assets contestably;

1. At minimum of 3 months prior to offer issue, or at an earlier date is so advised by DSO, the developer must indicate they require a contestable offer. In the absence of such a request DSO will issue a non-contestable offer
2. Where shared assets are involved the current rules for transmission contestability are such that all developers sharing the asset must agree in writing to the shared assets being built contestably and must nominate in writing the developer who will undertake the contestable build. However please see section 8 for further discussion on this issue.
3. Where an offer has been issued on a non-contestable basis a developer can opt for a modification to a contestable offer where the connection offer has been accepted, but where work³ has not commenced.
4. Where an offer issued on a non-contestable basis involves shared assets all parties must agree in writing to a modification request and as part of this agreement must indicate in writing which party will undertake the contestable build..

Where a developer or group of developers has opted to build their connection asset contestably and subsequently wish to revert to a non-contestable build, this request can be facilitated under the following conditions:

² Where design work has been undertaken, the developer may still opt for a contestable connection. However the developer will be liable for any costs incurred to date.

³ Where design work has been undertaken, the developer may still opt for a contestable connection. However the developer will be liable for any costs incurred to date.

- 1 Where the developer(s) has accepted a connection offer, but where work⁴ has not commenced, the developer may request a modification to a contestable offer from ESB Networks Ltd..
- 2 Where an offer has been made but not accepted, the developer(s) may request a modified offer post offer acceptance
- 3 Where the contestable offer was originally made in respect of shared assets, any request to then revert to a non-contestable offer can only be facilitated if there is a written modification request from all parties. The exception to this rule being where the developer building the assets contestably has failed to meet certain contractual longstop dates.
- 4 Where work has commenced on a project and the developer(s) requests a modification to a non-contestable offer⁵, ESB Networks Ltd will step in to complete the build on the following basis
 - Each project will be assessed on a case by case basis to ensure that the project can be taken over in a safe manner. In some cases this will mean abandoning works already done
 - Any works built contestably, but being included in the non-contestable connection must be completed to the distribution standards provided
 - ESB Networks Ltd. will advise of the costs of completing the project, based on a detailed design rather than standard costs
 - ESB Networks Ltd. will not be liable for any delays resulting from the request to take over a non-contestable build
 - Under certain circumstances – as set out in section 5.0 – ESB Networks Ltd. will draw down on the performance bond and this drawdown may be used in part to fund any additional costs incurred

7.0 Process for Connecting a wind farm to the Distribution System:

ESB Networks will meet with developers in advance of offer issuance. At these meetings ESB Networks will outline details of the connection method and developers will indicate whether they are likely to require a contestable or a non-contestable offer. A final decision on whether they wish to be issued with a contestable offer will be required within the timeframe set out above.

A contestable offer from ESB Networks will include details of the connection method i.e. the type of connection from the existing Distribution System to the high voltage bushings of the developer's transformer and will include voltage level, type of connection (Radial or looped) and the connection point.

As part of the contestable offer ESB Networks will provide

- An outline design and functional specification.

⁴ Where design work has been undertaken, the developer may still opt for a contestable connection. However the developer will be liable for any costs incurred to date.

⁵ Such request may sometimes be due to the party undertaking the contestable build being unable to complete the works

- an estimate of the inspection and commissioning charges which will be incurred to ensure that all Distribution Assets are built to ESB Networks Ltd. Distribution Standard.
- detailed costs for work on protection and communication equipment which will be carried out by ESB Networks Ltd.
- a cost breakdown of any non-contestable works
- a list of relevant equipment currently in use on the Distribution System. If developers choose to use equipment not on this list, this equipment will require approval by a materials standards committee similar to the system which operates in other European countries. The committee will operate along the lines of the Distribution Grid Code Committee and would comprise suitable experienced experts from ESB Networks, The National Standards Committee, CER, The Wind Industry and Universities. Terms of reference for this committee will need to be drafted to include the steps required to approve equipment for use on the Distribution System and the timelines. Where equipment is provided which ESB Networks does not already use, the Developer will be required to supply spares and training.

8.0 Building shared connection assets contestably

As already set out in section 2 under key principles the present ESB Networks Ltd. proposal is that all parties sharing a connection asset would have to agree, and nominate a developer in writing to allow the shared assets to be built contestably.

However ESB Networks is aware that the need to get agreement for shared assets is a contentious issue amongst developers. Should the industry favour an approach where agreement is not required for building of shared assets, ESB Networks will consider, in consultation with the CER, how such an approach could be managed.

To facilitate a debate on the issue, ESB Networks Ltd outline below issues which are likely to arise under both scenarios

8.1 – Agreement required from all developers sharing the assets in a specific gate

This approach gives rise to the following issues

1. Where an offer for connection is issued to a contestable asset in a subsequent Gate what rights does the new applicant have?

In this instance DSO propose the following rule set

- a. Where the contestable offer has been issued in advance of the offer issue to the party in a subsequent Gate, then the new applicant has no right of veto. The new applicant will then pay for the connection asset on the basis of standard prices, and the parties contesting the build will be refunded in the usual manner (see Joint TSO/DSO Group Processing Approach Pricing principles Guidelines)
- b. Where the contestable offer is requested after an offer has issued and/or been accepted by the 'new' applicant, the new applicant must agree to the contestable arrangement in the same manner as the parties in the original subgroup. The arrangements for payment of connection costs for the shared Distribution Connection Asset shall be a matter for the parties within the Subgroup including the new applicant

2. Where a group agree in writing to a contestable build, and an offer is issued, who is liable for any sunk costs where one of the party pulls out and opts for a non-contestable build?

As per section 6.2 DSO would propose that – once a party agrees to a contestable build they can only modify to non-contestable in the event that all parties also agree

3. Where a group requests in writing a modified offer to facilitate shared assets being built contestably, do all parties have to accept their modified offer prior to works commencing on the contestable?

DSO would propose that the modified offers should be accepted. In the event that the developer undertaking the contestable works opts to commence these works in advance of offer acceptance from all parties and ultimately the modified offers are not all accepted, then the cost of the works undertaken to date will be to the account of the developer of the works undertaken to date. In addition the developer may be liable for decommissioning and reinstatement costs.

8.2 – Agreement not required from all developers sharing the assets

This approach gives rise to the following issues

- 1. Where more than one party wishes to undertake the contestable build, who will decide which party is allowed to undertake these works?**
- 2. What incentive is there on the developer to complete the works to a timescale which suits other developers?**

As per Section 5.0 DSO proposes that all developers undertaking contestable works (regardless of whether the connection assets are shared) will be required to post a performance bond. In addition ESN Ltd proposes that any amounts paid by non-contestable developers would not be passed through to the contestable developer until such time as the connection is complete.

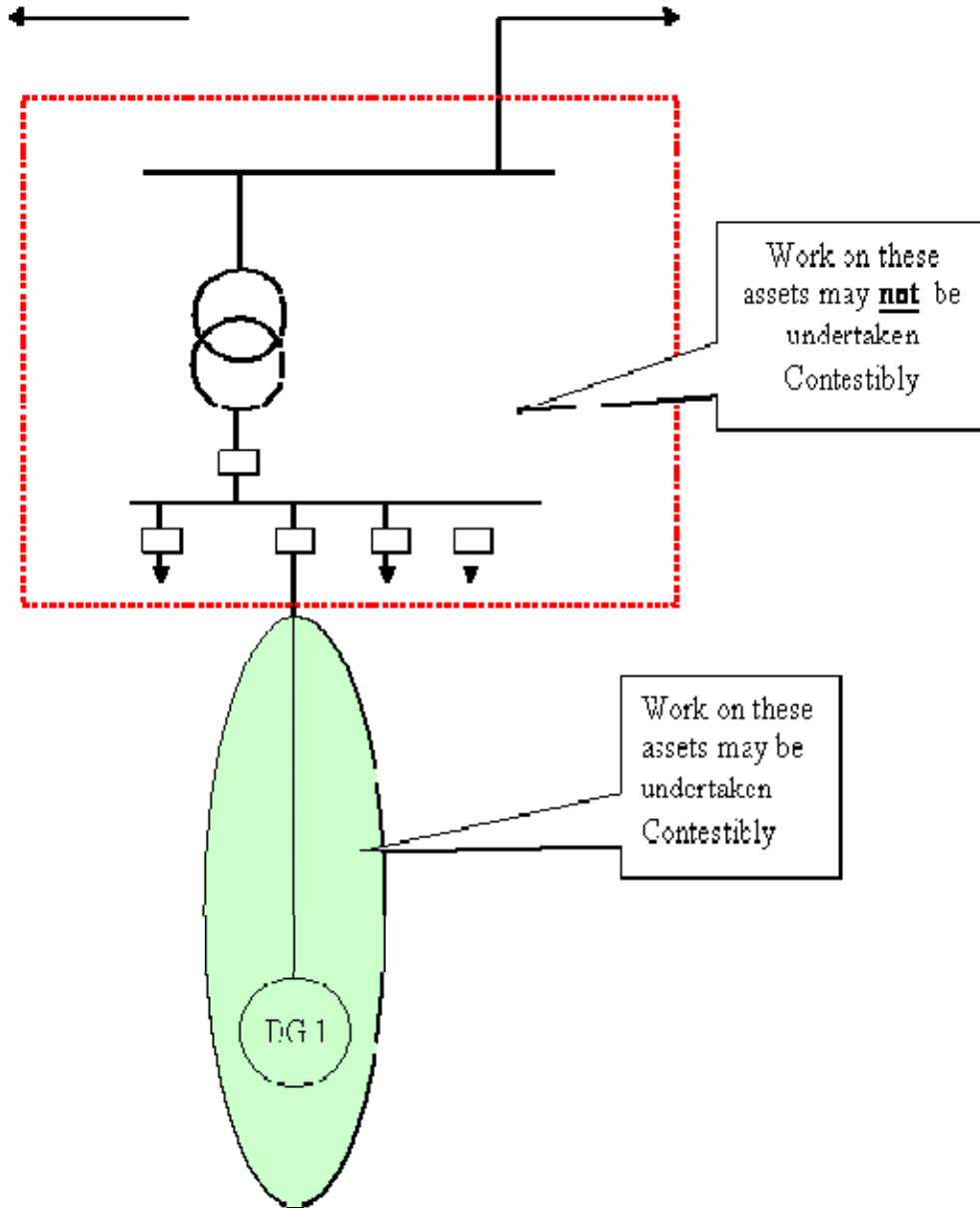
- 3. There is now no incentive for the developer undertaking the contestable works to share any resulting cost savings. Ultimately this may lead to less rather than more developments proceeding.**

Appendix 1 Examples of Connection Scenarios:

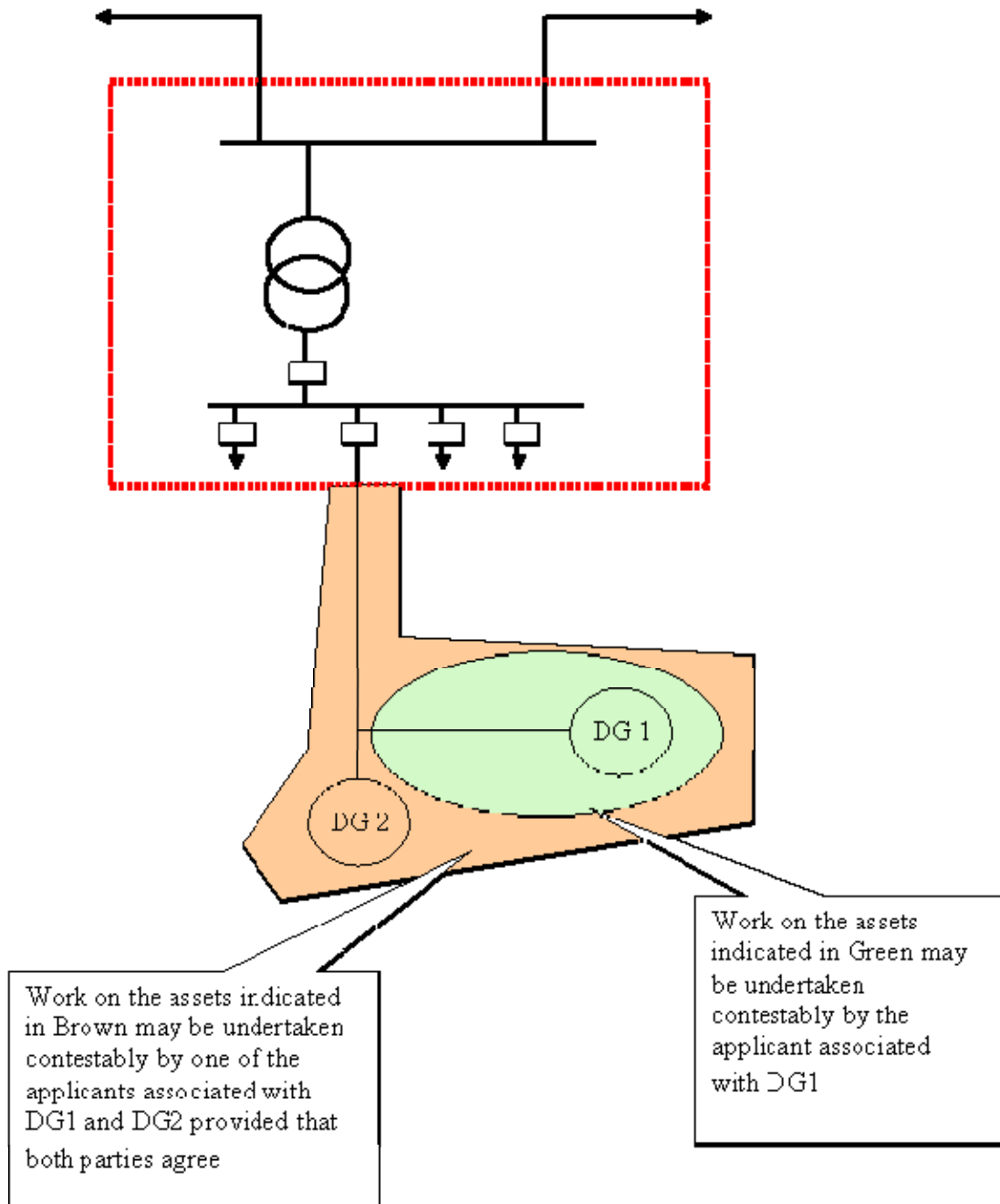
In this section some typical examples of connection scenarios to the Distribution System are presented to illustrate which parts of the connection are contestable. These scenarios also distinguish between parts of the connection which could be built contestably by a single developer and those that would be built by one developer following agreement among a number of developers in respect of an asset to be shared.

These scenarios also serve to indicate that part of a contestable connection which ESB Networks would take ownership of and what parts may remain in the ownership of the developer.

Secenario1: New dedicated MV feeder into existing 38kV/MV station



Scenario 2: New MV feeder into existing 38kV/MV station, shared between two applicants



Please note that the shared assets built contestably will be taken over by ESB Networks. In addition parties should agree in writing, indicating which developer is responsible for undertaking contestable works

Scenario 3: New dedicated DG 38kV station feed into existing line with three DGs fed from it at MV

