Contestability on the Distribution System – ESB Networks

Key Principles and Processes
paper 2009

Status: For Approval

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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 generators 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 SI 226 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 set out the principles under which contestability will operate at the Distribution level.

SI 226 2009 confers on generators 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 since 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.
- For reasons of public safety, ESB Networks Ltd. will take ownership of any distribution assets built contestably (subject to said assets being built to an acceptable standard). This may be reviewed in the future if public safety issues are satisfactorily resolved.
- 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.
- 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
- All Distribution Assets will be built to ESB Networks Ltd. Distribution Standards as provided to the party who is undertaking the contestable build.

July 2009, Page 2 of 14
• Only direct connections to a generator, or group of generators, 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. In the case of shared assets, the developer undertaking the contestable build will be liable for these charges.
• 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.
• Where parties are to be connected via shared assets, DSO proposes to adopt the TSO model which 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.
• The lead developer, nominated in writing by those sharing the assets to be built contestably, will be the sole point of contact for the project. This developer will be responsible for:
  o The delivery of the assets to an acceptable standard
  o The inspection and supervisory costs incurred by ESB Networks Ltd. over the course of the contestable build
  o The transfer of these assets to ESB if appropriate
  o The Performance Bond if required
• Where a connection involves both shared and dedicated assets, it may be that subsets of these assets are built by different developers. 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.
• Where the contestable build requires selection of station sites, such sites must be agreed with ESB Networks Ltd. Likewise cable and line routes must be agreed with ESB Networks Ltd.
• Where any part of a connection for a developer is being built contestably, the connecting party will not be eligible to receive a fixed date contract.
• Any asset being built contestably must be on the basis of the Connection Agreement signed and accepted by both ESB Networks Ltd. and the developer.
• 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.

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

1 Please note that where a dedicated connection involves discrete work elements, this provision may also apply – subject to agreement with DSO
- 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 method\(^2\)
- Any associated system reinforcements.
- Works and assets that are required for system protection, communication and metering.
- 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 may be required to post a Performance Bond with the DSO in respect of the connection works for shared assets being undertaken. This bond will not be required where parties who are sharing the assets to be built contestably are agreeable to the works being done contestably even in the absence of a Performance Bond.

**Where a bond is required**

1. **The bond requested shall be an On Demand bond, with the following credit rating**

   Banks licensed by the Central Bank of Ireland or authorised in other Member States of the European Economic Area (EEA) to carry on business in the State under EU Directive, 2006/48/EC with a long-term credit rating of at least A (Standard and Poors) or A2 (Moody’s) or equivalent. A-/A3 will not suffice. Where a company has a split rating, the lower rating will be considered for the purposes of this definition.

   The Customer shall be required to procure a new bond within 30 business days if the rating of the financial institution providing the bond falls below this rating.

2. **The bond should be put in place at offer acceptance.**

\(^2\) 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.
3. The developer undertaking the contestable works will be responsible for the bond. Obviously it is open to the sub-group to decide whether they wish to finance the bond in a shared manner.

4. The bond will be for the full cost of the connection works being built contestably based on standard prices.

5. In the event that ESB Networks Ltd. is subsequently requested to complete a build on a non-contestable basis the bond will be drawn down to finance this non-contestable build.

6. In the event that the full cost of the bond is not required to complete the connection, the balance will be refunded to the developer who put the bond in place.

7. The bond may be drawn down to complete the build (on a non-contestable basis) should the contestable build be incomplete at the contractual longstop date. However, this step will only be taken following discussions with the parties affected (parties affected may include the System Operator).

Where a bond is not in place, and ESB Networks Ltd is requested to complete the build on a non-contestable basis:

a. In relation to shared assets where all parties had agreed to these assets being built on a contestable basis, and had agreed to this being done without the requirement for a Performance Bond.

1. Prior to taking over the build DSO will assess the work carried out to date and cost the works required for completion based on standard pricing.

2. The DSO will issue new non-contestable connection offers to all parties sharing the assets. The timelines and costs included as part of these revised offers will be based on DSO's assessment of the works required for completion, rather than on any timelines or costs established and agreed as part of the contestable arrangements.

3. Once offers are accepted and any required payments made, the work will then be scheduled.

Connection Offers in this instance would include a connection charge for the outstanding works – as assessed by DSO - and based on standard prices. Staged payments would be on the same basis as other non-contestable builds i.e. 10% to be paid pre-completion of detailed design and planning permission. Total of 65% to be paid pre-construction.

b. In relation to shared assets where at least one of the parties involved was not party to the original agreement to contest the assets, and the works are requested to be completed on a non-contestable basis.

1. Prior to taking over the build DSO will assess the work carried out to date and cost the works required for completion based on standard pricing. Any outstanding costs, which would otherwise be to the account of the developer who was not party to the original agreement to build the assets contestably, and which will not be covered by the capital contribution for which that party is liable under their Connection Agreement, will be borne by the End-User.

2. Where any parties have dropped out and no longer require a connection, DSO will review the connection method and consider whether completing the contestable build

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*Please note that ESB Networks Ltd. will only take over the build where all parties request they do so, and/or the contractual longstop date has been reached.*
and connecting the remaining developers based on the original connection method is optimum from the perspective of minimising cost to the End-User.\[^1\]

3. The DSO will issue new non-contestable connection offers to all parties sharing the assets. The timelines and costs\[^2\] included as part of these revised offers will be based on the assessment of the works required for completion, rather than on any timelines and costs established and agreed as part of the contestable arrangements.

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### 6.0 Connections eligible to be built contestably

#### 6.1 Transition Period:

There are a number of live connection offers (as yet not accepted) issued to generators 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 generators which have not yet been connected/energised:

1. Where a developer has accepted a connection offer, but where work\[^6\] 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, 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 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. In addition developers will be asked to advise whether they require a Performance Bond to be provided by the lead developer as a condition of agreement.

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\[^1\] This may result in a delay to the connection parties

\[^2\] Please note, any parties connecting to the assets in question, but who were not party to the agreement and instead were charged based on DSO standard prices, will not be subject to an increased quote for their connection.

\[^6\] 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.

July 2009, Page 6 of 14
3. Where an offer has been issued on a non-contestable basis a developer will not be allowed to opt for a modification to a contestable offer.

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:

1. Where the developer(s) has accepted a connection offer, the developer may request a modification to a non-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 offer, 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 standard costs.
   - ESB Networks Ltd. will not be liable for any delays resulting from the request to take over a non-contestable build.
   - ESB Networks Ltd. will draw down on the performance bond (where available) and this drawdown will be used to fund any additional costs incurred.

7.0 Process for Connecting a generator 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 wind farm.

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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 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.

Post Offer acceptance, ESB Networks will provide:

- An outline design and functional specification.
- 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.
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.
Scenario 1: New dedicated MV feeder into existing 38kV/MV station

Work on these assets may not be undertaken
Contestably

Work on these assets may be undertaken
Contestably

DG 1
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.

Work on the assets indicated in Brown may be undertaken contestably by one of the applicants associated with DG1 and DG2 provided that both parties agree.

Work on the assets indicated in Green may be undertaken contestably by the applicant associated with DG1.
Scenario 3: New dedicated DG 38kV station feed into existing line with three DGs fed from it at MV

Work on the all assets indicated in blue may be undertaken contestably by one of the applicants associated with DG1, DG2 and DG3 provided that all parties agree.

Work on the assets indicated in yellow may be individually undertaken contestably by the applicant associated with their own dedicated assets.

Work on the assets indicated in brown may be undertaken contestably by one of the applicants associated with DG1, DG2 and DG3 provided that all parties agree.

Individual parties contestably built the assets in yellow.
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.

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.

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.

8.0 Building shared connection assets contestably

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
Where the contestible 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).
Where the contestible offer is requested after an offer has issued and/or been accepted by the ‘new’ applicant, the new applicant must agree to the contestible 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:
Where more than one party wishes to undertake the contestable build, who will decide which party is allowed to undertake these works?
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 ESBN 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.
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.