Implementation of Group Processing – Move to construction phase

Revision 0 Jan 2014

Version 1.0

Table of Contents

1 Introduction

In May 2011, the CER approved the Connection Offer Policy and Process (COPP) (http://www.cer.ie/docs/000893/cer11093(y)-appendix-a.pdf) – a joint document prepared by ESB Networks and EirGrid (the System Operators 'SOs'). The purpose of that document was to provide applicants seeking to connect with a clear set of guidelines in relation to connection offer policy.

Section 10 of COPP focussed on the baseline principles behind Group Processing and in particular what happens to a group if one party within the group does not accept their offer and/or terminates their offer at a later stage. Section 10 also dealt with minimising stranded assets in the scenario where one party within the group wished to change their connection method.

The intention of this paper is to **expand** on Section 10 of COPP in particular focussing on the challenges facing project delivery where the actions of developer(s) have the potential to impact on same. This paper will not cover all scenarios which may arise, but rather attempts to set out how the principles of Group Processing are intended to apply, as groups move past the offer acceptance stage and towards the construction phase of a Gate.

This paper is most applicable to generators whose connection method involves shared works with other developers. However, Section 3 covers scenarios applicable to stand alone developers. The layout of the paper is sequential dealing with each of the issues as they might logically arise.

Section 4.5 is, we would suggest, the most complex and we would therefore appreciate if this was given special attention. Specifically this section looks at the scenario whereby not all members of a subgroup are ready to make the pre-construction payment at the same time. A critical juncture in the progression of shared works is the payment of the pre-construction payment which allows materials be ordered and works to commence on site.

For avoidance of doubt, the SO's are of the view that once all group members have made their pre-construction payment, there will be no further requirement to re-optimise connections in order to protect the End-User (with the exception of unusual circumstances).

ESB Networks Ltd., the Distribution System Operator, will be referred to as "DSO" throughout the document. EirGrid plc, the Transmission System Operator, will be

referred to as “TSO” throughout the document. Collectively they will be known as the “SOs” throughout the document. The Use of System customer will be referred to as the “UoS Customer” or “End-User”.

Please note that in the event of any inconsistencies between this paper and any transmission or distribution connection agreement, the connection agreement would take precedence.

The purpose of this paper is

- to set out how the SOs currently apply the existing rules[1] in practice
- to further develop some of the principles set out in those decisions and
- to seek industry views on these developments.

Furthermore, issues which have arisen in practice where parties in subgroups are progressing at different speeds are dealt with in section 4.5 at the end of which options for dealing with these issues going forward are set out for the industry to comment on.

2. Next Steps

The System Operators would welcome comments on this paper. In particular the System Operators would welcome comments on Section 4.5. The issues which have been specifically identified for comment are set out specifically in Section 4.5.

Responses to this paper are to be submitted no later than 16 September 2014 to stephen.ogorman2@esb.ie and contractmanagement@eirgrid.com. The SO’s will review the responses in conjunction with the CER. Following a review of the submissions the CER will publish a decision paper on this matter.

[1] See appendix 3 for the policy papers referenced

3. Proposed approach in scenarios that arise that have the potential to impact on build out of a Stand Alone Developer

3.1 Accepts offer but requests modification

Modification requests can delay the progression of a project. As previously set out in the SOs' paper[2] on Mod fees and process (section 3):

> *It should be noted that a modification request may lead to other connection works on a project or other projects being put on hold temporarily. The decision as to whether construction works should be put on hold would depend on a number of factors including whether the modification has the potential to change the connection works required. Where a customer not requesting a modification is likely to be delayed as a result of same, consent will be required to allow the modification proceed*

Appendix 1 includes detail on some typical modifications and the likelihood of the modification delaying the works. In some situations the TSO will offer an Advanced Works Package to the developer to allow the project works continue during the modification processing time[3].

3.2 Accepts offer but requests that project is put 'On Hold'.

For the majority of standalone connections that do not impact on other developers or the development of the transmission or distribution system, a request from a developer to put a project on hold will be granted. However parties should be aware that longstop dates are unlikely to be extended where a project has been put 'on hold'. For clarity, where a project which is on hold reaches it's longstop date, the SOs will normally exercise their right to terminate the Connection Agreement.

---

[2] Joint DSO TSO Fees & Process for Connection Offer Modification.pdf

[3] http://www.eirgrid.com/media/Application%20for%20Transmission%20Advanced%20Works%20Packages.pdf

There are some scenarios where delivery of the project underpins an investment decision in the transmission or distribution networks and the SO may not be able to facilitate a request for a project to go on hold. For example, where the development of a project off sets a requirement for an investment in new network the SO may refuse a request to put a project on hold.

Where a request to put a project on hold has been granted, SO resources will be diverted from the connection project and it will lose its place in the overall transmission/distribution work program. As a result when at a later stage a request is made to take the project off hold the SO will advise the developer of the revised lead times.

3.3 Accepts offer, but does not make 2nd stage (pre-construction) payment

Where a standalone developer does not make their 2nd stage payment or has requested that the issuance of the invoice for 2nd stage payment is deferred, the programme for delivery will be affected as typically no construction work progresses in relation to that project and no materials will be ordered.

If the developer has requested that issuance of the invoice for 2nd stage payment is deferred the project will be considered to be on hold and the provisions of 3.2 above will apply. In the event that the developer does not request that the project is put on hold, and does not then make their second stage payment, the SO may terminate the connection agreement for breach of contract for failure to pay.

4. Proposed approach in scenarios that arise that have the potential to impact on build out of Group Developments

4.1 Offer(s) of at least one group member not accepted[4]

Where an offer has not been accepted by the offer expiry date, this offer will lapse[5].

Where some of the offers within a group lapse, or are rejected, the charge to other group members will not necessarily increase as – in line with Group Processing Principles - the End-User will pay the share of the lapsed/rejected offers. However the SOs may re-optimise the connection method to ensure an appropriate and cost effective network solution is designed to connect the remaining parties.

Where the majority of group members have accepted their offers it may in some cases be possible to quickly determine that there is no change required to the original connection method. In such a case it would be expected that there will be little delay to remaining developers and their projects and work will progress as planned (less any dedicated works associated with the unaccepted offers).

However in many cases, a full re-study will be required to determine whether the solution originally proposed remains the optimum solution for the group. In such a case

- It is likely that the restudy will involve 5-6 months work (and possibly more if there is potential for the change to have a significant impact on Transmission works). Furthermore, this timeline assumes that a minimal number of restudies/offers/modifications are being processed by the SO's at a single point in time. Based on the outcome of this restudy, the charge to the remaining group members will be the lessor of:
    - The charge which applied – based on the original subgroup share – provided this was based on the Lowest Cost Connection Method (LCCM)/ Least Cost Technically Acceptable Connection Method (LCTA) for the original subgroup. (with the End-User covering any shortfall)

[4] At the time of writing, the majority of Gate 3 offers have been accepted and therefore this is less likely to arise in Gate 3. However it is appropriate to note for future connection policy

[5] In exceptional circumstances as set out in Section 13 of COPP, an offer validity period may be extended. However this would be unusual where the offer is part of a group

- Their share of the LCCM for the new subgroup, based on the MW of the new subgroup

Subject to SO agreement should the group wish to ***avoid the delays*** which will result from a re-study, the group can request that the SO progress based on the original build. Amongst other things the SOs will take account of their obligation to develop efficient networks when considering such a request. If the SO accepts the request the group must increase their contribution to the shared assets such that the contribution associated with the lapsed/rejected offers is now paid for in full by the remaining group members.

Please note that a re-study will still be undertaken[6] to estimate what the additional cost to the End-User would be, if any, based on a re-optimised build. Once this contribution has been established, the capital contributions associated with the remaining group members will be re-calculated once more. Should the group decide to continue with the original build to avoid delays, then ultimately the shared asset charge to the remaining group members will depend on the outcome of studies and will be

- (where *following studies the original connection method is still the LCCM for the remaining group members. The end user is liable in full for share of group member who did not progress).* The shared asset charge which applied as per the original offer/original group share (with the End-User covering any shortfall); or
- *(where a re-optimised Connection Method could have been built which would have resulted in the End-User not incurring any costs.)* A per MW share of the LCCM (which the subgroup opted to build) for the original subgroup, but based on total MW of remaining group members; or
- *(where re-optimised Connection Method could have been built but End-User would incur costs.)* A per MW share of the (LCCM for the original subgroup less a contribution from the End-User[7]), but based on total MW of remaining group members. See example below.

[6] In such a scenario, this re-study will be considered lower priority work and re-study works which are impacting on project delivery will be prioritised.

[7] This contribution is based on the contribution the End-User would make to a re-optimised solution

Worked Example

The example below assumes 3 equal sized projects in group. One windfarm does not accept their offer. The remaining developers have the following options:

- wait for re-design or
- proceed with the original build

Following a re-study, the re-optimised connection method is determined to cost less than original connection method. However, in either scenario the End User takes the same risk.

		WF3 doesn't accept offer	
	Charge for shared works - Original offer	**Connection Method re-studied, and ultimately lower cost build is progressed**	**Gorup opts to proceed with original build to avoid delays**
WF1	8	8	10
WF2	8	8	10
WF3	8	0	0
End User	0	4	4
Total Shared works charge	**24**	**20**	**24**

4.2 Full group accepts but a developer(s) within the group seeks a modification

4.2.1 Modification to dedicated assets

Where the modification requested, following assessment, is deemed to have no impact on group works (including any timing or planning impact) the modification will be progressed in the normal fashion. The impact to the developer of the project in question will be as Section 3.1 above.

Where the modification requested, following assessment, is deemed to be likely to drive a change to group works, the following applies:

- If the modification is now the only technically acceptable option for that group the modification will progress and will result in delays for the entire group. For example, where a change in planning legislation means that an overhead line is no longer feasible, then a cable connection becomes be the least cost technically acceptable connection method and all members of the group will be impacted by the request.

- If the original connection works remain technically acceptable, consent of the group will most likely be required before the SOs will progress the modification. (The SO's will advise whether consent is required). An example of where consent may be required might be where the modification relates to relocation of some capacity such that there is a change in shared assets. It would be unusual (although possible) for a change from overhead line to cable or cable to overhead line to require subgroup consent.

  If the group consent to the modification request, shared works are likely to be delayed while the modification is being processed and pending acceptance by all group members of the modified offers. Processing the modification is likely to result in a delay of >6months. In such a scenario the party requesting the modification to dedicated works may also be liable for the cost of issuing modified offers to the rest of the sub-group. For more information on modification fees please consult the mods fees and process paper at the link below[8].

  If the group do not consent to the modification request, the modification request may be rejected. As a result the group works can progress with a minimal delay (time incurred in consenting process). The party who sought the modification has three options in these circumstances and can either:

[8] http://www.esb.ie/esbnetworks/en/commercial-downloads/Modification_Requests_to_Connection_31Aug.pdf

1. Proceed with their original offer/connection method,
2. Let their offer lapse (most probably no earlier than the next stage payment), or
3. The group works are progressed as per the original connection method, and the party's modification is also progressed (for example where the party relocates). However the modifying party will be liable for stranded cost as per their original connection and, the full cost for new connection.

Please note that in the event that the party seeking the modification does not get consent from the group and then allows their offer lapse at next stage payment, this may lead to the need to re-optimise the connection method for the group, potentially resulting in significant delays (but no additional charge[9]) for other group members. Further information on this scenario is provided in Section 10 of COPP.

4.2.2 Modification to shared assets

Typically full group consent will be sought prior to work commencing on processing the modification. Full group agreement is not considered to be in place until the revised offers have been accepted. In the event that any one member of the group does not accept the revised offer, then the original offer is progressed and the modified offers of all other parties are deemed to have lapsed.

[9] No additional charge assumes that the group accepts the delays required to re-optimise

4.3 One party in group disputes prior to offer acceptance

Where a party has raised a dispute under Section 34 (6) of the Electricity Regulation Act, 1999 with the CER prior to accepting their offer, no works will commence in relation to the dedicated assets of the disputing party (as offer has not been accepted).

If the dispute raised relates to shared works, then both shared and dedicated works for the entire subgroup will go on hold.

Where the dispute does not relate to shared works, the SO's will consider whether it is appropriate to progress shared works. The primary risk the SO's need to consider is the risk that the disputing party may not ultimately accept their offer resulting in an increased cost to End-User of progressing shared works with other parties. Another issue is whether the project of the disputing party should be included or excluded from design and planning. For example, where a bay in a station is dedicated to the disputing party should the station works progress on the basis of including or excluding the bay. In addition to costs, this decision may impact on outages for other group members at a later stage.

Appendix 2 sets out some 'Materiality Rules' which sets out the criteria to be used by the SOs in determining whether it is reasonable to proceed with shared works in the case where one party in a group disputes prior to offer acceptance. In all cases, the remaining group members will see a delay in progress as a high-level re-study is carried out (minimum of 1 month, but dependant on volume of work currently in progress). A more significant delay will be encountered should the assessment indicate that acceptance or otherwise of the disputing group member's offer is critical to determining the connection method for the group. In such a case no works can commence until the dispute has been determined and the disputing member accepts or rejects their offer[10].

[10] As set out in section 2.2.1 above, however, the remaining group would have the option of continuing with the original build and taking the risk that the disputing party will ultimately not progress

4.4 One party in group accepts and then disputes

Where a party accepts their offer, but then raises a dispute with the CER, the contracting SO will evaluate the nature of the dispute and it's potential impact on shared and dedicated works.

Following this evaluation, if appropriate the SO will seek confirmation from the disputing customer as to whether they wish to proceed with the current connection or put the works on hold.

As a general rule, where the dispute has the potential to impact on the connection method and/or the costs to be borne by the End-User, the SO's would have the view that works should be put on hold.

If the party indicates that they do want to proceed with current connection and the SO's consider that this is appropriate:

- Works on the shared assets will continue insofar as payments received to date cover these works;
- Work on the dedicated assets for disputing party will be lower priority and will only progress insofar as payments received to date cover these works;
- The delay in progressing shared works will be minimal (time to get the customer confirmation indicated above);
- The End-User takes the risk that costs may be incurred which might have been avoided should the disputing developer ultimately not proceed. The developers take the risk that there may, at a later stage, be delays to project progression. All developers also take the risk that there may be a need for outages post energisation due to staggered progression of the projects.

If the party indicates that they do not want to proceed with the current connection until the dispute is resolved:

- The impact on group works will be assessed in a similar manner as set out in Section 4.3.

4.5 Group have accepted offers but are not ready to go to 2nd stage payment at the same time

This section deals with the the scenario whereby not all members of a subgroup are ready to make the pre-construction payment/second stage payment at the same time. This scenario (progression at different rates) has the potential to cause significant delays to the progress of group works. The issue of parties wishing to progress at different rates has already arisen in Gate 2, and is likely to arise also in Gate 3. In an effort to provide clarity on how the SOs will proceed when this scenario occurs, this section outlines two suggested approaches which can be taken. The Materiality Rules proposed in Appendix 2 should be referred to when reading this section.

The timing of the pre-construction payment is slightly different for Distribution and Transmission connecting customers. For Transmission customers this "Pre-Construction Payment" means the payment is due on Consents Issue Date (CID). CID is a date agreed by parties and is normally the date when both the TSO and the Customer have achieved consents for their respective developments i.e. planning permission for the customer's facility is included in the definition of CID (however parties can agree to call CID in advance of these consents being achieved if they so wish). For Distribution connecting customers the payment is only linked to the achievement of Consents for the distribution network elements and not the customer's facility. [11]

The issue of groups progressing at different stages was somewhat dealt with, in the context of parties accepting their offers on the basis of awaiting firm access to the Transmission System, in appendix 3 of the Gate 3 Direction CER/08/260.[12] This Direction set out that where parties accepted their offers on a Firm Basis and were progressing at staggered rates due to staggered Firm Access Dates, the End-User would take the risk in relation to the distribution shared works. No equivalent provision was made in the policy in relation to shared transmission works. Where parties have accepted their offer on a firm basis and there are no transmission shared works associated with their connection, the principle set out in appendix 3 of CER/08/260 will apply. [13]Where there

[11] The specifics relating to timing of payments are as set out in the Distribution and Transmission Connection agreements

[12] http://www.cer.ie/docs/000903/cer08260.pdf

[13] As no Transmission customers who are part of a subgroup have accepted on a firm basis, this issue is not relevant for Transmission customers

are transmission shared works, however, the principles set out in this paper will apply – regardless of whether an offer was accepted on a firm basis or otherwise.

Please note, that in accordance with Section 11.2 of the Connection Offer Policy and Process Paper[14], customers can only change from a non-firm offer to a firm offer prior to Offer Issuance or Offer Acceptance and hence for the majority of Gate 1, 2 and 3 customers it is no longer possible to make this change.

Where a group is in agreement

If all members of the group are not ready to proceed to Second Stage Payment (SSP), the SOs will in the first instance, taking account of work programmes and contractual long stop dates amongst other issues, seek consent from all subgroup members on a revised timeline to move to the construction phase of the project/group works. If group agreement is reached then the SOs will work towards revised subgroup dates. See also section on 'Timing of what is referred to in this paper as the Second Stage Payment (SSP)'

Where a group is <u>not</u> agreed

As with a standalone developer, where a group member is not ready to move to second stage payment, typically no construction works will commence and no materials will be ordered in relation to the **<u>dedicated</u>** works for that party. The developer's project will be treated as "on hold" and the provisions of Section 4.1 will apply. Any subsequent impact on the lead times and costs associated with delivering these dedicated works at a later stage and possibly in a sub-optimum programme will be to the risk of the developer. The lead time impact will depend, amongst other things, on the point in the project where the developer makes the SSP and could be substantial.

In addition to putting dedicated works on-hold, the SOs will look at the impact on **<u>shared</u>** works of that one party not ultimately proceeding. In general the principle of 'materiality' will be applied by the SO when making this decision as outlined in the options below.

Where the impact on shared works is minimal

[14] http://www.esb.ie/esbnetworks/en/commercial-downloads/Connection-Offer-Policy-and-Process-Paper.pdf

From a materiality perspective where the impact is minimal, the shared works will proceed and allow that the later party will progress at a later stage. The End-User will bear the shared asset cost of the later developer in the interim. In some scenarios, it may be that the End-User risk can be mitigated by developing shared works in stages. This will have possible impacts as follows:

- The parties progressing are likely to experience an outage at a later stage when the later party makes a payment.
- The later party is likely to incur additional costs resulting from the staged development

For the avoidance of doubt, and to avoid excessive costs to the End-User, in such a scenario the early parties (whose facilities have been connected in advance of completion of all shared works) will be deemed to be temporary and therefore will be non-firm in the market until such time as either:

- The shared works are complete;
- The contract for the other party has been terminated.

In addition, it should be noted that where a party within the group is not ready to proceed to second stage payment and the remaining group members can be accommodated by a slightly lessor build, then the remaining group members will be considered to be entitled to this 'temporary' capacity without adopting the eligibility process set out in Section 4 of COPP,.[15] An example might be where the full group drive a transformer or line uprate, but the MW of the progressing group members can be accommodated without this work.

In the event that the slower party ultimately does not progress, then the connections will be deemed to be permanent once the remaining agreement has been terminated, for example in the event planning permission has not been achieved and/or facility has not been energised by respective longstop dates.

Where impact on shared works is medium / significant there are two options

[15] See in particular section 4.5 in Connection Offer Process and Policy

As with the section dealing with 'impact on shared works is minimal' and for the avoidance of doubt, and to avoid excessive costs to the End-User, in a scenario where parties progress at staggered rates, the early parties (whose facilities have been connected in advance of completion of all shared works) will be deemed to be temporary and therefore will be non-firm in the market until such time as either:

- The shared works are complete;
- The contract for the other party has been terminated.

Option 1 Invoice and terminate

- Once at least 1 member of the subgroup is ready to make the SSP/CID payment and the SOs are ready to proceed to the post-construction phase, all parties in the subgroup will be invoiced for SSP. It should be noted that contrary to the current definition of CID in the TSO Connection Agreements it is being proposed that for those members of the subgroup contracted with the TSO their own Consents would not be required to be in place for CID to be called.
- All parties will be given a **maximum** of 6 months to pay from the date of receipt of the invoice. Where at least one group member makes their payment, any members who do not pay within 6 months will have their connection agreements terminated. If a connection agreement is terminated the SO's will then consider whether the connection method should be re-optimised.[16] Please note parties who are not ready to make their full SSP, will be allowed to elect to pay just for the second stage payment portion of the **shared** works and to put their dedicated works on hold – if they choose this option they will remain contracted until their longstop dates are reached (or their connections agreements are terminated for other contractual reasons). However they will be invoiced for and required to contribute towards shared assets at other stage payment milestones also.
- Where one member (or a group of members) is ready and eager to progress; he can choose to pay the costs for the shared works of the remaining parties in the subgroup to avoid a re-optimisation risk and any further delays to progress of the project. He will be entitled to refunds of these monies only if/when the other parties later pay. Where the second stage payment portion of the shared works are paid for in full, contracts for the other parties would not be terminated for failure to pay the SSP invoice however their dedicated works would not be progressed and eventually their contracts would be terminated for breach of longstop dates (or other contractual reasons). Please note however, where a party/parties opt to cover the cost of another's shared works, they will also be liable for this cost at all subsequent payments until such time as the non-paying party is ready to proceed or drops

[16] Please note that – in addition to the delays resulting from a restudy - in the event that the connection method changes at this stage, there may also be significant delays associated with revising designs; resubmitting planning permission; rescoping the works required. Even should these issues not arise, the SO's would expect a minimum delay of 6 months.

out. In the event that the other parties contract is ultimately terminated any refunds attributable from/to the End-User will be calculated in line with Section 4.1.

Option 2 Invoice and Wait

- As above, once the first party is ready to make SSP/CID payment all parties are invoiced (under the same assumptions regarding CID as described in Option 1 above)
- Works on shared assets only progress when
    - all members of the subgroup have paid their invoice(or at a minimum the shared asset costs elements of their invoice) or
    - as above a subset of the group has opted to cover the full shared cost of the works (i.e. covering the cost of non-paying parties)
    - the contracts of non-paying parties have been terminated due to breach of longstop dates (or any other relevant contractual provision).

- **Note 1** in some limited instances, sufficient parties (a critical mass) may have made SSP payments to progress the shared works. This would generally only apply where the non-paying parties represent a small contribution to shared works and termination of those parties contracts would not change the shared works to be undertaken (on the basis that the principle of UoS picking up this costs already exists in the event of a termination). In this instance the contract of the non-paying party would be terminated at the appropriate long stop date.
- **Note 2** in some limited instances, sufficient parties may have made SSP payments to progress a sub-set of the elements of the shared works required to connect those parties. The SO will give consideration to progressing a sub-set of the shared works if the overall End-User cost of progressing these works in stages is minimal and the impact associated with splitting the works on program and other projects are not material.
- **Note 3 –** In Option 2 the SO's do not intend to exercise their option to terminate the connection agreement for failure to pay the SSP invoice. The connection agreement will be terminated due to breach of longstop dates (or any other relevant contractual provision).

Point to Note: Timing of *what is referred to in this paper as the* Second Stage Payment (SSP)

- *Under ESBN contracts the SSP is a Pre-Construction Payment (55% of connection charge) and is invoiced on receipt of planning permission for Company's (ESBN) Connection works.*
- *Under EirGrid contracts SSP is generally invoiced in two stages - 15% on submission of planning permission application for transmission works and 45% on Consents Issue Date*

(CID). CID is defined as the date when the Company (EirGrid) and the Customer have received consents for their works i.e. it is tied into the Consents of the Customer's works and Facility as well as the transmission works. For the proposals above to work it would be better if

- *1. CID for EirGrid Connection Agreements was based <u>only</u> on the Company's works*
- *2. In particular for subgroups it would be better to invoice for SSP for all contracts (TSO and DSO) based on the status of consents for shared works only*
- *3. in order to minimise the delays caused by failure to make SSP and to identify parties unwilling or unable to pay SSP, it may be better to invoice <u>all</u> parties the full SSP on planning lodgment for those shared works rather than on receipt of planning*
-

The SO's would welcome views the above proposed modifications to the second stage payment/CID payment schedule

The SOs are seeking views on:

- Whether Option 1 Invoice and Terminate, Or Option 2 Invoice and Wait is preferable.
- Is 6 months an appropriate length of time for the other members of the subgroup to make payment after the 'fast mover' has paid?
- Whether the definition of Consents Issue Date for EirGrid Connection Agreements should be based only on the Company's works
- Whether – for sub-groups – SSP payment should be linked to the status of consents for the shared works only
- Whether – with a view to minimising delays – the pre-construction payment for groups should always be requested at submission of planning permission for the plant with the longest construction lead time.

5.0 Next Steps

Response to consultation:

Views and comments are invited regarding all aspects of this document. Responses should be sent to stephen.ogorman2@esb.ie and contractmanagement@eirgrid.com by 16 September 2014

It would be appreciated if comments are clearly aligned with the sections and sub sections of this consultation paper to which they relate. In particular respondents are asked to consider the questions set out in Section 4.5 in their response.

On completion of the consultation period the SOs shall submit a copy of the responses along with a summary of the consultation responses to the CER and make a joint submission to the CER. Following a review of the submissions the CER will publish a decision paper on this.

Appendix 1 – Modifications and impact on project progression

Basic Type	Types of Modifications	Likely delay
Name Change	Applicant Name Change/Change of Legal Entity	None
Change from Firm to "Non-firm becoming Firm"	Change in choice of a firm or non-firm/firm offer where no shared shallow works	None
	Change in choice of a firm or non-firm/firm offer where shared shallow works	Possibly significant
Longstop Dates	Change to longstop dates where permitted by SOs	None
Metering	Change to metering arrangements	None unless late into the project
Merger	Merging projects with no significant expected change to works, charges or bonding arrangements (note 1)	Minimal
	Merging projects with no significant expected change to shallow works (note 1)	Minimal
	Merging projects with significant expected change to shallow works	Significant
Splitting	Splitting projects with no significant expected change to works, charges or bonding arrangements (note 1)	Minimal
	Splitting projects with no significant expected change to shallow works but impact on charges or bonding (note 1)	Minimal
	Splitting projects with significant expected change to shallow works (note 1)	Significant

Basic Type	Types of Modifications	Likely delay
Relocation	Capacity Relocation with no significant expected change to shallow works (note 1). This includes where a customer relocates capacity behind the connection point.	Minimal
	Capacity Relocation which only reduces the connecting circuit length	Significant
	Capacity Relocation with significant expected change to shallow works	Significant
MEC Change	Decrease in MEC with no significant expected change to shallow works (note 1)	Minimal
	Decrease in MEC with significant expected change to shallow works	Significant
MIC Change	Decrease in MIC with no significant expected change to shallow works (note 1)	Minimal
	Increase in MIC where no studies required - typically for a generator seeking a MIC increase less than 4MW and where MEC is greater than twice the MIC	None
	Decrease in MIC with significant expected change to shallow works	Significant
	Increase in MIC where studies required	Significant
Change to overhead or underground cable (See note 3 below)	Change from overhead line to underground cable or vice versa for connection method with no significant expected additional change to shallow works (note 1)	Significant
	Change from overhead line to underground cable or vice versa for connection method with significant potential additional change to shallow works	Significant
Phasing	Phasing legacy projects (no impact on	None

Basic Type	Types of Modifications	Likely delay
	connection works timeline)	
	Phasing Projects as per COPP ruleset	None
Contestability	Change to contestability decision where allowed	Significant
RTUs	Change in number of RTU devices	Minimal assuming not less than 12 months prior to energisation
Change to technology type	Change to technology type where assessment does not require additional studies[17]	None
	Change to technology type where assessment requires additional studies	Significant
	Change to technology type where assessment requires additional studies and likely to require significant changes to shallow works	Significant
Temporary Connection	Temporary Connections	Minimal
Change from AIS to GIS or vice versa	Change from indoor to outdoor or vice versa	Significant

Table 5 – Changes to Applicant Specific Data

Basic Type	Types of Modifications	Likely Delay
House Load	Change to house load	None
Reactive Power Devices	Change to reactive power compensation devices	None unless they require additional or dedicated bays

[17] Please note where the change is submitted as part of a change to specific data, and the change to specific data is chargeable, then there will be no additional charge for this modification

Basic Type	Types of Modifications	Likely Delay
Change to generation turbine/unit(s)	Change to generation turbine/unit[18] with no significant expected change to shallow works	None
	Change to number of generating turbines/units with no significant expected change to shallow works	none
	Change to generation turbine/unit[19] with significant expected change to shallow works	Significant
	Change to number of generating turbines/units with significant expected change to shallow works	Significant
Transformer Changes	Change to grid connecting transformer(s) specifications	None
	Change to number of grid connecting transformers	Medium to significant

[18] Including wind turbine changes etc.

[19] Including wind turbine changes etc.

Notes

1. Significant expected change' means where the SOs believe that the modification requested has a material impact on the connection method that was originally offered to the customer (beyond the specific change requested) and therefore is likely to affect the connection charge. Assets chargeable to the customer are as set out in the Quotation letter (DSO customers) or Offer Letter (TSO customers). Any changes to these assets would be considered significant. Primary examples of this would be where one or more of the following is likely to be changed:

Shallow Works (TSO & DSO)
Number or size of connecting stations
Number of circuits and associated terminations
Number of couplers in a connecting station
Length, type or rating of the circuit(s)
Number or rating of transformers
Number or rating of bays
Increased busbar rating
The modification requested causes changes to the asset sharing arrangements or other Connection Method changes to another connecting or connected customer
Requirements to introduce bonding arrangements to cover potential stranded assets
Deep reinforcement (DSO)
Changes in circuit reinforcement requirements
Changes in station reinforcement requirements
Changes in protection requirements

These types of changes impact on the works, costs, leadtimes and legal assumptions contained in the original connection offer and therefore require significant reassessment by the SOs across the technical, commercial and construction related drivers.

Appendix 2 – Materiality Rules

Distribution Works

DSO will review the potential impact on the End User customer when:

- Not all members of a group accepts their offers – almost past this stage now for Gate 3
- A party within a group disputes or seeks to delay
- A party within a group requests a modification

Whether the impact is determined to be minimal, material or significant will determine how group works will proceed:

Minimal Impact: Works progress as planned. End-User to pick up share of defaulting customer as per current rules

Medium Impact: This will involve a judgement call by DSO on the extent of works to proceed. However the basic principles of Group Processing permit the balance of cost of works not payable by developers to be borne by the End User – on the assumption that the DSO has re-designed such that that this cost is minimised.

Significant impact: this will drive a completely new study impacting all in group

Table 1 below sets out an example of how materiality maybe determined. In the scenario set out the impact consider is in relation to works required at the feeding station

	Same station Primary Voltage	**Same number of transformers at feeding station**	**Same transformer Rating**
No Impact	Yes	Yes	Yes
Minimal Impact	Yes	Yes	No
Medium Impact	Yes	No	Yes

Medium Impact	Yes	No	No
Significant Impact	No[20]	Yes/No	Yes/No

Table 1

Table 1 is indicative only as each situation will be different, with its own circumstances and nuances.

Essentially the only instance in which a significant impact will arise is where station voltage would change if a party drops out.

Medium impact will arise once the number of transformers feeding the station would be impacted irrespective of the transformer rating.

Transmission Works

The capital cost of transmission assets is generally high and progressing transmission works which may be potentially stranded if not all parties proceed will normally involve considerable End User cost exposure. Similarly, progressing with the construction of only the minimum of the shared assets required to connect the parties that are ready to proceed is generally infeasible as the impact on outages, costs and lead times of coming back to add the additional shared assets at a later date for the remaining group members can be very significant. Hence, in all cases, failure of one or more parties to progress such that the connection method is likely to change is deemed to have a **Significant Impact** and in such a scenario therefore, works cannot progress until all parties have either paid the CID payment or terminated their connection agreements (and if necessary the connection method has been re-optimised).

Minimal Impact

The one exception to this is when a planning application is being prepared for shared assets. In some cases the TSO may judge that the inclusion of shared works will not materially harm or invalidate the planning application if, at a later stage, they are not all constructed. In these circumstances the TSO may proceed with the planning application even if the subgroup has not all made their first stage payments.

[20] For clarity, if there is a change required to the station primary voltage, then this is a significant impact regardless of whether the number or rating of transformers has changed

Appendix 3 – Bibliography

In considering this paper the policy documents set out below may also be useful

- Connection Offer Process and Policy (link - Connection Offer Policy and Process)
- Modification fees for Connection Offers (link - Schedule of Application and Modification Fees for Embedded Generators)
- Information Memorandum on Longstop Dates for Generation Connection Agreements (link - Information Memorandum on Longstop Dates for Generation Connection Agreements.)