Early Competition

Distribution sector modifications
December 2021

nationalgridESO

Contents

Background

Following the Early Competition Plan (ECP) submission in April 2021, Ofgem published the *Update on the Electricity System Operator's Early Competition Plan*[1]. The ESO was asked to continue engagement with distribution stakeholders to consider in more detail whether modifications might be required to transpose the Early Competition model being developed for transmission, into the distribution sector. This work will help inform Ofgem ahead of a decision on whether to introduce further competition into the distribution sector.

This short report identifies:

- The areas and nature of potential modifications to the proposed transmission level process
- A high-level view of whether modifications might require code, licence, or legislative changes that would not be considered equivalent to those at transmission level
- A view of whether the types of needs addressed by NOA Pathfinders exist in the distribution sector and whether they are already subject to competition.

Executive Summary

An Energy Network Association (ENA) working group was formed to represent Distribution Network Owners (DNO). Three workshops were conducted which ENWL, SPEN, SSE and WPD attended. Minutes of the workshops have been circulated to all DNO's via the ENA Electricity Regulation Group (ERG).

The workshops walked through the proposed ECP so that delegates could provide views and rationales for modifications they believe might be required. Overall, the level of potential modification identified appears relatively low at this stage. Two main areas identified as potentially requiring some modifications to reflect different drivers in distribution are Criteria and Project Identification.

For criteria, the Cost Benefit Assessment (CBA) could require greater weighting on the potential operational impact of late delivery on consumers. Also, there is a preference for a value threshold to support timely decision making. For project identification the process will need to reflect the variety of different planning processes used by DNO and the different institutional structure of multiple entities performing Distribution System Operators (DSO) activities. In general, it is expected that required changes to codes, licence and legislation will need to be of an equivalent nature for distribution as those required at transmission level. It should be noted that the early competition process is currently high level, with detailed design due in 2022, so additional modifications could be required based on the final detailed processes.

Finally, pathfinders are not currently perceived to be a useful addition that should be progressed as a form of competition at distribution level. The types of needs addressed by NOA Pathfinders either don't exist at distribution level, or there is already a form of competition in place.

[1] *p.3 Update on the Electricity System Operator's Early Competition Plan – May 2021*

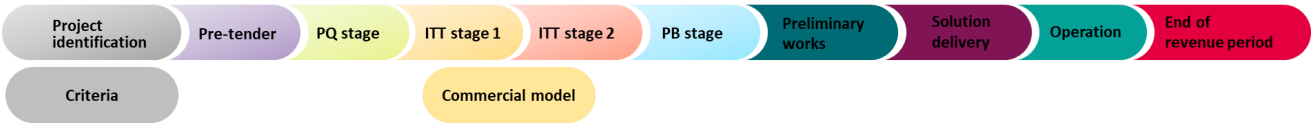
Approach

As part of the ECP submitted on April 2021, the ESO worked with an ENA Competition Working Group on a Thought Piece considering what role the ESO could perform in distribution level early competition. We have used the same working group membership to investigate potential modifications to the process.

Three workshops have been conducted with the outputs of the workshops circulated to the ENA Regulatory Managers group for feedback and comment. This provided an opportunity for DNO's who did not attend the workshops to input.

The workshops provided the opportunity to walk through the available detail on the EC process so that the delegates could consider whether they thought modifications could be required if the process is transposed to distribution level. *Diagram 1* sets out all the process sections reviewed, with criteria and the commercial model also being specifically covered as dedicated topics. The workshops only considered the early competition process. All other aspects such as roles, renumeration and liability were out of scope.

Diagram 1 - early competition process



For each section of the process a table has been created which captures:

- a description of proposed modifications
- supporting rationale
- a view of whether codes, licence or legislation might need to be treated differently compared to work on the transmission level process
- where no modifications were identified, a list of the key features covered during the walk though.

Please see the Appendix for copies of all the tables agreed with the ENA working group.

Modifications proposed by the ENA working group.

The following sections up to and including Pathfinders set out a summary of the feedback from the ENA working group and focus on the areas where modifications have been identified.

Criteria

The CBA might require more weighting/focus on the risk of potential operational impact on end consumers if delivery is delayed or fails. At distribution level the impact of late or non-delivery is more likely to result in consumers being materially impacted e.g. DNOs being unable to accommodate the appetite for electric vehicles (EVs), the electrification of heating, or supporting local authority targets, to the timescales required, than at transmission level. The CBA as described has a bias towards financial impact. This view is driven by the perception that at transmission level there is a comparatively greater level of redundancy and plant available to manage constraints, so

there is more scope to manage constraints commercially. The CBA may also need to consider an alternative approach to assessing whether there is time available to run a competition, as constraint costs appear to be a proxy for timescales. DNOs do not operate a connect and manage process, so constraints costs are not a mechanism used by the distribution sector. Therefore, they would not work as a proxy to assess whether there is time available to run a competition. However, it should be noted that the CBA detail available to share is high level, so at this stage the actual level of modification required is difficult to predict.

At transmission level the ESO has proposed the CBA replace a defined value threshold. For distribution the delegates propose a value threshold should apply in addition to the proposed transmission criteria of new, separable, and certain. However, at this stage a suitable value has not been proposed. The volume of projects at distribution that would need to be assessed against competition criteria is potentially significantly greater than at transmission level, and the decision-making timeframes are generally shorter. A value threshold would allow for a faster initial short-listing process and more certainty on projects that won't be competed. This would also allow supply chain planning to be started sooner. One delegate indicated that for one DNO around 100 projects every 6 months would need to be assessed. This compares to transmission level where we are expecting to assess around 100 projects every 12 months from the NOA process.

Delegates have mixed views on whether a value threshold should completely replace a CBA, or whether a CBA could be applied to an initial value-based shortlist. Some delegates feel that the CBA could be useful to refine the list by taking into consideration deliverability and operational impact factors. Following Ofgem's final decision on the proposed transmission level process including criteria in early 2022, the proposed modification may be redundant as a point.

Project Identification

The Project Identification (PI) stage will need to be modified to recognise and align to each of the DNOs longer term planning processes. At transmission level the process is linked to the Network Options Assessment (NOA) process which is not currently utilised by distribution.

Although it strays into Roles, the upcoming Distribution System Operator Governance review may impact the PI stage. The level of separation between DSOs and their respective DNOs will be clearer, and modifications such that greater Ofgem oversight to ensure neutral decision making may be required.

Remaining process steps

Except for Operation, based on the current level of detail the proposed processes appear to work for distribution without obvious need for modification. A key factor in this response is because the overall process is intended to be flexible so that it be adjusted to suit the need. This means that the level of complexity and timescales to run each event can be adjusted.

While no modifications for Operation have been proposed at this stage, this is likely to change when more detail is available given the different operational natures of the two sectors.

Licence, Code, Legislation

The types of changes to licences and codes at distribution level is expected to be equivalent to those required at transmission. There are no current concerns that licence and code changes would be materially different in nature. However, it should be noted that there has not been specific

consultation on a model of distribution early competition, or a funded project team to develop such model, so thinking in this area is immature. The working assumption on legislation is that it will cover both transmission and distribution sectors.

Pathfinders

The introduction of pathfinders to be run by the distribution sector does not appear to be useful at this stage. Two of the three types of needs addressed by pathfinders, Stability and High Voltage, are not types of needs managed at distribution sector level and are issues that present on the transmission system rather than distribution system. For the third type of need, Constraint Management, the developing DNO flexibility services market is broadly fulfilling the same role as NOA Pathfinders. DNOs are running competitive events to secure active network management services and flexibility services from generators, to reduce the need for traditional build solutions.

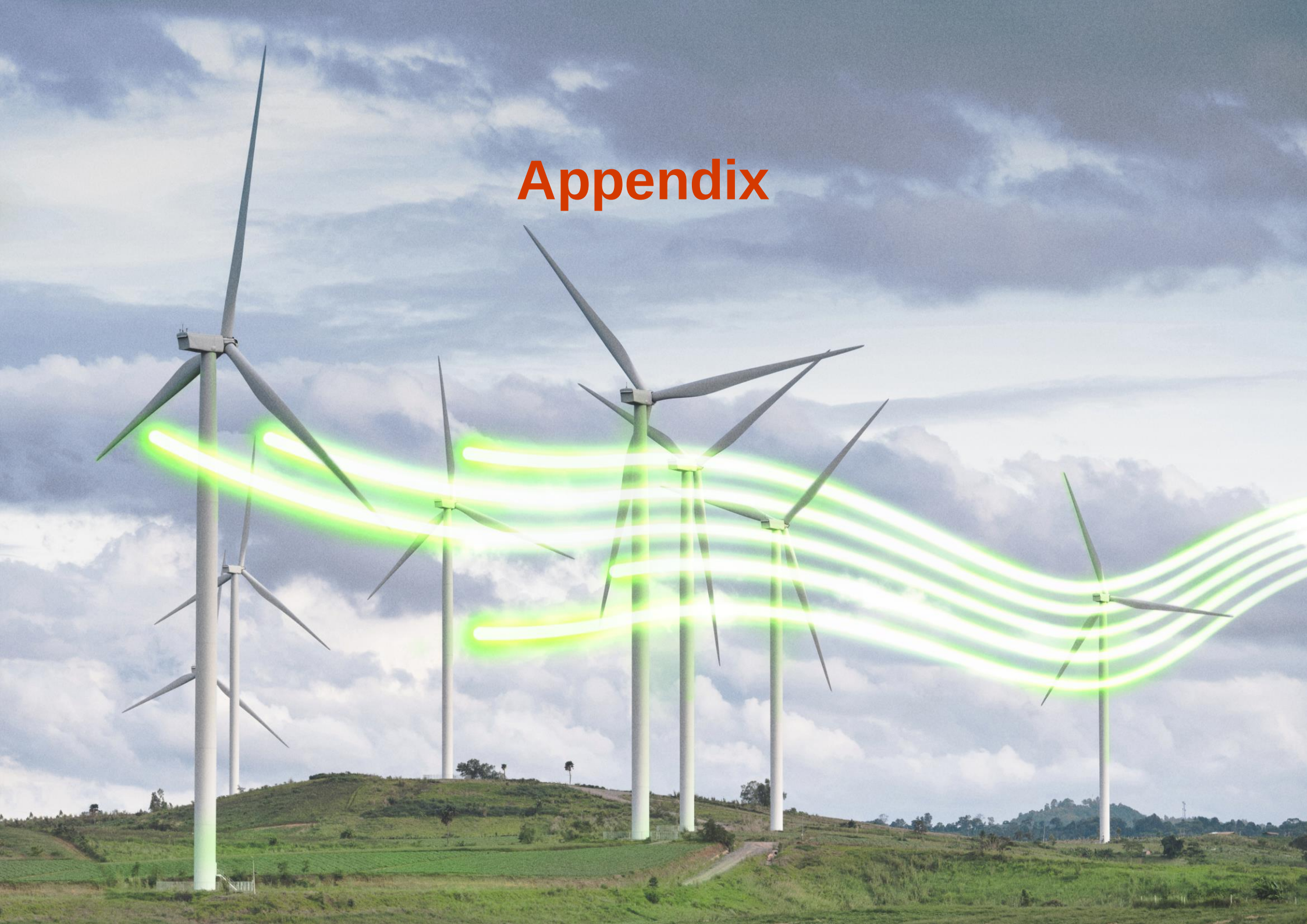
Additional stakeholder feedback

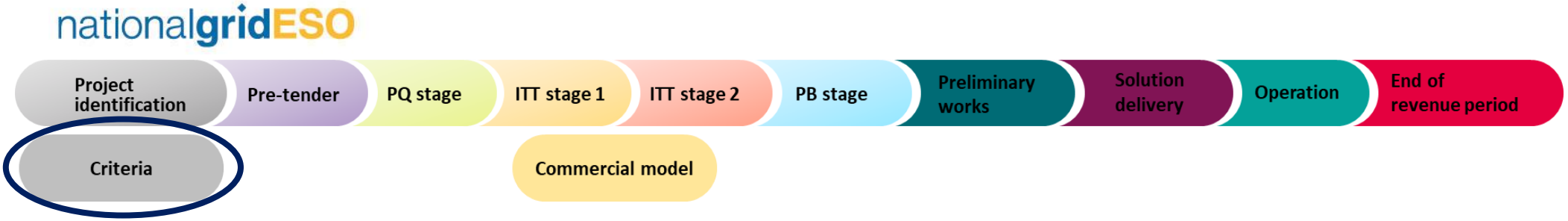
Engagement on this topic has been primarily focussed on working directly with the DNOs as they are potentially the most impacted, should Ofgem consider transposing the ECP. However, we did take the opportunity to present the work and emerging thinking on this area at our update webinar to stakeholders on 17 November. Stakeholder feedback was limited to a single question asking for more detail on the nature of the proposed Project Identification process and there was no feedback suggesting additional areas of modification.

Conclusion

Based on the ENA working group input, the areas that potentially require modification are focussed on identification and selection of potential projects. The rest of the process at this stage does not appear to require modification due to the intended level of flexibility we are proposing for the ECP. However, it should be noted that the distribution community may identify further potential modifications as the Early Competition proposals are developed in granular detail at transmission level.

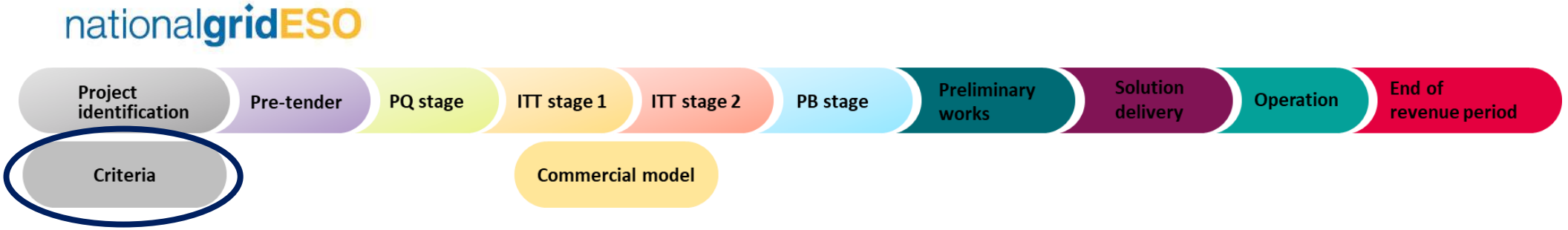
Appendix



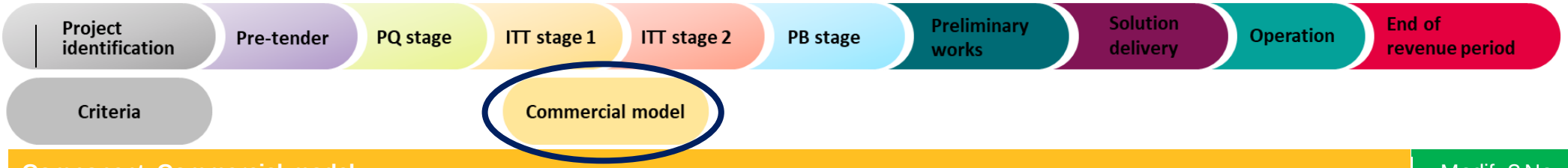


Component: EC criteria	Modify? Yes

Modification(s)	**CBA** ▪ Higher weighting (or inclusion) of security of supply, to consider the impact of potential delay causing operational/non-availability of service to end consumers ▪ Different approach to assessing whether there is time available to run a competition ▪ The CBA should factor in potential costs introduced associated with higher levels of complexity and co-ordination required to manage the Distribution (Dx) network, where the number of parties involved increases. **Criteria** ▪ No proposed modifications to new, separable, and certain ▪ Stakeholders feel that a value threshold should be included for Dx sector early competition. The transmission (Tx) process proposed by the ESO does not have a value threshold.
Why	**CBA** ▪ Stakeholders feel that at Dx level there is a greater risk of delay/non-delivery of a solution resulting in consumers being materially impacted rather than financially e.g. DNOs being unable to accommodate the appetite for EVs, the electrification of heating, or supporting local authority targets, to the timescales required. ▪ Stakeholders perceive that the Tx network has a higher level of redundancy built in and that the ESO has more plant and outage options available to use as a balancing mechanism. Their view is that at Tx if there was a delay caused by competition, it would predominantly manifest as a financial impact, rather than physical impact, on end consumers.

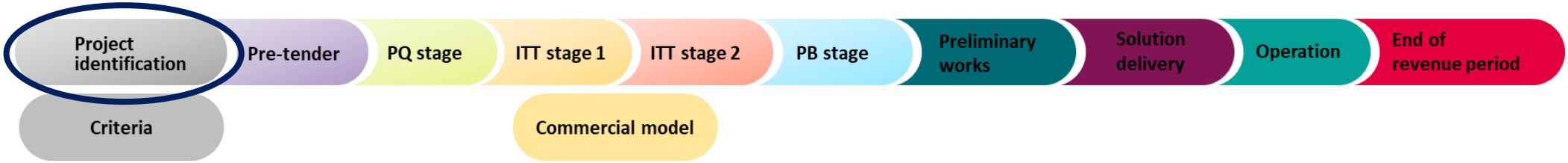


Component: EC criteria cont'd	Modify? Yes
Why cont'd	▪ Stakeholders feel that the CBA as outlined has a heavy focus on transactional/financial costs. Constraint costs at Tx level were recognised as a proxy for the assessment of whether there is a suitable amount of time to run an event. However, at Dx level an alternative approach to assessing whether there is time available would be required. Constraints costs as a mechanism do not exist as DNOs do not currently operate a connect and manage regime. ▪ It should be noted that the CBA at Tx level is currently developed at high level only, so the required level of modifications may be less than indicated as the methodology is developed in more detail **Criteria** ▪ Stakeholders feel a value threshold at Dx level would prevent over complication of forward planning, citing that there are a comparatively high number of projects that would require assessment in each planning cycle compared to Tx. ▪ One DNO indicated that c.100 projects every 6 months would need to be assessed. ▪ There is concern that a CBA only approach introduces a level of complexity and potential delay to decision making, with many DNO projects being delivered under framework agreements requiring forward planning of the supply chain.
Enabling	Legislation, license, and code change expected to mirror what is required at Tx. Main work would be in developing a methodology to incorporate risk profile of non-delivery impact on end consumers into CBA process.

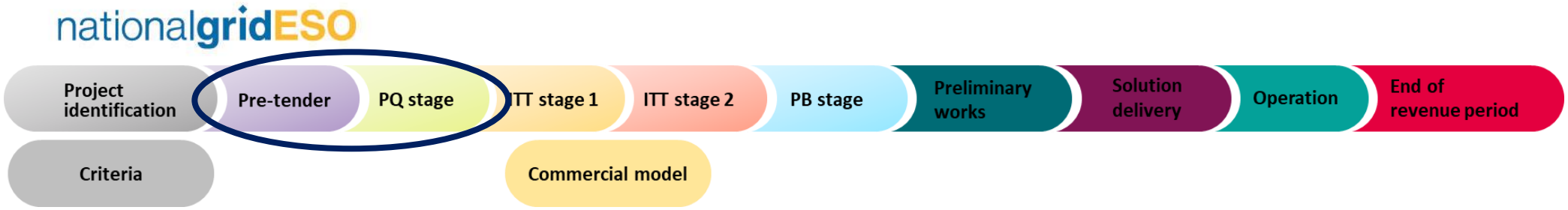


Component: Commercial model	Modify? No

Modification(s)	None proposed
Why	Key features seem compatible: ▪ All bidders receive same revenue model Tender Revenue Stream (TRS), aligned to length of need ▪ Payment commences on operation, flexibility to agree milestone payments in preliminary works and solution delivery phase ▪ End of revenue period – predetermined options in original contract. Discussed exclusion of incumbent from follow on competition if they have declined pre-agreed extension option ▪ Partial indexation of TRS to CPI-H, exact level proposed by bidders as part of bid impact on consumers is part of assessment ▪ TRS proposal is not fully fixed in tender proposal (to reduce cost of risk inflation). Procurement Body (PB) sets some assumptions and specifies which components must be offered as fixed and final and which components can be indicative. ▪ TRS is adjusted after Preliminary Works (PW) phase via Post Preliminary Works Costs Assessment (PPWCA) process. Adjustment on components that were indicative in tender and will be principle based (to be developed in implementation – economic & efficient). Upward adjustment cap specified by PB to limit overall increase, designed to mitigate against bidders low balling estimates ▪ Debt competition – for big projects where PW could be significant and debt terms cannot be secured for an equivalent period, the winning bidder will run a debt competition to secure funding for solution delivery. PB will oversee running of competition. Cost and gearing of debt in tender proposal will be an assumption set by PB for all bidders to use. ▪ A form of security is required from winning bidder during PW and Solution Delivery to discourage walk away. Scale is reduced as get closer to Operation ▪ Once operational further adjustment/reopeners to TRS limited. Proposal is it will be like OFTO and focus on pass through costs, refinancing gainshare, incentive performance ▪ Network solutions awarded a Licence, non-network solutions awarded a contract. All current obligations and codes apply. ▪ If need changes/disappears during tender bidder is liable for own costs, during PW bidder reimbursed costs (economically & efficiently incurred), during Licence or contract period will be specified and decided as part of pre-tender planning.
Enabling	Legislation, license, and code change expected to mirror what is required at Tx

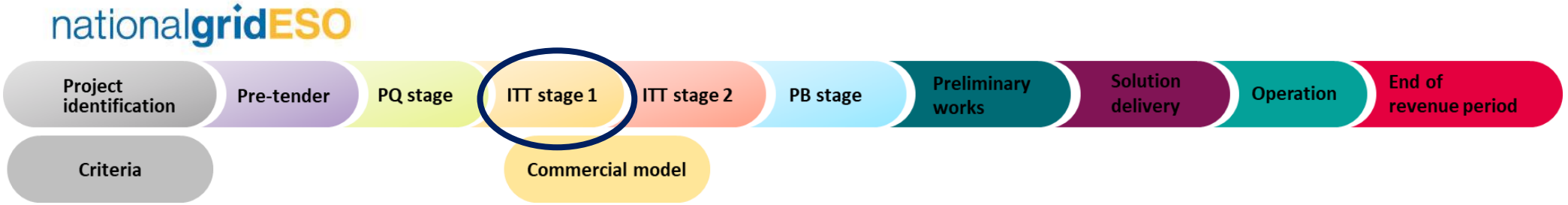


Component: Project identification (PI)	Modify? Yes
Modification(s)	• PI process will need to integrate with each DNOs planning process. • PI process will be on a regional basis rather than national • Ofgem may be required to have a more active role in ensuring the competition criteria have been correctly applied to identify all opportunities for competition, dependant on DSO roles
Why	▪ The Tx process to identify projects is currently based on integrating with the Network Options Assessment process (NOA). This is a process run by the ESO in collaboration with the three onshore TOs to agree a programme of solutions to network needs to be addressed at a GB level. ▪ The DNOs do not operate the same process, nor is there currently a common process across all DNOs. The DNOs will also only consider their individual networks, rather than the national picture that would be considered by the Tx process. **DSO** ▪ At Dx level during ED2 is it expected that there will be multiple Distribution System Operators (DSO) integrated with their respective DNO. At Tx there is a single Electricity System Operator (ESO), legally separated from NGET and independent of SPEN and SSE ▪ Following the forthcoming DSO Governance review, the nature of potential conflict of interests between DSO and DNO will be clearer. The level of separation of the DSO from the corresponding DNO may be such that additional measures to ensure neutral decision making associated with Project Identification are in place. Additional Ofgem involvement in the application of criteria compared to Tx level could be required.
Enabling	Legislation, license, and code change expected to mirror what is required at Tx

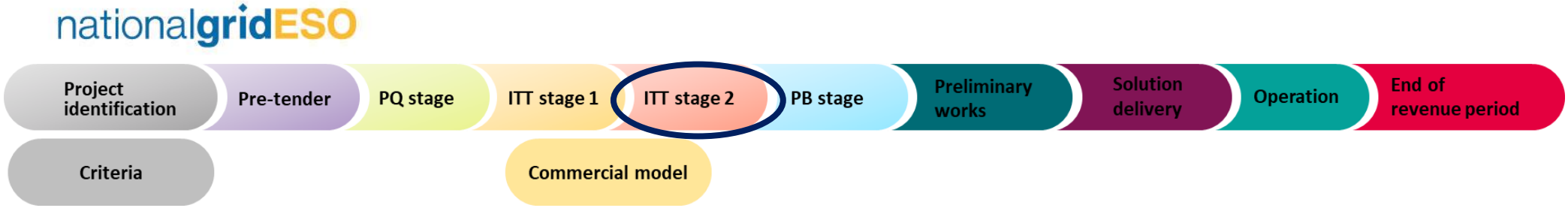


Component: Pre-tender	Modify? No
Modification(s)	None proposed
Why	Key features seem compatible: ▪ Event Strategy – Early Competition is designed as a standard approach that is adjusted to make it event specific. ▪ The event strategy is a formal component of early competition and it is intended there will be a methodology to decide appropriate changes. ▪ Stakeholders are comfortable that the principle of flexibility would work for Distribution. ▪ Market engagement – Project and Process engagement activities are within the current DNOs capability
Enabling	Legislation, license, and code change expected to mirror what is required at Tx

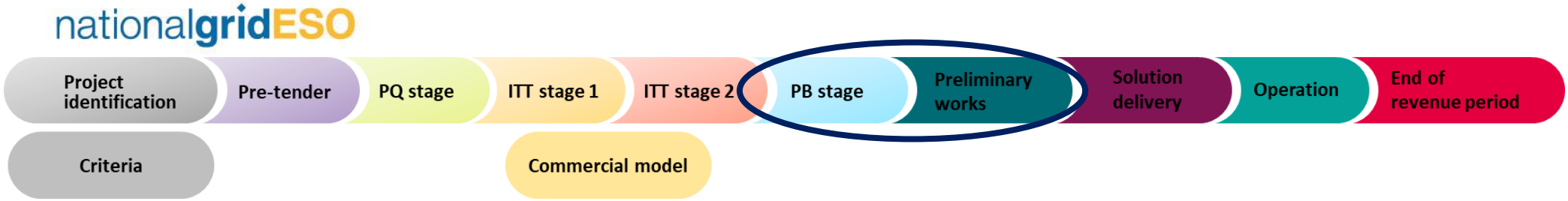
Component: Pre-Qualification	Modify? No
Modification(s)	None proposed
Why	Key features seem compatible: ▪ Process described is a standard approach, with the aim being that any bidder who passes should be capable if they win. ▪ Pass/fail assessment considers a range of capabilities, data control and due diligence criteria such as legal and financial standing make sense ▪ Passporting concept where bidders who have passed are then pre-qualified for future similar events
Enabling	Legislation, license, and code change expected to mirror what is required at Tx



Component: Invitation to Tender (ITT) stage 1	Modify? No
Modification(s)	None proposed
Why	Main concern from stakeholders was that the timeframes/complexity are too much for distribution. However, based on Event Strategy which allows for the event to be flexed to the need, for example single stage ITT, stakeholders were comfortable that there are no obvious modifications required. Key features seem compatible: ▪ Non-binding reference design ▪ 2 stage ITT that can be combined, Technical only evaluation on pass/fail at ITT stage 1 ▪ Standard three section tender pack (Event instructions; Information; Submission instructions) ▪ Bidders model solutions to demonstrate capability & shadow studies conducted ▪ Level of innovation that will be accepted is specified ▪ Studies commissioned by PB; no connection application required during tender
Enabling	Legislation, license, and code change expected to mirror what is required at Tx

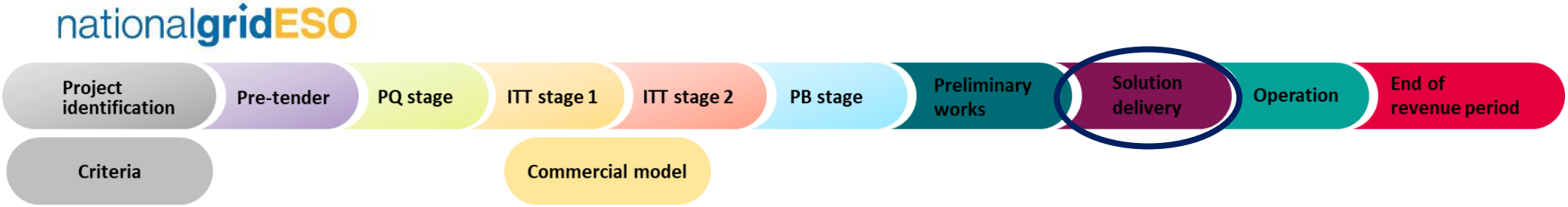


Component: ITT stage 2	Modify? No
Modification(s)	None proposed
Why	A stakeholder highlighted that at Dx they would like the ability to restrict the number of proposals that each bidder could submit. This is compatible with the thinking at Tx level where this decision would form part of the Event Strategy Key features seem compatible: ▪ Commercial evaluation approach doesn't appear to require modification. ▪ TRS proposed by bidder uses some assumptions set out by the PB, as well as which costs must be fixed, and which can be estimated. ▪ The proposed TRS is subject to an adjustment factor based on second stage of technical evaluation to create ranked bids. ▪ Second stage technical assessment focusses on robustness of delivery plans with weighted scoring. Lower score leads to higher adjustment factor being applied. ▪ Clarification question process premised on publication of questions and answers to all participants PB deems there to be a need for confidentiality) seems sound
Enabling	Legislation, license, and code change expected to mirror what is required at Tx

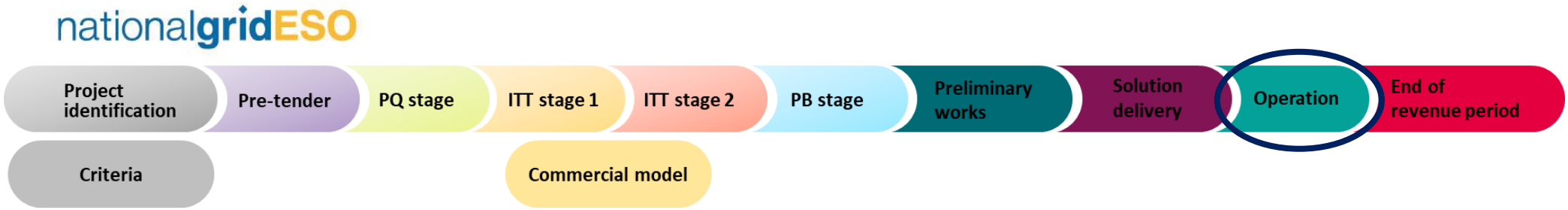


Component: Preferred Bidder (PfB)	Modify? No
Modification(s)	None proposed
Why	Key features seem compatible: ▪ PB recommends winning bid to Approver (Ofgem) to agree a contract or Licence award can be made ▪ All bidders receive feedback on their bid including relative strengths and weakness versus winning proposal ▪ Licence or contract is put in place with winning bidder, who supplies security or performance bond ▪ Preferred bidder makes application for connection or Licence through relevant process as required ▪ 3 stage dispute process built into tender (PB senior management; independent expert; legal challenge under relevant legislation)
Enabling	Legislation, license, and code change expected to mirror what is required at Tx

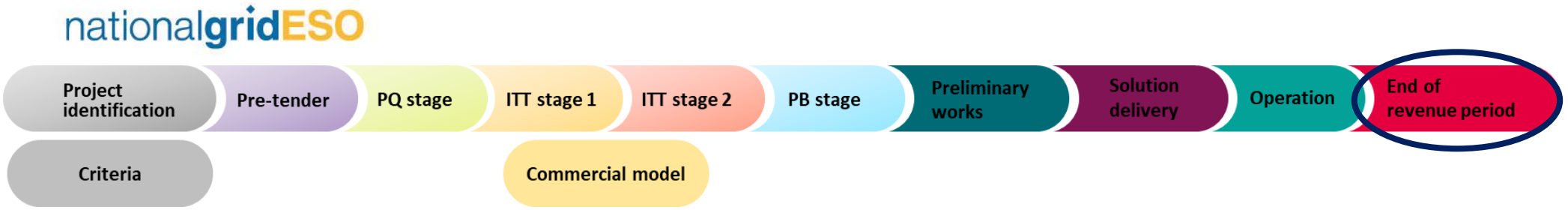
Component: Preliminary works	Modify? No
Modification(s)	None proposed
Why	A concern was how to prevent delays in this phase. Discussed how at Tx level mitigation is primarily that TRS only starts when solution is operational Key features seem compatible: ▪ Post Preliminary Works Costs Assessment (PPWCA) discussed and in principle does not require modification ▪ Assumptions and estimates updated with known costs ▪ An economic and efficient test of permissible cost changes (specified by PB in tender) is applied and TRS amended ▪ There is a maximum upward adjustment cap (specified by procurement body in tender) to mitigate against low ball pricing ▪ Debt competition to finalise cost of debt to finance solution is part of standard process. Can be removed as part of Event Strategy if not required
Enabling	Legislation, license, and code change expected to mirror what is required at Tx



Component: Solution delivery	Modify? No
Modification(s)	None proposed
Why	Posting of security that is returned on milestone basis did not raise any obvious issues for application in Dx Approach to dealing with delays in this phase discussed. Where delays cause late delivery and classed as “unacceptable” the preferred bidder owns the liability for lost TRS and is not held whole. Where delay is “acceptable” TRS is re-profiled so that preferred bidder earns the same amount over shorter revenue period. Principles for determining “acceptable” and “unacceptable” will be part of Tx implementation work due after decision on early competition. Commissioning of solution aligns to existing process/codes, with Licence or Contract stipulating any additional requirements in event of more innovative solutions not covered by codes
Enabling	Legislation, license, and code change expected to mirror what is required at Tx



Component: Operation	Modify? Maybe
Modification(s)	None proposed
Why	Stakeholders indicated that the level of available of detail at this point is very high level. While at this stage there are no obvious modifications, this area will require further consideration and could require modifications based on the different nature and complexity of the transmission and distribution networks. Stakeholders raised question of how liability for network security (SQSS) will determined – Tx model will develop a more detailed approach to this during implementation. An equivalent review and changes would be required at Dx level. Key features seem compatible: ▪ The principle of winning bidder delivering against Licence or contract doesn't appear to require modifications. ▪ Incentive regime focussed on availability; environment and connections doesn't present any immediate concerns. ▪ Solution owner liable for new capital investment
Enabling	Legislation, license, and code change expected to mirror what is required at Tx



Component: End of revenue period	Modify? No
Modification(s)	None proposed
Why	Stakeholders raised a question of how to prevent solution owner from 'gaming' any subsequent competition if the need continues after the revenue period. Key features seem compatible: ▪ Tx process proposes that providers who decline pre-agreed extension options are excluded from subsequent competition ▪ Proposal to set out end of revenue period options in original Licence or contract doesn't appear to require modification for Dx
Enabling	Legislation, license, and code change expected to mirror what is required at Tx