Digitalised Whole System Technical Code (dWSTC)

April 2022

Consolidation Paper

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Contents

1. Executive Summary 3

2. Background 4

3. Glossary of Terms 4

4. Consolidation of Codes 2

4.1. Stakeholder Responses in Favour of Consolidation 2

4.2. Stakeholder Views Against Consolidation 3

4.3. Alternative Potential Solutions to Consolidation 3

5. Key Risks 3

6. Conclusion 4

7. Next Steps 5

Appendix A: Voting Results & Workstream Assignments 6

Appendix B: Contingency Plan 8

1. Consolidation Objectives 8

2. Consolidation Scope Considerations 8

3. Consolidation Indicative Timelines 10

1. Executive Summary

National Grid Electricity System Operator's (NGESO) RIIO-2 business plan included a proposal for a digitalised Whole System Technical Code (dWSTC) encompassing the existing Distribution Code (and associated Engineering Recommendations (ERECs)) and the Grid Code to be delivered with engagement from industry on the direction of this work. Stakeholder engagement commenced in June 2021 and a Consultation was conducted between September and November 2021. The analysis of responses led to a number of possible solutions to take forward and the instigation of a Steering Group to provide overall oversight, strategic direction and decision making on behalf of industry. In February 2022 the Steering Group voted on which solutions should be taken forward to scope out further, provide greater clarity on objectives, benefits, risks, and timelines for delivery and grouped into workstreams as follows:

- Alignment of Codes
- Digitalisation of Codes
- Code Administrator Performance Improvement
- Improving SQSS Governance
- Consolidation of Codes
- Guidance and Training for the use of Codes
- Simplification and Rationalisation of Codes

The purpose of this document is to expand the detail on the workstream relating to Consolidation of Codes. Separate documents released alongside this document have been developed for the other workstreams.

Stakeholders who were supportive of consolidation mapped it to addressing the issues associated with the number of codes within industry, duplication and the need to track two sets of code modifications. However, proceeding with consolidation was on condition that the text in the existing codes was simplified, the new WSTC well-structured to aide users understanding their obligations and the result not being an excessively large document.

Stakeholders who were against consolidation expressed that there are no significant benefits which would be worth the effort, disruption and cost involved in delivering a WSTC and therefore industry resources should be assigned to more pressing matters. To that end, stakeholders proposed alternative solutions that could deliver the intended outcome such as User Journeys, single governance arrangements and only consolidating particular sections of the technical codes. These stakeholders felt that consolidation should only proceed with clear and unequivocal sanction by Ofgem & BEIS (as part of the ECR review) and wide industry support; none of which is in place at the moment.

In addition, stakeholders raised risks associated with pursuing consolidation comprising increased legal text, larger document volume, omission of technical requirements, long delivery timescales, misinterpretation of the projects objectives by industry, loss of clarity, creating an unintended barrier to entry and loss of flexibility.

Therefore, some stakeholders feel that consolidation should be put on hold until there is clear sanction by Ofgem /BEIS to ensure that consolidation is undertaken in a coherent and consistent manner.

The dWSTC Steering Group recommendation is that industry focusses its resources on pursuing the other workstreams for which a 'Go' decision was received i.e., Alignment, Digitalisation, Guidance and Training, Performance Improvement, SQSS governance and Simplification & Rationalisation.

In the event that the ECR outcome indicated that consolidation workstream should go ahead, a proposed contingency plan which shows how to undertake the work has been provided.

2. Background

National Grid Electricity System Operator's (NGESO) RIIO-2 business plan included a proposal for a digitalised Whole System Technical Code (dWSTC) encompassing the existing Distribution Code (and associated Engineering Recommendations (ERECs)) and the Grid Code. NGESO committed to ensure that there was engagement from industry on the direction of this work from the outset. In line with this commitment, stakeholder engagement commenced in June 2021 gathering views on the project's scope, objectives and approach which formed Consultation 1. The consultation gave an opportunity for stakeholders to formally provide their views on the proposed dWSTC. It was released in September 2021 and closed in November 2021.

- 25 responses across a range of industry stakeholders were received in both written and verbal forms.
- An analysis of the responses was conducted and has been published on the Digitalised Whole System Technical Code Website.

The analysis of responses led to a number of possible solutions to take forward and the instigation of a Steering Group to provide the project with overall oversight, strategic direction and decision making on behalf of industry. The Steering Group had their inaugural monthly meeting in December 2021. In February 2022 they voted on which solutions should be taken forward to scope out further, providing greater clarity on objectives, benefits, risks and timelines for delivery. The results of the vote can be seen in Table 2.

The work that has been approved to take forward has been grouped into workstreams as follows:

- Alignment of Codes
- Consolidation of Codes
- Digitalisation of Codes
- Guidance and Training for the use of Codes
- Code Administrator Performance Improvement
- Simplification and Rationalisation of Codes
- Improving SQSS Governance

The purpose of this document is to expand the detail on the workstreams relating to the Consolidation of Codes.

Separate documents released alongside this document have been developed for the other workstreams:

- Code Governance Scoping Document detailing the Guidance and Training for use of the Codes workstream and Code Administrator Performance Improvement workstream
- Code Content Scoping Document detailing the Alignment of Codes workstream and Simplification and Rationalisation of Codes workstream
- Digitalisation Scoping Document detailing the Digitalisation of Codes workstream
- Improving the SQSS Governance Scoping Document detailing the Improving the SQSS Governance workstream

3. Glossary of Terms

Alignment

Alignment is the process by which areas of the Distribution Code (and ERECs) and Grid Code that are not aligned, in intent or execution, are identified and then modifications to the relevant code panel are raised via the normal code governance process to correct these. Areas where codes are not aligned may be within each code itself (e.g., the Grid Code) or between different codes (e.g., the Grid Code and Distribution Code).

Consolidation

Consolidation is the process by which the Grid Code and Distribution Code (and ERECs) are merged together to produce a single technical code that Users connected to either the transmission or distribution systems would be legally bound to comply with. The creation of a consolidated code should not change any obligation on any code party.

Digitalisation

Digitalisation is the process of presenting either the existing PDF based Grid Code and Distribution Code (and ERECs) or their consolidated equivalent code in a new digital format in order to improve the experience of the code users. The presentation of a PDF based code in a digital format would not change any obligation on any code party.

Rationalisation

The task of streamlining undue detailed prescription and removing any irrelevant or outdated information

Simplification

The tasks of translating code requirements (where possible) from technical prescriptions and legalese into plain English and establishing outcome-based regulation into new rule design.

4. Consolidation of Codes

During our initial stakeholder engagement, feedback was received that there is need to identify and understand the challenges faced by stakeholders in using the technical codes so that appropriate solutions are developed and mapped against each of them. To understand these, a question was included in Consultation 1 seeking views from stakeholders on their challenges with the technical codes. Stakeholders indicated challenges below which cut across both distribution and transmission:

Issue 1 The codes are very lengthy and not the easiest of documents to understand, especially for new entrants.

Issue 2 The codes are overly complex and difficult to comprehend, resulting in difficulty in interpreting the meaning of certain clauses.

Issue 3 The codes lack clarity and can be confusing for new users.

Issue 4 It is difficult for industry participants to understand their obligations from the codes

Issue 5 The codes are difficult to navigate

Issue 6 The code modification process is resource intensive, cumbersome, lengthy, and not closely aligned with other codes. The issue is that many of the smaller players likely to play an important part in Net Zero will be disenfranchised and see the codes as a barrier to the necessary change.

Issue 7 There are a number of administrative points, including scope changes, duplication etc. that need to be addressed. For example, the separate technical codes have duplications, which can result in contradictions and in the need for compliance across multiple codes which complicates the compliance process.

Consolidation was mapped as a potential solution to Issue 7.

The next section provides information on consolidation as provided by stakeholders. This feedback was from a broad range of stakeholders.

No new views arose from the Steering Group members' voting statements.

4.1. Stakeholder Responses in Favour of Consolidation

Stakeholders identified that consolidation would address the issues associated with the number of codes within industry, duplication, and the need to track two sets of code modifications. Their support of consolidation was as long as the text in the existing codes was simplified, the new dWSTC well-structured to aide users understanding their obligations and the result not being an excessively large document.

Stakeholders also highlighted that consolidation of the codes should be put on hold until the outcome of the ongoing ECR is known. This view was based on the following:

- Given that the Ofgem and BEIS preferred model for code consolidation is not yet known, stakeholders feel that it is premature to undertake new major code restructuring projects before the ECR consultations are concluded.
- Waiting for the ECR outcome would ensure that the new Code Manager (potentially covering all technical codes) would be in a position to organise and manage the revised code governance arrangements and the merger of the codes in a coherent and consistent manner.
- Proceeding now would add complexity and confusion to existing arrangements e.g., licensing, panels, code governance and administration.
- It is unclear if assigning resources to consolidation would be the best use of industry resources at this time given other ongoing works within industry, such as, the Energy Code Review, charging reviews, and other initiatives from BEIS, Ofgem and the ESO.

The responses in favour of consolidation by stakeholders can be found on the project website.

4.2. Stakeholder Views Against Consolidation

Stakeholders expressed that there are no significant benefits which would be worth the effort, disruption and cost involved in delivering a WSTC. The general view was that there were more pressing matters that should be addressed which would be a better use of time and resources. Also, there are alternative solutions that could deliver the intended outcome such as User Journeys. Another view was that combining the two huge documents could potentially create more problems than it would solve and should only proceed with clear and unequivocal sanction by Ofgem and wide industry support. Thirdly stakeholders held the view that they agree there are some "no regrets" activities that can be started before there is a decision from BEIS / Ofgem regarding the Energy Code Reform (ECR), but any work on amalgamating the technical codes should wait until there is clarity of the enduring solution arising from the ECR.

4.3. Alternative Potential Solutions to Consolidation

Stakeholders have indicated that there are alternative solutions to consolidating the codes short of rewriting them in their entirety, such as:

- Consolidating the governance arrangements, for example, to have a joint Grid Code and Distribution Code Review Panel.
- Consolidating only certain sections of the technical codes
- Providing User Journeys to assist with navigation across the two codes.

5. Key Risks

Stakeholders identified several risks that could arise from consolidating the codes as in Table 1. The risks raised by stakeholders include increased legal text, larger document volume, omission of technical requirements, long delivery timescales, misinterpretation of the projects objectives by industry, loss of clarity, creating an unintended barrier to entry and loss of flexibility.

Table 1: Risks of Consolidation as indicated by Stakeholders

ID	Theme	Risk Description
1.	Contradictions	There is the potential for contradictions and confusion where multiple codes refer to the same situation
2.	Increased Legal Text	Combining codes together may leave stakeholders with more legal text to analyse to understand which provisions apply to them

3.	Larger document volume	Merged codes will result in very large documents making it more difficult to find the bits that are relevant consequently having the converse effect than that desired If consolidation becomes the preferred option, it will need to be thought about and structured in such a way as to avoid having a single document that is large, hard to follow and difficult or time consuming to modify. E.g., it wouldn't be sensible to re-issue the whole document each time
4.	Omission of technical requirements	The technical criteria/legislation could be unintentionally omitted when trying to combine and simplify the codes.
5.	Long Delivery Timescales	Due to high resource requirements, the project cannot be easily delivered in the near term
6.	Misinterpretation of the projects objectives by industry	Some participants may see code merging as a reduction in obligations when it is not
7.	Loss of Clarity	Simplifying codes could mean a loss of legal clarity
8.	Creating an unintended Barrier to entry	Creating a single WSTC could unintentionally create a barrier to entry for flexible resources if technical requirements are aligned across current codes without properly considering the impact on smaller assets
9.	Loss of flexibility	Having a single WSTC could result in the loss of the ability to allow flexibility to apply small differences that are appropriate for sector or scale of operation

6. Conclusion

Stakeholders who were supportive of consolidation mapped it to addressing the issues associated with the number of codes within industry, duplication and the need to track two sets of code modifications. However, proceeding with consolidation was on condition that the text in the existing codes was simplified, the new WSTC well-structured to aide users understanding their obligations and the result not being an excessively large document.

On the other hand, the stakeholders who were against consolidation expressed that there are no significant benefits which would be worth the effort, disruption and cost involved in delivering a WSTC and therefore industry resources should be assigned to more pressing matters. To that end, stakeholders proposed alternative solutions that could deliver the intended outcome such as User Journeys, single governance arrangements and only consolidating particular sections of the technical codes. These stakeholders felt that consolidation should only proceed with clear and unequivocal sanction by Ofgem and wide industry support.

In addition, stakeholders raised risks associated with pursuing consolidation comprising increased legal text, larger document volume, omission of technical requirements, long delivery timescales, misinterpretation of the projects objectives by industry, loss of clarity, creating an unintended barrier to entry and loss of flexibility.

Therefore, although some stakeholders are in favour of consolidation, others also proposed that it should be put on hold until the ECR outcome is known to ensure a coherent and consistent delivery.

There is broad industry consensus to disregard the 'Do Nothing' option. That being said, there is a risk that all the proposed drafting solutions are resource-intensive for industry, or lead to fundamental short-term operational challenges, when considered in the context of the broader BEIS/Ofgem ECR. If there were to be a BEIS/Ofgem minded-to position to comprehensively review and restructure the energy codes in the coming year, the majority (if not all) of the initiatives proposed in this consultation would immediately be superseded. The consultation view is that developing an 'overarching WSTC' or a 'single WSTC' maybe a helpful pilot for

the ECR. However, it would require a massive amount of industry effort during a time of unprecedented regulatory change. It could also add complexity and confusion to existing arrangements e.g., licensing, panels, code governance and administration. It is vital that any proposed solutions taken forward via this review require minimal industry resources and time to implement, whilst leading to tangible benefits for users. Aligning the technical codes around key issues (or making the existing code provisions face off much better to users) would to be a sensible interim improvement option for user accessibility.

7. Next Steps

The recommendation is that industry focusses its resources on pursuing the other workstreams for which a 'Go' decision was received i.e., Alignment, Digitalisation, Guidance and Training, Performance Improvement, SQSS governance and Simplification and Rationalisation. Once the ECR outcome has been published the Steering Group will be consulted for the next steps for this workstream. In the meantime, this workstream is placed on hold.

The Steering Group is asked to approve this recommendation.

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Appendix A: Voting Results & Workstream Assignments

Table 2: Voting Results and Workstream Assignments

Proposed Solutions	For	Against	Comments	Workstream Assignment(s)
1	11	0	Take forward to scoping	Digitalisation
2	10	1	Take forward to scoping	Guidance & Training
3	9	1	Take forward to scoping	Digitalisation
4	8	3	Take forward to scoping	Digitalisation
5	11	0	Take forward to scoping	Digitalisation
6	6	2	Further vote required	Simplification & Rationalisation
6 a	6	0	Take forward to scoping	Simplification & Rationalisation
6 b	3	3	Take forward to scoping	Simplification & Rationalisation
7	6	3	Take forward to scoping	Consolidation and Simplification & Rationalisation
8	8	0	Further vote required	Simplification & Rationalisation
8 a	5	2	Take forward to scoping	Simplification & Rationalisation
8 b	7	0	Take forward to scoping	Simplification & Rationalisation
9	8	2	Take forward to scoping	Guidance & Training
10	6	3	Take forward to scoping	Consolidation
11	10	0	Take forward to scoping	Alignment
12	3	7	Do not take forward	
13	1	9	Do not take forward	
14	3	6	Do not take forward	
15	5	5	Take forward to scoping	Performance Improvement
16	2	6	Do not take forward	
17	11	0	Take forward to scoping	Digitalisation
18	9	2	Take forward to scoping	Digitalisation
19	8	3	Take forward to scoping	Digitalisation
20	8	2	Take forward to scoping	Digitalisation
21	10	1	Take forward to scoping	Digitalisation
22	5	6	Take forward to scoping as low priority	Digitalisation
23	4	4	Take forward to scoping	Digitalisation
24	3	5	Take forward to scoping as low priority	SQSS Governance
25	4	4	Take forward to scoping	Digitalisation and Consolidation
Recommendations	**For**	**Against**		
1	9	0	Take forward	
2	10	0	Take forward	
3	8	1	Take forward	Digitalisation
4	9	0	Take forward	
5	10	0	Take forward	All (include in each workstream)
6	10	0	Take forward	
Proposed Delivery Solutions	**For**	**Against**		

1	7	3	Take forward to scoping	Alignment
2	7	3	Take forward to scoping	Consolidation
3	5	5	Take forward to scoping	Digitalisation

Appendix B: Contingency Plan

In the event that the ECR outcome indicates that consolidation workstream should go ahead, the following plan shows how best to undertake the work.

1. Consolidation Objectives

Table 3 shows the objective of consolidation and its corresponding priority considering the responses from stakeholders.

Stakeholders have indicated that the work on consolidation will deliver value better if the ASR workstream is underway or completed.

Table 3: Objectives of Consolidation

Workstream	Objectives	Priority* (High, Medium or Low)
Consolidation	Create a single Whole System Technical Code that ➢ Joins the text in the Distribution Code, Grid Code and associated documents ➢ Is structured correctly	High – based on Steering Group voting results

* The priority assigned to each objective is based on the result of the steering group vote on each issue. Where an item has been voted on unanimously, the objective is high priority. Where the vote on an item has been tied or the majority was against, the objective is a low priority. These are being progressed at the request of the Steering Group. Other objectives have been rated medium.

2. Consolidation Scope Considerations

The scope and objectives of consolidation work will generate the benefits as shown in Table 4. For further details, see section 4.

Table 4: Benefits of Consolidation

ID	Workstream	Benefit
	Consolidation	• Address the issues of duplication. • Form an important enabler for a whole system approach • Address the market accessibility issues.

Scope considerations for this workstream

The scope for the Consolidation workstream can be seen in Figure 1. Each of the processes identified in the diagram is detailed below.

Form a Project Team: In this process a project team, drawn from interested industry parties, will be formed. The purpose of the project team will be to carry out the next step using knowledgeable industry resources.

Identify suitable sectioning and produce estimates and a plan to achieve Consolidation: During this process the project team will:

1. Identify a suitable sectioning of the work: The members of the project team will work together to identify the best way of splitting up the work into manageable sections. Each section should be well defined. The member of the project team should also identify whether each section will need a joint workgroup, a Grid Code workgroup or a Distribution Code workgroup.
2. Provide estimates for each section: For each section identified in the previous step, estimates for resource and effort should be produced.

3. Produce a high-level plan: The plan should detail what order work on the sections should happen in and any dependencies between the sections. This step should also consider the availability of knowledgeable industry resources.
4. Provide a common understanding of how the work is to be carried out: Example clauses should be produced to show how a clause(s) can be consolidated.

Following the presentation of this work to the steering group, the project team will be dissolved.

Form informal workgroups for each approved section: For each section that has been approved for work by the steering group, an informal workgroup should be formed. The purpose of each informal (Joint) workgroup is to consolidate the section of the Code(s) assigned to it.

Identify and raise modifications to achieve Consolidation: Each Workgroup will work towards identifying any changes needed to their section of the code(s) to achieve Consolidation. Where it is needed, the informal (Joint) workgroup will raise modifications via the existing process(es), this will include writing terms of reference, draft text and a modification proposal.

Produce report and close down workgroups: When an informal (Joint) workgroup agrees that it has competed its work to raise all the necessary modifications, it will report this fact to the Steering Group, then it will be dissolved.

Figure 1 shows the Flowchart of work in the Consolidation Workstream.

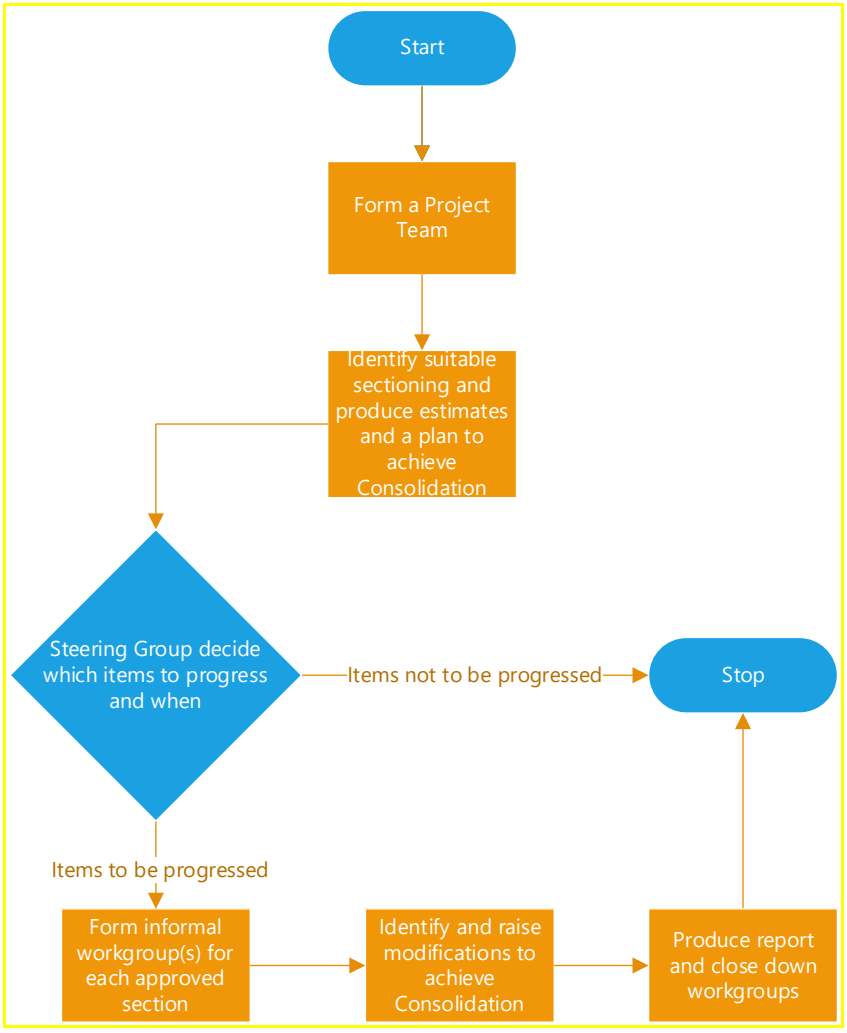

Figure 1: Flowchart of work in Consolidation Workstream

3. Consolidation Indicative Timelines

Figure 2 shows the indicative timelines for the Consolidation workstream. The start of consolidation is dependent when the outcome of the ECR will be known. The best option could therefore be to progress Consolidation in parallel with ASR to enable efficient use of industry resources.

Figure 2: Gantt chart for Consolidation workstream