

10th December 2021

National Grid ESO response to Consultation on IT Guidance for ESO Business Plan Guidance

Dear ESO Regulation,

We welcome the opportunity to respond to your consultation on IT guidance for the ESO Business Plan Guidance.

National Grid ESO is the Electricity System Operator for Great Britain. We move electricity around the country second by second to ensure that the right amount of electricity is where it's needed, when it's needed – always keeping supply and demand in perfect balance. As Great Britain transitions towards a low-carbon future, our mission is to enable the sustainable transformation of the energy system and ensure the delivery of reliable, affordable energy for all consumers. We use our unique perspective and independent position to facilitate market-based solutions which deliver value for consumers.

We support Ofgem's ambition to drive greater cost transparency and improved cost management through the application of the Technology Business Management (TBM) taxonomy for the purposes of assuring the ESO IT investment portfolio. We are also very appreciative of the early engagement with Ofgem on this guidance which has allowed the ESO to mobilise a planning phase for the BP2 IT submission. We look forward to continuing to collaborate and engage with Ofgem as our organisations embark on this first-of-a-kind assurance process for the UK energy sector. We are particularly keen to continue to regularly share and discuss our ongoing progress as we build our BP2 submission over the coming months.

Our ESO Total IT Cost Scope

To generate a holistic view of ESO's total IT costs, four different cost elements must be amalgamated together. These each come with different investment approval statuses and data structures which necessitate a considered and varied approach. These cost elements can be summarised as follows:

- **Direct IT investments** - the IT investments self-funded by ESO for building or enhancing business capabilities. It is assumed that this cost component will be the primary focus of the Ofgem BP2 assessment, given it represents new information.
- **Shared IT investments** – the IT investments provided centrally by National Grid Group which are mostly composed of IT infrastructure spend. These investments were approved in 2020 as part of the T2 5-year RII02 ex-ante process for 2021-26.
- **Run-the-Business (RTB) expenditure** – the ongoing ESO IT OPEX costs to support operations including resourcing, licencing, and ongoing IT infrastructure spending. Along with our Shared IT investments our RTB forecast expenditure was also approved within 2020 for the 2021-26 period.
- **Cybersecurity** - the ESO IT costs relating to cybersecurity which were approved in 2020 as part of the 3-year NIS Directive process. It has been confirmed that Cybersecurity spend is out of scope for BP2 and therefore not part of the BP2 TBM submission.

For our Shared IT investments and RTB forecast spend, given their differing approval cycles, we will not produce any new or additional underlying justifications or expression of costs for these elements. Instead, the basis of all information submitted for Shared IT investments and RTB forecast spend will be the exact documents that met the requirements for approved baseline funding in 2020.

The findings of our BP2 IT submission planning phase

ESO's Shared IT investments and RTB forecast expenditure is managed according to the Unified Cost Allocation Methodology (UCAM). This is a cost allocation framework designed by Ofgem to ensure

transparent and effective allocation of IT costs for National Grid's UK businesses. The analyses of our planning phase have found that this UCAM methodology fundamentally limits our ability to achieve a full and accurate TBM breakdown for our Shared IT investments and RTB spend components.

Specifically, with differing data structures, compositions and levels of granularity, the mapping of our high-level forecast cost data from UCAM to the required lower TBM levels specified by Ofgem can only be achieved if sizeable cost assumptions are applied. These assumptions would limit drill down, interrogation and reconciliation back to the original UCAM figures, and, in our opinion, will produce a dataset of questionable value both to Ofgem and ESO. This is explained in further detail in Appendix 1, which is the PowerPoint file titled 'NGESO Response - IT Guidance for ESO Business Plan – Appendix 1'.

For this reason, our view is that cost allocation data for Shared IT investments and RTB spend can only be broken down as far as level 2 across all layers in the TBM structure. Where possible we will look to go beyond this, but this represents the likely limit of valuable cost breakdowns.

Furthermore, as outlined above, we will not produce any new or additional underlying justifications or expression of costs for our UCAM-aligned cost elements. Therefore the basis of all information submitted for Shared IT investments and RTB spend will be the exact documents that met the requirements for approved baseline funding in 2020, and which in the case of Shared IT investments covers only those investments that met the Ofgem-agreed materiality investment requirements at the time of submission.

We seek a change to the BP2 IT guidance to align with our proposed TBM data availability

For the reasons cited above we will therefore be unable to meet the full scope of requirements as set out in the BP2 IT guidance. Based on our analysis we have determined that it will be possible for ESO to publish, as part of our BP2 submission, the following levels of detail:

- **For Direct IT investments**
 - Fully populated TBM layers 1-4 covering levels 1-4 detail.
 - Business TBM layer informed by Ofgem ESO's Roles Guidance published March 2021.
- **For Material Shared IT investments and Run-the-Business expenditure**
 - Populated architecture mapping for TBM layers 1-4 covering levels 1-4 detail.
 - Populated costs for TBM layers 1-4 to at least levels 1-2 detail, and beyond where possible, noting that any further drill-down will become highly assumption-based.

We therefore seek changes to the BP2 IT guidance to align with our findings, and our suggestions for the changes are provided in Appendix 2, which is attached to this letter.

Our cost-transparency ambitions for the future

We want to emphasise that we strongly support Ofgem's goal of increased IT cost transparency. National Grid Group is already in the process of adopting the TBM taxonomy through the RIIO-2 IT investment 'Cost Transparency and Bill of IT'. This investment will enable dynamic, consumption-based tooling that provides a clear 'line of sight' between consumption and allocation of IT costs to business units, helping us to improve IT cost transparency and management, and to enhance decision-making in IT investment and delivery.

The 'Cost Transparency and Bill of IT' investment will also eventually enable ESO to obtain further cost breakdown accuracy within the Shared IT investments and RTB expenditure spaces, however, this new tooling will not be fully operational until after the RIIO-2 period, so it cannot be relied upon to support the BP2 submission requirements.

The value of our proposed BP2 IT submission to consumers

The TBM data models that we propose to publish meet the majority of the current IT guidance. Furthermore, our proposed submission provides those elements of the TBM data models which are most relevant to Ofgem's objective of assuring that ESO is economically and efficiently delivering the IT that will enable our second RIIO-2 business plan. This is because our Direct IT investments portfolio represents those IT investments that will build or enhance ESO's business capabilities across the RIIO-2 period.

The information that we propose to provide on Material Shared IT investments and RTB expenditure will also provide Ofgem with information on ESO's foundational IT resources, IT spend profiles, and the ability to check for investment gaps. This will enable Ofgem to achieve their aim of assuring ESO IT's investments at a portfolio-level. We do not believe that the addition of highly assumption-based cost information at level 3-4 TBM detail for Material Shared IT investments and RTB expenditure will further Ofgem's objective in this instance.

We welcome the opportunity to further discuss the points raised within this response. Should you require any further information or would like clarity on any of the points outlined in this paper then please contact Gareth Davies in the first instance at gareth.davies5@nationalgrideso.com

Yours sincerely



Norma Dove-Edwin

Chief Information Officer, Electricity System Operator

Appendix 2 – Suggestions for Changes to the Guidance

This appendix provides suggestions for changes to the IT Guidance for the ESO Business Plan Guidance. If these changes are adopted, we believe that the TBM data models we propose to publish in the BP2 submission will become compliant with the guidance.

Suggested changes relating to Table 2:

Remove: “A TBM taxonomy-compliant description of the as-is and to-be states of ESO IT in the form of a data model to at least “level 4” detail.”

Replace with: “A TBM taxonomy-compliant description of the as-is and to-be state of ESO IT in the form of a data model to the granularity of detail described below:

- **For Direct IT investments:**
 - Fully populated TBM layers 1-4, covering levels 1-4 detail.
 - Business TBM layer informed by Ofgem’s ESO’s Roles Guidance published March 2021.
- **For Material Shared IT investments and Run-the-Business expenditure:**
 - Populated architecture mapping (i.e. the description of the ESO IT estate) for TBM layers 1-4 covering levels 1-4 detail.
 - Populated costs for TBM layers 1-4, to at least levels 1-2 detail.

For the avoidance of doubt, descriptions of ESO IT and costs relating to Cybersecurity and to Non-material Shared IT investments are outside of the scope of the BP2 submission.”

Create a paragraph to define types of ESO IT costs prior to paragraph 3.11: “Ofgem recognises that ESO IT costs are composed of 4 different types, with 3 different investment approval statuses due to the regulatory process. These four types of IT costs are:

- Direct IT investments - the IT investments self-funded by ESO designed for building or enhancing business capabilities,
- Shared IT investments – the IT investments provided centrally by National Grid Group composed mostly of IT infrastructure,
- Run-the-Business (RTB) expenditure – the ongoing ESO IT OPEX costs to support operations including resourcing, licencing, and ongoing IT infrastructure spending,
- Cybersecurity – the ESO IT costs relating to cybersecurity.

Shared IT investments are composed of two types:

- Material Shared IT investments – the investments for which a cost-breakdown was provided in the T2 5-year RII02 ex-ante process for 2021-26.
- Non-material Shared IT investments – the investments for which a cost-breakdown was not provided in the T2 5-year RII02 ex-ante process for 2021-26.”

Suggested change to paragraph 3.18:

Remove: “We require the ESO to provide at least level 4 detail when submitting TBM taxonomy-compliant information for its BP2 IT investments.”