

ESO Business Plan 2

Ofgem Consultation Response

Version 1.0 - ISSUED

Context & Purpose

- Since our previous conversation in November, we have undertaken further detailed analysis on our BP2 approach, assessing what we can achieve within the specified timelines
- Our analysis has identified that the UCAM methodology limits our ability to achieve a full and accurate TBM breakdown for Shared IT investments and RTB spend
- Following this assessment we can provide and accelerate the following data submission by April 2022:
 - For the Direct IT Investments portfolio, we can provide all layers and levels where Ofgem need to assess the benchmark costs
 - For Shared IT Investments and RTB, we can provide all layers to at least level 2 with assumption-driven allocations. Level 3-4 detail and the mapping to solution/business layers is so assumption driven (rather than consumption driven) that we do not propose to submit this information as its value is questionable

Since our last conversation we have conducted further detailed analysis on our BP2 approach and revised what we believe is achievable by the April 2022 BP2 submission date

What we *previously* proposed to Ofgem

Direct Investments

By April 2022:

- Populated Direct Investments for TBM Layers 1-2 covering all levels (1-4)

By August 2022:

- Remaining population of Layers 3 and 4 covering all levels (1-4)

Shared Investments

By August 2022:

- Populated Shared IT Investments for all TBM Layers (1-4) covering all levels (1-4)

Run-the-Business

By August 2022:

- Populated IT Run the Business (RTB) costs for all TBM Layers (1-4) covering all levels (1-4)

What we are proposing *now*

Direct Investments

By April 2022:

- Fully populated IT Direct Investments for all TBM Layers (1-4) covering all levels (1-4)
- Business TBM layer informed by Ofgem ESO's Roles Guidance March 2021)

Shared Investments

By April 2022:

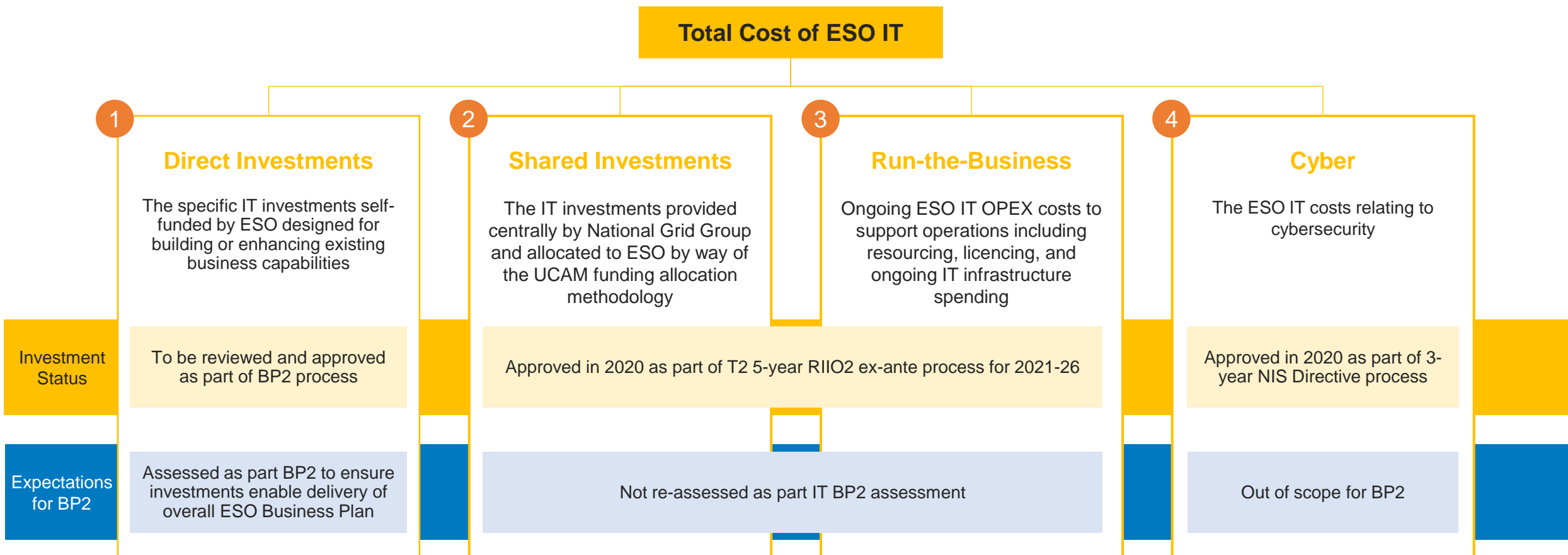
- Populated Shared IT Investment architecture mapping for all TBM Layers (1-4) covering all levels (1-4)
- Populated Shared IT Investment costs for all TBM layers (1-4) to at least levels 1-2, and beyond where possible, noting that any further drill-down will become highly assumption-based

Run-the-Business

By April 2022:

- Populated RTB architecture mapping for all TBM Layers (1-4) covering all levels (1-4)
- Populated RTB costs for all TBM layers (1-4) to at least levels 1-2, and beyond where possible, noting that any further drill-down will become highly assumption-based

ESO's Total IT Cost is composed of four different cost elements, each with different investment approval statuses and structures which necessitate a considered and varied approach



To consolidate a total view of ESO's IT spend we therefore need to apply a varied approach given the different data sources, whilst focusing our efforts on our Direct Investments portfolio which specifically requires Ofgem assessment for BP2

A comparison of UCAM and TBM highlights a number of implications which complicate our ability to build a unified ESO cost model

Unified Cost Allocation Methodology (UCAM)

- Designed to ensure transparent and effective cost allocation for National Grid's UK businesses.
- Covers costs that can be directly charged ('attribution'), and those which cannot ('allocation')
- 'Allocated' costs are attributed to business based on specific drivers (e.g. headcount, CNI, usage)

Technology Business Management (TBM)

- Standardised industry taxonomy to describe cost sources, technologies, IT resources (towers), and solutions
- A mechanism for analysing IT cost consumption, and attributing this to end business value delivery
- A means for defining a detailed spending profile, enabling drill-down and benchmarking between organisations

Submission implications for Shared & RTB spend elements

1. Our available ESO forecast data is of a different composition, structure and granularity than the desired data typically used for TBM
2. The definition of a consumption-based TBM profile for Shared and RTB spend is not possible currently as our UCAM approach is fundamentally an assumption-driven cost allocation method
3. With only high-level forecast data available as a starting point, further assumptions would need to be applied to achieve lower TBM level granularity, thereby limiting drill down, interrogation and reconciliation back to the UCAM figures

Objective	Fair allocation of current and future costs to National Grid companies		Improve cost transparency and showcase value of IT
Outputs	ESO allocation of actuals at cost centre level and future costs at combined cost centre level		A consumption-driven, detailed IT spend profile mapped to technology and businesses layers
Approach	Top down and high-level cost views		Bottom-up and detailed cost views
Cost allocation logic	Assumption (driver) driven		Consumption-data driven
Data assumption	Designed to address data limitations through 'driver' allocation logic		Designed to provide structure to detailed consumption based data

We can illustrate our mapping challenge by taking one of our Shared Investment Line items and applying it to the TBM structure

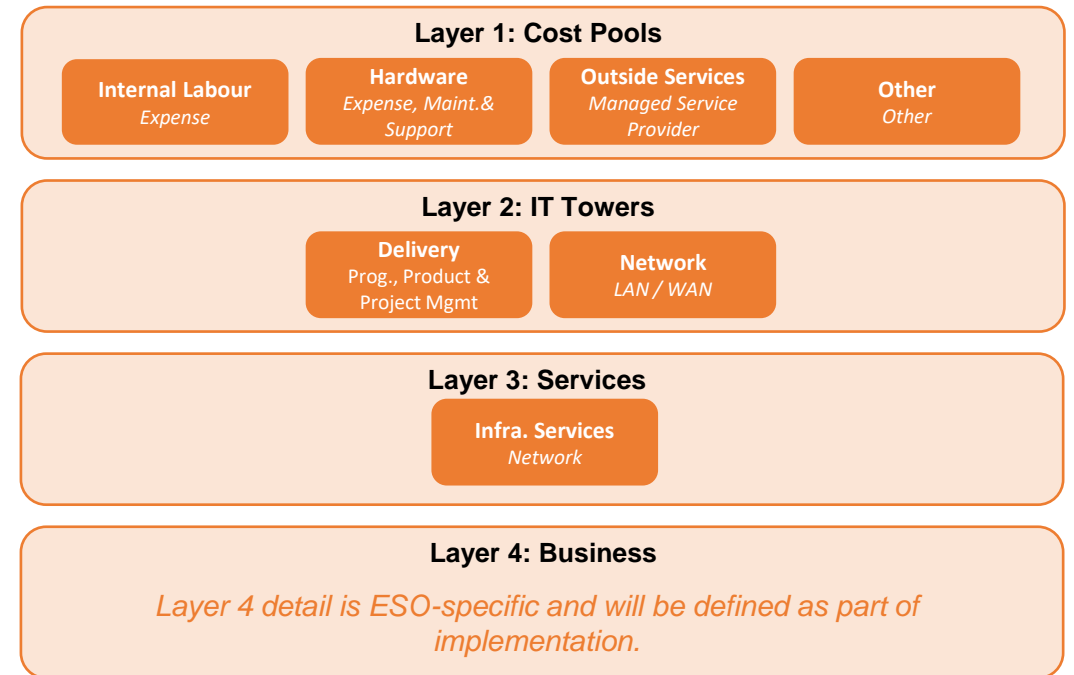
Screenshot of Shared Investment 'Enterprise Network Refresh Program'

LAN Services		
Cost Category	Costs (£m)	Estimation Basis
NG resource costs	£3,795,606	Internal estimating process using previous project experience
Third party resource costs	£6,205,800	Experience from previous projects
Hardware/Software	£12,679,758	Average Unit Prices
Risk Margin	£1,267,976	
Project Total	£23,949,140	

WAN Services		
Cost Category	Costs (£m)	Estimation Basis
NG resource costs	£2,541,367	Internal estimating process using previous project experience
Third party resource costs	£3,297,920	Experience from previous projects
Hardware/Software	£13,307,930	Average Unit Prices
Risk Margin	£1,330,793	
Project Total	£20,478,010	

- The above highlights the total cost breakdown for the 'Enterprise Network Refresh Program' as approved in 2020.
- These figures represent the information that will be used to inform the BP2 submission, but as can be seen the UCAM forecast allocation provides only a limited cost forecast granularity
- The above numbers are also the total National Grid cost; a % proportion of these figures would need to be derived to arrive at the ESO breakdown

Translation of Enterprise Network Refresh Program into TBM (Levels 1-2)



- Based on the forecast total cost summary we can begin to map these costs to the TBM structure across all four layers.
- Due to the limited cost forecast granularity, associating costs beyond level 2 (*italics*) becomes heavily assumption-driven in the absence of either further cost information or consumption data to inform this

The UCAM methodology limits our ability to achieve a full and accurate TBM breakdown for Shared IT investments and RTB spend

ESO Cost Item	Data constraints & challenges	RAG	Mitigations	Outcomes we can deliver for Ofgem
Direct Investments	<ul style="list-style-type: none"> Existing project costs follow standard IT accounting principles but not TBM Taxonomy Investments are at early delivery stages meaning solution design is not available to inform lower solution TBM detail 	G	<ul style="list-style-type: none"> Direct investments are not allocated via UCAM so investments can be mapped to TBM structure An assumption-based methodology for allocating costs through TBM layers rather than a consumption-driven approach will be applied 	<ul style="list-style-type: none"> Full TBM population enabling Ofgem to ensure IT investments economically and efficiently enable delivery of ESO Business Plan
Shared IT investments	<ul style="list-style-type: none"> ESO's Shared IT investments have already been approved through to 2025/26 using Ofgem's Unified Cost Allocation Method (UCAM). UCAM allocations are not aligned to TBM taxonomy introducing mapping challenges UCAM allocations are also not at sufficient granularity to enable population of lower TBM cost levels for all investment lines 	A	<ul style="list-style-type: none"> Given the different approval cycle for Shared Investments, we will not produce any new or additional underlying justifications or expression of costs for this element The basis of all information for Shared Investments will be the exact documents that met the requirements for baseline funding in 2020 We will use this existing submitted information to the fullest extent to inform investment mapping to the TBM taxonomy, taking this to as low a level as possible 	<ul style="list-style-type: none"> Allocation of IT Shared investment costs to TBM taxonomy to at least level 2, with best endeavours to go beyond this where possible. Given the limited granularity in the UCAM allocation, achieving a lower level of TBM granularity whilst possible would be heavily assumption driven, and of questionable value
Run the Business (RTB)	<ul style="list-style-type: none"> ESO's Shared IT investments have already been approved through to 2025/26 using the Unified Cost Allocation Method (UCAM). UCAM allocations for future forecast RTB are not at sufficient granularity to enable a full TBM breakdown for the ESO IT stack 	A	<ul style="list-style-type: none"> Given the different approval cycle for Run the Business costs, we will not produce any new or additional underlying justifications for this element We will obtain a profile of today's RTB spend (assumption-based) and apply this to the forecast total RTB values to arrive at a breakdown, assuming that this profile remains static and is reflective of future OPEX costs 	<ul style="list-style-type: none"> Allocation of RTB spend to TBM taxonomy to at least level 2, with best endeavours to go beyond this where possible. This will provide a forecast spread, but costs will not be reconcilable back to UCAM allocation. Further detail beyond level 2 would be heavily assumption driven, and of questionable value

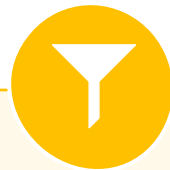
We are committed to implementing greater cost transparency and a consumption-driven view of our ESO IT spending

- Our ambition to drive greater cost transparency in IT spending is reflected in our 'Cost Transparency & Bill Of IT' investment item as outlined in our BP1 submission.
- This investment will enable us to implement new, dynamic, consumption-based tooling that provide clear 'line of sight' between consumption and allocation of IT costs to that Business Units, helping us drive the following benefits for ESO and its consumer.
- The outputs from this BP2 exercise will help us to define the solution and business layers which we will build into our future TBM tooling solution



Improve Cost Transparency

Through implementing a TBM consumption-driven taxonomy, ESO will be able to drive greater cost transparency and visibility of its spending, providing insights on cost, consumption and value of IT across the organisation



Enhance Investment & Transformation Decision making

A TBM-based cost model will help provide a richer dataset, highlighting areas of focus and informing future ESO spending and investment decision making, as well transformation delivery and improvements



Improve IT Cost Management

The proposed TBM cost model will also provide a framework for improved IT cost management, enabling the ESO leadership to balance tech spending across the portfolio and make trade-offs to improve value

Appendix

We will deliver a full TBM model of Direct Investments, and partial views for Shared Investments and Run the Business for the April 2022 submission deadline

TBM Model Outputs

For Direct Investments:

- Fully populated IT Direct Investments for all TBM Layers (1-4) covering all levels (1-4)
- Business TBM layer informed by Ofgem ESO's Roles Guidance March 2021)

For Shared Investments:

- Populated Shared IT Investment architecture mapping for all TBM Layers (1-4) covering all levels (1-4)
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For Run the Business:

- Populated RTB architecture mapping for all TBM Layers (1-4) covering all levels (1-4)
- Populated RTB costs for all TBM layers (1-4) to at least levels 1-2, and beyond where possible, noting that any further drill-down will become highly assumption-based

Proposed April 2022 Outputs	Description	Total IT cost breakdown		
		Direct Investments	Shared Investments	RTB
Cost Pool Taxonomy	TBM Taxonomy reference tables	Population of TBM structure and costs to Levels 1 – 4	Population of TBM architecture to levels 1-4, and costs form levels 1-2	Population of TBM architecture to levels 1-4, and costs form levels 1-2
IT Tower Taxonomy				
Solution Taxonomy				
Business Taxonomy				
Cost Pool	Input data sheets for different Layers	✓	✓ (at least level 2)	✓ (at least level 2)
IT Tower		✓	✓ (at least level 2)	✓ (at least level 2)
Solution		✓	✓ (at least level 2)	✓ (at least level 2)
Business		✓	✓ (at least level 2)	✓ (at least level 2)
Projects		✓	✓ (at least level 2)	n/a
CP-IT Tower Translator	Describes the relationships between different Layers	✓	✓	✓
IT Tower-Sol Translator		✓	✓	✓
Serv-Bus Translator		✓	✓	✓
Projects Translator		✓*	✓*	n/a

Note: The basis of all information to be submitted for Shared IT investments and RTB will be the exact documents that met the requirements for approved baseline funding in 2020 as part of the T2 5-year RII02 ex-ante process. In the case of Shared IT Investments this covers those investments that met the Ofgem-agreed materiality investment requirements at the time of submission, equating to £71M (91%) of the total ESO Shared Investment portfolio.