

RIIO-ED2 Investment Decision Pack

Commercial & Deliverability - Tools & Systems

Investment Reference No: 444/SSEPD/IT/Capital Investment



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Definitions and Abbreviations

BPDT	Business Plan Data Table
CAPEX	Capital Expenditure
CEG	Community Energy Group
CI	Customer Interruptions
CML	Customer Minutes Lost
DER	Distributed Energy Resources
DG	Distributed Generation
DNO	Distribution Network Operator
DSO	Distribution System Operator
EJP	Engineering Justification Paper
EV	Electric Vehicle
FTE	Full Time Equivalent
IDP	Investment Decision Pack
LCT	Low Carbon Technology
MDM	Master Data Management
NPV	Net Present Value
OPEX	Operational Expenditure
OT	Operational Technology

1. Executive Summary

The Capital Delivery Model and associated increased volume of works that is to be mobilised prior to, and implemented during, RIIO-ED2 will require extensive transformation across the SSEN Distribution business. In addition, there is the need to move towards more strategic collaboration with our supply chain to achieve outperformance during successful delivery of the RIIO-ED2 work bank. As such, tools and systems that offer SSEN staff, and where relevant our suppliers in relation to outsourced programme delivery, an enhanced and more efficient approach to managing capital works, will be fundamental to achieving these key RIIO-ED2 objectives.

The proposed investment in this area will bring about benefits that will considerably outweigh the outlay required to secure the tools and systems, and facilitate delivery with more effective project, commercial, financial, risk and benefits management, and associated efficiencies during RIIO-ED2.

2. Investment Summary Table

Summary Table			
Name of Scheme / Programme	Commercial & Deliverability - Tools & Systems		
Primary Investment Driver	Safe, Resilient and Responsive Networks		
Scheme Reference / Mechanism or Category	444/SSEPD/IT/Capital Investment		
Output References / Type			
Cost (CAPEX)	■		
Delivery Year	RIIO ED2		
Reporting Table	C4		
Outputs Included in RIIO ED1 Business Plan			
Spend Apportionment	ED1	ED2 ■	ED3

3. Introduction and Background Information

We have already started to move to our new Capital Delivery model, based on industry best practice, by redefining our work allocation models and supplementary commercial strategies which respond to the supply chain and our customers' needs. In RIIO-ED2 our delivery strategies move away from being short term and transactional and will involve a greater level of collaboration through partnerships over multiple years. This change will ultimately drive the best value for money, productivity and safety for our people and our customers.

This enhanced collaborative approach is enabled by robust tools and systems to create a common working environment for a single source of the truth providing design and construction coordination, integrated project controls, a common data environment and dedicated contract management solution for various industry standard suites of contracts. This allows for management of a diverse range of contractual relationships across, frameworks, partnerships, alliances for projects, programmes, and portfolios. Ultimately, a common environment for project delivery and control and process enables faster and safer working.

4. Business Plan Fit

This project can be mapped to following strategic themes:

Progress to Net Zero	Safe, resilient, and responsive networks	A trusted and valued service to customers and communities	Positive Impact on Society
✓	✓	✓	✓

5. Optioneering

Our plan is based on using industry best practice coupled with tools that aid collaboration across the supply chain, our partners, and other stakeholders. The tools we will use will need to deliver the following functions:

- Design and Construction Coordination – Coordinate the processes between clients, project managers, subcontractors, and consultants.
- Integrated Project Controls – Visibility of project performance across time cost and quality and proactively monitor project performance
- Common Data Environment – A single platform to connect process and data across the lifecycle and within the supply chain. An auditable trail will reduce disputes and achieve faster resolution.
- Portfolio, Programme and Project Management – managing thousands of work packages makes it easier to track and control to completion.
- Contract Management - Streamline contract change management with a single portal to manage upstream and downstream contacts.

These tools will need to be integrated with our core systems, in particular our Financial and Procurement systems, as well as our Work and Asset Management systems.

5.1.1 Alternative Options

ED2 will mean a major increase in the number of contracts we will have to manage. We will therefore need to implement changes to manage this increase. The only viable alternative to an IT solution would be to continue to manage all contracts manually. The resources required to do this have been set out in the Benefits section and would be more than the total cost of the IT solution. Moreover, a manual solution would not allow our partners and supply chain to work more efficiently, and hence potentially offer discounts.

This project has been estimated using the best value solutions available at this time to deliver the project outcomes. However, given the pace of development in IT solutions, the market will be re-examined at the project commencement to ensure the best value solutions at that time are chosen for delivery.

6. Stakeholder Evidence

We have completed extensive stakeholder engagement to substantiate our investment decision. The ED2 enhanced supply chain engagement programme started in October 2020 with invitations to >300 supply chain organisations to get involved. The overarching aim was to share SSEN's ED2 business plan objectives with both existing and non-existing and potential providers of network and non-network solutions; and to understand how, from the supply chain's perspective, the supply chain strategy could be developed in the most effectively and appropriately way.

Following initial feedback gained at our launch event in Nov 2020, where over 100 supply chain organisations attended, at the start of 2021 we received 56 responses to a detailed questionnaire requesting supplier feedback & insights from all categories of supply and linked to our ED2 strategic outcomes. In April 2021 the same >300 suppliers were invited to participate in our supply chain sustainability survey, with 80 responses received and 13 one-to-one sessions completed.

During summer 2021 we held bilateral sessions with several suppliers in order to gather a greater understanding of specific insights they had shared earlier in our engagement programme. The opportunity for supply chain to provide feedback included to SSEN's [Power Our Plan consultation document](#).

The extensive insights gained throughout our engagement programme have directly influenced our proposed investments and ED2 Commercial & Deliverability Strategy including associated tools and systems to make this successful.

We recognise the need to have the organisational capability required to manage and deliver portfolios of work effectively and efficiently and therefore engaged expert consultancy advisory services to develop an improvement roadmap to enhance the effectiveness and efficiency of delivery programme and P3M3 capability to meet the needs of the ED2 Commercial & Deliverability Strategy. Key improvement recommendations included:

- Implementation of centralised Project Management Office and new programme management roles & functions that incorporate effective end-to-end project and programme management practices, processes, and benefits capture.
- Advising the implementation of industry standard good practice, post-contract management systems to better manage in-flight projects and programmes of work, improve supplier payment as well as increased control over scope change and variation.

The expert assessment also found that underpinning all Management Control should be robust and accurate data and information to inform decision making. It was observed that we do not currently have a single source of truth with data being stored on multiple, disparate and at times, inappropriate systems. These findings correspond to the policy paper, Infrastructure Performance: Roadmap to 2030, published by the Infrastructure and Projects Authority.

More details of overall stakeholder engagement are set out in the ***Digital Investment Plan (Annex 5.2)***.

7. Analysis and Cost

Costs for this proposed investment have been developed using a combination of:

- Identification of the requirements associated with the tools & systems required for the implementation of Enterprise Project Portfolio Management (EPPM) / end-to-end capital delivery capabilities; meaning all aspects of project portfolio management being part of the solution and including workflow governance, cost and financial management;
- Based on the above requirements we attained an indicative quotation from Oracle (using Oracle as the indicative solution but this would be determined by a regulated procurement tender) on the costs of licensing and implementation of two key software packages, namely [REDACTED] and [REDACTED], which would offer end-to-end capital delivery capabilities;
- Systems configuration in accordance with the requirements defined by SSEN's Commercial & Deliverability Strategy mobilisation plan and improvement roadmap.
- Resources including for analysis, Project Management, integrations, testing business change etc.

The investment costs have been assessed over a 5-year term due to:

- (i) ensuring alignment with the ED2 regulatory price control period.
- (ii) the likelihood of this term representing a preferential investment in resources, training and commercially.
- (iii) the basis of the Oracle indicative quote representing a 3-year commitment + 2 optional years, which is one of the options they could provide should a future formal procurement exercise materialise.
- (iv) the assumption that any IT system is likely to need some form or upgrade after 5 years of operation (common assumption across all IT projects).

The benefits identified have also been assessed for a 5-year operational period.

7.1 Cost Profile

This project has the following cost profile and is initially presented as follows:

- Primarily as capital investment across the ED2 regulatory price control period.
- The investment in system software using Oracle as the indicative solution (this would be determined by a regulated procurement tender).
- Costs and benefits have been set out in the years they are expected to occur.

In line with CBA guidance, as both options (IT and manual) equate to an increase against ED1 expenditure (to manage the increase in workload due to Flexibility and other Net Zero initiatives), both have been treated as costs with no benefits (hence the negative NPVs). The full build-up of costs is contained in the ED2 IT Investment Plan (Non-Op Capex) Cost Estimate spreadsheet.

	Total £'M	2023/24 £'M	2024/25 £'M	2025/26 £'M	2026/27 £'M	2027/28 £'M
CAPEX	■	■	■	■	-	-
ED2 OPEX	■	-	-	■	■	■
ED2 Benefit	■			■	■	■
5 Year OPEX	■					
5 Year Benefits	■					
NPV 5 Year (Recommended Option)	■					
NPV 45 Year (Recommended Option)	■					
<i>NPV 5 Year (Alternative Option)</i>	■					
<i>NPV 45 Year (Alternative Option)</i>	■					

7.2 Benefits

7.2.1 Financial Benefits

With consideration of expert consultancy advisory services, the investment into the tools and systems required to enable the commercial and deliverability strategy are one of a number of contributing activities to support the ongoing efficiency of 0.5% per annum. This solution is one of systems, processes and people capabilities that will enable us to deliver the efficiencies we are targeting. Without this solution we cannot work in a collaboration with our supply chain to make use of digital technologies to improve productivity, efficiency, and quality. We have below set out some financial benefits that relate to offsetting new resources that would otherwise be required to manage the volume of procurement activities within ED2 if we did not have these facilities. There are also additional financial benefits that we are not able to estimate currently which will also contribute to the overall plan.

The benefits below are shown for the first 5 years after the project is implemented.

	Total	Year 1	Year 2	Year 3	Year 4	Year 5
Currently 42 staff are employed; with the step change increase in ED2 this equates to a need of 27 additional commercial managers. The ED2 business plan asks for 15; and therefore, the difference (12 No. OA16) is avoided headcount and associated activities; NEC3 contract administration completed manually and not recognised best practice. Unable to determine consequential impacts of upstream and downstream contract risk/decision-making. Budget/forecasting de-linked from work schedules, limiting ability to manage over/underspend.	■	■	■	■	■	■
Additional headcount, based on requirements of Major Projects, Connections, SHEPD Customer Operations and Regions (5 Major Projects, 3 Connections, 3 SHEPD Customer Ops and 3 for Regions). This considers our proposed totex phasing and 'ramp-up'. Avoided headcount has been informed by key stakeholders. This element is to offset 13 Admin staff (SS03).	■	■	■	■	■	■
Additional headcount, based on requirements of Major Projects, Connections, SHEPD Customer Operations and Regions (5 Major Projects, 3 Connections, 3 SHEPD Customer Ops and 3 for Regions). This considers our proposed totex phasing and 'ramp-up'. Avoided headcount has been informed by key stakeholders. This element is to offset 5 PM staff (SS04).	■	■	■	■	■	■

7.2.2 Non-Financial Benefits

These include:

- Enabling collaboration and support cultural change.
- Reduce commercial risk through contract compliance

- Simplifying the management of sophisticated contracts
- Reduces commercial risk through improved contract compliance.
- Improved governance audit trail.
- Improved business intelligence critical to managing behaviours and identifying trends.
- Improved accountability and productivity

Note that this project would remove the following risks and inefficiencies:

- Without the right tools and systems to support the Commercial and Deliverability strategy we cannot deploy our strategy and will be limited to transactional relationships without the ability to outturn at the appropriate cost.
- We cannot setup ourselves to become an intelligent and attractive client to work in collaboration with the supply chain and limits our ability to secure the limited resources (plant, labour, materials).
- We risk our ability to manage upstream and downstream contacts (interdependencies) ultimately impacting our ability to deliver and risk net-zero targets.
- Limits the ability of our business to work in a collaborative environment with the supply chain and restricts any transition to future delivery models that have proven benefits.
- Manual workflow management is an outdated practice and any delay on part of anyone involved will delay the contract lifecycle.
- Reduced productivity with the increase in volume delivery, limited process management across the entire lifecycle.
- Challenging to create a single source of truth and data management could result in increased errors.
- Limited opportunity for scalability and agility to respond to future customer needs.
- Manual interface management between inter-dependent contracts.
- Manual commercial, contract and admin of work packages, projects, and programmes.
- Admin staff required to act as document controllers and support contract activities.
- Without schedule and cost being integrated (i.e., understanding consequential impacts) headcount and time required to complete the analysis manually.
- Manually interpretation of P6 schedules (baseline and progress) in pdf format, no ability to check schedule integrity; therefore, having to accepting commercial risk under our contracts.

7.2.2.1 Foundation to other Projects/Initiatives

- ED2 Commercial and Deliverability Strategy.
- ED2 Workforce Strategy.
- ED2 Supply Chain Strategy.
- Ability of other ED2 IT investments to facilitate and/or align with this investment case.

7.3 Key Assumptions

- Single, integrated system is delivered which delivers end-to-end capital delivery management across all P3M3 levers.
- Cultural change due to extent of ED2 C&D transformation programme, is achievable early in the ED2 period and does not require more than 2 years to embed.
- Indicative quote only at this stage, for system investment (■■■■ only at this stage), with regulated procurement tender required to convert assumptions to market pricing.

7.4 High Level Dependencies

Aligned with Key assumptions above, and will also rely on another key project, Work Management 2.

7.5 Deliverability & Risk

Our ***Ensuring Deliverability and a Resilient Workforce (Chapter 16)*** describes our approach to evidencing the deliverability of our overall plan as a package, and its individual components. Testing of our EJPs has prioritised assessment of efficiency and capacity, and this has ensured that we can demonstrate a credible plan to move from SSEN's ED1 performance to our target ED2 efficiency. We have also demonstrated that SSEN's in house and contractor options can, or will through investment or managed change, provide the capacity and skills at the right time, in the right locations. This assessment has been part of the regular assessment of our EJPs, IDPs and BPDs. Our ***Deliverability Strategy (Annex 16.1)*** and ***Supply Chain Strategy (Annex 16.2)*** are included in the Business plan Submission.

Our deliverability testing has identified a major strategic opportunity which is relevant to all EJPs.

- In ED2 SSEN will change the way Capital Expenditure is delivered, maximising synergies within the network to minimise disruptions for our customers. This is particularly relevant for a Price Control period where volumes of work are increasing across all work types.
- The principle is to develop and deliver Programmes of work, manage risk and complexity at Programme level and to develop strategic relationships with our Suppliers and Partners to enable efficiency realisation.

8. Conclusion

This project enables our ED2 Commercial & Deliverability Strategy to be successfully delivered across multiple functions, during a necessary mobilisation period of transformational improvement to establish new way of working.