Discovery

Number	Heading	Appendix?	Template?	Word count
Question 1	Lead Network (not scored)	No	No	n/a
Question 2	Problem statement	Yes	Yes – Investment tab of PMT No - Video	200
Question 3	Innovation justification	No		400
Question 4	Impacts and benefits selection (not scored)	No	No	400
Question 5	Impacts and benefits description	No		400
Question 6	Team and resources	No		400
Question 7	Project management and delivery	Yes	Yes – Key Info, Project Plan, Risk Register tabs of PMT No – Gantt chart	400
Question 8	Key outputs and dissemination	No		400
Question 9	Intellectual Property Rights (IPR) (not scored)	No		400
Question 10	Value for money	No		400

Question 1 – Lead Network (not scored)

You must select the Lead Network, who will be the funding recipient, for this application:

- Cadent Gas Limited (Cadent)
- Electricity North West Limited (ENWL)
- National Grid Electricity Distribution (WMID): West Midlands Plc
- National Grid Electricity Distribution (EMID): East Midlands Plc
- National Grid Electricity Distribution (SWALES): South Wales Plc
- National Grid Electricity Distribution (SWEST): South West Plc
- National Grid Electricity System Operator Limited (NGESO)
- National Grid Electricity Transmission Plc (NGET)
- National Gas Transmission Plc (NGT)
- Northern Gas Networks Limited (NGN)
- Northern Powergrid (Northeast) Plc (NPgN)
- Northern Powergrid (Yorkshire) Plc (NPgY)
- Scottish and Southern Energy Power Distribution (SHEPD): Scottish Hydro Electric Power Distribution Plc
- Scottish and Southern Energy Power Distribution (SSEPD), Southern Electric Power Distribution Plc
- Scotland Gas Networks Plc (SGN)
- Southern Gas Networks Plc (SGN)

- Scottish Hydro Electric (SHE) Transmission Plc
- SP Energy Networks: Distribution Ltd (SPD)
- SP Energy Networks: Manweb Plc (SPMW)
- SP Transmission (SPT)
- UK Power Networks: London Power Networks Plc (LPN)
- UK Power Networks: South Eastern Power Networks Plc (SPN)
- UK Power Networks: Eastern Power Networks Plc (EPN)
- Wales & West Utilities Limited (WWU)

Ouestion 2 – Problem statement

This is a two-part question. Provide a summary of the problem that you want to solve through your project, along with a video lasting no longer than 60 seconds.

In your summary, you must explain:

- the problem identified and how your project will address the identified problem
- how your project meets the primary Innovation Challenge aim and focus area stated
- if applicable, how your project meets other Innovation Challenge aims and focus areas
- the potential users of your innovation and how your project addresses their needs
- what other public or network innovation funded work have you already completed that is relevant or is contributing to this project

You must complete the Investment worksheet in the Project Management template (PMT) to support your answer. The PMT must be downloaded from the link in question 7 and once completed, uploaded as an appendix in response to question 7.

In your video you must summarise:

- the problem you are addressing
- your idea in providing a solution
- the benefits it will bring to customers

You must upload a video to YouTube, provide a link to your video and any passwords to allow access to it, in your answer to this question. You must ensure your video is 'unlisted' in the privacy settings.

If we are unable to view your video or it is not hosted on YouTube, your application will be made ineligible. The video must remain available until [ADD IN DATE]

You can find more information on how to create an unlisted video on YouTube.

If your project is successful in winning funding, Innovate UK will publish your 60 second video as part of the press release for this Phase.

Your submitted video must be:

- suitable for representing your project and company in public
- an acceptable standard for Innovate UK's YouTube channel

Separate guidance on quality standards is available on Sharepoint. If necessary, we may ask you to remake your video to a better standard before publication.

If you are having problems uploading your video to YouTube, you must contact support@iuk.ukri.org at least 10 working days before the competition closes for advice.

This question covers Eligibility Criterion 1: Projects must address the Innovation Challenge set by Ofgem, as outlined in chapter 2 of the SIF Governance Document.

Question 3 – Innovation justification

How does your project demonstrate novel and ambitious innovation in the energy networks? Why is it suitable to be funded by SIF rather than other sources?

You must explain:

- what the core innovative aspects of your project are, including demonstration of the technical understanding relevant to the Project
- how your project activity or output is innovative compared to the most relevant state of the art product, process or service, quantifying this information where possible
- how your project builds on previous research and goes beyond incremental innovation
- the current and estimated technology readiness levels (TRL), integration readiness levels (IRL) and commercial readiness levels (CRL) for your innovation at the end of this current phase
- why the proposed size and scale of your project is the most appropriate to achieve SIF objectives and the relevant Innovation Challenge
- why your project cannot be funded elsewhere within the price control or considered as part of business as usual activities
- what counterfactual solutions and approaches have you considered, including how and why
 you have disregarded alternative approaches

The definitions of TRL, IRL and CRL for the purpose of this competition can be found here.

You can upload relevant supporting documentation in a separate appendix to support your answer. It can include images and diagrams, It must be a PDF, up to two A4 pages long and no larger than 10MB in size. The font must be legible at 100% zoom.

This question covers these Eligibility Criterion, as outlined in chapter 2 of the SIF Governance Document:

- 1: Projects must address the Innovation Challenge set by Ofgem;
- 3: Projects must involve network innovation;
- 5: Projects must be innovative novel and/ or risky

Question 4 – Impacts and benefits selection (not scored)

From the list below. you must identify all applicable SIF specific benefits which your project is looking to deliver against a business-as-usual counterfactual and state them as your response to this question:

- Financial future reductions in the cost of operating the network
- Financial cost savings per annum on energy bills for consumers
- Financial cost savings per annum for users of network services

- Environmental carbon reduction direct CO2 savings per annum
- Environmental carbon reduction indirect CO2 savings per annum
- Revenues improved access to revenues for users of network services
- Revenues creation of new revenue streams
- New to market products
- New to market processes
- New to market services
- Others that are not SIF specific

This question covers Eligibility Criterion 2: Projects must have clearly identified potential to deliver a net benefit to consumers (whomever is paying for the innovation), as outlined in chapter 2 of the SIF Governance Document.

Question 5 – Impacts and benefits description

For all of the SIF benefits identified in question 4, you must:

- describe what the current position (pre-innovation baseline) is, and the metrics that will be used to report on these
- provide an initial forecast of the quantified or qualitied cumulative net benefits to energy consumers to be realised, calculated at a network partner level, should the innovation be implemented into business as usual
- describe, quantify, or qualify any benefits already realised through project delivery

If you have stated 'other' in question 4, you must also describe any other impacts and benefits your project is looking to deliver against a business-as-usual counterfactual, over and above those identified in question 4 (such as social, environmental or wider energy supply resilience benefits).

This question covers Eligibility Criterion 2: Projects must have clearly identified potential to deliver a net benefit to consumers (whomever is paying for the innovation), as outlined in chapter 2 of the <u>SIF</u> Governance Document.

Question 6 – Team and resources

Who is in the project team and what are their roles and responsibilities?

You must explain:

- why you chose your Project Partners and subcontractors, indicating if this is a new or preexisting relationship
- the roles, skills and experience of each Project Partner or subcontractor to deliver their part of the project
- the resources, equipment and facilities needed for the current phase of the project and how you will access them
- the details of any other external parties, network users or consumers who are vital for the successful delivery of the current phase of this project

This question covers Eligibility Criterion 6: Projects must include participation from a range of stakeholders, as outlined in chapter 2 of the <u>SIF Governance Document</u>.

Question 7 – Project management and delivery

How will you manage your project effectively? What is your project plan? What are your milestones? What are the risks associated with your project?

You must explain:

- your approach to Project management, identifying any major tools and mechanisms you will
 use to get a successful and innovative Project outcome
- any links or dependencies between work packages or milestones
- your risk management strategy
- any specific risks in relation to policy and regulatory challenges to deployment, derogations and requests for changes in regulation that the Project is aware of for the Discovery Phase and any future Phases
- any planned or potential unplanned supply interruptions for consumers, the steps the Project
 has taken to avoid or investigate how to avoid supply interruptions, and how the Project will
 ensure consumers have access to the energy services they require
- any interaction or engagement with energy consumers or any impact the Project may have on existing or future energy consumers and their premises

Using the Project Management template (PMT), outline your project approach.

You must download the PMT and complete all the worksheets:

Investment worksheet: to support your answer to question 2

Key Info worksheet: you must add a key contact for each Project Partner and subcontractors, where applicable.

Project Plan worksheet:

- describe the objectives, tasks, milestones and deliverables for each work package of your Project
- indicate which work package is meeting which of the Innovation Challenge aims and focus areas
- indicate the lead partner or subcontractor, where appropriate, and the SIF Funding allocated to each work package
- indicate the relevant success criteria for each stage-gate, milestone and deliverable, where applicable

Risk Register worksheet:

- describe the main risks and uncertainties which may hinder the successful delivery of the Project, such as technical, political, policy, regulatory barriers, potential supply interruptions, commercial, managerial, and environmental factors
- explain how you will mitigate these risks and who will be responsible for the mitigation actions

You must upload the completed Project Management template as an appendix to this question in support of your full application.

The template must be uploaded as an Excel spreadsheet no larger than 10MB in size. The font must be legible at 100% zoom.

You must also upload a Gantt chart as an additional appendix to support your response for this question. It must be a PDF or Excel spreadsheet, up to four A4 pages long and no larger than 10MB in size. The font must be legible at 100% zoom.

This question covers Eligibility Criterion 8: Projects must be well thought through and have a robust methodology so that they are capable of progressing in a timely manner, as outlined in chapter 2 of the SIF Governance Document.

Question 8 – Key outputs and dissemination

What are the expected key outputs of your project and your plan for disseminating them along with any lessons learned?

You must describe:

- what you want to achieve by the end of your projects Discovery Phase
- who within the project team will be responsible for each key output and planned dissemination activity
- how and where you intend to disseminate your key outputs and lessons learned
- how your project will not undermine the development of competitive markets

This question covers Eligibility Criterion 4: Projects must not undermine the development of competitive markets, as outlined in chapter 2 of the SIF Governance Document.

Question 9 – Intellectual Property Rights (IPR) (not scored)

Although a default Intellectual Property Rights (IPR) arrangement is set out in the SIF Governance Document, Ofgem is willing to consider alternative IPR arrangements on a case-by-case basis.

You must state whether you are using the default arrangement or any alternative arrangement as your response to this question.

If applicable, you must set out and justify any proposed alternative IPR arrangements for the Discovery phase.

You can and upload relevant supporting documentation in a separate appendix to support your answer. It must be a PDF, up to four A4 pages long and no larger than 10MB in size. The font must be legible at 100% zoom.

For information on the default Intellectual Property Rights for SIF Projects, see Chapter 9 in the SIF Governance Document.

Question 10 – Value for money

How much will the project cost for the Discovery Phase and how does it represent value for money for the consumer?

You must describe:

- the total Project costs, the amount of SIF funding requested and how the costs and SIF funding for the Project is balanced across the Project partners
- how your Project will meet the minimum 10% compulsory contribution from private funds

- how each Project partner will finance their contributions to the Project
- any subcontractor costs and why they are critical to the Project
- any additional funding coming from other innovation funds
- any use of pre-existing assets or facilities
- any plans for commercialisation of the proposed innovation and how the Project can be moved into business as usual

This question covers Eligibility Criterion 7: Projects must provide value for money and be costed competitively, as outlined in chapter 2 of the <u>SIF Governance Document</u>.