

Interested parties

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## **Consultation on potential changes to the default approach to the Strategic Innovation Fund for Round Two or Three Innovation Challenges, and Information gathering on Round 3 Challenges**

The Strategic Innovation Fund (SIF) is a 5-year £450 million initiative to encourage innovation that will unblock the energy transition. SIF was launched in July 2021 by Ofgem as a RIIO<sup>1</sup>-2 funding mechanism. The SIF focuses on finding and funding ambitious, innovative projects with the potential to accelerate the transition to net zero and delivering net benefits to energy consumers.

Ofgem is the decision-maker in relation to the SIF. To support the SIF's operation, Ofgem partnered with Innovate UK, part of UK Research and Innovation (UKRI). As per the SIF Governance Document<sup>2</sup>, Innovate UK's role is to deliver the SIF in line with the SIF Governance Document, including making recommendations to Ofgem on operational matters.

To date, the SIF has issued two rounds of Innovation Challenges (Round 1<sup>3</sup>, Round 2<sup>4</sup>) that networks and innovator partners have responded to with Applications for funding, with Round 1 Discovery and Alpha completed, and Round 1 Beta and Round 2 Discovery Applications incoming or under review.

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<sup>1</sup> RIIO stands for Revenue = Incentives + Innovation + Outputs

RIIO-2 is the price control period which runs between 2021-2026 for Electricity System Operator, Electricity Transmission, Gas Transmission and Gas Distribution sectors and from 2023 for the Electricity Distribution sector. RIIO-2 is our approach to ensuring that monopoly companies who own and operate our gas and electricity networks have enough revenue to run an efficient network that delivers what customers need.

<sup>2</sup> [Updated SIF Governance Document | Ofgem](#)

<sup>3</sup> [Strategic Innovation Fund - Innovation Challenges | Ofgem](#)

<sup>4</sup> [Strategic Innovation Fund - Round Two Innovation Challenges | Ofgem](#)

We<sup>5</sup> are continually seeking to improve and listen to stakeholder feedback regarding the SIF. Accordingly, this consultation seeks feedback on two issues that have been raised:

*Issue (A)* Potential changes to the default SIF approach of applicants applying initially into a Discovery phase, then later (sequentially) into the Alpha and Beta phases. We are seeking input on the proposal for Projects to apply directly into the Alpha and Beta phases, and, if this provides value, whether this updated process should be introduced for SIF Round 2 or 3.

*Issue (B)* What Round 3 Innovation Challenges should be set by Ofgem for networks and innovators to respond to.

### ***Issue (A) Assessing options for direct access into Alpha Phase and / or Beta Phase***

Ofgem sets the strategic direction on what the SIF will fund by issuing Innovation Challenges, as set out in paragraph 1.8 of the SIF Governance Document<sup>6</sup>.

In an effort to make the funding process less burdensome for innovators, this consultation is an information gathering exercise to inform the assessment of the potential merits of allowing projects to depart from the default three phase approach that is outlined in paragraph 1.10 of the SIF Governance Document<sup>7</sup> (Discovery to Alpha to Beta) for the SIF Round 2, and / or the SIF Round 3. This would involve the assessment of, and potentially the award of funding to Projects to enter Alpha and / or Beta Phase that have not previously completed the prior SIF phase (subsequently referred to as 'direct access' in this consultation).

For Round 1 the Discovery and Alpha Phases have been completed, and we are currently awaiting Beta Phase applications. For Round 2, we issued Innovation Challenges in May 2022<sup>8</sup> and received 65 Applications for the Discovery Phase. We will shortly issue our decisions on these Applications and Projects will begin Discovery Phase work by Spring 2023. These Projects may then apply to receive funding for the Alpha Phase by July 2023.

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<sup>5</sup> The terms the "Authority", "Ofgem", "we", "our" and "us" are used interchangeably in this document. The Authority refers to the Gas and Electricity Markets Authority. Ofgem is the Office of the Gas and Electricity Markets Authority

<sup>6</sup> [Updated SIF Governance Document | Ofgem](#)

<sup>7</sup> [Updated SIF Governance Document | Ofgem](#)

<sup>8</sup> [Strategic Innovation Fund - Round Two Innovation Challenges | Ofgem](#)

Section 1.14 of the SIF Governance Document states the default approach is that all Projects will start at the Discovery Phase, unless it is explicitly stated within the Innovation Challenge that Projects can start at the Alpha Phase or the Beta Phase, or that phases can be combined. The rules set out in the SIF Governance Document therefore allow for a flexible, agile and responsive Project environment, whilst maintaining regulatory certainty and adherence to the established SIF funding principles.

This consultation seeks to investigate and draw out the circumstances where direct access to the Alpha Phase and / or Beta Phase may be appropriate, and under which conditions this model could operate. It also seeks to investigate whether any changes should be incorporated while Round 2 is running (via an update to the Round 2 Innovation Challenges) or implemented as part of the launch of the next Innovation Challenges (Round 3).

We are issuing this consultation in response to stakeholder and applicant feedback<sup>9</sup> that there are some Projects that have already received funding through alternative mechanisms (such as the Network Innovation Allowance, Network Innovation Competition and other innovation funding programmes) to undertake feasibility type studies, similar to what would be done in the Discovery Phase. Allowing direct access into Alpha Phase and / or Beta Phase may help to avoid duplication of work, improve efficiency, and provide nearer-term commercialisation opportunities by allowing existing Projects that are ready to move into experimental development and / or solution deployment to do so using SIF funding.

If such an approach was incorporated in Round 2 and / or Round 3, to receive funding, applicants would be required to demonstrate that the previous work they have completed (for example in a Network Innovation Allowance (NIA) Project) is to a sufficient level for them to move directly to the Alpha and / or Beta phases of SIF. In assessing whether sufficient development work has been successfully completed prior to applying to the SIF, we will apply the framework outlined for Alpha and Beta Applications in Table 2 and Table 3 of the SIF Governance<sup>10</sup> Document, and may also consider the dimensions that are outlined in 1.15-1.17 of the SIF Governance detailing the expected outputs of each funding Phase, including but not limited to:

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<sup>9</sup> See e.g. responses to our 2022 [consultation on modification of the RIIO-2 Strategic Innovation Fund Governance Document | Ofgem](#), and responses to our 2022 consultation on our [RIIO-ED2 Draft Determinations](#).

<sup>10</sup> [Updated SIF Governance Document | Ofgem](#)

- a) whether the problem to be solved and value in solving the problem have been clearly defined.
- b) whether an understanding has been reached on what energy consumers and network users need from the innovation.
- c) whether constraints on the proposed solution and options to resolve these have been identified.
- d) how far testing of the solution(s) to the problem has progressed.
- e) the extent to which the riskiest assumptions have been tested.
- f) the steps required before solution is ready for demonstration and deployment.

We are considering limiting the number of Projects that go through to Alpha Phase and / or Beta Phase via direct access to ensure manageability of Application numbers and to ensure the value of the Discovery Phase continues to be utilised. For example, we may limit the number of Applications per licensee, and / or to Projects that meet certain criteria. These criteria could include, for example, having completed previous development and testing work funded by specific funding mechanisms such as the NIA or the Network Innovation Competition (NIC), and these could be assessed on a case-by-case basis.

As noted in Paragraph 8 above, additional requirements may be placed on direct access applications into the Alpha or Beta Phase of the SIF. We expect that such requirements would be published either in an updated Innovation Challenge document if direct access is introduced in Round 2, or in the Round 3 Innovation Challenge document if direct access is introduced for Round 3, and could include but may not be limited to:

- a) Registration link on the Smarter Networks Portal, [ENA Innovation Portal \(energynetworks.org\)](https://www.energynetworks.org)
- b) Library of deliverables (including technical reports)
- c) Overview of previous finances / costs (such as distribution and allocation between partners)
- d) Detailed closedown report
- e) Details of dissemination activities
- f) Demonstration of value for money

- g) Information indicating what the impact of your Project will be and what benefits it will deliver, to the standard of a Discovery/Alpha end of phase report as minimum.

### **Consultation questions**

#### *Eligibility requirements*

1. In general, what benefits could be gained from allowing SIF Applications to apply directly for Alpha or Beta Phase funding (rather than allowing only Projects to apply that have completed SIF Discovery Phase). Conversely, what could be disadvantages of allowing this?
2. Specifically for Round 2 where Applications for the Discovery Phase have already been submitted and assessed, what are your views on allowing direct access to Alpha or Beta Phase funding? Should direct access be limited to certain funding sources? For instance:
  - i. only for Projects that have completed previous development and testing through NIA and / or NIC Projects and / or
  - ii. Projects that have received other funding which can demonstrate similar activities required of a Discovery Phase Project e.g. funding governmental bodies such as DESNZ (Department for Energy Security and Net Zero).
3. What would be appropriate mechanisms for previously non-network led Projects to find and secure a lead network partner if this process was opened up to other types of funding?
4. Would the imposition of a qualifying time period be reasonable (for example, restricting direct access to Projects which have concluded in the last 2 years)? What do you think would be an acceptable qualifying time limit to impose, and why?

#### *Anticipated Application numbers*

5. Under a direct access model, should there be a limit on the number of Projects that have not completed a previous SIF Discovery and, or Alpha Phase that are awarded funding? Should there be a limit on the total number of Applications of this type that each network licensee may submit? Or should there be no limits at all? Please provide justification for your reasoning.
6. For network companies only: if direct access was enabled for Round 3, approximately how many Alpha Phase and Beta Phase Applications would you anticipate submitting?

7. For network companies only: if direct access was enabled for Round 2, approximately how many additional Alpha Phase and / or Beta Phase Applications would you anticipate submitting in each phase respectively (over and above Projects you are planning will complete round 2 Discovery Phase)?
8. For network companies only: would direct access to the Alpha Phase and / or Beta Phase in future Innovation Challenges impact the number of Discovery Phase Applications submitted by your network?

#### *General*

9. Are there any specific considerations relating to the proposed direct access to Alpha Phase/ or Beta Phase which need to be taken into account?

#### ***Issue B) Information gathering exercise to understand industry perspectives on what types of solutions SIF Round 3 should fund***

The SIF will help us meet our 2035 decarbonisation milestones to reduce emissions by 78%. We want to spend this money wisely and impactfully, funding those innovations that will bring about the biggest change. To do this, Ofgem sets the strategic direction (using Innovation Challenges) for what the SIF will fund.

In May 2021, Ofgem published its Innovation Vision, which informs markets about where Ofgem has identified the need for significant innovation.<sup>11</sup> It highlights priority areas needed to achieve the multi-vector transition to net zero across power, heat and transport. The Innovation Vision covers a vast space across the energy landscape and Ofgem's strategic change programmes, with the SIF Innovation Challenges addressing some of these areas.

The key underlying principles established to secure consensus and to prioritise SIF Innovation Challenges in Round 2<sup>12</sup> were:

- Strategic: innovations are required to meet national and devolved net zero targets effectively
- Network relevant: innovation needs and solutions that can be taken forward or materially supported by energy networks

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<sup>11</sup> <https://www.ofgem.gov.uk/publications-and-updates/ofgem-innovation-vision-2021-2025>

<sup>12</sup> [Strategic Innovation Fund - Round Two Innovation Challenges | Ofgem](#)

- Timely: the challenge should focus on problem areas where solutions can be scaled up to meet the requisite net zero targets and commitments
- Scope: the scope of innovation challenge being additional and or complimentary to other UK innovation programmes

So far, we have issued two rounds of Innovation Challenges for the SIF. This consultation is looking to ensure that for Round 3 funding we identify more granular problems to which innovators can develop cost effective and scalable solutions. The most recent Round 2 Innovation Challenges are:

- Supporting a just energy transition
- Preparing for a net zero power system
- Improving energy system resilience and robustness
- Accelerating decarbonization of major energy demands

While these are broad statements there are detailed issues and problems behind each<sup>13</sup>. For Round 3, we are looking for more specific, high-impact problems that we should seek solutions for. As an example of a more granular problem / challenge, it seems that solving low power system inertia is one of the defining challenges facing a net zero power system. Is this too granular or is this the right level of detail that will directly signal to innovators a clear problem that is today blocking a net zero system?

### ***Consultation questions***

- 1) What are other similarly granular and transformational net zero challenges demanding innovative solutions on energy networks?

### ***Next steps***

Issue (A) We will use these responses to assess whether to allow flexibility in the default process (of Discovery-Alpha-Beta) for the Round 2 or Round 3 Challenges, and what form this flexibility will take. We expect that changes would take the form of amendment to previously issued Innovation Challenges, or would be incorporated into the Round 3 Innovation Challenges that we will issue later this year.

Issue (B) With regards to the SIF Challenge setting we will utilise these responses to develop the Round 3 Innovation Challenges.

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<sup>13</sup> [Strategic Innovation Fund - Round Two Innovation Challenges | Ofgem](#)

Stakeholders are invited to respond to this consultation no later than 5pm on 4 April 2023. All responses to this consultation should be sent to [networks.innovation@ofgem.gov.uk](mailto:networks.innovation@ofgem.gov.uk), [SIF\\_ofgem@iuk.ukri.org](mailto:SIF_ofgem@iuk.ukri.org) and [luke.blackaby@ofgem.gov.uk](mailto:luke.blackaby@ofgem.gov.uk).

We also ask that any network licensee without views or comments on our proposals to provide confirmation of receipt and their nil response to the email addresses above by the consultation close.

The annex to this letter details our approach to handling consultation responses and explains that respondents can request their response (in full or in part), be kept confidential.

Subject to our consideration of stakeholder responses to the consultation questions, we will publish an update in the Spring of 2023 (alongside non-confidential responses to this consultation).

Yours sincerely,

**Marzia Zafar**  
**Deputy Director for Strategy & Decarbonisation**  
**For and on behalf of the Authority**



## **Annex: Your response, data and confidentiality**

We want to hear from anyone interested in this consultation. Please send your response to the person or team named on this document's front page.

We've asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.

We will publish non-confidential responses on our website at [www.ofgem.gov.uk/consultations](http://www.ofgem.gov.uk/consultations).

### **Your response, data and confidentiality**

You can ask us to keep your response, or parts of your response, confidential. We'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.

If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you do wish to be kept confidential and those that you do not wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we'll get in touch with you to discuss which parts of the information in your response should be kept confidential, and which can be published. We might ask for reasons why.

If the information you give in your response contains personal data under the General Data Protection Regulation (Regulation (EU) 2016/679) as retained in domestic law following the UK's withdrawal from the European Union ("UK GDPR"), the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see Appendix 4.

If you wish to respond confidentially, we'll keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We won't

link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

#### General feedback

We believe that consultation is at the heart of good policy development. We welcome any comments about how we've run this consultation. We'd also like to get your answers to these questions:

1. Do you have any comments about the overall process of this consultation?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Were its conclusions balanced?
5. Did it make reasoned recommendations for improvement?
6. Any further comments?

Please send any general feedback comments to [stakeholders@ofgem.gov.uk](mailto:stakeholders@ofgem.gov.uk)