

This document contains the guidance and scoring used by the Assessors when reviewing your application. Assessors will review your answers for each scored question and mark each of them between 1 and 10 (1 being the lowest and 10 being the highest).

Any questions that are not scored will not be reviewed by the Assessors.

Question 1: Applicant location (not scored)

Your answer can be up to 400 words long.

You must state the name and full registered address of your organisation and any partners working on the project. You must specify if any test bed partners are participating in your project. We are collecting this information to understand the geographical location of all applicants.

Question 2: Animal Testing (not scored)

Should ideally be Q2, but must definitely align with IFS

Will your project involve any trials with animals or animal testing?

You must select one option:

- Yes
- No

We will only support innovation projects conducted to the highest standards of animal welfare.

Further information for proposals involving animal testing is available at the [UKRI Good Research Hub](#) and [NC3R's animal welfare guidance](#).

Question 3: Need or challenge

What is the business need, technological challenge or market opportunity behind your innovation?

Explain:

- the environmental monitoring, need, technological challenge or market opportunity identified
- why your proposed solution will be in demand from end users
- how your solution would deliver significant improvements on existing sensing systems and capabilities, improving sustainability, connectivity, data collection, analysis, reporting and cost-savings
- how your project will help industry transition towards net zero emissions, and support environmental outcomes
- how your solution could be integrated into existing systems, and any specific features that allow its use by non-experts
- the wider economic, social, environmental, cultural or political challenges which are influential in creating the opportunity, such as incoming regulations

Question 3: Assessor guidance and scoring

Scores 9 - 10

There is a compelling need, opportunity or challenge for the project. The applicant has provided insightful evidence that the need or challenge is a critical issue for environmental monitoring and why there will be demand from end users. The applicant has clearly demonstrated how the project output could deliver significant improvements on existing sensing systems and capabilities while also helping rapidly transition towards net zero emissions and other environmental benefits. The solution will significantly improve one or more factors of sustainability, connectivity, data collection, analysis, reporting and cost savings while easily integrating into existing systems. There are significant wider factors identified as driving this opportunity.

Scores 7 - 8

There is a good need, opportunity or challenge for the project. The applicant has shown the need or challenge is a major issue for environmental monitoring and end users. The applicant has demonstrated how the project output could result in large

improvements on existing sensing systems and capabilities while helping the transition towards net zero emissions or other environmental benefits. The solution could largely result in improvements to one or more factors of sustainability, connectivity, data collection, analysis, reporting and cost savings while integrating well into existing systems. The wider factors influencing this opportunity have been identified.

Scores 5 - 6

The project's need, opportunity or challenge is good and it is a common issue for environmental monitoring and end users. The applicant has demonstrated how the project output could result in moderate improvements on existing sensing systems and capabilities. The solution could result in some improvement to one or more factors of sustainability, connectivity, data collection, analysis, reporting and cost savings while integrating into existing systems. There is mention of supporting environmental outcomes and how this links to helping the industry transition towards net zero. However, there is a lack of or mention of the wider factors influencing this opportunity.

Scores 3 - 4

The need, challenge or opportunity is poorly defined or it is a minor issue for environmental monitoring.

The project output could make minor improvements on existing sensing systems and capabilities. There is no mention of how the solution could result in some improvement to one or more factors of sustainability, connectivity, data collection, analysis, reporting and cost savings, or about integrating into existing systems.

References to supporting the transition to net zero or the wider factors influencing this opportunity are very limited or are not relevant.

Scores 1 - 2

The need, challenge or opportunity is a peripheral and minor issue for environmental monitoring.

The project outputs will have negligible impact on existing sensing systems and capabilities, and there is no mention on how this would improve upon sustainability, connectivity, data collection, analysis, reporting or cost savings. There is also no mention about of integrating into existing systems. References to supporting net zero transitions or wider factors influencing this opportunity are not offered or are not relevant.

Question 4: Approach and innovation

What approach will you take and where will the focus of the innovation be?

Explain:

- the approach or innovation and how will it address the identified problem, need or challenge
- how your solution will improve on existing approaches to sensor systems or capabilities in one or more of the priority areas
- the technological maturity of your solution at the start and expected at the end of the project
- whether the solution will focus on existing technologies in new areas, the development of new technologies for existing areas, or be a totally disruptive approach
- how the solution fits with your current product, service lines or offerings.
- the nature of the outputs you expect from the project, for example reports, demonstrator, know-how, new process, product or service design, and how these will help you to target the need, challenge or opportunity identified
- why the test site is suitable to test your solution, including how it fits with your target market, if you are working with a test site partner,
- how your project will demonstrate the solution's output in the appropriate relevant environment if you are not working with a test site partner

You can submit one appendix to support your answer. It can include diagrams and charts explaining how your solution is the best approach to meet your selected challenge. It must be a PDF, up to 2 A4 pages long and no larger than 10MB in size. The font must be legible at 100% zoom.

Question 4: Assessor guidance and scoring

Scores 9 - 10

The approach and innovation are well defined and address the need, challenge or opportunity identified in Q3. The focus of the innovation is commercially or technically significant and will make a significant contribution to improve existing approaches to sensor systems or capabilities for the areas defined in the scope. It is clear where the project will be focused on (technology or area).

Solid and clear evidence is presented to substantiate the level of innovation at the start and expected by the end of the project. The nature of the project outputs are clear and very well aligned to address the need or challenge identified, and will complement existing technologies or systems.

As appropriate, the applicant has clearly shown how they will validate the solution either through testing with the relevant test site partner for their target market, or through demonstration in the most relevant environment.

Scores 7 - 8

The approach and innovation is defined and satisfactorily addresses the need, challenge or opportunity identified in Q3. The innovation is good from a technical or commercial perspective and the evidence provided indicates it will contribute well to improve existing approaches to sensor systems or capabilities for the areas defined in the scope. The nature of the outputs are appropriate to addressing the need or challenge identified, and are likely to complement existing technologies or systems. The level of expected innovation at the start and expected by the end of the project is outlined.

As appropriate, the applicant has shown how they will validate the solution either through testing with the relevant test site partner for their target market, or through demonstration in the most relevant environment.

Scores 5 - 6

The approach is moderately defined and may address the need, challenge or opportunity identified in Q3.

The innovation focus is plausible and shows a link to improvements in competitiveness or productivity, as well as contribute to improving existing approaches to sensor systems or capabilities for the areas defined in the scope. Moderate evidence is presented to substantiate the level of innovation expected at the start and end of the project. The nature of the outputs may complement existing technologies and help target the need or challenge identified.

As appropriate, the applicant has referenced how they will validate the solution either through testing with the test site partner, or through demonstration, however these are not clear or relevant for their target market.

Scores 3 - 4

The approach and innovation is poorly defined with an unconvincing link to the need or challenge identified in Q3. Improvement in competitiveness or productivity is not very convincing. The nature of the outputs are not clear or are inadequate to address need or

challenge to support improvements to sensor systems or capabilities. There is little mention of the expected level innovation at the start or end of the project.

The applicant has referenced in little detail how they will validate the solution either through testing with the test site partner, or through demonstration. It is also not clear if these are relevant to the approach or addressing the challenge.

Scores 1 - 2

The approach and innovation is not well defined or inconsistent with the need or challenge identified in Q3. There is no identification of how this will improve approaches to sensor systems or capabilities. The outputs are not relevant for addressing the need or challenge identified.

There is no mention to the expected level of innovation during this project.

There is no mention of how the applicant is expecting to validate their solution or mention of test-site partners or environments.

Question 5: Team and resources

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

Explain:

- the roles, skills and experience of all members of the project team that are relevant to the approach you will be taking
- the resources, equipment and facilities needed for the project and how you will access them
- how existing and new users of environmental monitoring sensors and systems will be engaged in the development and testing of your solution
- the details of any vital external parties, including subcontractors, who you will need to work with to successfully carry out the project
- the current relationships between project partners and how these will change as a result of the project
- any roles you will need to recruit for

You can submit one appendix. This can include a short summary of the main people working on the project to support your answer. It must be a PDF, up to 4 A4 pages long and no larger than 10MB in size. The font must be legible at 100% zoom.

Question 5: Assessor guidance and scoring

Scores 9 - 10

Given the approach described in Q4, the consortium is well placed to carry out the project and exploit the results. There is a clear and convincing plan to obtain all the resources, equipment and facilities they will need, including access to external parties where project skills are inadequate. There is strong evidence that the consortium will work well. Detailed roles and plans of engaging with the end-users of environmental monitoring sensors and systems throughout the project are clearly stated.

Scores 7 - 8

Given the approach described in Q4, the consortium is suitable to carry out the project and exploit the results. There is a clear plan to obtain all the resources, equipment, and facilities they will need. There is a plan of including external parties where project team skills are inadequate. The consortium is likely to work well. Plans for engaging with the end-users of environmental monitoring sensors and systems are satisfactory.

Scores 5 - 6

The consortium has most, but not all, of the required skills and experience required. Plans of including external parties where project team skills are inadequate are not clear. It is unclear whether the consortium will work well together or not. Plans for engaging with the end-users of environmental monitoring sensors and systems are limited.

Scores 3 - 4

There are significant gaps in the consortium with little or no information about how these will be filled. There may be some partners with little relevance to the project activities. Plans for engaging with the end-users of environmental monitoring sensors and systems are weak.

Scores 1 – 2

The applicant or consortium will not be capable of either carrying out the project or exploiting the results. There are no plans to engage with the end-users of environmental monitoring sensors and systems during the project.

Question 6: Market awareness

What does the market you are targeting look like?

Describe:

- the target markets for the project outcomes, any other potential markets, either domestic, international or both
- the size of the target markets for the project outcomes, backed up by references where available
- your target customers or end users, the level of demand expected from end users, the value of the solution to them, and why they would use or buy your product or service
- the structure and dynamics of the target markets, together with predicted growth rates within clear timeframes
- the target markets' main supply or value chains and business models

If your project is highly innovative, where the market may be unexplored, describe or explain:

- what the market's size might be
- how your project will try to explore the market's potential

Question 6: Assessor guidance and scoring

Scores 9 - 10

The target market size, drivers and dynamics are fully quantified and evidenced. There is a detailed and convincing description of target customers or end users, the demand and the value proposition of the output to them. The applicant provides highly credible information on the market structure with a justified and realistic estimate of the expected market share.

Scores 7 - 8

There is a good awareness of the target market's drivers and dynamics. The market size is quantified with some evidence. There is a clear description of target customers or end users, the demand and the value proposition of the output to them. The applicant has provided valid information on the market structure and a realistic estimate of the expected market share.

Scores 5 - 6

The general market size and dynamics are understood but the addressable market is poorly quantified. There is a broad overview of target customers or end users, the demand and the value proposition of the output to them. The applicant has provided moderate information on the market structure and a broad estimate of the expected market share.

Scores 3 - 4

Some information about the general market is offered but the extent of the addressable market for the project is not described. There is a vague description of target customers or end users, the demand, and the value proposition of the output to them. The applicant has provided limited information on the market structure and an unrealistic estimate of the expected market share.

Scores 1 - 2

The market is poorly defined or is irrelevant to the motivations of the project. There is no description of target customers or end users, the demand and the value proposition of the output to them. The applicant has not provided any information on the market structure or the expected market share.

Question 7: Outcomes and route to market

How are you going to grow your business and increase long term productivity as a result of the project?

Explain:

- your current position in the markets and supply or value chains outlined, and whether you will be extending or establishing your market position

- your route to market for your solution
- how you are going to profit from the innovation, including increased revenues or cost reduction
- how the solution will affect your productivity and growth, in both the short and the long term
- how you will protect and exploit the outputs of the project, for example, through know-how, patenting, or designs or changes to your business model

If there is any research organisation activity in the project, describe:

- your plans to spread the project's research outputs over a reasonable timescale
- how you expect to use the results generated from the project in further research activities

Question 7: Assessor guidance & scoring

Scores 9 - 10

There is a detailed and highly credible plan of how to take the outcomes of the project forward. The routes to market and how profit, productivity and growth will increase are clearly explained and evidenced. The project has a highly relevant business model and a clear understanding of routes to adoption.

The exploitation or dissemination of the main project outputs is evidenced and the research organisations have convincingly shown how they would use the results generated.

Scores 7 - 8

There is a clear and credible plan of how to take the outcomes of the project forward. The routes to market and how profit, productivity and growth will increase are identified with evidence. The project has a clear business model and understanding of routes to adoption. Research organisations have described with evidence how they would use the results generated.

Scores 5 - 6

There is an adequate outline of how to take the outcomes of the project forward. The routes to market and how profit, productivity and growth will increase is identified but little evidence is presented. The project has a satisfactory business model and understanding of routes to adoption. Research organisations have provided some evidence of how they would use the results generated.

Scores 3 - 4

There is a limited discussion of how to take the outcomes of the project forward. The routes to market and how profit, productivity and growth will increase are not identified. The project appears to have little understanding of routes to adoption. Research organisations have provided little information on how they would use the results generated.

Scores 1 - 2

The applicant provides little or no information about the route to market, adoption and business model. Research organisations have provided no information on how they would use the results generated.

Question 8: Competitors and barriers

Who else is operating in this space and what barriers limit your ability to exploit your project output?

Explain:

- the freedom you have to operate
- the process you have completed to evaluate the work of competitors including those near market, or in development
- how does your proposal build on, or differentiate from competitor offerings
- what regulatory, cultural or other barriers exist, both in the UK and internationally that prevent you from fully exploiting this opportunity, where applicable

Question 8: Assessor guidance and scoring

Scores 9 - 10

There is a detailed understanding of competitor activity and the strengths and weaknesses of competing products in the market. Detailed and credible descriptions of how the outputs of the project are significantly different from competitor offerings are included. Where applicable, there is a crisp and detailed awareness of the barriers, both in the UK and internationally, that may prevent the applicant from exploiting this opportunity.

Scores 7 - 8

There is a good understanding of competitor activity and the strengths and weaknesses of competing products in the market. Comprehensive descriptions of how the outputs of the project are significantly different from competitors' offerings are evidenced. Where applicable, there is a good level of awareness of the barriers, both in the UK and internationally, that may prevent the applicant from exploiting this opportunity.

Scores 5 - 6

There is a basic understanding of competitor activity and the strengths and weaknesses of competing products in the market. Some description of how the outputs of the project are significantly different from competitor offerings are presented. Where applicable, there is a moderate level of awareness of the barriers, both in the UK and internationally that may prevent the applicant from exploiting this opportunity.

Scores 3 - 4

There is a lack of basic understanding of competitor activity and the strengths and weaknesses of competing products in the market. Applicants have provided limited information on how the outputs of the project are significantly different from competitors' offerings. Where applicable, there is very little awareness of the barriers, both in the UK and internationally, that may prevent the applicant from exploiting this opportunity.

Scores 1 - 2

There is no understanding of competitor activity and the strengths or weaknesses of competing products in the market. Applicants have provided no descriptions of how the outputs of the project differ from competitors' offerings. Where applicable, there is no mention of the barriers, both in the UK and internationally, that may prevent the applicant from exploiting this opportunity.

Question 9: Wider impacts

What impact might this project have outside the project team?

Describe and, where possible, measure:

- the environmental, sustainability and resilience benefits from the project to external parties, for example, contributing to net-zero targets for emissions, halting biodiversity loss, or reduction of waste
- any other expected impact on government priorities or legal obligations, such as Environment Act 2021 targets or statutory monitoring requirements
- the economic benefits from the solution to external parties, such as productivity increases and import substitution at a regional or national scale
- the long-term social and welfare impacts from the project
- how you have determined that the solution will not widen any social inequalities, including any negative environmental impacts that you have identified, and how you will mitigate against these

Question 9: Assessor guidance and scoring

Scores 9 - 10

The project has a strong environmental, sustainability and resilience benefit to the wider sector. The expected economic and environmental impacts, as well as impact to government priorities or legal obligations are considered and described with compelling evidence to justify claims. Any possible negative impacts are addressed and fully mitigated where appropriate. The positive impact on others outside of the team, such as net-zero targets for emissions, halting biodiversity loss, and reduction of waste, is clearly understood, realistic and of significantly positive social, economic and environmental impact in the long term

Scores 7 - 8

The project has a clear environmental, sustainability and resilience benefit to the sector. There is good awareness and description of the expected long-term economic, social, and environmental impacts the project may have on external parties. Other expected impacts to government priorities or legal obligations are well reasoned. Any possible negative impacts are partially mitigated where appropriate.

Scores 5 - 6

The project has a satisfactory environmental, sustainability and resilience benefit to the sector. There is basic awareness of the economic, social and environmental impacts the project could have on others outside the project. Other expected impacts to government priorities or legal obligations are mentioned. Little mitigation is offered where there may be negative impacts.

Scores 3 - 4

The applicant provides limited information about environmental, sustainability and resilience benefit to the sector but significant gaps remain. Impacts to external parties, to government priorities or legal obligations are vaguely or not considered. There is little consideration for possible negative impacts and where appropriate, no mitigations are considered.

Scores 1 - 2

There is no information about the environmental, sustainability and resilience benefit to the sector. No information is provided about how the project might impact on external parties or the project may have negative or detrimental impacts upon the sector.

Question 10: Project management

How will you manage the project effectively?

Explain:

- the main work packages of the project, indicating the lead partner assigned to each and the total cost of each one
- your approach to project management, identifying any major tools and mechanisms you will use to get a successful and innovative project outcome
- the management reporting lines
- your project plan in enough detail to identify any links or dependencies between work packages or milestones

You must submit a project plan or Gantt chart as an appendix to support your answer. It must be a PDF, can be up to 2 A4 pages long and no larger than 10MB in size. The font must be legible at 100% zoom.

Question 10: Assessor guidance and scoring

Scores 9 - 10

The project work packages are outlined with the research category, lead partner and total cost provided for each one. The approach to project management is described. The plan is designed to meet the objectives of the project in a realistic and efficient way. Any links or dependencies between work packages or milestones are identified.

Scores 7 - 8

The project work packages are outlined with the research category, lead partner and total cost provided for each one. The approach to project management is stated. The plan seems appropriate to the project objectives. Any links or dependencies between work packages or milestones are identified.

Scores 5 - 6

The project work packages are outlined but there are some details missing. The plan seems reasonable but not tailored to the objectives of the project.

Scores 3 - 4

The plan has serious deficiencies or major missing aspects. The plan has little chance of meeting the objectives of the project.

Scores 1 - 2

The plan is totally unrealistic or fails to meet the objectives of the project.

Question 11: Risks

What are the main risks for this project?

Explain:

- the main risks and uncertainties of the project, including the technical, commercial, managerial and environmental risks

- how you will mitigate these risks
- any project inputs that are critical to completion, such as resources, expertise and data sets
- any output likely to be subject to regulatory requirements, certification, ethical issues and other requirements identified, and how you will manage this

You must submit a risk register as an appendix to support your answer. It must be a PDF and can be up to 2 A4 pages long and no larger than 10MB in size. The font must be legible at 100% zoom.

Question 11: Assessor guidance and scoring

Scores 9 - 10

The key risks and uncertainties of the project are considered and mitigated. Critical inputs to the project are identified. Relevant constraints or conditions on the project outputs, such as regulatory requirements, certification or ethical issues, are identified. The risk analysis is appropriate and professional.

Scores 7 - 8

The key risks and uncertainties of the project are considered with appropriate mitigations. Relevant constraints or conditions on the project outputs are identified.

Scores 5 - 6

Most major risks have been identified, but there are some gaps or the mitigation and management is insufficient to properly control the risks.

Scores 3 - 4

The risk analysis is poor or misses major areas of risk. The mitigation and management is poor.

Scores 1 - 2

The risk analysis is superficial with minimal mitigation or management suggested.

Question 12: Added value

How will this public funding help you to accelerate or enhance your approach to developing your project towards commercialisation? What impact would this award have on the organisations involved?

Explain:

- what advantages public funding would offer your project, for example, appeal to investors, more partners, reduced risk or a faster route to market.
- the likely impact of the project outcomes on the organisations involved
- what other routes of investment or means of support you have already approached and why they were not suitable
- how any existing or potential investment or support will be used in conjunction with the grant funding
- what your project would look like without public funding
- how this project would change the R&D activities of all the organisations involved

Question 12: Assessor guidance and scoring

Scores 9 - 10

There is a compelling case for the positive difference funding will make. Alternative sources of support are described with an explanation of why they are discounted or used in conjunction with the grant funding. The project will significantly increase the industrial partners' R&D spend during the project and afterwards

Scores 7 - 8

The arguments for public funding are good and justified. The project will significantly increase the industrial partners' commitment to R&D.

Scores 5 - 6

The public funding arguments are acceptable, but the difference made by the grant will be modest. The project will improve the industrial partners' commitment to R&D.

Scores 3 - 4

The funding arguments are poor or not sufficiently justified. There is not likely to be any improvement to the industrial partner's commitment to R&D.

Scores 1 - 2

There is no justification for public funding and no reason why the applicant should not fund the work.

Question 13: Costs and value for money

How much will the project cost and how does it represent value for money for the team and the taxpayer?

In terms of your project goals, explain:

- your total project costs
- the grant you are requesting
- how each partner will finance their contributions to your project
- how this project represents value for money for you and the taxpayer
- how it compares to what you would spend your money on otherwise
- the balance of costs and grant across the project partners
- any subcontractor costs and why they are critical to your project

Question 13: Assessor guidance and scoring

Scores 9 - 10

The project costs are entirely appropriate and represent excellent value for money compared to alternative approaches outlined, including doing nothing. The partners have a clear idea of how they will finance their contribution. The balance of costs and grants between partners, and use of subcontractors, is justified and reasonable for the proposed project.

Scores 7 - 8

The project costs are appropriate and should be sufficient to successfully complete the project. The balance of costs and grants between partners, and use of subcontractors, seems reasonable. The project represents good value for money compared to alternative outlined approaches, including doing nothing.

Scores 5 - 6

The project costs seem ok but the justifications are not clear. The balance of costs and grants between partners is acceptable. Little information is offered about alternative approaches and the value for money this project offers.

Scores 3 - 4

The project costs seem too high or too low given the proposed project. The split of costs and grants between partners is unbalanced, or inappropriate use is being made of subcontractors.

Scores 1 - 2

The costs are not appropriate or justified. The balance between partners and subcontractors is not justified.