

CRACK IT

CRACK IT Mega Challenges Guide for Participants

Contents

CRACK IT Challenges programme overview	2
Section 1: CRACK IT Mega Challenges	3
1.1 Overview.....	3
Table 1: Mega Challenges competition overview	4
1.2 Eligibility criteria.....	5
1.3 How to apply.....	5
Table 2: Phase specific considerations.....	7
Summary of the application process *	10
1.4 CRACK IT Challenges application form	11
Table 3: Summary of attachments	15
1.5 Assessment procedures	15
1.5.1 The Review Panel.....	15
Table 4: Review Panel scoring criteria.....	16
1.5.2 The Challenge Panel.....	16
Table 5: Challenge Panel scoring criteria	17
1.6 Award process.....	17
1.6.1 Phase 1 awards	17
1.6.2 Phase 2 awards	18
1.6.3 Phase 3 awards	19
1.7 Post award information.....	19
1.7.1 Intellectual property.....	19
1.7.2 Project management.....	20
1.7.3 Reporting, publication and dissemination	20
Table 6: Researchfish reporting requirements.....	21

CRACK IT Challenges programme overview

[CRACK IT Challenges](#) is an open innovation, challenge-led, funding competition. Challenges are developed by Sponsors from industry, academia and the charitable sector in collaboration with the NC3Rs and put forward to all industries and academia for solving. Successful applicants receive funding from the NC3Rs and/or Sponsors along with in-kind support from the Sponsors (for example, data, compounds, equipment).

Section 1: CRACK IT Mega Challenges

1.1 Overview

The CRACK IT Challenges competition consists of three challenge-led schemes:

- [CRACK IT Mega Challenges](#) are similar to Two Phase Challenges but on a larger scale, requiring additional investment and time for completion. Mega Challenges have three Phases with Phase three being awarded subject to successful delivery of Phase 2.
- [CRACK IT Two Phase Challenges](#) require a significant amount of funding and may include research, development and validation of new technologies, prototypes and methods.
- [CRACK IT Single Phase Challenges](#) require less research and lower development costs compared to Two Phase Challenges and primarily focus on the validation of new technologies, prototypes and methods that are closer to market.

This document provides a comprehensive guide for participants of the **CRACK IT Mega Challenges** competition.

	Mega Challenge
Budget	Up to £2.6 million*
Duration	Up to five years

*Inclusive of VAT/EU reverse charges. The specific budget and duration of each Challenge can be found in the Challenge briefs.

Defining the Challenges

The Challenges are developed jointly by the NC3Rs and the Sponsors. CRACK IT Challenges are identified with Sponsors either through an open call or through office-led initiatives. Challenges can come from Sponsors from industry, academia or the charitable sector. Sponsors provide in-kind contributions (e.g. access to data, compounds, expertise etc.) and/or co-funding to help solve the Challenge.

The [CRACK IT Advisory Panel](#) assess potential Challenges, taking into consideration external reviewer comments, and recommends to the NC3Rs which Challenges to run as competitions. An invitation to tender and brief for each Challenge is published on the [NC3Rs Innovation Platform](#) explaining the overall aims of the Challenge and the key deliverables.

The naming of the Sponsor(s) in the Challenge brief does not commit them legally to provide support; however, the expectation is that such support will be forthcoming for applications of very high quality. Sponsors should only participate with this intention in mind.

For further information on current Challenges, deadlines for submission and other important dates, please visit the [NC3Rs Innovation Platform](#).

Building Teams to Solve the Challenges

The NC3Rs hosts a launch event to provide networking opportunities for potential applicants to meet new partners and the Sponsors so they can explore the scope of the Challenge and build the strongest possible team. Applicants are strongly encouraged to attend the launch event. Sponsors of each Challenge hold a surgery at the launch event and frequently asked questions (FAQs) from the surgeries are published on the [NC3Rs Innovation Platform](#) after the event. A recording of the launch event can be viewed on the NC3Rs Innovation Platform Challenge pages.

The NC3Rs will facilitate interactions between applicants and Sponsors following the launch event.

Table 1: Mega Challenges competition overview

Sponsor-led	Defining the Challenges
	<p>CRACK IT Challenges are developed jointly by the NC3Rs and the Sponsors. The CRACK IT Advisory Panel assess potential Challenges, and recommends to the NC3Rs which Challenges to run as competitions. An invitation to tender and brief for each Challenge is published on the NC3Rs Innovation Platform explaining the overall aims of the Challenge and the key deliverables.</p>
Applicant-led	Building teams to solve the Challenge
	<p>The NC3Rs provides networking opportunities for potential applicants to identify new partners to build the strongest possible team, and to meet the Sponsors so they can explore the scope of the Challenge.</p>
	Application and review process
	<p>CRACK IT Mega Challenges: This is a three-phase application process:</p> <ul style="list-style-type: none"> ▪ Phase 1 supports proof-of-concept studies for up to nine months, with proposals assessed by a Review Panel. ▪ At the end of Phase 1, a Challenge Panel recommends which single project to support in Phase 2 to address the full Challenge requirements, following a ‘Dragons’ Den’ style interview. Entry into Phase 2 is dependent upon successful completion of Phase 1. ▪ Phase 3 supports finalising R&D, early validation, iterative testing and small-scale deployment of the technology developed to potential end-users. Entry into Phase 3 is dependent upon successful completion of Phase 2 and assessment by the Challenge Panel.
Applicant & Sponsor-led	Agreements and awards
	<p>Prior to award, the successful applicant’s organisation signs an agreement with the NC3Rs. The NC3Rs will have an agreement with the Sponsor(s) and/or co-funder(s). An agreement is also recommended between the contractor (successful applicant) and the Sponsor(s).</p>
	Project management
	<p>Agreements are milestone-driven with regular Project Management Team meetings to ensure milestones are on schedule and to manage risks. The release of funds for Phases 2 and 3 is dependent upon the achievement of milestones.</p>
	End of Challenge
	<p>CRACK IT Advisory Panel meeting: All CRACK IT contractors funded to deliver the whole Challenge will be invited to meet with the CRACK IT Advisory Panel no earlier than six (6) months before and no later than six (6) months after their contract with the NC3Rs expires.</p>

1.2 Eligibility criteria

Applicant eligibility	<p>CRACK IT Challenges are run using the Small Business Research Initiative (SBRI) process which is supported by Innovate UK.</p> <p>The competition is open to:</p> <ul style="list-style-type: none">▪ Any UK or European Union (EU) body, public or private.▪ Applications can be made from single organisations/investigators or from consortia.▪ The lead applicant must be UK or EU-based. <p>Please note: Phase 3 (and Phase 2 if feasible) Contracts are expected to be signed with commercial enterprises as lead contractors and not academic institutions. Academic institutions can be sub-contractors.</p> <p>Applicants may already hold a grant or contract from the NC3Rs and other funding bodies for research related to the topic for which new funds are being sought and should provide details of all relevant research funding, including that from industry, in their application.</p>
Sponsor eligibility	<p>Challenges can come from Sponsors from industry, academia or the charitable sector.</p> <p>It is preferable but not essential that each Challenge has more than one Sponsor. Challenges should generally have broad relevance across the relevant industrial or academic sector.</p> <p>There is no restriction on where the Sponsor's contributory work is carried out. For practical reasons and for ease of project management, the UK/EU is preferred, but a case should be made for work outside the UK/EU if this is critical to the success of the project.</p>

Independence

A typical project consists of at least two legal entities: one or more Sponsors and one contractor.

The legal entity receiving funding (the contractor), for example an SME, must be independent from legal entities providing financial or in-kind support. Independence can be defined to mean that neither legal entity is under the direct or indirect control of the other. Control can take the form of directly or indirectly holding a majority of the nominal value of the issued share capital in the legal entity concerned, or a majority of the voting rights of the shareholders or associates of the entity, or directly or indirectly holding decision making powers in the entity, whether in fact or in law.

1.3 How to apply

Applicants to the CRACK IT Challenges competition are required to submit an application form which can be downloaded from the [NC3Rs Innovation Platform](#). [Section 1.4](#) provides guidance on completing the application form and should be read in conjunction with the Invitation to Tender prior to submission.

Lead applicants are expected, before submitting applications, to have discussed their proposal with their organisation or any other body whose co-operation will be required in the conduct of the project, including sub-contractors.

By submitting the application, applicants are confirming that the information given in the application is complete, that they are actively engaged in the project and responsible for its overall management and agree to administer the award if made.

General Guidance for all applications

- Applications for CRACK IT Challenges must be made using the application form and guidance available on the NC3Rs Innovation Platform. Completed applications must be sent by email to crackitenquiries@nc3rs.org.uk. All applications are treated in confidence.
- Application forms and attachments must be submitted as PDF files.
- Failure to complete mandatory fields on the application form and to submit all required attachment types with an application may result in the rejection/return of the application.
- Where there is more than one organisation involved in the proposal, the application must be submitted by an agreed lead applicant and all other organisations listed as sub-contractors.
- The application form should be completed using a font size no smaller than 10pt (Arial) and text limits must not be exceeded.
- The use of acronyms should be kept to a minimum.
- If an applicant wishes to submit more than one application to the competition, they must contact the NC3Rs, via email crackitenquiries@nc3rs.org.uk before the competition deadline.
- Specific considerations to be taken into account for each Phase can be found in [Table 2](#).

Attachments

Supporting information can be provided in the form of attachments as indicated within this guidance and the application form. Attachments must:

- Be submitted as separate PDF files.
- Be named appropriately and indicate the application form section number to which they refer e.g. Section 5 Additional Information/Diagrams.
- Not be added or pasted within the application form.
- Be completed using a font size no smaller than 10pt (Arial).

Only provide attachments as specified in the application form and in this guidance. Any additional materials or documentation submitted will not be considered and may result in your application being rejected/returned.

Table 2: Phase specific considerations

Phase 1	<p>Phase 1 application forms should be completed and submitted via email to crackitenquiries@nc3rs.org.uk. The deadline for application submission is 12pm (noon) GMT, 28 October 2021.</p> <p>Applicants may be able to demonstrate that they have already proven the feasibility of their idea in meeting Phase 1 deliverables. In this case, applicants should nevertheless apply for Phase 1, setting out:</p> <ul style="list-style-type: none">▪ How they have already achieved the Phase 1 deliverables▪ Plans for tackling the Challenge as a whole, but without requesting funding for Phase 1 <p>Applications are considered by the Review Panel, with successful applicants invited to participate in the subsequent Phase 2 competition. Applicants must be able to start the Phase 1 project no later than 31 January 2022. Incorrect start dates may result in applications being rejected/returned.</p>
End of Phase 1: Proof-of-concept report	<p>All awardees of Phase 1 funding are required to submit a proof-of-concept report and final expenditure statement (FES), regardless of whether they wish to continue to Phase 2, describing:</p> <ul style="list-style-type: none">▪ How they have met the Phase 1 deliverables▪ Detailed plans for addressing the Phase 2 deliverables set out in the Challenge brief <p>Failure to provide a proof-of-concept report, demonstrating the work undertaken, may result in the Phase 1 funding being rescinded.</p> <p>The report template and FES will be sent to all Phase 1 awardees at least six (6) weeks before the Phase 2 application deadline as part of the Phase 2 application pack.</p>

Phase 2

A Phase 2 application pack will be sent to all Phase 1 awardees at least six (6) weeks before the Phase 2 application deadline. The Phase 2 application pack includes:

- Phase 2 application form
- Phase 1 award letter containing Review Panel feedback. Any feedback provided by the Review Panel should be addressed in the application for Phase 2
- Challenge Panel guidance for applicants
- PowerPoint presentation template
- Proof-of-concept report template
- Final Expenditure Statement (FES) template
- Challenge brief

Phase 2 application forms should be completed and submitted via email to crackitenquiries@nc3rs.org.uk before **12pm (noon) BST, 16 June 2022**.

The lead applicant for Phase 2 is encouraged to be a commercial entity and not an academic institution.

Successful Phase 2 applicants must start the project no later than 31 January 2023. Incorrect start dates may result in applications being rejected/returned.

Phase 3

A Phase 3 application pack will be sent to Phase 2 awardees at least six (6) weeks before the Phase 3 application deadline. The Phase 3 application pack includes:

- Phase 3 application form
- Challenge Panel guidance for applicants
- PowerPoint presentation template
- Phase 2 report template
- Final Expenditure Statement (FES) template
- Challenge brief

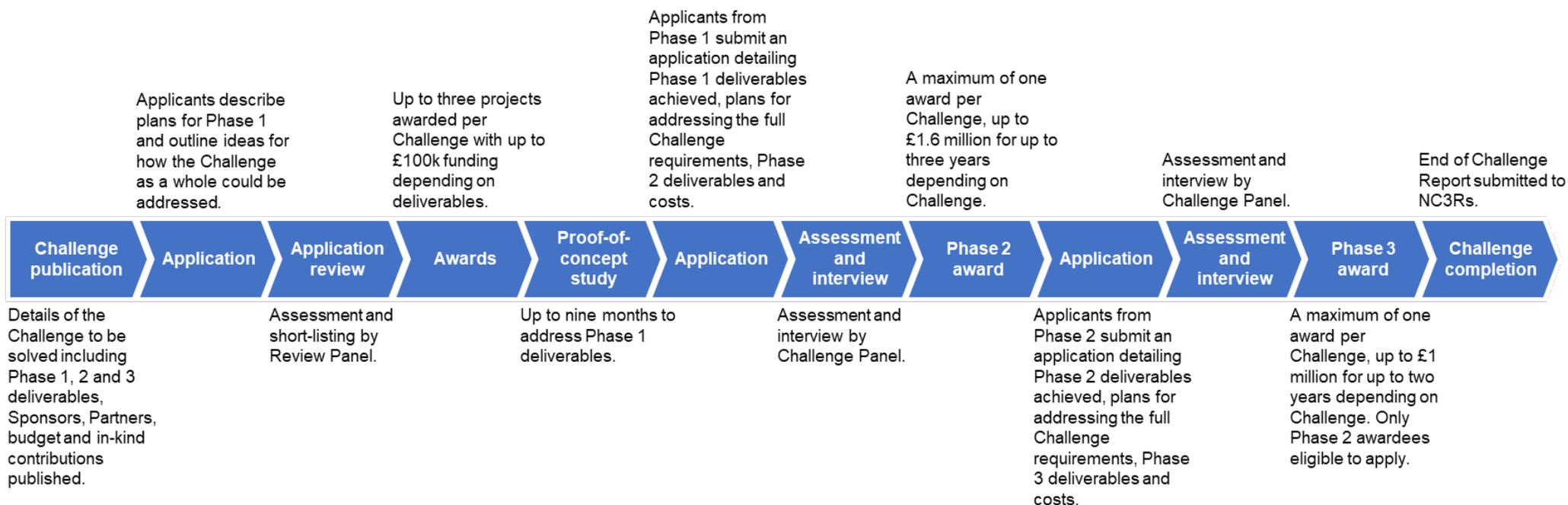
Phase 3 application forms should be completed and submitted via email to crackitenquiries@nc3rs.org.uk. Deadlines will be provided during Phase 2.

The lead applicant for Phase 3 is expected to be a commercial entity and not an academic institution.

Questions about the application process should be addressed directly to the NC3Rs via email crackitenquiries@nc3rs.org.uk

The NC3Rs reserves the right to amend the application process.

Summary of the application process *



*The NC3Rs reserves the right to amend the application process.

1.4 CRACK IT Challenges application form

This section contains guidance on how to complete the application forms for Phase 1 and Phase 2. Application forms and guidance for Phase 3 will be released subject to progress in Phase 2. Sub-sections are numbered as they appear in the application form.

1. Application

Project Title: Please provide your own title for the project. This should be both clearly descriptive and concise. It should contain keywords relevant to the project.

Project Duration: As specified in the Challenge brief.

Total Cost (£s): Proposed projects can request up to the maximum total cost, inclusive of VAT/EU reverse charges, which is specified in the Challenge brief. Requests for more than this sum will be rejected.

For applications from organisations based outside of the United Kingdom, please note that a European Union (EU) reverse charge of VAT will be applied to your award. This will be charged at 20% and will need to be taken into consideration when costing your application, as the maximum amount that will be paid out inclusive of VAT and EU Reverse Charges will not exceed the total amount offered for the Challenge.

Challenge Number: if multiple Challenges are listed, please select the number of the Challenge for which you wish to apply from the drop-down menu.

Proposed Start Date: Please refer to the specific guidance for each Phase.

2. Details of Lead Applicant Organisation

Please include the name of the company/organisation of the lead applicant, and other details as requested on the application form.

- If the application is being made from an academic institution, please select 'Other' from the Business Sector drop down menu.

3. Contact Details

Please provide the lead applicant's name, company/organisation name, position etc.

4. Abstract for Publication

Please describe the proposed project in simple terms suitable for a lay audience.

Please note - the NC3Rs publishes abstracts from its funded contracts on the NC3Rs website to demonstrate the potential impact of its funded research. Applicants are responsible for ensuring that any confidential information, or information that might be considered controversial or sensitive, is not included within the abstract.

5. Description of Proposed Idea/ technology

Describe clearly how your proposed idea or technology will deliver the outcomes as outlined in the Challenge brief, avoiding the use of unnecessary technical jargon.

- For **Phase 1** applications, please provide a general overview on your approach to addressing the Challenge as a whole;
- For **Phase 1**, please also provide your approach to addressing Phase 1 deliverables (section 5b);

- **Phase 2** applications should take account of what has been achieved in Phase 1.

Associated attachment (optional): Additional pictures or diagrams

Phase 1: maximum two sides of A4 for each sub-section, 5a and 5b.

Phase 2: maximum two sides of A4.

6. Scientific/Technical Project Summary

Please provide a structured summary of the scientific and technical basis of the project. This should detail the approach to be taken, including what is innovative, and the key deliverables. Include details of the research and development that will be done in order to demonstrate the scientific merit of the project. Describe the key scientific and technical challenges of the project and how they will be overcome, including consideration of alternative and risk management strategies. In this section refer, where necessary, to the resources required as in-kind contribution from the Sponsor(s).

Associated attachment (mandatory for Phase 2):

End of Phase 1 proof-of-concept report for which a template will be provided.

7. Current State of the Art and Intellectual Property (IP)

Describe the current state of the art and any competing or alternative strategies. Explain the benefits of your proposed approach to the Challenge. Include details of any other existing IP and its significance to your freedom to operate. Include details of your own background IP and any restrictions this may impose on the dissemination and exploitation of the project findings.

- **Proposed Arrangements for IP:** Please provide an indication of how any IP, which might arise during the project, would be handled i.e., the proposed arrangements for ownership, exploitation and dissemination.

8. Project Plan and Methodology

The project plan should identify the major packages of work, with well-defined milestones and key deliverables. The key scientific lead for each milestone should be listed.

Please include plans for commercialisation of the results of the project.

- **Project Management:** Identify the project management processes that you will use to ensure that milestones are achieved in a timely manner. In addition, please provide details of identified risks and mitigation strategies and plans for interaction with the Sponsors.

For **Phase 2** applications, milestones must be at six (6) monthly intervals for the duration of the project. Include in the resource requirements section, details of the in-kind contributions that will be needed from the Sponsor(s). The emphasis throughout should be on practicality – we are seeking evidence that the technology works, can be made into a viable solution to the Challenge and can achieve the proposed benefits.

Associated attachment (mandatory for all applications)

Additional milestones/Gantt chart (maximum two sides of A4).

9. Scientific/Technical Team and Expertise

Provide a detailed description of the skills, expertise and track record of the team, including those of any sub-contractors. Indicate the relevant knowledge and skills of each member and the proportion of their time that will be spent on the project. Relevant commercial and management expertise should also be included.

Associated attachment (mandatory for all applications):

CVs of **up to five** principal team members may be combined and included as a separate attachment (maximum of one side of A4 per team member).

10. Application Finances

CRACK IT contracts are non-Full Economic Costing (FEC) and as such, applicants can apply for 100% directly incurred and indirect costs. Please provide a summary of the overall costs for the whole project, inclusive of VAT/EU Reverse Charges, as appropriate.

CRACK IT is contract research (**not a grant**) for research and development services to solve the Challenge.

For UK-based lead applicants

CRACK IT awards are subject to VAT at UK standard rates (20%) where applicable. **It is the responsibility of the lead applicant to determine whether VAT should be paid; if VAT should be paid, the total amount including VAT should not exceed that offered for the Challenge.**

For EU-based lead applicants

For applications from organisations based outside of the United Kingdom, please note that a **European Union (EU) reverse charge of VAT** will be applied to your award. This will be charged at 20% and will need to be taken into consideration when costing your application, as the maximum amount that will be paid out, inclusive of the EU Reverse Charge of VAT, will not exceed the total amount offered for the Challenge.

In addition, please detail the model used to calculate costs and provide justification for (i) the model used and (ii) the resources required to undertake the proposed project.

Please note: Review and Challenge Panels are required to judge requested resources in terms of value for money i.e., does the proposed cost for effort and deliverables reflect a fair market price. The costs should cover the following, as applicable:

Direct Costs

These are costs that are specific to the project, including:

- Labour costs for all those contributing to the project broken down by individual
- Material costs (including consumables specific to the project)
- Capital equipment costs
- Travel and subsistence
- Other costs specifically attributed to the project (e.g. costs associated with protection of IP)

Indirect Costs

Indirect costs should be charged in proportion to the amount of effort deployed on the project.

Applicants should calculate them, using their own cost rates, and may include:

- General office and basic laboratory consumables
- Library services/learning resources
- Administrative support

- Finance, personnel, public relations and departmental services
- Central and distributed computing
- Cost of capital employed
- Overheads
- Publications and Open Access publishing (for non-academic and non-UK based applicants)

Itemisation of costs and methods of calculation may be requested to support the application at a later date.

Please note - The NC3Rs will not cover applicants travel costs to the Challenge Panel.

Associated attachment (mandatory for all applications):

If the proposal involves sub-contractors, applicants must provide a breakdown of the costs for each contributing organisation. This should be in the same table format as in Section 10 of the application form and combined in one PDF document.

Payment Schedule: For **Phase 1**, costs will be paid on receipt of the signed contractor agreement. **Phase 2** funding is released quarterly and is dependent on the achievement of milestones.

Funding from other public and private bodies: Please provide details of other funding - both public and private, for related work, including the source and the amount.

IMPORTANT: Please note, for the first payment of Phase 2, the amount requested must not exceed 10% (inclusive of VAT) of the total award value.

11. Plans for dissemination and commercialisation of Challenge product

The Challenge brief outlines that the CRACK IT Challenges competition is designed to support the development of new 3Rs technologies and approaches, which will improve business processes and/or lead to new marketable products. Please include a plan for commercialisation and dissemination of the Challenge product.

12. 3Rs Impact Assessment

The Challenge brief outlines the potential 3Rs benefits arising from the successful completion of the project. Please provide your own assessment of the 3Rs impact of the work, including quantitative estimates of the numbers of animals affected wherever possible.

13. Declaration

The lead applicant is expected to have discussed the application within their own organisation and with any other body whose co-operation will be required to deliver the project. The lead applicant will need to obtain consent from an authorised officer or appropriate signatory at their company/organisation who will sign the agreement if successful. The agreement is a legally binding document and subject to the outcome of this competition. By submitting the application, you are confirming that the information given, in the application, is complete and that you are actively engaged in the project and responsible for its overall management and agree to administer the award if made. You are also confirming that you have read and understood the relevant explanatory materials including the Invitation to Tender and this Guide for Participants.

Please note: The application cannot be accepted without the Declaration section being completed.

Table 3: Summary of attachments

Application form section	Attachment name	Page limit (sides of A4)	Application stage applicable*
Section 5(a)	Additional information/diagrams	2	P1, P2
Section 5(b)	Additional information/diagrams	2	P1 only
Section 6	End of Phase 1 proof-of-concept report	Template provided	P2 only
Section 8	Additional milestones/ Gantt chart	2	P1, P2
Section 9	CV	1 per team member (5 in total)	P1, P2
Section 10	Subcontractor costings	1 table per contributing organisation	P1, P2

*P1 = Phase 1, P2 = Phase 2,

1.5 Assessment procedures

1.5.1 The Review Panel

The evaluation of applications for **Phase 1** is undertaken by a Review Panel.

The **Phase 1** Review Panel:

- Assesses Phase 1 applications and recommends up to three of the most promising applications to carry out the Phase 1 proof-of-concept stage.
- Phase 1 applicants will receive feedback from the Review Panel and awards will be made to the successful applicants' organisations subject to signing a non-negotiable [Phase 1 contractor agreement](#) with the NC3Rs.

The lead applicants are informed by email of the decision of the Review Panel approximately one week after the Panel meeting. The Review Panel's decision is final and not open to appeal.

The Review Panel and Chair are appointed for each Challenge by the NC3Rs and consists of experts from academia and industry with the appropriate business development experience. Each Panel also includes a representative(s) from the Challenge Sponsors and where appropriate, Challenge Partners. Members of the Review Panels may also participate in the Challenge Panels.

Membership of the Review Panels is published on the [NC3Rs Innovation Platform](#).

Table 4: Review Panel scoring criteria

Phase 1 Review Panel
<ul style="list-style-type: none">▪ Quality of the science and technological innovation▪ How the proposal will meet Phase 1 deliverables▪ Expertise and track record of the team▪ Value for money▪ Plans for solving the Challenge as a whole▪ Interpretation of the 3Rs impact▪ Plans for dissemination and commercialisation of Challenge Product▪ Sponsor interaction and collaborative potential

1.5.2 The Challenge Panel

The evaluation of **Phase 2 applications** is undertaken by a Challenge Panel, run in a ‘Dragons’ Den’ style.

The **Phase 2** Challenge Panel:

- Discusses the results of the Phase 1 stage, judges the progress against the Phase 1 key deliverables, assesses and questions applicants on their proposals to:
 - Solve Phase 2 deliverables as outlined in the Challenge Brief.
 - Plans to deliver Phase 3 if Phase 2 is successful.
 - Address the feedback provided by the Review Panel.
- The Challenge Panel recommends up to one Phase 2 award per Challenge with funding of up to £1.6 million for up to three years, depending on the Challenge.

Presentations to the Challenge Panel are made by **no more than two speakers**, one of whom must be the lead applicant. A presentation template and guidance will be provided in advance of the deadline. A maximum of six additional team members are welcome to also attend the interview to answer the Panel’s questions.

Up to one award will be made per Challenge. If none of the applications provide adequate evidence of their ability to meet the criteria and deliver the Challenge, then no award will be made. The lead applicant will be informed by email of the decision of the Challenge Panel approximately one week after the presentation. The Challenge Panel’s decision is final and is not open to appeal.

The NC3Rs will not cover costs associated with travel to the Challenge Panel interviews.

The Challenge Panel and Chair are appointed for each Challenge by the NC3Rs and includes the Sponsors and independent experts. The members of the Challenge Panel who represent the Sponsors should consult within their companies to ascertain their level of commitment and come to the meeting with delegated authority to make decisions on funding or in-kind contributions. In the event that Challenge Sponsors are unable to agree on which applications to support, the NC3Rs may decide that it is more appropriate for each Sponsor to fund its preferred application directly without the financial involvement of the NC3Rs. Such decisions are agreed on a case-by-case basis between the Sponsors and the NC3Rs.

Membership of the Challenge Panels is published on the [NC3Rs Innovation Platform](#).

Table 5: Challenge Panel scoring criteria

Challenge Panel to assess Phase 2 Applications
<ul style="list-style-type: none">▪ Completion of Phase 1 deliverables and response to Review Panel feedback for Phase 1▪ Ability to deliver what is stated in the Phase 2 application, including deliverables as outlined in the Challenge brief▪ Plans to deliver Phase 3 if Phase 2 is successful.▪ Originality and level of technological innovation of the proposal▪ Motivation to drive and manage the project, risk mitigation and delivery of milestones▪ Strength of the team▪ Interpretation of the 3Rs impact▪ Plans for dissemination and commercialisation of Challenge Product▪ Sponsor interaction and collaborative potential▪ Value for money

Panel Terms of Appointment, Code of Conduct and Conflicts of Interest

Members of the Review and Challenge Panels are expected to abide by the principles set out in the [Code of practice for members of Council and MRC boards](#). On appointment to the Panel, members are required to complete a declaration of interests form and sign a confidentiality agreement. A list of Panel members, their affiliated organisations and completed declarations of interest forms are published on the [NC3Rs Innovation Platform](#).

1.6 Award process

Awards are made to the successful applicant's organisation, who then administers the award, subject to them signing a non-negotiable agreement with the NC3Rs (Phase 1 and Phase 2 contractor agreements can be found on the [NC3Rs Innovation Platform](#)).

For successful applications, involving more than one organisation, the lead applicant (contractor) must agree to manage the award from the NC3Rs on behalf of the other organisations (the sub-contractors). Sub-contractors negotiate their agreements with the contractor directly.

Furthermore, should they be successful, applicants should be able to demonstrate that they have a team in place ready to start working on the project on receipt of the agreement.

Contracts are expected to be finalised and signed within **two weeks** of receipt.

The NC3Rs leads the awards' announcements via the [NC3Rs Innovation Platform](#). Award holders may be required to participate in media-related activities regarding the announcements.

1.6.1 Phase 1 awards

Awards made following the Review Panel are subject to the terms outlined in the [Phase 1 contractor agreement](#), including the deadline for Phase 2 applications. Where in-kind contributions are required, it may be necessary for the applicant and Sponsor to sign an agreement before starting the proof-of-concept study.

Phase 1 awardees are expected to start work on receipt of the agreement and no later than **31 January 2022** as the deadline for Phase 2 applications, 16 September 2022, will not be extended.

Full payment of the total amount specified in the agreed payment section will be released on receipt of a signed copy of the contract.

1.6.2 Phase 2 awards

Phase 2 awards are made to the successful applicant's organisation subject to them signing a non-negotiable agreement with the NC3Rs. The NC3Rs also has an agreement with the Challenge Sponsor(s) and/or co-funder(s). A further agreement between the successful applicant's organisation and the Sponsor is also recommended.

- **Phase 2** work should commence promptly and no later than 31 January 2023. Failure to comply will result in the award being rescinded

To allow for the purchase of equipment etc., and to ensure rapid commencement of work, the first payment can be up to 10% of the total award amount. Thereafter funding is released quarterly and is dependent upon the achievement of milestones, as defined in the agreement between the successful applicant's organisation and the NC3Rs. Payments will begin on receipt of a signed copy of the contract.

Important information

The Terms and Conditions for all CRACK IT awards are set out in the agreement between the NC3Rs and the successful applicant (Contractor Agreement) and the agreement between the NC3Rs and the Sponsor(s) and/or co-funder(s).

Contractor Agreements are available to download from the [NC3Rs Innovation Platform](#). Applicants are strongly advised to read the agreements prior to applying. The NC3Rs will have an agreement with the Sponsors and/or co-funder(s) and an agreement is also recommended between the successful applicant and the Sponsor(s).

Agreements:

- Agreements between the NC3Rs and the Challenge winners take the form of standard contract research agreements from the NC3Rs.
- These agreements are intended to protect and benefit both the NC3Rs and the Challenge winners to ensure the effective delivery of the research.
- Agreements are standard across all Challenges and they are non-negotiable. The NC3Rs will not amend these agreements.
- Agreements between the Sponsor, Partners and the Challenge winners should be made at their discretion. This can range from a Confidential Disclosure Agreement (CDA) or a Material Transfer Agreement (MTA) to a full contract.

Sponsors

Sponsorship normally takes the form of in-kind contributions. Although no formal estimation of the value of the in-kind contribution or auditing of the work done is undertaken, the NC3Rs expects Sponsors to act in good faith in providing an in-kind contribution that adds significant value to the financial contribution of the NC3Rs and is complementary to the research undertaken by the academic/SME partner(s).

A list of the in-kind contributions is included within the Challenge brief. These might include data, data processing, clinical materials, human and animal cells and tissues, access to equipment, complementary in-house experiments, hosting of investigators etc.,

- Sponsors do not normally provide in-kind contributions to applicants awarded **Phase 1** funding. In some circumstances, however, depending on the Challenge, in-kind contributions may be necessary. In these cases, an agreement is recommended between the Sponsor(s) and the applicant.
- For **Phase 2** and **Phase 3** awards the list of in-kind contributions forms part of the agreement between the NC3Rs and the Sponsor(s).

Partners

Partners collaborate with the NC3Rs and provide additional resources to help winners solve the Challenge. Access to the Partner's resources is provided by the NC3Rs and shall align with what is described in the Challenge Brief. **Phase 1** and **Phase 2** awardees may be required to sign appropriate agreements with Partners to access additional resources.

1.6.3 Phase 3 awards

Phase 3 awards are made to the successful applicant's organisation subject to them signing a non-negotiable agreement with the NC3Rs. The NC3Rs also has an agreement with the Challenge Sponsor(s) and/or co-funder(s). A further agreement between the successful applicant's organisation and the Sponsor is also recommended.

Please note: Phase 3 agreements are expected to be signed with commercial entities and not academic institutions.

Further details on Phase 3 awards, contract and administration will be provided during Phase 2.

1.7 Post award information

1.7.1 Intellectual property

Intellectual property (IP) developed within the project is the property of the contractor (Challenge winner) and its sub-contractors, as described in the agreement between the NC3Rs and the contractor. One recipient of NC3Rs funding should be nominated as the IP manager for the project. The NC3Rs does not provide a model agreement but suggests as a default that IP arising from the research should be jointly owned by the contractor and its sub-contractors in equal shares. Failing this, they should agree among themselves on the ownership of IP, for example, by adapting one of the [Lambert Agreements](#). Further details on IP can be found in the agreement between the NC3Rs and the contractor.

Although the NC3Rs is not a joint owner of any IP arising from a project, it is a condition of funding from the NC3Rs that work furthering the 3Rs must be made available to the rest of the bioscience sector. The protection of IP through filing of patents should therefore be pursued without unreasonable delay, and access by third parties to 3Rs benefits must be provided through publication and dissemination, or by appropriate licences, royalty-free or royalty-bearing on fair and reasonable terms. The exact arrangements are detailed in the agreement between the NC3Rs and the contractor.

Sponsors, Partners and/or co-funder(s) are also not joint owners of any IP arising from a project. Sponsors benefit from early access to any new technology during the term of the project. Access beyond the project duration can be through granting of royalty-free licences or through favourable pricing for an agreed period.

Any expectations of the Sponsors and/or co-funder(s) in this respect are detailed in the Challenge briefs and included in the contract between the NC3Rs and the Sponsor(s) and/or co-funder(s). The Sponsor(s) and/or co-funder(s) and the contractor are required to sign a separate agreement detailing the arrangements for access to IP arising from the project and any other matters that are necessary for the project to proceed.

1.7.2 Project management

Phase 1 project management

The contractor is responsible for managing the Phase 1 award and ensuring that sufficient resources are allocated to the study to meet Phase 1 deliverables. They are also responsible for completing the end of **Phase 1 proof-of-concept report** and **final expenditure statement (FES)** within the agreed timeframe.

Phase 2 and Phase 3 project management

The NC3Rs requires the establishment of a Project Management Team whose members include representatives of the contractor, its sub-contractor(s) and the Sponsors. The Chair of the Project Management Team should be the lead representative of the contractor and acts as the liaison with the NC3Rs. The responsibilities of the Chair are described in the agreement between the NC3Rs and the contractor.

The Project Management Team is responsible for ensuring key deliverables are met within agreed timeframes. The Project Management Team should meet quarterly during the award period. The minutes from the Project Management Team meetings are required by the NC3Rs.

Typically, a representative from the NC3Rs will attend the introductory meeting and a minimum of every six (6) monthly Project Management meeting thereafter unless otherwise agreed.

1.7.3 Reporting, publication and dissemination

Reporting

All **Phase 1** awardees are required to submit a proof-of-concept report and a final expenditure statement (FES) as part of the Phase 2 application or within three months of the Phase 1 completion/termination date if not applying for Phase 2. Templates for both will be provided as part of the Phase 2 application pack.

All **Phase 2** awardees are required to submit a Phase 2 report and a FES within three (3) months of the completion/termination date. The Phase 2 report should describe the work undertaken, the achievements and outcomes of the project and details of how the project advanced the 3Rs. The report template, FES and additional guidance will be sent to all awardees six (6) weeks before the completion date.

All **Phase 3** awardees are required to submit a Phase 3 report and a FES within three (3) months of the completion/termination date. The Phase 3 report should describe the work undertaken, the achievements and outcomes of the project and details of how the project advanced the 3Rs. The report template, FES and additional guidance will be sent to all awardees six (6) weeks before the completion date.

Failure to provide the requested report and FES, within the specified timeframe, may result in funding being rescinded. It is the responsibility of the contractor to manage the funds awarded responsibly and any additional costs incurred above the total amount awarded will not be reimbursed.

CRACK IT Advisory Panel meeting

All CRACK IT Phase 3 contractors will be invited to meet with the CRACK IT Advisory Panel no earlier than six (6) months before and no later than six (6) months after their contract with the NC3Rs expires.

The purpose of the meeting with the CRACK IT Advisory Panel is to update the NC3Rs on progress made in addressing the original Challenge brief and for the Panel to provide tailored advice on next steps, including commercialisation.

The original CRACK IT Challenge Sponsors and the NC3Rs representative on the Project Management Team are encouraged to participate in the meeting with the CRACK IT Advisory Panel.

Table 6: Researchfish reporting requirements

Who	<ul style="list-style-type: none"> ▪ Compliance with Researchfish reporting is a requirement for every CRACK IT Contractor. ▪ The lead contractor is ultimately responsible for ensuring their Researchfish record is up to date.
When	<p>Contractors can, and should, submit information to Researchfish all year round and after the contract has ended:</p> <ul style="list-style-type: none"> ▪ Phase 1: for at least one (1) year ▪ Phase 2: for at least five (5) years ▪ Phase 3: for at least five (5) years <p>In line with the Research Councils, the NC3Rs also has an annual collection period.</p> <p>There is also a requirement to update Researchfish when your contract is coming to an end.</p>
What	<ul style="list-style-type: none"> ▪ Details of all outputs, outcomes and impacts, when available, arising from the contract. ▪ Particularly, complete the sections on Publications and Replacement, Reduction and Refinement.
Why	<ul style="list-style-type: none"> ▪ Researchfish is one method by which we monitor progress on contracts. Contractors who do not report into Researchfish when requested to do so, or use the system inappropriately, may become ineligible to apply for additional awards from the NC3Rs (and potentially the Research Councils). ▪ Researchfish is not a publicly accessible data repository. However, data held in Researchfish may be used by the NC3Rs to populate our website and for production of publications such as our Annual Report.

Publication

Alongside the commercialisation and distribution of the Challenge product, award holders are expected to disseminate their results by publishing in appropriate scientific journals and participating at relevant conferences. The [UKRI open access policy](#) should be adopted. Award holders are required to report research outputs and outcomes on a regular basis using [Researchfish](#). There is a mandatory annual collection period for the submission of data.

Publications should have the prior agreement of the Project Management Team and in particular publication timing, must respect the need to protect IP arising from the work.

The NC3Rs support for the project should be acknowledged on all publications and presentations where such support has been significant.

The NC3Rs should be informed of any publications or other promotional material or events arising from the award.

Sponsors are permitted to place organisational logos on promotional materials arising from the collaboration by prior agreement with the NC3Rs.