SCIENCE FOUNDATION IRELAND

SFI Research Centres Programme 2016

Call for Submission of Proposals

KEY DATES	
Call announcement	December 2015
Deadline for submission of abstracts	4th March 2016,13:00 Dublin, Ireland local time
Deadline for submission of pre-proposals	28th April 2016,13:00 Dublin, Ireland local time
Deadline for submission of full proposals	2nd November 2016,13:00 Dublin, Ireland local time

Terms of Reference

Contents

1. Introduction

SFI's <u>Agenda 2020</u> strategy aims to position Ireland as a global knowledge leader. A key objective of this strategy is to develop a set of world-leading, large-scale research centres that will provide major economic impact for Ireland. The SFI Research Centres Programme was launched in 2012 to achieve this objective by creating new Research Centres and building on previously-made significant large scale investments (e.g. CSETs, SRCs). Seven Research Centres were funded as a result of the first Research Centres Call in 2012, and five were funded as a result of the second Call in 2013[1].

The purpose of the SFI Research Centres Programme is to help link scientists and engineers in partnerships across academia and industry to address crucial research questions, foster the development of new and existing Ireland-based companies to create innovative products leading to job creation, attract industry that could make an important contribution to Ireland and its economy, and expand educational and career opportunities in Ireland in science and engineering. SFI Research Centres will exploit opportunities in science, engineering, and technology where the complexity of the research agenda requires the advantages of scope, scale, dynamism, synergy, duration, equipment, and facilities that a centre can provide.

SFI Research Centres must exhibit outstanding research quality, intellectual breadth, active collaboration, flexibility in responding to new research opportunities, and integration of research, education and public engagement in the fields that SFI supports. A key feature of SFI Research Centres is the consolidation of research activities across higher education institutes to create a critical mass of internationally leading researchers in strategic areas which become a key attractant to industry and lay the foundation for effective and productive academic and industrial partnerships. Additionally, these centres will be excellent, relevant, sustainable, and will serve as international beacons for attracting talent and leveraging non-Exchequer funding with particular emphasis on industry and Horizon 2020. The goal of SFI, in partnership with its sister agencies and departments, is to develop a dynamic research centre ecosystem that can evolve to meet the changing needs of industry and society. SFI Research Centres funded under the forthcoming call will contribute significantly to achieving this and as such, are expected to integrate with other SFI- and non-SFI-funded Centres, where appropriate, to maximise capabilities, outputs and industry offerings.

The 2016 SFI Research Centres Call will operate on a non-thematic basis, and will accept applications aligned with all areas of SFI's legal remit[2]. Proposals will be accepted in areas which are sufficiently distinct from existing SFI-funded Research Centres. Proposals focussed in research areas which are not sufficiently distinct from existing SFI-funded Research Centres are likely to be returned without review. Applicants are encouraged to consider submitting such proposals, in collaboration with existing Research Centres, to the SFI Spokes Programme.

2. Objectives

At a high-level, the SFI Research Centres Programme will deliver excellent basic oriented and applied research and discoveries in research areas informed by, and of interest to, Ireland-based companies. This will result in significant economic and societal impact during and beyond the lifetime of the programme

[1]

[2]

More specifically, the objectives of the SFI Research Centres Programme are:

1. To achieve, maintain and enhance research excellence and leadership, as measured through indicators such as publication in top-tier journals and conferences, citations, editorship of top-tier journals, and giving invited lectures at top-tier conferences,
2. To deliver significant economic and societal impact – research excellence with impact – which will be aligned with areas of strategic opportunity for Ireland, including the 14 National Research Priority areas and including the six broad enterprise themes (ICT, manufacturing & materials, heath & medical, food, energy, and services & business processes) outlined in Innovation 2020 - Ireland's Strategy for Research and Development, Science and Technology
3. To increase the level of industrial and commercial investment in R&D activities with existing Ireland-based companies, and furthermore to attract large Foreign Direct Investments in corporate R&D laboratories
4. To spin out new, high-technology start-up companies that have the potential to raise external angel or venture funding
5. To transfer technology, through licences, to Multinational Companies (MNCs) and Small and Medium Enterprises (SMEs) based in Ireland
6. To transfer knowledge, expertise and know-how to MNCs and SMEs based in Ireland.
7. To undertake joint research projects with industry
8. To inspire the future generation of STEM students and train and educate a cohort of engineers and scientists at MSc/MEng, PhD and post-doctoral level that will take up high-value employment in MNCs and SMEs based in Ireland
9. To attract additional non-Exchequer funding through industry sources and external research-funding organisations
10. To engage the general public and equip them with the tools to confidently understand and debate science, technology and engineering research in Ireland

3. Definitions

Lead Applicant	The Lead Applicant is defined as the Scientific and Technical lead for the proposed Research Centre and is nominated as the Research Centre Director on the Research Centre proposal. The Lead Applicant will have overall responsibility for delivery of the objectives of the SFI Research Centre. The Lead Applicant will serve as the primary point of contact for SFI on the award, during the review process, and if successful, during the course of the award. The Lead Applicant will be designated as the lead investigator of a funded Research Centre and will be responsible for the scientific and technical direction of the research programme and the submission of reports to SFI. The lead investigator has primary fiduciary responsibility and accountability for carrying out the research within the funding limits awarded and in accordance with the terms and conditions of SFI.
Co-Applicant	A Co-Applicant has a well-defined, critical and continuing role in the proposed investigation. A Co-Applicant would be expected to lead one or

	more Targeted Projects, or projects within the Platform Research component of the centre. For the purposes of eligibility, reviewing and monitoring, <u>a Co-Applicant applying for funding under the SFI Research Centres programme will receive equal evaluation to the Lead Applicant</u> and will hold equal accountability for the delivery of the proposed research objectives. In this documentation, the terms and conditions for 'applicant' and 'Co-Applicant' are interchangeable. A Co-Applicant will be designated as a co-lead investigator in a funded Research Centre.
Funded Investigator	A funded investigator is an academic member of staff who is undertaking a management role in a research project within a Centre. It is anticipated that SFI Funded Investigators have budgetary responsibility for a research project within an SFI Centre. , but who is not a named Lead Applicant or Co-Applicant. SFI Funded Investigators will serve under the direction of the Lead Applicant (PI) or one of the Co-Applicants (co-PIs). The funded investigator designation in an SFI centre should be a reflection of the level of input of the individual to the research programme, and should take account of the career stage of the investigator.
Official Collaborator	An official collaborator may be either (a) an academic member of staff of an Irish or international Research Body or (b) a member of a relevant non-academic institution, such as a Government Agency, who is committed to providing a focused contribution for a specific task(s). The collaborator will serve under the direction of the Lead Applicant or one of the Co-Applicants, and may or may not receive funding through the award (see budget justification). Official collaborators may not be the primary supervisor/mentor of postgraduate students, postdoctoral researchers or research staff enrolled on the Award.
Industry Collaborator	An industry collaborator is the lead contact person from an industry partner company contributing cash or in-kind costs to the SFI Centre budget. Note that industry collaborators are not eligible to receive funding through the award.
Industry Partner	An industry partner is a company making a financial contribution to the budget of the Research Centre, as well as an intellectual contribution to the research agenda of the centre. The Industry Partner is represented in the SFI Centre by its Industry Collaborator.
Research Centre	A group funded under this programme will be referred to as an SFI Research Centre.
Applicant Group	An applicant group is defined as the set of Lead Applicant and Co-Applicants that submits a proposal for funding under the Research Centres Programme.
Centre Budget	The centre budget of the Research Centre is defined as comprising three parts: an SFI cash contribution (direct costs), an industry cash contribution and an industry in-kind contribution.

	The centre budget is considered to be direct costs only and does not include the SFI or industry contribution towards the overheads of the Research Body.

4. Expectations

While each Research Centre shall be unique in some respects, SFI expects that each centre will:

- Have an "edge" over competing research activities world-wide – i.e. unique feature or features that distinguish the proposed Research Centre activity, thereby giving it the potential to be world leading in its chosen domain
- Be able to demonstrate clearly the "added value" of being funded as a centre (rather than a set of individually funded projects) – i.e. creating opportunities that take advantage of the scope, scale, synergy, multi-disciplinarity, duration, equipment, and facilities that a centre-type grant can provide
- Have a Lead Applicant with a record of internationally recognised research achievement and demonstrated ability to lead a major academic-industry partnership centre initiative
- Carry out a unifying research programme in areas covered by the remit of the Research Centre's programme
- Achieve strategic goals shared by the host and partnering institutions
- Form effective partnerships with industry to work on challenging problems and facilitate technology and knowledge transfer among the participants. Efforts to establish co-operation and collaboration with other academic institutes are also strongly encouraged.
- Provide educational and research opportunities and industrial laboratory internships for researchers (for example, undergraduate and postgraduate students, postdoctoral researchers, industry fellows, and primary- and secondary-level teachers)
- Stimulate public understanding, interest and involvement in science, technology, engineering and maths (STEM) through education and public engagement programmes. SFI is committed to broadening opportunities for all residents of Ireland in STEM
- Work with Enterprise Ireland (EI) to develop R&D in indigenous Irish industry and with the Industrial Development Agency Ireland (IDA Ireland) to attract and retain foreign direct investment and participation in the Irish research community
- Leverage complementary funding from other sources (in addition to the cost-share with industry partners outlined above). In particular SFI encourages Research Centres to lead initiatives of scale funded by the European Commission's Horizon 2020
- Link with existing SFI-funded Research Centres and other state-funded Centres to identify opportunities for synergistic collaboration and implement linkages across areas where there is greatest potential for economic and societal benefit

5. General Eligibility

The eligibility criteria set down below must be met by the Lead Applicant, Co-Applicants and Funded Investigators and host institutions on the closing date for submissions of the pre-proposal – namely, **28th April 2016, 13:00 Dublin, Ireland local time**. Any submissions to the programme that are deemed ineligible on that date will be eliminated from the programme without review.

In addition to the specific eligibility conditions outlined below, the Lead Applicant, Co-Applicants and Funded Investigators and host institutions must comply with SFI's general terms and conditions.

5.1. Programme Remit

The 2016 SFI Research Centres Call will operate on a non-thematic basis, and will accept applications aligned with all areas of SFI's legal remit[3] which can generate significant economic and societal benefit for Ireland. However, it should be noted that proposals submitted in areas which overlap with the 12 existing SFI-funded Research Centres are likely to be returned without review. In such scenarios, applicants should apply to the SFI Spokes Programme.

5.2. Eligibility Criteria of the Lead Applicant and Co-Applicants

Applicant groups must have one Lead Applicant and a number of Co-Applicants. The appropriate number of Co-Applicants should be defined by the applicant group. When defining the Co-Applicant group, it should be noted that all Co-Applicants will receive equal evaluation to the Lead Applicant and will hold equal accountability for the delivery of the proposed research objectives of the proposed Research Centre.

SFI expects that the Lead Applicant and Co-Applicants (or a sub-group of Co-Applicants) will form the executive management committee of the Research Centre, with administrative responsibility for the performance of the centre.

The Lead Applicant and Co-Applicants must be:

1. Members of the academic staff of an eligible Research Body (permanent or with a contract that covers the period of the grant), or

2. A contract researcher with a contract that covers the period of the grant, who is recognised by the Research Body as an independent investigator and will have an independent office and research space at the host Research Body for which he/she will be fully responsible for at least the duration of the SFI grant, or

3. Individuals who will be recognised by the Research Body upon receipt of the SFI grant as a member of the academic staff or as a contract researcher as defined above. The applicant does not necessarily need to be employed by the Research Body at the time of proposal submission.

4. The Lead Applicant and Co-Applicants must hold a PhD or equivalent for at least 8 years by the pre-proposal deadline.

    The official date of a PhD is defined as the year that the degree was conferred, i.e., the year printed on the official PhD certificate. The number of years is determined by calendar year.

5. The Lead Applicant and Co-Applicants must be senior author on at least 10 international peer reviewed articles. Only original research publications, and not review articles, are acceptable. Consult the accompanying FAQ document regarding the definition of "senior author".

    Please note that 10 senior author publications is a minimum eligibility criterion, however applicants with higher numbers of publications are likely to be more competitive.

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6. The Lead Applicant and Co-Applicants are required to have demonstrated research independence through securing at least one independent research grant as a lead investigator or as co-investigator.

   Personal awards such as travel awards, career fellowships (which only include the salary of the PI and not research team costs (i.e., salary for team member(s) & consumables etc.)) do not count as independent research grants. Consult the accompanying FAQ document for further details.

7. The Lead Applicant and Co-Applicants are expected to have proven prior experience, capability and authority to mentor and supervise postgraduate students and team members.

8. A Lead Applicant is only permitted to be named on one pre-proposal submission. An investigator may be a named Co-Applicant on a maximum of two pre-proposal submissions.

9. Lead and Co-Applicants who are currently under evaluation in other SFI programmes, are eligible to apply for funding under this programme.

10. Lead Investigators (i.e. Research Centre Directors) of currently funded Research Centres are not eligible to apply to the 2016 call as a Lead Applicant or Co-Applicant but are eligible to contribute to a proposal as either a funded investigator or official collaborator.

11. Co-lead investigators of currently funded Research Centres are eligible to apply as a Co-Applicant, funded investigator or official collaborator.

In all cases where Lead or Co-Applicants are already in receipt of significant SFI research funding (e.g. Recipients of SFI PI, IvP or Investigators awards, strand leaders on CSETs, SRCs, Strategic Partnerships or Research Centres), the evaluation process will examine the commitment and work load of the Lead/Co-Applicant in determining the suitability of such an arrangement. Such applicants must include strong justification for their role in the applicant group.

Approval for an investigator to engage as a co-lead investigator on two separate Research Centres will only be granted in exceptional cases and will be evaluated on an on-going basis during the lifetime of the Research Centre.

Co-Applicants may be located at a different SFI-eligible Research Body than the Lead Applicant. In this case, the grant will be administered through the Research Body of the Lead Applicant. A Co-Applicant, where applicable, must comply with the same eligibility and evaluation criteria as the Lead Applicant.

5.3. Eligibility Criteria for Funded Investigators

Those nominated as funded investigators in the proposal must meet the following criteria:

1. Funded investigators must hold a PhD or equivalent for at least 3 years by the pre-proposal deadline.

   The official date of a PhD is defined as the year that the degree was conferred, i.e., the year printed on the official PhD certificate. The number of years is determined by calendar year.

2. Funded investigators must be senior author on 3 international peer reviewed articles. Only original research publications, and not review articles, are acceptable.

3. The funded investigator is expected to have the experience, capability and authority to mentor and supervise postgraduate students and team members.

A mechanism is available for funded Research Centres to add or remove Funded Investigators from the group of individuals listed at the proposal stage. Further details of the process involved are available on the following webpage: http://www.sfi.ie/funding/sfi-policies-and-guidance /policies-specific-to-award-holders/

5.4. Eligibility of the Applicant Group

Applicant groups eligible to apply for funding under the Research Centres programme may comprise research groups that have previously been funded by SFI (e.g. CSETs and SRCs), research groups recognised at a Research Body level but not in receipt of SFI centre/cluster funding, or groups newly formed for the purpose of participating in this programme.

In addition, all applicant groups must have raised cumulatively at least **€10M cash** (direct costs) in research funding from any sources from 2010–2016. Examples of such sources include, but are not necessarily limited to:

- SFI awards such as Research Centres, CSET, SRC, PI, IvP, RFP, SIRG, PIYRA, Research Professorship and Strategic Partnerships;
- Industry-funded research projects;
- National funding agencies such as Enterprise Ireland, the Health Research Board, the Environmental Protection Agency, IRCSET/Irish Research Council;
- EU Framework Programme awards;
- International funding sources such as Wellcome Trust, the National Institutes of Health (NIH), and the US National Science Foundation;
- Irish or international charities.

All awards that are identified as meeting this eligibility criterion must have been awarded in the period 2010-2016, and must have been awarded to the Lead Applicant or a Co-Applicant on the Research Centres proposal. In the event that such a qualifying award was a multi PI award (e.g. SFI Research Centre, CSET, FP7 award), only that part of the award that is attributable to a member of the applicant group may be included.

Additional detail on this criterion can be found in Appendix C: Funding History.

5.5. Eligibility of Research Body

The Research Body is the body responsible for the overall financial and administrative co-ordination of research programmes supported by research grants from SFI. Host Research Bodies must be situated in the Republic of Ireland and be eligible for SFI funding. A list of eligible Research Bodies is available on the SFI website. The award will be administered by the host Research Body of the Lead Applicant.

6. Economic and Societal Impact

Each year the Irish Government spends in the region of €800 million on scientific research, training and development. As with all public spending, it is necessary to demonstrate and articulate the potential impact and benefits of scientific research. In the current climate of constrained public spending there is an even greater focus on demonstrating the economic, social and cultural benefits of publicly funded scientific research to wider society if this level of funding is to be maintained

For the Research Centres Programme, scientific excellence is both necessary and paramount but is not sufficient; applications must also be able to clearly articulate the potential for economic and societal impact. SFI regards clear and convincing impact statements as being fundamental components of competitive proposals. Impact statements are required at both pre-proposal and full proposal stages and applicant groups who make it through the full proposal stage will have to present their potential Impact to an Impact assessment review panel.   Applicants should be aware that proposals that are not seen to have the potential to deliver sufficient impact, or have not successfully articulated how this impact can be delivered, <u>will not be funded through this programme, regardless of scientific excellence</u>.

What is meant by Impact?

Impact can be described as *the demonstrable contribution that excellent research makes to the economy and society.* Impact embraces the diverse ways in which research-related knowledge and skills benefit individuals, organisations and nations. SFI has developed detailed guidelines on research impact which are available on the SFI website: <u>Research Impact guidelines.</u> **Applicants are encouraged to read all impact guidance documentation and to listen to the Impact webinar provided on the SFI website.**

a) Impact Statement

Impact statements are required at the pre and full proposal stages with page limits of 5 and 10 respectively. The Impact Statement should be as specific and comprehensive as possible and provide information that external reviewers will find helpful in assessing the potential impact of the proposed research activity. It should be written primarily in lay, non-technical language. Appropriate plans, milestones and deliverables associated with impact may also be indicated.

In addressing the potential of the proposed Research Centre to deliver significant economic and societal impact, it may be useful to consider:

- **What** is the competitive "edge" of the proposed Research Centre? (e.g. novelty, innovation, ability to create synergistic opportunities, ability to become world leading)
- **Who** will benefit from this research? (academic partner(s), industry partner(s), public, policy makers, other stakeholders)
- **How** will stakeholders benefit from this research? (e.g., increased capacity/competitiveness, knowledge transfer, licensing of patents, education and career development of Ireland's students and research team members, development of new products, spin-out of high-tech start-ups, ability to address significant national/international challenges, policy change and development, increased public engagement in STEM. How will the industry partner enable increased impact? What supports are they offering? Have routes to commercialisation been considered?
- **When** will there be a benefit from this research? (i.e., over what timeframe might the expected benefits of the proposed research programme be realised)
- **Where** will the benefit of this research be realised? (e.g., Ireland, Europe, market sectors)

> **Applicants are encouraged to consider SFI's Agenda 2020 and to review the SFI 'Research Impact' guidance documentation before writing their impact statement.**

In assessing various possible impacts, applicants are also encouraged to make reference to the programme objectives described in Section 2 of this call document and particularly to consider the potential of the proposed Research Centre to:

- Identify and exploit opportunities (both scientific and commercial) for synergistic collaboration and implement linkages across areas in order to deliver significant economic and societal benefit
- Enhance the international competitiveness of Irish-based enterprises and attract Foreign Direct Investment
- Enable high-tech start-up companies capable of raising investment (e.g., angel or venture capital funding) to be spun-out
- Deliver world-class educational, training and public engagement components
- Deliver indirect societal impact, such as improving the health and well-being of the population, addressing food and energy security issues, enabling environmental protection, supporting Government policies, initiatives and strategies

7. Research Centre Structure

An SFI Research Centre funded under this programme will follow a hub-and-spoke model.

7.1. Hub

The Hub of the Research Centre will comprise:

- **Operations:** the operations of the centre includes aspects such as management, administration, business development, marketing and communications, education and public engagement, and IT technical support.
- **Platform Research:** core / platform research activities or technologies are those that are necessary or valuable to the mission of the Research Centre and are deemed to be common across a number of individual Targeted Projects with industry or which underpin the development of future Targeted Projects .

Platform research activities will also include large scale equipment or infrastructure that might be common across a number of individual research projects.

7.2. Spokes

Each Research Centre will consist of a number of Spokes which are comprised of one or more thematically related Targeted Projects. Each Targeted Project will be a collaborative effort between the academic partners and one or more industry partners and, if appropriate, after the centre is funded, new academic and industry partners that were not part of the original proposal.

Further detail on the funding allocation and how it is aligned with the structure of the Research Centre is provided in section 9.

7.3. Management and Governance

Research Centres will be expected to put a sufficient and appropriate management structure in place to ensure the efficient operation of the centre. It is expected that the Centre Lead Applicant (i.e. Director), Centre Manager and the named Co-Applicants (or a sub-group of the Co-Applicants) will become the Executive Management Committee of the centre. The Executive Management Committee

will be responsible for the management, administration and financial control of the Research Centre and furthermore will be responsible for the successful execution and delivery of the research programme, including the public engagement plan and effective promotion of the SFI brand

In addition to a management structure, funded Research Centres will put in place sufficient and appropriate governance structures including:

- **A Scientific Advisory board**, comprising senior international academics, that advises the Executive Management Committee of the Research Centre as to the technical and scientific direction of the centre.
- **An Industry Advisory board**, comprising representatives of the relevant industry, including, but not necessarily limited to the industry partners of the centre, that advises the Executive Management Committee as to the needs of, and direction of, companies in the industry areas of relevance to the centre.
- **A Governance board**, comprising representatives of the partner institutions, senior academic and industry leaders, that has oversight responsivity and advises the Host Institution President/Provost and SFI as to the performance of the Research Centre.

Applicants should refer to the 'Research Centres Management and Governance' document on the Grant Policies – SFI Research Centres webpage.

8. Programme Structure

The 2016 Research Centres Programme call will follow three stages:

8.1.   Pre-Proposal

> **Applicant groups intending to submit a pre-proposal application to the call *must* provide a proposal title and abstract (max. 200 words) to centres@sfi.ie no later than the 4th March 2016, 13:00 Dublin, Ireland local time. This information is mandatory and is required by SFI for planning purposes. A template for this document can be found in Appendix A: SFI Research Centres Abstract Sheet.**

The deadline for submission of pre-proposal applications is the **28th of April 2016, 13:00 Dublin, Ireland local time**. Pre-proposals must follow the structure outlined in section 12.

Each pre-proposal will be reviewed by a panel of scientific and commercialisation experts who will evaluate both the scientific merit of each pre-proposal and its potential to deliver significant economic and societal impact.

Only those pre-proposals that are deemed to be excellent both in terms of science and potential for delivering economic and societal impact to Ireland will progress to the full proposal application stage.

Pre-proposals deemed not to have met the required level of scientific excellence and potential for impact will be eliminated from the evaluation process.

SFI anticipates that invitations to submit full proposal applications will be issued in late **July 2016.**

8.2.   Full Proposal

The deadline for submission of full proposals is the **2nd of November 2016, 13:00 Dublin, Ireland local time**. Full proposals must follow the structure outlined in section 13. Only full proposals from applicant groups invited by SFI to submit a proposal will be evaluated.

Full proposals will be sent for postal review. For each proposal under evaluation, SFI will solicit between five and seven written reviews (i.e., postal review) from international topic experts who will appraise the quality of the applicant team and proposed research programme. Applicants will be provided with the anonymised postal reviews and will be invited to provide a brief written response to these reviews (i.e., applicant response).

Based on the evaluations submitted by the postal reviewers and the applicant responses, SFI will select the proposals that have demonstrated a high-level of scientific excellence to progress to the Impact Panel assessment stage.

Proposals not selected for the final Impact Panel meeting will be eliminated from the evaluation process.

8.3. Impact Panel Presentation

The Impact Panel meeting is expected to be held during **late February/early March 2017**. The Impact Panel will comprise high-level members, such as Vice Presidents of Research from universities, corporate R&D Directors, partners from the investment and venture capital communities, entrepreneurs and experts in public engagement. SFI anticipates issuing invitations to applicant groups to attend the panel meeting in **February 2017**. Details of the structure and operation of the final panel will be released at that time.

The Impact Panel will be provided with all documentation relating to each application, including the proposal, budget, postal reviews and applicant response.

The Impact Panel will be tasked with identifying fundable proposals and will provide SFI with a list of such proposals ranked in order of priority for funding. The ranked list of fundable proposals will inform the final decision as to which Research Centre proposals are to be funded by the SFI Executive Committee and SFI Board.

SFI anticipates that the decision for funding will be made in **April 2017**. SFI expects that Research Centres funded at that time will commence operations in Q4 2017.

9. Funding

Proposals may request funding from SFI of between **€1M** and **€5M** per annum (direct costs) over six years. Refer to section 3 for the definition of 'centre budget' that is used throughout this section. If an applicant team wishes to request an SFI contribution towards the budget of more than €5M per annum, a strongly justified case for exceeding this limit, which includes evidence of significant industry funding, must be included as part of the pre-proposal submission. The scale of request will be considered by the pre-proposal review panel as part of their overall assessment, which will include consideration of value for money.

SFI encourages applicants to consider the inclusion of contributions from other national and international funding agencies, philanthropic organisations or other sources (referred to as 'other non-exchequer contributions' later in this document and in the budget templates) of funding as part of their Research Centres application. Applicants may include details of such cash and in-kind contributions as part of a Research Centres proposal provided that they are pledged specifically to the proposed Research Centre. Whilst such contributions are encouraged and may result in significant benefits to the proposed Research Centre, please note that they do not count towards minimum industry cost share levels and will not leverage additional SFI funding.

Successful Research Centres will be required to achieve and maintain a minimum of 30% of their Centre budget in contributions from industry sources, with a minimum of 10% of the Centre budget in cash and the balance of the industry contribution being made up from in-kind contributions, for each calendar year of the award. SFI will contribute a maximum of 70% of the centre budget of the Research Centre.

Applicant groups that can achieve greater than the minimum 10% industry cash and 30% overall industry contribution to the centre budget may be evaluated as delivering a greater economic impact to Ireland and hence may be more competitive.

Failure to maintain an industry cost-share as described above on an on-going basis may result in a reduction in or termination of SFI's contribution to the Centre budget.

SFI expects Research Centres to comprise a mixture of large and small companies and are given the flexibility to achieve the relative mix of cash and in-kind contributions in whatever fashion is most appropriate for the centre and the industrial areas and industry partners to which it will be most closely aligned.

For information related to intellectual property rights available to companies providing cost-share contributions, refer to section 15.

The centre budget is structured in a number of tiers as outlined in the following sections.

9.1.   Operations

The Operations component of the centre budget is expected to fund some or all of the operational running costs of the Research Centre. Such costs may include, but are not necessarily limited to, personnel such as a CEO/Executive Director (if required), Centre Manager, EU Grant Manager, Project Managers, Business Development personnel, Administrators, Communications, Education and Public Engagement Manager, IT technical support, as well as travel and related business expenses associated with these roles.

The Operations component of the centre budget is capped at a maximum of **20%** of the centre budget. Applicants should note that the average approved operations budget for Research Centres funded as a result of the 2012 and 2013 Research Centres Calls is approximately 10%.

9.2.   Platform Research

The Platform Research component of the centre budget is expected to fund core research activities or technologies that are necessary or valuable to the mission of the Research Centre. It is anticipated that the results of platform research will be of value to and accessible by some or all industry partners to the Research Centre, on a non-exclusive basis.

The Platform Research budget may fund core equipment or infrastructure that is common across a number of Targeted Projects (Spokes), as well as a core team of research staff, including Postdoctoral Researchers/Fellows and students (Ph.D. and Masters), as are required to develop science and technology in the key areas of the Research Centre.

Please note that the requirement from the 2012 and 2013 Research Centres Calls that 'Centres must cap the Platform Research component of the Centre budget at a maximum of 30% of the centre budget' is not a requirement for the 2016 Research Centres Call. Applicants may define an appropriate split between Platform Research and Targeted Projects.

9.3.   Targeted Projects (Spokes)

As described in section 7.2, each Research Centres Spoke will contain one or more thematically related Targeted Projects. Each Targeted Project will have at least one, and perhaps a number of industry partners. Industry partners are expected to make both a material contribution to the Targeted Project (in terms of cash and in-kind contributions described above), as well as an intellectual contribution to the goals, objectives, deliverables and execution of the Targeted Project. Applicants and Industry Partners are encouraged to review the 'Research Centres Guidelines for Industry Access to Intellectual Property' document (available on the SFI website) when considering industry cost share levels.

Targeted Projects in Research Centre proposals may be new projects with industry partners with whom the applicant group already collaborates, or may be new projects with new industry partners. Targeted Projects may not, however, be existing projects that have already been funded, prior to the pre-proposal deadline, and would otherwise proceed irrespective of the establishment of the SFI Research Centre.

The total budget allocation to the Centre Spokes is flexible and will depend on the funds allocated to other aspects of the centre budget, as discussed above.

For each Targeted Project, suitable contracts and IP agreements between the Research Body, or Bodies, and the Industry Partner(s) must be concluded and signed within 90 days of the official start date of the Centre, as per the Letter of Offer. Copies of these agreements are to be returned to SFI.

It is anticipated that, after a Research Centre is funded, further Spokes will be added through the SFI Spokes Programme which currently operates on both a fixed deadline and rolling call basis. Submissions to the fixed deadline Spokes call currently require a minimum cash contribution of 30% from industry. Submissions to the rolling call currently require a minimum cash contribution of 50% from industry. Further details are available on the Spokes Programme webpage. Success in securing such follow-up funding will be seen as a critical performance indicator in the on-going, long-term performance evaluation of the Research Centre.

SFI recognises that there may be circumstances in which the research agenda of a particular Spoke would require the technical or domain expertise of two or more Research Centres and hence that a formal collaboration between these Centres would be appropriate. Such collaborations may take the form of collaborations between two Centres proposed through this call, or collaborations with an already established Centre through the 2012 and 2013 Research Centres Programme Calls.

Targeted projects that connect with an existing Research Centre may be supported *either* through an application to the Spokes programme or through the engagement of a co-lead investigator or funded investigator of a 2012/2013 Centre in a bid for a 2016 Research Centre. It is the responsibility of the applicant team to identify the most appropriate funding route.

Applicants should note that applications for funding of a potential Spoke cannot be under active review at the same time that it is being reviewed as part of the Research Centres 2016 Programme.

9.4.   Industry Funding

The SFI Research Centres are funded with the condition that they must maintain a minimum cost share of the Research Centre budget that is not less than 10% cash and not less than 30% in total (cash and in-kind) for each individual calendar year of the Award. The Research Centre budget is defined as comprising three parts: an SFI cash contribution (direct costs), an industry cash contribution and an industry in-kind contribution. The Research Centre budget is considered to be direct costs only and does not include the SFI or industry contribution towards the overheads of the Research Body. The

cash and in-kind contributions are paid by industry partners collaborating on a Targeted Project. Each Research Centre must maintain a number of Targeted Projects with at least one, and ideally a number of industry partners. Industry partners are expected to make both a material contribution to the Targeted Project (in terms of cash and in-kind contributions described above), as well as an intellectual contribution to the goals, objectives, deliverables and execution of the Targeted Project.

The following contributions can be counted towards the industry cash cost share

- Cash paid as part of a collaborative, co-funded, Targeted Research Project

    In all cases, the Research Centre Director must ensure that the cash contributions from each industry partner are free and unencumbered and have not been used to secure a support grant from EI, IDA or any other agency.

- Cash from Fully-Funded Research

    For collaborative Targeted Projects in which an industry partner requires full ownership of the IP and is willing to pay the full cost of the Research Centre Targeted Project, the industry cash contribution can be counted towards the cost share of the Centre provided that the company is actively participating in the research collaboration and that the contribution of the collaborative project to the goals of the Research Centre is clearly outlined in the proposal.

    Industry cash secured though contract research undertakings where the Research Centre is providing a service, for example, in the form of access to equipment and testing facilities or is undertaking a defined body of research for the industry partner on a non-collaborative basis, cannot be counted towards the Centre's industry cost share.

- Membership Scheme

    Research Centres may, at their discretion, choose to implement a membership scheme for industry partners. It is envisaged that a membership scheme would charge companies to participate in the activities of the Research Centre, and may provide certain privileges or benefits to member companies and contribute towards the running costs of the Research Centre.

    All funds raised through the membership scheme may be used to fulfil some or all of the Research Centre's industry cash contributions.

    Research Centres intending to implement such a membership scheme should provide an outline as to the anticipated operation of the scheme and consequent benefits offered to industry partners.

    Applicants are reminded, however, that a membership scheme cannot be used as a mechanism whereby existing industry partners can exclude new companies from participating in, or contributing to, the Research Centre.

Industry in-kind contributions include, but are not necessarily limited to, the following items:

- Industry scientists, engineers and technicians assigned to working on Platform Research or Targeted Projects in the Research Centre
- Student or faculty placements with industry partners
- Equipment

- Software
- Materials
- Data

Further details on SFI's policy with respect to in-kind contributions may be found on the SFI website.

Industry funding that has already been earmarked against an Irish Exchequer enterprise support (such as supports provided by IDA Ireland, Enterprise Ireland or the Irish Research Council) or International support programmes may not be counted as a qualifying contribution to the Centre budget.

Contributions, whether in cash or in kind from Irish Exchequer sources such as other funding agencies, Government Departments or other Agencies of the State cannot be counted as an industry contribution[4]. Likewise, funding from charities, not-for-profit organisations or philanthropic donations, while welcomed and encouraged, cannot be counted as an industry contribution.

Research Centres are designed to be flexible and to allow Spokes to be added or removed as appropriate, provided always that at least the minimum industry contribution, as set out in this section, is maintained. For the purposes of evaluation of the full proposal, industry funding, both cash and in-kind, must be committed for at least the first 24 months of the Research Centre, and may be indicative for subsequent years, with the understanding that Research Centres will be evaluated on a periodic basis (at least every two years), and must maintain their forward commitment at an appropriate level.

9.5.   Eligible Costs

Eligible costs include:

- Contributions to salaries/stipends of research staff hired specifically to carry out the research programme;
- Contributions towards salaries of operations staff (e.g. Executive Director or CEO, Centre Manager, EU Grants Manager, Administration staff)
- Materials and consumables, equipment, travel;
- Access to facilities and services not available to the applicant, including test-bed facilities for technology demonstration;
- SFI-approved access charges;
- Travel fellowships and travel costs associated with hosting senior international researchers in the proposed Research Centre;
- Directly related education and public engagement costs, including a contribution towards an EPE resource

Examples of ineligible costs include, but are not necessarily limited to:

- Contingency or miscellaneous costs;
- Entertainment costs;
- Technology transfer or patent costs;
- Legal Fees;
- Conference & workshop organisation costs;
- Journal subscriptions;
- Relocation expenses;

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[4] Commercial semi-state companies such as the group of companies under CIE, ESB, Ervia, etc. are *excluded* from this definition.

- Clinical time or teaching buyout**.

** Please note that requests for clinical buy-out will be considered from Lead Applicants that are clinician scientists, with prior approval from SFI.

9.6. Overheads

In addition to the direct costs, SFI also makes an indirect, or overhead, contribution to the host Research Body, which is reflected as a percentage (currently 30%) of the "modified" total direct costs (i.e., total direct costs less the cost of equipment) of SFI's contribution. Overheads are payable as a contribution to the Research Body for the indirect costs of hosting SFI-funded research programmes and are intended to enable the Research Body to develop internationally competitive research infrastructure and support services, including contributions towards the costs of technology transfer and filing and maintenance of patents.

SFI will ask host institutions to clearly describe how it will support the proposed Research Centre, both as a partner and as a recipient of overhead funding.

10. Proposal Review Process and Criteria

The submission of an application to SFI shall be construed as consent by the applicants to participate in the peer review process.

Applications to the 2016 SFI Research Centres Programme will be evaluated by rigorous international peer review on the basis of the following criteria:

- Quality, significance, and relevance of the recent research record of the Lead and Co-Applicants and the strength and cohesiveness of the applicant group, including likely synergy in delivering research and potential for international leadership

- Quality, significance, and relevance of the proposed research, including value for money and the potential to advance knowledge and understanding within its own field or across different fields

- Quality, significance, and relevance of the proposed research's potential contribution to demonstrably support and underpin enterprise competitiveness and societal development in Ireland

- Quality of plans for execution and delivery of the research programme and Centre goals, including the appropriateness of the proposed milestones and deliverables (*specific to evaluation of full proposal applications*)

SFI expects that the projected output and achievements of the proposed Research Centre will be commensurate with the level of funding being requested.

Selection of reviewers is at the sole and exclusive discretion of SFI. The identity of experts who serve as pre-proposal panel or postal reviewers shall remain confidential and shall not be disclosed to the applicants. However, decisions resulting from the evaluation will be provided to the applicants, including relevant review comments, following the conclusion of the SFI review process. SFI shall not be liable for the release of information concerning proposals to third parties by those individuals involved in the merit review process.

Should circumstances arise, SFI reserves the right to modify the review process. Applicants will be notified of any relevant modification to the review procedure.

The final funding decisions are at the sole and exclusive discretion of SFI.

11.   Submission

> **For the Research Centres Programme 2016 Call, submissions will only be accepted through SESAME, SFI's grants and awards management system.**

Access to SESAME is controlled by staff at the Research Office of your host Research Body. Please follow your internal organisational process to request this access.

Once you have been registered by your Research Office, **you will receive an email** containing:

1. Username
2. Password
3. SFI PIN number
4. SESAME website address

Your **username** and **password** are needed to log in to SESAME. The Co-Applicant's PIN number must be provided to the Lead Applicant, in order to be associated with the same application. This PIN number is also stored in your **contact profile** on SESAME.

SFI's grants and awards management system, SESAME, is accessed using the Internet; no additional software needs to be installed. You can access SESAME online from any location. The configuration of some browsers and internet infrastructure (popup blockers, firewalls, etc.) can restrict an individual's access to the internet and as a result to the SESAME system. If you are having any such difficulties please contact your organisation's internal IT support team.

> **The SESAME system is accessed using the following Internet address:**
>
> **https://grants.sfi.ie**

Please see the **SESAME Researcher User Guide** for more detailed information.

SESAME enables:

- Individual researchers to apply online for SFI grants.
- Host Research Bodies to review and authorise all applications.

Individuals may only submit as Lead Applicant on <u>one</u> proposal to an open call of the SFI Research Centres Programme. If an individual submits as Lead Applicant on more than one proposal to an open SFI Research Centres Programme, these applications will be returned without review. Individuals may engage as Co-Applicant, funded investigator, official collaborator, industry collaborator or industry partner on multiple proposals to an open call of the SFI Research Centres Programme. See section 5 for further details.

Once submitted by the host research body to SFI through SESAME, an application cannot be withdrawn and subsequently modified for resubmission in the same call, regardless of the date of submission.

11.1. Application Procedure

Applicants are invited to submit the following documentation:

- Pre-proposal,

    and, **if invited** to do so after the pre-proposal evaluation stage,

- Full proposal

Pre- and full proposals must be submitted online through SESAME to SFI by the Research Office of the Lead Applicant's research body before the call deadline.

Applicants are **strongly advised** to familiarise themselves with the SESAME Researcher User Guide before they submit their proposal to SESAME. Applicants should closely follow the instructions provided below.

Pre- and full proposal submission requirements:

- **All text in uploaded PDFs** should be provided in Times New Roman font or similar, with minimum font size of 12, and at least single-line spacing as well as a minimum margin size of 2.5cm. Text in diagrams may be in any clearly legible font.
- Uploads in SESAME must be submitted in **Adobe or Microsoft PDF format only**
- The number of pages in uploads must not exceed the specifications for any given section. **Applications that do not comply with these requirements will be deemed ineligible and will be returned without review**.
- Appendices or other unsolicited documentation are not permitted. **Applications that include such unsolicited documentation will be returned without review.**
- The currency to be used is the **Euro** (€).

Applications not adhering to these requirements, or with incomplete content, will be deemed ineligible and will not be accepted for review, regardless of the date of submission.

It is the responsibility of the applicant to ensure that eligible proposals are received by SFI on, or before, the deadline indicated. In order to safeguard against ineligibility, applicants are reminded to adhere rigorously to the guidelines in the call documentation and to review the proposal document prior to submission in SESAME.

Applications cannot be withdrawn and subsequently modified for re-submission in the same call.

12. Pre-Proposal Submission

For the pre-proposal, there is a requirement for some information to be uploaded to SESAME as part of a Pre-Proposal Programme Document. This Pre-Proposal Programme Document is formatted in accordance with the standard SFI template that can be downloaded from the SFI Research Centres

webpage. Please note that page limits (where applicable) must be strictly adhered to. The SESAME system will not alert applicants when page limits have been exceeded.

Applicants are requested to name file uploads using the following format: (i) include the term 'Pre' at the start of all file names; (ii) use an appropriate term to describe each document (e.g. Budget, Programme Document; Letters of Support) and (iii) include the acronym of the proposed Research Centre in the file name. For example, where the acronym of the proposed Research Centre is 'Nova', document file names should follow the following format: "Pre_ProgrammeDoc_Nova" "Pre_Budget_Nova" "Pre_Letters_of_Support_Nova" etc.

The Pre-Proposal Programme Document should be uploaded to SESAME using the file upload buttons located in the Programme Documents section of the SESAME application form (see below).

Programme Documents

Programme Documents Upload - Pre Proposal: | Multiple Files... | Single File...
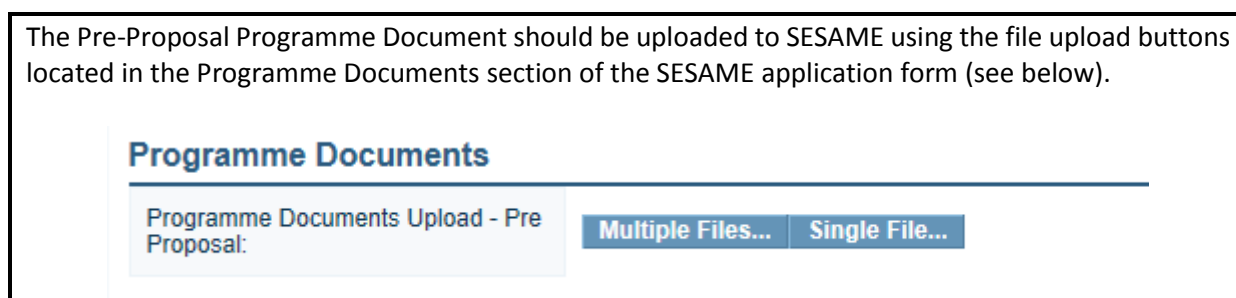
Step 1: Acknowledgement of Eligibility Criteria

Applicants will be asked to confirm that they have read and understood the eligibility criteria for the 2016 Research Centres Programme Call. The application cannot proceed until this acknowledgement is confirmed.

Step 2: Pre-Proposal Information Entry

a) Proposal Summary

- **Proposal Title**
  The proposal title should clearly convey the nature of the research to be undertaken, in up to 30 words.

  After entering the Proposal title and selecting "Save Draft" a Proposal ID is automatically generated by SESAME. Additional fields now appear in the SESAME application form.

- **Total Funding Request Amount**
  Enter the total funding request amount in Euro (€).

- **Duration of Award Requested**
  Enter the duration (in months) of the award requested.

- **NRP Area**
  Select the National Research Prioritisation (NRP) area to which the proposed research most closely aligns with. If the proposal does not align with a NRP area, please select 'other'.

- **Research Area (Primary)**
  Select a primary SFI research area from the drop-down menu, which best describes the proposed research.

- **Research Area (Secondary)**
  Select a secondary SFI research area from the drop-down menu, which best describes the proposed research.

- **How does the proposal align with SFI's legal remit**
  Use the textbox provided to describe (max. 250 words) how their proposal aligns with SFI's legal remit.

b) Lead Applicant Details

- **Location of the Lead Applicant at the time of Submission**
  Applicants must enter the country in which they are employed at the time of submission.

- **Lead Applicant Commitment to Project**
  Indicate the percentage time commitment, as a percentage of the total working time of the Lead Applicant, to the proposed research programme, which should represent a substantial time commitment to the overall management of the Research Centre.

- **Lead Applicant CV (max. 2 pages)**
  A CV for the Lead Applicant (max. 2 pages) must be formatted using the SFI Research Centres Programme CV template and uploaded as a PDF document from within the Lead Applicant Details section.

  Clicking "Save Draft" will make the uploaded CV visible on the SESAME application form.

- **Publications to Date**
  Provide summary information on the total numbers of publications to date. Values should be entered for the number of publications attributed directly to the Lead Applicant (see section 5 for the eligibility criteria relating to publications).

- **Supervisory Experience**
  Provide summary information on supervisory history of the Lead Applicant to date. Indicate the total numbers of graduated MSc and PhD students, the number currently under supervision, and the number of staff currently under supervision.

c) Co-Applicant Details

- **Addition of Co-Applicant(s)**
  Before adding a Co-Applicant to a proposal, the Co-Applicant's SFI PIN number is required. This number can only be obtained by the Co-Applicant under the Additional Information section of their SESAME profile.

  To add a Co-Applicant to a proposal, the Lead Applicant must **add their SESAME SFI PIN number and surname**. SESAME will retrieve the Co-Applicant's details. The Lead Applicant must then associate the Co-Applicant with the proposal. Once associated, the Co-Applicant must access the proposal and add the remaining required information (as described below).

  Note: SESAME does not permit two individuals to concurrently modify a proposal. The Lead Applicant must close the proposal to allow a Co-Applicant to make modifications, and vice versa.

- **Percentage Time Commitment**
  Indicate the percentage time commitment, as a percentage of the total working time of the Co-Applicant(s), to the proposed research programme.

- **Publications to Date**
  Provide summary information on the total numbers of publications to date. Values should be entered for the number of publications attributed directly to the Co-Applicant (see section 5.2 for the eligibility criteria relating to publications).

- **Supervisory Experience (Co-Applicant)**
  Provide summary information on supervisory history of the Co-Applicant to date. Indicate the total numbers of graduated MSc and PhD students, the number currently under supervision, and the number of staff currently under supervision.

- **CV**
  A **CV** (max. 2 pages) for each Co-Applicant must be formatted using the SFI Research Centres CV template and uploaded as a PDF document from within the Co-Applicant Details section.

d) Collaborator Details (Funded Investigators and industry/academic collaborators)
Include organisation (academic/industrial), name, contact information and other required details of funded investigators, official or industry collaborator(s), if any. Please indicate whether collaborators are based in academia or industry. Note that the "Mentor" role is not applicable for this call.

Once all collaborator information has been entered, the collaborator may then be associated with the proposal by the Lead Applicant.

e) Main Body of Proposal
- **Keywords (max. 15)**
  List a number of descriptors (max. 15) that best characterise the subject of your proposal.

- **Scientific Abstract (max. 200 words)**
  Provide a succinct and accurate scientific summary of the proposed work.

- **Lay Abstract (max. 100 words)**
  Provide a succinct and accurate summary of the proposed work in lay (i.e., non-technical) language.

f) Profile of Applicant Group (max. 3 pages) – Pre-Proposal Programme Document
Provide a description of the applicant group as a whole. Provide background as to its history and development. Describe the recent key scientific or technical discoveries or achievements of the group in addition to the group's key economic and societal impact achievements.

g) Funding History – Pre-Proposal Programme Document
Provide details of the funding history for the applicant group using the guidance and template table provided within Appendix C: Funding History. The funding history should demonstrate the eligibility of the applicant group, according to the criteria specified in this document. Specifically, the total funding raised by the group in the specified period must be at least **€10M** cash in direct costs.

h) Research Programme (max. 5 pages) – Pre-Proposal Programme Document
Applicants are requested to provide a description of the proposed research programme structured according to the following headings:

1. **What is the overall vision of the proposed Research Centre?**

2. What specific research question(s) will the **Research Centre address?**
Describe clearly and concisely the specific aims and objectives of the proposed research programme followed by a brief description of how they will be addressed including descriptions of the proposed Platform Research component of the Centre, and each proposed Targeted Project/Centre Spoke. In the case of Targeted Projects, the pre-proposal should identify the expected industry partners (where known).

3. What is the current state-of-the-art in the area and how will the **proposed research advance this?**

4. Why is a Research Centre required to address the proposed research question(s) and what is the competitive advantage of the team to deliver in this area?

i) References – Pre-Proposal Programme Document
Provide a full list of all references. The reference list should include the following details: author(s), title of article, name of publication, date of publication, and other appropriate details (such as volume, pages).

j) Impact Statement (max. 5 pages) – Pre-Proposal Programme Document
Outline the high-level economic and societal impact objectives of the Research Centre. Describe the expected economic and societal impact of the proposed Platform Research and each of the Targeted Projects. Explain how the applicant group intends to achieve its anticipated economic and societal impact over the lifetime of the Research Centre, explaining who will benefit from the research outcomes and how they will benefit.

Describe the potential impact of the Research Centre outputs on the R&D activities and product pipeline of the industry partner(s) and how the industry partners will engage in the Research Centre to maximise the potential for economic impact.

Outline your plans for engaging the non-academic public with your work, including details of team experience in delivering previous public engagement activity.

In this section, pre-proposals must make strong and clear reference to some or all of the Research Centres Programme objectives identified in section 2 of this document and follow the guidance outlined in section 6 (Economic and Societal Impact).

k) Membership Structure (max. 1 page) – Pre-Proposal Programme Document
Applicant groups intending to institute a membership scheme as outlined in section 9.4 above should provide a brief description as to how the intended membership scheme will operate.

l) Summary Budget and Justification – Pre-Proposal Programme Document
The costs eligible for grant support by SFI under the Research Centres 2016 Programme are those costs that can, uniquely and unambiguously, be identified with the proposed research programme. Applicants must provide details of all relevant costs, including staff, equipment, materials and travel. Ensure that the final total provided includes all costs. All awards are made directly to the Lead Applicant's Research Body. Applicants must adhere to SFI Grant Terms & Conditions and also the SFI Grant Application Budget Policy.

Applicants are requested to provide both:

(i) A summary budget using the Microsoft Excel template provided on the 2016 Research Centres webpage. This file should be uploaded to SESAME in Microsoft Excel Format. (See Appendix D: High-level Pre-Proposal Budget Template for more details), and;

(ii) A copy of the completed budget tables from the Microsoft Excel template within the budget summary section of the Pre-Proposal Programme Document template

The budget provided in the Pre-Proposal Document template and the Microsoft Excel template should be identical, and should provide the following details:

- An overall Centre budget (as defined in section 3 of this document), encompassing the SFI contribution as well as the likely or expected industry cash and in-kind contributions, and also including likely or expected 'other non-exchequer contributions'
- A summary budget specifically for the requested SFI contribution to the Centre budget separated by staff, equipment, materials and travel
- A budget for the Centre Operations, Platform Research and each Targeted Project

Budgets should be prepared on a project year basis (i.e., Year 1, Year 2, Year 3 etc.) at the application stage and should cover a period of 72 months (six years).

The applicant group should also provide a brief budget justification (max. 1 page) for the requested resources (e.g., staff, materials, equipment travel) within the Platform, Operations and Spokes of the Centre and should ensure that the indicative budget request adheres to the SFI Grant Application Budget Policy.

m) Letter(s) of Support - Pre-Proposal Programme Document

Provide one letter of support (or intent) from each proposed industry partner according to the guidance provided within Appendix E: Industry Partner Letter of Support. Letters should provide details of the industry partner's intended intellectual input and level of financial (cash, in-kind or both) contribution to the research programme. Applicants should ensure that a completed company contribution table is included within each letter.

Provide one letter of support (or intent) from each organisation committing other non-exchequer contributions (e.g. philanthropic, charity) towards the Research Centre (see Appendix F). Letters of support should be converted to PDF format and appended to the Pre-Proposal Programme Document.

Note: Letters of support from other forms of collaborators or participating research bodies are not required at the pre-proposal stage.

n) Research Funding

Applicants must list any prior research funding that has been received since the award of their PhD or equivalent qualification. A text box is provided in the SESAME application form to describe (in a maximum of 1,000 words) any scientific overlap that exists between any of the previously funded projects and the research proposed in the Research Centres 2016 application.

Step 3: View Proposal Prior to Submission

Before submitting the proposal, applicants are strongly encouraged to review the proposal and to ensure that the specified word and page limits have been adhered to. This can be done within SESAME.

13. Full Proposal Submission

In general, the full proposal document will follow the same basic structure as the pre-proposal, albeit with the opportunity to provide greater detail.

For the full proposal, it is a requirement that some information is uploaded to SESAME as part of a Full Proposal Programme Document. The Full Proposal Programme Document is formatted in accordance with a standard SFI template that will be made available to those applicants invited to submit a full proposal.

Applicants are requested to name file uploads using the following format: (i) include the term 'Full' at the start of all file names; (ii) use an appropriate term to describe each document (e.g. Budget, Programme Document; Letters of Support) and (iii) include the acronym of the proposed Research Centre in the file name. For example, where the acronym of the proposed Research Centre is 'Nova', document file names should follow the following format: "Full_ProgrammeDoc_Nova" "Full_Budget_Nova" "Full_CV_ApplicantName_Nova" "Full_Letters_of_Support_Nova" etc.

The following sections must be completed in the Full Proposal Programme Document. Please note that page limits (where applicable) must be strictly adhered to. The SESAME system will not alert applicants when page limits have been exceeded.

Sections to be completed in Full Proposal Programme Document

Section	Max. Pages
Research Centre Executive Summary	5
Background Context	15
Research Programme	30
References	Not specified
Impact Statement	15
Execution and Delivery	10
Support from the Host Research Body	2
Budget	Not specified
Budget Justification	5
Proposed Funded Investigators	Not specified
Proposed Academic & Industry Collaborators	Not specified
Existing International Collaborators/Partners	Not specified
Description of Funded Team Members	Not specified
Funding History	Not specified

NOTE:

- A high-level budget for the requested SFI contribution to the Research Centre must be completed within SESAME. Additionally, applicants are also required to prepare a detailed budget using a Microsoft Excel budget template that will be made available to those applicants invited to submit a full proposal. Additionally, applicants must include a number of summary budget tables (which can be automatically generated by the Excel template - Centre Summary Budget worksheet), in the Budget section of the Full Proposal Programme Document. See 12. s below for detailed instructions).
- Letters of Support/Intent can be uploaded to SESAME from within the Letter of Support section of the SESAME application form.

The Full Proposal Programme Document should be uploaded to SESAME using the file upload buttons located in the Programme Documents section of the SESAME application form (see below).

Programme Documents

Programme Documents Upload - Pre Proposal: | Multiple Files... | Single File...
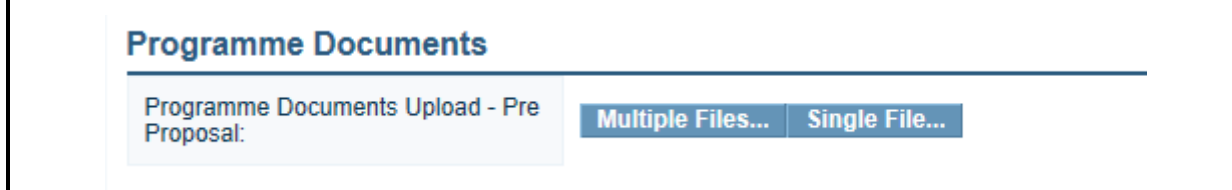
SFI recognises that it may be necessary for applicant groups to modify their set of Lead/Co-Applicants between the pre-proposal and full proposal stages in line with pre-proposal panel recommendations. Hence it is not required that an identical set of Lead/Co-Applicants be named on the full proposal as were named on the pre-proposal.

Applicant groups intending to change their set of Lead/Co-Applicants must contact SFI in advance of submission of the full proposal. SFI will consider the request and, if approved, will effect the change on SESAME. From that point forward, only the NEW Lead Applicant will have the authority to submit the Proposal.

Step 1: Acknowledgement of Eligibility Criteria

Applicants will be asked to confirm that they have read and understood the eligibility criteria for the 2016 Research Centres Programme Call. The application cannot proceed until this acknowledgement is confirmed.

Step 2: Full Proposal Information Entry

a) Proposal Summary
The proposal details will be automatically populated from the pre-proposal. Applicants should carefully check these details, and update them if necessary.

b) Lead Applicant Details
The 'location at the time of submission' and '% time commitment to the project' fields will be automatically populated from the pre-proposal. Applicants should carefully check that the information presented is correct, and update if necessary.

- **Lead Applicant CV (max. 5 pages) - Programme Document**
A CV for the Lead Applicant (max. 5 pages) must be formatted using the standard SFI Research Centres CV template and uploaded as a PDF document from within the Lead Applicant Details section.

Clicking "Save Draft" will make the uploaded CV visible on the SESAME application form.

- **Publications and Supervisory Experience to Date (Lead Applicant)**
The 'publication to date' and 'supervisory experience to date' fields will be automatically populated from the pre-proposal. Applicants should carefully check that the information presented is correct, and update if necessary.

c) Co-Applicant Details

The 'location at the time of submission' and '% time commitment to the project' fields will be automatically populated from the pre-proposal. Applicants should carefully check that the information presented is correct, and update them if necessary.

- **Co-Applicant CVs (max. 5 pages) - Programme Document**
  CVs for the co-applicants (max. 5 pages) must be formatted using the standard SFI Research Centres CV template and uploaded as a PDF document from within the Co-Applicant Details section.

  Clicking "Save Draft" will make the uploaded CV visible on the SESAME application form.

- **Publications and Supervisory Experience to Date (Co-Applicant)**
  The 'publication to date' and 'supervisory experience to date' fields will be automatically populated from the pre-proposal. Applicants should carefully check that the information presented is correct, and update if necessary.

  Note: SESAME does not permit two individuals to concurrently modify a proposal. The Lead Applicant must close the proposal to allow a co-applicant to make modifications, and vice versa.

d) Collaborator Details (Funded Investigators and academic/industry collaborators)

The list of Funded Investigators, Academic Collaborators and Industry Collaborators provided at the pre-proposal stage will be carried forward to the full proposal template.

Collaborator and Funded Investigator details are permitted to change from the pre- to full proposal stage of submission. Collaborator and funded investigator details should be updated as necessary, adding new collaborators by following the instructions described in the Pre-Proposal submission section.

Please note that CVs for Funded Investigators and academic/industry collaborators are not required as part of this Call.

e) Main Body of Proposal

These details (i.e. keywords, scientific and lay abstracts) will be <u>automatically populated from the pre-proposal</u>. Applicants should carefully check that the information presented is correct, and update if necessary.

f) Research Centre Executive Summary (max. 5 pages) - Full Proposal Programme Document

In addition to the full proposal, applicant groups are required to provide a summarised version of the full proposal, including the elements of the makeup of the team, the research programme, the proposed economic and societal impact and a summarised budget. The summarised proposal should capture all key aspects of the full proposal.

Note: It is anticipated that the Impact Panel, will be provided with the Executive Summary along with all other proposal-related documentation, to facilitate their deliberation.

g) Background Context (max. 15 pages) – Full Proposal Programme Document

Provide a description of the background context to the proposal. In particular, the following areas must be addressed:

- **Cohesiveness, Value-Add and Profile of the Research Centre**
  Provide a description of the applicant group as a whole, emphasising its history and development. Describe the key scientific or technical discoveries or achievements,

focussing on the key economic and societal impact achievements of the group in recent years. It is particularly important to demonstrate how the configuration of the applicant group relates to the research and economic objectives of the proposed Research Centre.

Describe how the applicant group will make a cohesive centre, and what steps need to be taken to develop that cohesion. In so doing, demonstrate why a Research Centre award, as opposed to a number of individual Investigator Awards, is necessary to achieve the aims and objectives of the applicant group.

- **Literature Survey/State of the Art Review**
  Provide a brief summary of the current state of the art in those fields related to your proposal. Clearly demonstrate in your summary that you are aware of the key problems and challenges in the area, of the limits of current practice and of the relevant seminal and recent work in this space.

  A full list of all references should be provided in the references section of the Full-Proposal Programme Document Template, directly after the Research Programme section. References should include the following details: author(s), title of article, name of publication, date of publication, and other appropriate details (such as volume, pages).

- **International Benchmarking**
  Provide a brief overview of other international academic and/or commercial research groups that are active in the fields related to your proposed centre. Describe how you benchmark yourself against those groups. In so doing, provide a brief description of the unique configuration of research activities that will make your centre competitive relative to other international groups.

- **National Research Landscape**
  Provide an overview of the current national research landscape as it pertains to your group. Describe other relevant centres (both SFI and non-SFI funded), and how this proposal will relate to them. Describe relevant infrastructure that is available for your centre, both locally and nationally.

- **International Collaborations and Partnerships**
  Provide an overview of the significant international research groups with which your applicant group collaborates, either formally on funded projects (e.g. EU FP7 Integrated Projects, STREPs or H2020 projects), or informally, such as through regular international visits. Describe the nature of these collaborations and in so doing, summarise the key achievements of the collaboration.

  Describe how the proposed Centre will develop further international collaborations with relevant, world-leading centres.

h) Funding History – Full Proposal Programme Document

Describe the funding history for the applicant group in the Funding History section of the Full Proposal Programme Document. The funding history should demonstrate the eligibility of the applicant group, according to the criteria specified in this document. Specifically, the total funding raised by the group in that period must be at least €10M cash in direct costs.

i) Research Programme (max. 30 pages) – Full Proposal Programme Document

Outline at a high-level the key research objectives of the proposed research programme, identifying the critical novel discoveries/inventions/innovations that are to be sought by the Research Centre and why they are important.

Provide a detailed description of the research programme: the proposed Platform Research component of the Centre, and each proposed Targeted Project. The specific aims, objectives, milestones and deliverables of each should be described clearly and concisely.

Provide convincing evidence as to why the proposed research is relevant, timely and novel.

Describe how the proposed research programme will compete successfully for major European initiatives such as Horizon 2020.

Provide a project plan, identifying any dependencies between the Platform Research and the Targeted Projects, or the Targeted Projects with each other and identify the associated industry partners. Specifically, within the project plan include the following details:

- **Objectives**
  Objectives of the proposed research should be summarised.

- **Milestones, Deliverables and Key Performance Indicators (KPIs)**
  Describe the milestones and deliverables for each project along with delivery dates and key performance indicators (KPIs) used to measure progress.

- **Principal Investigators and Industry Partners**
  Describe the role of specific PIs and their teams with responsibility for delivering the project plan in the proposal, including the role of PIs towards delivering each milestone. Clearly present all industry partners and their specific role in each Targeted Project.

- **Risk**
  Include an assessment of risks associated with the delivery of each Targeted Project and explain measures to mitigate and manage these risks.

  Note: The project plan should be written in a way that facilitates evaluation by the postal and panel reviewers, and with due consideration to on-going annual assessment by SFI of centres that are funded.

j) References – Full Proposal Programme Document
  Provide a full list of all references referred to within the proposal. References should include the following details: author(s), title of article, name of publication, date of publication, and other appropriate details (such as volume, pages).

k) Impact Statement (max. 15 pages) - Full Proposal Programme Document
  Outline the high-level economic and societal impact objectives of the Research Centre. Describe the expected economic and societal impact of the proposed Platform Research and each of the Targeted Projects.

  Explain how the applicant group intends to achieve its anticipated economic and societal impact over the lifetime of the Research Centre, explaining who will benefit from the research outcomes and how they will benefit.

Provide a brief business development plan outlining how the projected economic impact will be achieved. In particular, focus on how activities such as acquisition of new partner companies and projects, licensing of IP, development of spin-outs, etc. will be enabled and what resources will be required to do so. Describe the key performance indicators and targets related to the execution of the business development plan.

Describe the approach to IP management and commercialisation that the proposed Research Centre will adopt.

Applicant groups should make specific reference to the objectives of the Research Centres Programme as described in section 2 of the call document and how their proposed economic and societal impact will further those objectives.

Entrepreneurship is recognised as a powerful driver of economic growth and job creation. The National Policy Statement on Entrepreneurship[5] in Ireland published in 2014, sets out a number of strategic objectives to support Ireland's ambition to be among the most entrepreneurial countries in the world. SFI Research Centres can play a significant role in this ambition. In assessing various impacts, applicants are asked to consider and describe how a culture of entrepreneurship will be developed and supported within the Centre and how researchers will be encouraged, incentivised and rewarded for entrepreneurial activities.

Describe the training and education activities proposed for the Centre. This should include both training of directly funded students (e.g., taught MSc and PhD courses) as well as wider training and education activities in the HEI sector and the industry/commercial sector.

Outline your plans for engaging the non-academic public about your work (approximately 3 pages). This should include

- The vision for you programme, including aims, target audiences, activities and outputs
- Public engagement experience of staff and external partners
- How your programme will be monitored and evaluated, including success indicators
- Host organisation support for education and public engagement aspects of the programme

Please refer to Section 6 (Economic and Societal Impact) section of the call document for guidance on how to compose the Impact statements.

l) Execution and Delivery (max. 10 pages) - Full Proposal Programme Document

Provide a description of the management and operations of the Centre. In particular, the following areas should be addressed:

- **Executive Management**
  Describe the Executive Management structure of the proposed Research Centre. Describe the membership of this Executive, both from the cohort of Lead/Co-Applicants and other members of the Centre (e.g. Centre Manager/Executive Director/CEO). Clearly describe

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[5] *https://www.djei.ie/en/Publications/National-Policy-Statement-on-Entrepreneurship-in-Ireland-2014.html*

the role of the Centre Director and, where relevant, the roles of any Vice- or Co-Directors, and the process by which decisions will be made and disputes resolved.

- **European Initiatives**
  Applicant groups should describe which significant European research initiatives that they are aligned to, including, but not limited to Marie-Sklodowska-Curie Actions, European Research Council, and Horizon 2020, and should describe what proactive steps they will take to ensure that they are positioned competitively to lead and win in these programmes. Include specific plans and targets for participation in each of the relevant programmes.

- **Key Performance Indicator (KPI) Targets**
  Applicants are required to provide a set of specific targets for a subset of the performance indicators described in section 23 (Progress Reporting Requirements) for each year of the award using the template provided within Appendix H: Performance Indicator Targets Template. These targets should be ambitious, but realistic and achievable and will form part of the evaluation of the proposal.

  For successful proposals, these targets may be adjusted in discussion with the applicants and in line with findings or recommendations of the proposal evaluators and/or SFI staff.

  These targets will be reviewed on a six monthly basis, and compared against the reported performance of the Research Centre, typically following the submission of the annual report. Targets may be updated for future years following that review, with the agreement of SFI. Definitions of the Performance Indicator Targets are available on the following webpage:

  http://www.sfi.ie/funding/sfi-policies-and-guidance/budget-finance-related-policies/

- **Infrastructure Access Plan**
  Applicant groups with substantial existing capital infrastructure or equipment, or intending to purchase such infrastructure, who wish to submit an access charge plan for usage and access to the relevant infrastructure and facilities for SFI approval should contact centres@sfi.ie to request the relevant documentation.

- **Industry Membership Scheme**
  Applicant groups intending to institute an industry membership scheme as described in section 9.4 should provide a brief description and justification as to how the intended membership scheme will operate. In particular, outline the anticipated membership fees that will be charged to member companies, the benefits that will accrue to members and the expected annual income from membership fees.

- **Centre Sustainability**
  SFI expects that Research Centres funded through the 2016 Call will grow and evolve and develop a sustainable funding model over the lifetime of the award. Applicants are requested to outline a plan for moving towards a model where one third of the Research Centre's funding would be secured from industry sources, one third from non-exchequer competitive grants with the remaining one third of the budget being supported by SFI.

m) Support from the Host Research Body (max. 2 pages) - Full Proposal Programme Document
  Describe the infrastructure, facilities space and services to be provided by the Host Institution. This should include details of the office, laboratory, computing, animal or other facilities as necessary, where the research will be done, including all of the

equipment that will be available, but excluding equipment requested in this application. In cases where shared equipment or core facilities are being requested, letters of support from colleagues or grant collaborators should be attached to the application. Indicate what IP/technology transfer services are provided by the Research Body. It will be helpful if the host Research Body can clearly describe how it will use the overhead income it will be awarded to support the operation, sustainability and impact of the Centre. The amount provided will be dependent on the size of the Centre award.

The Host Research Body should comment on how it will support the Centre Director, and describe the reporting structure which has been / will be put in place within the Research Body.

In addition, a letter of support must be included from the Lead Applicant's Research Body and from the Research Body of the Co-Applicants and Funded investigators, if different (see letters of support section).

n) Proposed Funded Investigators – Full Proposal Programme Document
Complete the 'Proposed Funded Investigators' table by providing the following details for each proposed Funded Investigator: Name, Research Body, position, year of PhD, number of senior author publications, number of PhD students graduated to-date, number of Masters students (research only) graduated to-date, area of expertise, and spoke / targeted project alignment.

o) Proposed Academic & Industry Collaborators – Full Proposal Programme Document
Complete the 'Academic Collaborators (National)' and 'Academic Collaborators (International)' tables by providing the following details for each proposed Funded Investigator: Name, Research Body, position, year of PhD, number of senior author publications, number of PhD students graduated to-date, number of Masters students (research only) graduated to-date, area of expertise, and spoke / targeted project alignment.

Complete the 'Industry Collaborators' table by providing the following details for each proposed Industry Collaborator: Name, organisation, position, area of expertise, and spoke / targeted project alignment.

p) Existing International Partners/Collaborators – Full Proposal Programme Document
Identify all current or recent international partners or collaborators of all Lead/Co-Applicants and funded investigators using the following table (include details of collaborators who are involved in the proposed Research Centres and who are not involved in the proposed Research Centre).

Lead/Co-Applicant or Funded Investigator	Collaborating University or Company	Collaborating Research Group	Collaborator(s)	Project(s)

q) Description of Funded Team Members – Full Proposal Programme Document
For each team member (Postdoctoral Researcher, Research Assistant, PhD Student, Masters Student, operations staff etc.) for whom funding is requested, provide a description (~200 words) of the required expertise and the specific tasks, projects and industry partners with whom that researcher will be working. Take note to fully justify the researcher's role in the relevant research project.

Include the salary scale (as per SFI Grants Team Member Budgeting Scale) for each team member. Clear and explicit justification is required for any request for an experienced Postdoctoral Researchers and Research Fellows, i.e. one who will be appointed higher than Level 2A, Point 1 of the SFI team member budgeting scales. Please note that when preparing a budgets, applicants should use separate 'budget line item' for each individual Postdoctoral Researcher post. Applicants may request a contribution towards salary costs of each Postdoctoral Researcher position for a period of one, two, three or four years.

r) Research Funding

These details will be automatically populated from the pre-proposal. Applicants should carefully check that the information presented is correct, and update them if necessary.

s) Budget – SESAME application form and Full Proposal Programme Document

Applicants are required to provide the following budgetary information:

(i)   A high-level budget for the requested SFI contribution to the Research Centre, within Sesame.

(ii) A detailed Research Centre budget prepared in the Microsoft Excel budget template that will be made available to those applicants invited to submit a full proposal. Detailed guidance on completing the budget template will also be provided to full proposal applicants. This budget file should be uploaded in Microsoft Excel format to SESAME using the Programme Documents upload button.

(iii) Finally, applicants must include the following summary budgets, which will be automatically generated by the Microsoft Excel budget template (Centre Summary Budget worksheet), within the Budget section of Full Proposal Programme Document:
- A budget for the requested SFI contribution to the Research Centre budget separated by staff, equipment, materials and travel
- Budgets for the SFI contribution to the Research Centre Operations, Platform Research and Spokes
- A detailed breakdown of industry financial contributions to the Centre, both cash and in-kind (e.g. staff, equipment, other). Note that the financial commitments identified in these tables should be in accordance with and supported by the commitments provided by the industry partners in their letters of support.
- A detailed breakdown of 'other non-exchequer contributions' (e.g. philanthropic, charity etc.) being made to the Centre
- An overall Research Centre budget (as defined in section 3, plus any 'other non-exchequer contributions'), encompassing the SFI contribution, the industry cash and in-kind contributions, and other non-exchequer cash and in-kind contributions.

Applicants must follow SFI's Grant Applications Budget Policy. Budgets should be prepared on a project year basis (i.e., Year 1, Year 2, Year 3 etc.) at the application stage and should cover a period of 72 months (six years).

t) Budget Justification (max. 5 pages) - Full Proposal Programme Document

The applicant group should outline the required expertise for each requested researcher and justify the researcher's role in the research project. Include the salary scale (as per SFI

Grants Team Member Budgeting Scale) for each team member. Clear and explicit justification is required for any request for an experienced post-doctoral researcher, i.e. one who will be appointed higher than Level 2A, Point 1 of the SFI team member budgeting scales. Justification should also be provided for requested equipment, consumables and travel, and the requested duration of funding. Details should be provided if funding is apportioned to collaborator(s) (only allowable where collaborators are within an eligible Research Body). All funding will be administered through the Research Centre's host Research Body.

Where contributions to salary for administrative support roles are requested, clear rationale and justification must be provided and reference must be made to the relevant role description, HR recruitment procedure and local Research Body salary scale. This information must be detailed in the budget justification. SFI will not contribute to the funding of any permanent core staff (e.g., funded by the HEA block grant). The following details also apply in cases where SFI contributions to Administrative Support salary are being considered:

- A description of the qualifications required for an individual to be hired, together with the expected roles and responsibilities of the post must be provided within section q (Description of Funded Team Members)
- Requests for non-research posts must be aligned to the relevant point on the Research Body scale, details of which must be included within section q
- Appropriately detailed justification must be provided for senior administrative posts attracting substantial salaries
- The Research Body must make provision for an open and transparent recruitment process

Access charges may be sought for use of infrastructure where SFI pre-approved access charge plans are in place or for use of other shared facilities or national test-beds, which are required as part of the proposed research. The requested access charges should be specified in the budget and justified in the budget justification section. The scientific rationale for undertaking such experiments should be outlined in the research description.

If funding is sought for use of overseas equipment/services, this should be clearly justified and the rationale for not carrying out this activity in Ireland must be provided.

This document can be uploaded from within the Budget Justification section of the SESAME application form.

Note: SFI funding may not be used to fund access to facilities, where access by the research community has already been provided for by alternate Exchequer funding.

u) Excluded Reviewers (max. 4)

Provide up to 4 individuals or organisations (e.g., companies) that you request SFI to exclude from acting as postal reviewers for reason of competition.

v) Letter(s) of Support

Applicants must include the following letters of support with their proposals:

- A letter of support from <u>each Industry Partner</u> outlining their intention to participate in the proposed Research Centre. Industry letters of support should outline any previous history of collaborations with the academic applicants and

outline how the research to be undertaken aligns itself with the current and future needs of that Industry Partner. The letter of support should describe the level of cost-share commitment from the industry partner, both in terms of cash and in-kind contributions and the time period for which the contribution is being made. Applicants should ensure that a completed company contribution table (Appendix E: Industry Partner Letter of Support) is included within each letter.

- A letter of support from <u>each official collaborator</u>. Details of how official collaborators will contribute to the proposed research programme must be clearly described.
- A letter of support from the <u>Research Body of the Lead Applicant, each Co-Applicant and each Funded Investigator</u>. These letters should comment on the infrastructure, services and support available to the proposed Research Centre. They should also name the Lead Applicant, Co-Applicant(s), and/or Funded Investigator(s) from their Research Body who are listed on the application and include an endorsement of their eligibility. The letter of support from the Lead Applicant's Research Body should also describe what services and supports will be made available to the proposed Research Centre Director.
- Where applicable, a letter of support from each organisation committing other non-exchequer contributions (e.g. philanthropic , charity) towards the Research Centre (see Appendix F)

Letters of Support can be uploaded directly to the Letter(s) of Support section of the SESAME application form.

Step 3: View Proposal Prior to Submission

Before submitting the proposal, applicants are strongly encouraged to review the proposal and to ensure that the specified word and page limits have been adhered to. This can be done within SESAME.

14.   Research Body Approval

It will be noted that Research Body submission of an application represents their approval of an application and agreement to the <u>SFI Terms and Conditions of Research Grants</u>. Submission must only be made by an authorised Research Body representative. In particular, the Research Body is approving:

- Eligibility of each Lead Applicant/Co-Applicant and funded investigator as well as the eligibility of the applicant group as a whole
- That the Lead Applicant and each Co-Applicant are recognised as an employee of one of the collaborating the Research Bodies for the duration of the award
- That the requested budget including salaries/stipends, equipment, travel and consumables are in line with accepted institutional and national guidelines
- The availability of infrastructure within the institution as outlined by the applicant group in the research proposal
- That the proposed research programme has not been funded by other sources
- That relevant legal and ethical approval has been sought and will be granted prior to the award commencing
- That the relevant licences will be in place at the time of award
- That the details provided in relation to research funding history (i.e., current, pending or expired grants, as detailed in the application) are valid and accurate

Furthermore, submission of an application further represents the approval of the Lead Applicant and all Co-Applicants of the application and agreement to SFI Terms and Conditions of Research Grants.

15. Intellectual Property Management

IP management practices should be in accordance with national guidelines. In particular, Research Centres must comply with the practices and procedures described in the Putting public research to work for Ireland (IP Framework) document. Research Centres will be expected to update their practices in line with changing directives from Knowledge Transfer Ireland (KTI), SFI or other relevant official sources during the life-time of the Research Centre.

Industry partners must make a minimum contribution to the full cost of the Targeted Project(s) in which they are engaged in order to enjoy preferential access to IP associated with or arising from the project. Preferential access may include privileges such as first sight of technology, first options to negotiate particular licenses, and other benefits as decided by the TTO and which are not available to outside parties. An industry partner wishing to enjoy preferential access to IP must make a formal commitment before the project commences to contribute not less than 30% of the full cost of the project and must include a minimum of 10% cash, in line with the general structure of the Research Centres programme.

Details of specific IP guidelines as they pertain to the SFI Research Centres programme are described in the Guidelines for Industry Access to Intellectual Property in the SFI Research Centres Programme document on the SFI website.

16. Doctoral Education

For postgraduate students funded by SFI, the host Research Body is expected to adopt the principles, standards and good practice for doctoral education as described in the National Framework for Doctoral Education (2015), which SFI has endorsed.

17. Research Integrity

SFI places high importance on ensuring research integrity and endorses the National Policy Statement on Ensuring Research Integrity in Ireland. All applicants and institutions are expected to abide by the aforementioned Irish Policy on Research Integrity and European Code of Conduct for Research Integrity. SFI plans to audit compliance by award holders and relevant research bodies with the principles laid down in these guidelines that are relevant to the agency's activities and the awards it makes.

18. Ethical Issues

All investigators and research bodies must ensure that, before the research commences and during the full award period, all the necessary ethical, legal and regulatory requirements in order to conduct the research are met, and all the necessary licences and approvals have been obtained. All research bodies are responsible for ensuring that a safe working environment is provided for all individuals associated with a research project.

If research activities involve the use of animals, applicants must comply with the Health Products Regulatory Authority's (HPRA) position on the use of animals in research. SFI will only support research using animals that is fully compliant with the requirements of the HPRA, has been independently peer reviewed and where consideration has been given to the use of alternative approaches not involving the use of live animals and addressing the principles of the 3R's (reduction, replacement, refinement).

For studies involving humans, ethical approval must be obtained from the relevant national or local ethics committee prior to the start of the project. Additional requirements apply to clinical trials, as outlined in the 'Clinical Trials' Section of this document.

Furthermore, in line with a current directive from its parent Government Department, research funded by SFI must not comprise any component of the following:

- Research intended to create human embryos solely for the purpose of research or for the purpose of stem cell procurement, including by means of somatic cell nuclear transfer
- Research using human embryonic stem cells or tissues.

19.   Clinical Trials

SFI permits early stage clinical trials (Phase I) to be undertaken with support from an SFI Research Centre, Spoke or Strategic Partnership Award. Any such clinical trial must be conducted in accordance with SFI Terms and Conditions and adhere to the relevant SFI Policy including the terms outlined below.

Investigator(s) proposing to undertake clinical trials should avail of the input, advice, services and/or support of a Clinical Research Facility/Centre (CRF/CRC), a Clinical Trials Unit (CTU) or other specialist facilities at the study design stage and the clinical trial must be under the governance and oversight of an established Clinical Research Facility/Centre.

SFI cannot take on the role of sponsor; therefore appropriate sponsorship arrangements, satisfactory to SFI, must be made in compliance with relevant EU Clinical Trials Directives and related regulations, or, where relevant, the EU Medical Device Directives. Details of Sponsors, including Letters of Support from sponsors, must be provided to SFI prior to initiation of the clinical trial.

It is the responsibility of the Principal Investigator to ensure that the clinical trial is conducted in a manner that is compliant with all applicable legislation, regulations and guidelines, including the Guidelines for Good Clinical Practice. Furthermore, evidence that the requisite ethical and competent authority approval has been secured, and that the appropriate insurance cover (including no-fault and legal liability insurance as deemed appropriate by SFI) is in place to cover the liability of all parties including the Principal Investigator, Research Body and Sponsor, must be provided to SFI prior to initiation of the clinical trial. Responsibilities of the Principal Investigator shall also include that the clinical trial will be well managed and monitored in respect of any inherent risks, that the principles of good clinical practice are applied effectively, and that sound safety reporting systems are put in place.

The award shall be subject to such terms and conditions for clinical trials at the discretion of SFI and notified to the Research Body. In the case of any clinical trials that may be multi-site, SFI may apply additional terms and conditions.

Please note that payment on awards involving clinical trials will not be issued until evidence of ethical and competent authority approval and the requisite insurance cover has been submitted to SFI.

Additionally, the host Research Body and/or Sponsor (as stipulated by SFI) must fully indemnify SFI from all claims and proceedings arising from the trial by submitting a signed indemnity to SFI using a template to be provided.

20.   Non-Compliance

Proposals not in compliance with any details specified in this document, or in the <u>SFI Terms and Conditions of Research Grants</u> or any other relevant SFI policies will not be eligible for funding and will be returned without review.

21.   Confidentiality

Science Foundation Ireland takes all reasonable steps to ensure that information provided in the application form is treated as confidential, subject to submission to the members of its committees and merit review and to any obligations under law.

Please note that proposal titles and abstracts should only include details which are non-confidential.

22.   Conflict of Interest

Conflict of interest rules are applied rigorously and apply to both reviewers and applicants.

Reviewers engaged by SFI are required to adhere to SFI's conflict of interest policy and immediately declare to SFI where a conflict of interest exists or arises so that an alternative reviewer may be appointed. International peer reviewers will not provide comments or scores on any application on which they have a conflict of interest.

Reviewers must adhere to high standards of integrity during the peer review process. They must not compromise the intellectual property integrity of the application and may not appropriate and use as their own, or disclose to any third party, ideas, concepts or data contained in the applications they review.

SFI recognises that applicants may have a prior relationship with an industry partner engaged in an application for funding to SFI (e.g., industry consultancy role, founder of an academic spin-out company) which may be perceived as a conflict of interest. Where a potential conflict of interest exists, SFI requires that it is disclosed by the applicant to SFI and their Research Body and that any such situations are managed by the Research Body in accordance with the principles and mandates laid out in the National Intellectual Property Guidelines.

Potential conflicts of interest with respect to industry collaborators/partners named in the Research Centres application should be directly declared within the industry partner letter of support at the full proposal stage. Furthermore, the Host Research Body Letter of Support should contain a brief description of the institutional policy regarding management of such conflicts.

23. Progress Reporting Requirements

SFI has stringent requirements for the reporting by applicants on the grants that it makes. Award holders that fail to comply with these reporting requirements run the risk of having their grant payments suspended.

Each year, on a calendar year basis, SFI must receive a report from the Lead Investigator (Centre Director) that summarises the progress, outputs/outcomes and achievements of the Research Centre award. The purpose of this report will be to capture individual activities relating to the objectives of the programme as described, with input from the industry partner organisations where appropriate. This will be coincident with reporting for the annual stocktake of SFI Research Outputs, via a 'Research Profile' (RP) in SESAME. The RP will capture metrics associated with both near and far term outputs, such as placement of individuals with partner organisation such as Industry, which are in direct support of the Key Performance Indicators (KPIs), as defined in "Agenda 2020". Award holders will be expected to maintain an up-to-date profile for the Research Centre, and a snapshot of that profile will be captured for reporting purposes twice yearly.

A template for the annual report and further guidelines on the reporting requirements will be provided to successful applicants in due course. Submission of annual reports will be made through SESAME.

Progress against the objectives set out for the Research Centres Programme 2016 will be evaluated using information entered into the Research Profile, the annual reports and, at SFI's discretion, progress site reviews. Each objective with expected outputs is discussed in turn below.

1) **To achieve, maintain and enhance research excellence and leadership, as measured through indicators such as publication in top-tier journals and conferences, citations, editorship of top-tier journals, giving invited lectures at top-tier conferences.**

   Award holders will be asked to report on:

   a) The number of publication outputs in journals and conferences directly supported by the Research Centre award;
   b) Community participation through editorship of journals, and programme committee membership of conferences;
   c) Reputation of Centre members through presentations and invited lectures at international conferences;
   d) The number of prestigious international awards for academic excellence.

   SFI funding has produced high quality high impact publications which have resulted in Ireland rising to the top 20 in international bibliometric rankings of repute. SFI's Agenda 2020 sets a target for Ireland to remain in the top rankings. SFI's expectation is that the grants made in the Research Centres Programme will contribute significantly to this target. In the annual report, award holders will be asked to identify the most significant impact (or rank specific impacts) arising from their Research Centre award, describe the impact their research is making to the Irish economy and society. Award holders will be asked to monitor the impact of their most important publications through citation counts and to report on highly cited publications.

2) **To deliver significant economic and societal impact – research excellence with impact – which will be aligned with areas of strategic opportunity for Ireland, including the 14 National Research Priority areas, and including the six broad enterprise themes (ICT, manufacturing & materials,**

heath & medical, food, energy, and services & business processes) outlined in Innovation 2020 - Ireland's Strategy for Research and Development, Science and Technology.

SFI expects that awards funded under the Research Centres programme will develop knowledge and technologies in industrial and commercial sectors of importance to Ireland, as specified in Government documents such as the Action Plan for Jobs, the Report of the Research Prioritisation Steering Group and any other relevant documents or policies in particular areas. In their report, awardees will be asked to report on how their activities align with defined areas of national economic importance, where relevant, with reference to areas defined in the report of the NRP Steering group and to enterprise themes referred to in Innovation 2020 and other relevant current government policy.

3) **To increase the level of industrial and commercial investment in R&D activities with existing Ireland-based companies, and furthermore to attract large Foreign Direct Investments in corporate R&D laboratories.**

Award holders will be asked to report on the financial contributions (cash and in-kind) made by industry partners to the running of the Centre. Award holders will be asked to describe how those industry contributions supported and facilitated the research programme of the Research Centre.

Award holders will be asked to report on the number of new FDI investments in corporate R&D laboratories that are directly linked with the Research Centre. In conjunction with IDA data on such investments, award holders will be asked to report on the total value of the investment (in terms of jobs and capital) as well as any specific part of the investment directly linked to the Research Centre.

4) **To spin out new, high-technology start-up companies that have the potential to raise external angel or venture funding.**

Award holders will be asked to report on the number of start-up companies that have been created and/or spun-out from the Host Institution. Award holders will furthermore be asked to track and report on fund-raising activities of these spin-out companies through Enterprise Ireland as well as private sources such as angel investors or venture capital firms.

5) **To transfer technology, through licences, to Multinational Companies (MNCs) and Small and Medium Enterprises (SMEs) based in Ireland.**

Award holders will be asked to describe the technology protection activities (such as invention disclosures, patent filings) and technology transfer events (options, licences, assignments) from the academic partner to the industrial/commercial partner. Award holders will furthermore be asked to describe the nature as to how those licensed technologies have been commercialised through novel products and services.

6) **To transfer knowledge, expertise and know-how to MNCs and SMEs based in Ireland.**

Award holders will be asked to report on the number of engagements involving knowledge or expertise transfer to companies based in Ireland. Such engagements will involve activities such as:

a) Joint projects under taken with industry partners;
b) Placements of industry partners within the Research Centre;
c) Placements of Research Centre staff with the industry partner.

Award holders will be asked to describe the nature of the industrial collaborations, as well as the key achievements of those collaborations.

7) To undertake joint research projects with industry.

In addition to seeking financial contributions from industrial partners, Research Centres are expected to deepen the intellectual partnership between industry and academia. To that end, award holders are encouraged to undertake joint-publications between research staff and their industry participants. Award holders will be asked to report on the number of academic publications joint publications with industry co-authors.

8) To inspire the future generation of STEM students and to train and educate a cohort of engineers and scientists at MSc/MEng, PhD and post-doctoral level that will take up high value employment in MNCs and SMEs based in Ireland.

Award holders will be asked to report on the number of students graduating from the Research Centre. Award holders will furthermore be asked to report on the first destination of these researchers post-graduation as well as the first destination of all post-doctoral researchers upon completion of their contracts with the Research Centre. Where applicable to the public engagement plan, in terms of influencing primary and post primary education on careers awareness, award holders will be asked to report on the number of students or key stakeholders engaged with.

9) To attract additional non-Exchequer funding through industry sources and external research-funding organisations.

A key purpose of Research Centres Programme is to build capacity, expertise and relationships so as to enable researchers to (i) secure additional industry-funded research projects and (ii) lead proposals in major funding programmes, in particular Horizon 2020.

Award holders will be asked to report on any new part of wholly industry funded projects that are awarded to the Research Centre. Additionally, award holders will be asked to report on their role in any applications made to the any major Irish, EU or international initiatives, and in particular Horizon 2020. Award holders will be asked to report on new funding awards that arise directly out of the collaboration facilitated by the Research Centre Programme and the value of those awards to the Research Centre.

10) A key objective of Science Foundation Ireland is for Ireland to have the most engaged and scientifically informed public. This in informed by the SFI Science in Ireland Barometer.

Award Holders will be asked to report on the outputs, outcomes and impacts of their education and public engagement programme.

Applicants may refer to the detailed 'Research Centres reporting guidelines' for further reference.

24.   Summary Programme Timeline

Call announcement	December 2015
Information & networking events	January 2016
Webinar	January 2016
Deadline for submission of abstracts	4th March 2016,13:00

Deadline for submission of pre-proposals	28th April 2016, 13:00
Invite to full proposals	July 2016
Deadline for submission of full proposals	2nd November 2016, 13:00
Invite to Impact Panel	February 2017
Impact Panel meeting	February/early March 2017
Funding Decision	April 2017

While we will make every attempt to adhere to the timetable and deadlines outlined above, SFI retains the right to modify the timetable, if necessary, for operational reasons. In such an eventuality, SFI will advise all applicant groups in the evaluation process at that stage as soon as possible. Note that all times referred to are Dublin, Ireland local time.

25. Further Information

For further information on the Research Centres Programme contact: **centres@sfi.ie**

26.Appendix A: SFI Research Centres Abstract Sheet

PROGRAMME NAME: **SFI Research Centres Programme 2016**	CLOSING DATE FOR RECEIPT OF ABSTRACTS 4th March 2016,13:00 Dublin, Ireland local time
TITLE OF PROPOSAL (up to 30 words)	
NAME OF HOST INSTITUTION	FULL NAME OF LEAD APPLICANT
SCIENTIFIC ABSTRACT (up to 200 words)	

27.Appendix B: Lead/Co-Applicant Pre-Proposal CV Template

Section 1: Required Details (Max. 1 page)

Name and Contact Details

Career Profile (Education and Employment)

Include details of any adjunct positions held and include year of PhD

If you wish you may provide details of any career breaks or periods of part-time work, for example parental or long-term sick leave.

Details of Most Relevant Research Funding as Lead/Co-Applicant

This section should only include a summary of funding, current and expired, obtained as an independent PI. Note that this section does not replace the requirement to directly enter details of current and past awards into SESAME.

History of Mentoring and Supervision

Please provide an overview of career paths being pursued by former team members. This information will complement details on numbers of current and completed MSc and PhD students, directly under your supervision, as well as details of previous and current post-doctoral staff, that have been directly entered into SESAME.

Innovation/Commercialisation Activity (e.g., relevant industry collaborations, invention disclosures, patents, spin-outs)

Distinguish between patents applied for and under review versus patents granted

Other Information as Appropriate

Include details of key achievements including measures of esteem, invited presentations, principal scientific activities and responsibilities, as well as a statement demonstrating the applicant's accomplishments as an independent investigator.

Section 2 – Selected Publications (Max. 1 page)

Provide a hyperlink to an independent publication database (e.g. Scopus, Web of Knowledge, Google Scholar etc.) listing your publications, and complete the various fields in the table below as per the details of the database provided. Please note that links to Research Body webpages are not acceptable.

Name of Source	(e.g. Scopus, Web of Knowledge, Google Scholar)		
Hyperlink to Profile			
Number of publications		Number of citations	
H-index		Year of 1st publication	

List most recent, relevant publications using the full reference, including title, for each publication.

Highlight with an asterisk each of your senior author publications (as per the eligibility criteria).

Underline the names of the Research Centre Proposal Lead Applicant and Co-Applicants on each publication listed.

28. Appendix C: Funding History

Provide a detailed funding history for the applicant group of applicant/Co-Applicants named on the proposal from 2010 - 2016. The funding history should demonstrate the eligibility of the applicant group, according to the criteria specified in this document. Specifically, the total funding raised by the group in that period must be at least **€10m** cash in direct costs.

- Applicants/Co-Applicants that were CSET or SRC Directors during that period may count the full value of the relevant CSET/SRC award.
- Applicants/Co-Applicants that were Co-PIs of a CSET, SRC or Research Centre during the period (but not director) may count their portion of the overall award value, if the award has not already been included as per the previous point.
- Applicants/Co-Applicants that held individual investigator awards such as SFI Principal Investigator, SFI Investigators, SFI RFP, SFI Research Professor, SFI PIYRA, SFI SIRG, ERC Starting/Advanced Investigator may count the full value of that award.
- Applicants/Co-Applicants that were named co-PIs on multi institution awards such as EU FP7 awards should count their portion of the overall award value.
- Applicants/Co-Applicants that were named co-PIs on multi-PI awards such as PRTLI research centres/awards should count their portion of the overall award value. Note that PRTLI capital funding (e.g. building grants) are not to be included.

Provide a table identifying relevant funding in the following format within Profile of Applicant Group (section 12.g). New rows may be added as required.

Funding History						
Name of applicant/Co-Applicant	**Grant Title**	**Grant Code**	**Granting Body**	**Award Date**	**Total Grant Value**	**Applicant/Co-Applicant Share**
Total					€XXX	€YYY

Notes:

- In the case of a single investigator award, the 'total grant value' and 'applicant/Co-Applicant share' will be the same value.
- The values provided should be direct costs made available for the delivery of the relevant research programme only. Overheads or other indirect costs should be excluded from these values.
- Only those awards that were formally granted (i.e., whose letter of offer or contract was dated) in the period 1st January 2010 – 28th of April 2016 should be counted and included on the above table.
- The figure €YYY in the above table must be at least €10m.
- If the *applicant group* has significantly greater than the minimum €10m in eligible prior funding, it is encouraged to provide full details, as it may be seen by the evaluation panels as evidence of greater scale or capacity.

Applicant groups must, if requested by SFI, be able to provide documentary evidence in support of each relevant claim above.

29.Appendix D: High-level Pre-Proposal Budget Template

Applicants are requested to provide both:

(i) An indicative summary budget using the tables provided in the budget summary section of the Pre-Proposal Programme Document template; and

(ii) A summary budget using the Microsoft Excel template provided on the 2016 Research Centres webpage. This file should be uploaded to SESAME in Microsoft Excel Format.

A. Overall Research Centre Budget

Fill out a **budget summary** for the proposed Research Centre using the format shown below.

TOTAL RESEARCH CENTRE BUDGET							
	Year 1 **€**	**Year 2** **€**	**Year 3** **€**	**Year 4** **€**	**Year 5** **€**	**Year 6** **€**	**Total** **€**
Industry Cash							-
Industry In Kind Contribution							-
Requested SFI Contribution							-
Total Centre Budget	**-**	**-**	**-**	**-**	**-**	**-**	**-**

	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**
Other Non-Exchequer Cash Contribution							-
Other Non-Exchequer In-kind Contribution							-
Additional Non-Exchequer Contributions	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Centre Budget + Non-Industry Non-Exchequer Contributions:							**-**

B. Summary Breakdown of Requested SFI Contribution

Provide a summary breakdown of the requested contribution to the centre budget from SFI. The following table should show the requested amount across all aspects of the Research Centre.

REQUESTED SFI CONTRIBUTION: RESEARCH CENTRE BUDGET							
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**
Staff							-
Equipment							-
Materials							-
Travel							-
Total Direct Costs	**-**	**-**	**-**	**-**	**-**	**-**	**-**

C. Breakdown of Requested SFI Contribution

Provide a budget summary for the Centre Operations, Platform Research and each Targeted Project in the Research Centre.

REQUESTED SFI CONTRIBUTION: OPERATIONS, PLATFORM, SPOKES BUDGET							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	**Total**
Operations							**-**
Platform							**-**
Targeted Project 1							**-**
Targeted Project 2							**-**
Targeted Project 3							**-**
Targeted Project 4							**-**
Targeted Project 5							**-**
Targeted Project 6							**-**
Targeted Project 7							**-**
Targeted Project 8							**-**
Targeted Project 9							**-**
*Targeted Project 10							**-**
Total Direct Costs	**-**	**-**	**-**	**-**	**-**	**-**	**-**

* Insert additional rows as required.

30.Appendix E: Industry Partner Letter of Support

A letter of support from each industry partner outlining their intention to participate in the proposed Research Centre must be provided at both the pre- and full-proposal application stages. Industry letters of support should outline any previous history of collaborations with the academic group and outline how the research to be undertaken aligns itself with the current and future needs of that industry partner. It should also provide an overview of the profile of individuals in the company who will be involved with the proposed Research Centre, and provide details of their role within the Centre.

The letter of support should also describe the level of cost-share commitment from the industry partner, both in terms of cash and in-kind contributions and the time period for which the contribution is being made as per the following table:

INDUSTRY PARTNER "X" CONTRIBUTIONS							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	**TOTAL**
Cash Contribution							
Staff Contribution							
Equipment Contribution							
Other In-Kind Contribution							
TOTAL							

31.Appendix F: 'Other Non-Exchequer Contribution' Letter of Support

A letter of support from each organisation/individual committing 'other non-exchequer contributions' (e.g. philanthropic, charity) towards the Research Centre must be provided at both the pre and full proposal stages. The letter should provide details of the source of the funding, a background of the organisation / individual committing the funds, and details of what the funds are to be used for.

The letter of support should also describe the level of cost-share commitment from the organisation/individual, both in terms of cash and in-kind contributions and the time period for which the contribution is being made as per the following table:

ORGANISATION "X" CONTRIBUTIONS							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	**TOTAL**
Cash Contribution							
In-Kind Contribution							
TOTAL							

32.Appendix G: Lead/Co-Applicant Full Proposal CV Template (max. 5 pages per applicant)

Provide a detailed CV for each Lead Applicant and Co-Applicant, (max. 5 pages each). Each CV should include evidence of the eligibility of the Lead/Co-Applicant according to the criteria specified in this call document. The CV template below will be made available through SESAME to those applicants invited to submit a full proposal. Ensure that all sections required in the template are included and that they are presented in a clear and consistent fashion.

SFI recognises that it may be necessary for applicant groups to modify their set of Lead/Co-Applicants between the pre-proposal and full proposal, and hence it is not required that an identical set of Lead/Co-Applicants be identified on the full proposal as were identified on the pre-proposal.

> **Applicant groups intending to change their set of Lead/Co-Applicants must contact SFI in advance of submission of the full proposal. SFI will consider the request and, if approved, will affect the change on SESAME.**

32.1. Part 1 – Required Details (Max. 2 pages)

Name and Contact Details

Career Profile (Education and Employment)

Include details of any adjunct positions held and include year of Ph.D.

If you wish you may provide details of any career breaks or periods of part-time work, for example parental or long-term sick leave.

Details of Most Relevant Research Funding as Lead/Co-Applicant

This section should only include a summary of funding, current and expired, obtained as an independent PI. Note that this section does not replace the requirement to directly enter details of current and past awards into SESAME.

History of Mentoring and Supervision

Please provide an overview of career paths being pursued by former team members. This information will complement details on numbers of current and completed MSc and PhD students, directly under your supervision, as well as details of previous and current post-doctoral staff, that have been directly entered into SESAME.

Innovation/Commercialisation Activity (e.g., relevant industry collaborations, invention disclosures, patents, spin-outs)

Distinguish between patents applied and under review versus patents granted

Other Information as Appropriate

Include details of key achievements including measures of esteem, invited presentations, principal scientific activities and responsibilities, as well as a statement demonstrating the applicant's accomplishments as an independent investigator.

32.2. Part 2 – Publication Listing (Max. 3 pages)

Provide a hyperlink to an independent publication database (e.g. Scopus, Web of Knowledge, Google Scholar etc.) listing your publications, and complete the various fields in the table below as per the details of the database provided. Please note that links to Research Body webpages are not acceptable.

Name of Source	(e.g. Scopus, Web of Knowledge, Google Scholar)		
Hyperlink to Profile			
Number of publications		Number of citations	
H-index		Year of 1st publication	

List most recent, relevant publications using the full reference, including title, for each publication.

Highlight with an asterisk each of your senior author publications (as per the eligibility criteria). Underline the name of Research Centre Proposal Lead Applicant and Co-Applicants on each publication listed. Where available, state the Impact Factor of the journal/conference as well as the number of citations for that paper.

33.Appendix H: Performance Indicator Targets Template

KPI	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Academic Outputs						
# Journal publications						
# Conference publications						
Human Capital Outputs						
# MSc/MEng Graduates						
# PhD Graduates						
% trainee departures with industry as first destination						
Funding Diversification						
# Participations in major EU initiatives						
# Coordinations of major EU initiatives						
# ERC awards						
Funding from non-Exchequer, non-commercial sources						
Cash in Bank						
Commercialisation						
# Spin-out companies formed						
# Enterprise Ireland commercialisation awards						
# Licence agreements						

Note: SFI reserves the right to change/modify these performance indicators.

Definitions of the Performance Indicator Targets are available on the following webpage:

http://www.sfi.ie/funding/sfi-policies-and-guidance/budget-finance-related-policies/index.xml