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# Collaborative Project for Technological Convergence Related to Enabling Technologies

PUBLISHED 16 AUG 2022 | LAST UPDATED 19 JUN 2023

Financial scheme:

Collaborative and Knowledge-building Project

Application deadline: 16 November 2022, 13:00 CET

Relevant thematic areas for this call:

Enabling technologies

Target groups: Research organisations

Funding scale: NOK 12 000 000-15 000 000

Amount of funding presumed available for this call for proposals:

up to NOK 115 000 000

Project duration: 36-60 months

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## Important dates

**05 Oct 2022: Date call is made active**

**16 Nov 2022: Application submission deadline**

**01 Jul 2023: Earliest permitted project start**

**01 Jul 2024: Latest permitted project start**

**30 Jun 2029: Latest permitted project completion**

## Last updates

05 OCT  
2022

- A new and amended template for project description is added to the call. Be sure to download the latest version of the template. In addition, changes have been made to the call for proposals on the following points: the assessment criteria and the text for the administrative procedures has been published.

# Purpose

The objective of the call is to achieve radical new technological development across the enabling technologies through projects that endeavour to help to achieve the UN Sustainable Development Goals and resolve major societal challenges. The projects are to focus on collaboration between research organisations and stakeholders from outside the research sector that represent societal and/or industry needs for knowledge, research competence and technology.

A total of NOK 115 million is available, distributed between two calls for proposals; the call you are currently reading and the call for [Researcher Project for Technological Convergence related to Enabling Technologies](#).

Call for proposals

Application results

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## SHORTCUTS

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## About the call for proposals

The UN Sustainable Development Goals and major societal challenges dominate the political agenda, and new technology is expected to contribute solutions. Enabling technologies are key drivers behind change and transformation, and the technological convergence initiative aims to develop groundbreaking technology and radical innovations related to sustainability and societal challenges.

Applicants are advised to consult the [Guide for Applicants](#) for Collaborative and Knowledge-building Projects for answers to various questions related to this application type.

### Relevant projects

Funding is available for projects that will lead to radical new technologies based on collaboration between various social actors and established technological areas in the enabling technologies. Biotechnology, ICT and nanotechnology are

typical examples of enabling technologies. The projects must be based on concrete societal challenges and build collaboration, knowledge and technological expertise suitable to meet these challenges.

The projects can be high risk/high gain, meaning there can be a high risk of not fully achieving the project's radical goals. However, you must describe how you plan to handle various risk elements relating to the implementation of the project in the grant application.

There is uncertainty surrounding the effects of technology development and innovation. In addition to solving societal challenges, using new technology can also play a part in reinforcing challenges or creating new ones. In the grant application, describe the processes and management structures for project participants' reflection on and discussion of intentional and unintentional applications and the impact of the technology you are developing. The projects must involve relevant social actors with active roles in the research process. You must facilitate actual co-production by ensuring that the actors work together on developing good solutions in line with expectations of Responsible Research and Innovation (RRI).

Challenges relating to health, safety and the environment must be clearly described where relevant.

Read more about how you can [incorporate Responsible Research and Innovation](#) in the application.

Also see [the portfolio plan for Enabling Technologies](#).

## Show that you want to engage in groundbreaking research

We want projects that are ambitious, advance the research front and are capable of radical technological development. We therefore make efforts through our administrative procedure to increase opportunities to identify groundbreaking projects.

## Own funds for networks and learning arenas

Projects that are granted funding by the Research Council must be willing to participate in networks and learning arenas across projects. Separate funds will be earmarked for this purpose.

The Norwegian-language call for proposals is the legally binding version.

## Contact persons

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### Who is eligible to apply?

The call is open to approved Norwegian research organisations in effective collaboration with relevant actors from public sector entities, non-governmental

organisations, the business sector and/or other private organisations.

See the list of [approved Norwegian research organisations](#).

Who can participate in the project?

### **Requirements relating to the Project Owner**

The organisation listed as the Project Owner in the grant application form must have approved the submission of the grant application to the Research Council. The application must be aligned with the Project Owner's strategies.

### **Requirements relating to project managers**

You must have an approved doctorate or similar qualifications before the date of the application submission deadline. If you do not have an approved doctorate but are qualified at associate professorship level or have current or previous employment in a position as *forsker 1* (research professor), *forsker 2* (senior researcher) or *seniorforsker* (senior researcher) in the institute sector or a health trust, you are also qualified.

You can only be the project manager for one application submitted either under this call or the call "Researcher Project for Technological Convergence related to Enabling Technologies"; the submission deadline is 16 November 2022 for both calls. Project managers of a Collaborative Project for Technological Convergence or a Researcher Project for Technological Convergence already under way (funding granted in January 2022), cannot be project managers under this call for proposals.

### **Requirements relating to partners**

Projects are to be carried out by one or more research organisations in effective collaboration with relevant actors from public sector entities, non-governmental organisations, the business sector and/or other private organisations.

- The project must have **at least two Norwegian partners** that are not research organisations (see the guide for a definition). These must be partners from the business sector or other parts of society that will contribute their experience and knowledge, and ensure that the project and its objectives address real societal and/or industry-related challenges.
- The partners from the business sector or other parts of society must participate actively in the project. At least 10 per cent of the project's total costs must be budgeted to these partners. The guide describes this as the "participation requirement".
- All project partners are required to take active part in planning and following up the project as well as in disseminating project results and promoting the utilisation of new knowledge.
- The grant application must describe how the project incorporates the strategic objectives of all the partners. This must be confirmed in the Letters of Intent.
- The project must have a steering committee or reference group which includes partners that represent the industry-related or societal challenge.
- The project proposal must describe how the knowledge developed in the project will be of benefit to wider user groups.

## Roles in the project

One and the same project participant may not be assigned more than one role in the project, e.g. as Project Owner and partner or subcontractor.

The Project Owner and collaborating partners cannot be in a position where they can exercise so-called controlling influence over other collaborating partners or subcontractors in the project. Nor can a subcontractor exercise controlling influence over the Project Owner or collaborating partners. By controlling influence, we mean majority ownership or other specific legal or factual conditions which result in one actor being able to control the other.

What can you seek funding for?

## Scope of funding

The minimum amount of funding you can apply for is NOK 12 million and the maximum is NOK 15 million. The projects may last from three to five years.

You can apply for funding to cover the costs necessary to carry out the project. The Project Owner must obtain information about costs from each project partner. These costs are to be entered in the cost plan under the relevant category.

The following cost categories must be used:

- **Payroll and indirect expenses**, related to researcher time (including research fellowship positions) at the research organisations, and the partners' personnel hours. For doctoral research fellowships, funding is limited to a maximum of three full-time equivalents. Funding for two to four years may be granted for post-doctoral research fellowships.
- **Equipment**, encompasses operating and depreciation costs for scientific equipment and research infrastructure necessary for the execution of the project.
- **Other operating expenses**, which comprise costs for other activities that are necessary to carry out the project. Procurements from subcontractors that exceed NOK 100,000 must be specified.

Do not use the item **Procurement of R&D services**.

You will find detailed and important information about [What to enter in the project budget](#) on our website

## The costs of Norwegian partners

As described under the section "Requirements relating to partners", at least 10 per cent of the total costs must be budgeted to those representing the industry-related or societal challenge in the project. This can be in the form of payroll expenses or other project costs.

The Research Council's funding can be used to finance the costs of all Norwegian partners in the project. This means that the partners' costs can be covered in part or in full, but the participants are naturally free to fund their own costs in the project. Partners must be registered in the Norwegian Register of Business Enterprises.

[The state aid rules](#) impose certain restrictions on funding for partners that are

undertakings. The level of support (aid intensity) permitted will depend on the undertaking's size and the type of activity that is carried out (basic research or industrial research). If the application is recommended for funding, we will request more information to ensure that our allocation is in accordance with the state aid rules.

### **The costs of international partners**

The Research Council's funding can be used to finance the costs of international research organisations. See [Calculating payroll and indirect expenses for the university and university college sector](#).

The costs of other international partners will not be funded through the project grants. These costs must be excluded from the budget tables. The activities these partners will perform, as well as any self-funded costs, should be described in the project description (under section 3.2).

### **Conditions for funding**

- The funding allocated to research organisations is to go to their non-economic activity in the form of independent research. It does not therefore constitute state aid. The Research Council requires a clear separation of accounts for the organisation's economic and non-economic activities.
- The call for proposals has been approved as an aid scheme by the EFTA Surveillance Authority (ESA) with the reference: GBER/54/2022/R&D&I. Companies serving as partners may have parts of their project costs covered in accordance with the General Block Exemption Regulation Article 25 (Commission Regulation (EU) No. 651/2014). Conditions and concepts are to be interpreted in keeping with corresponding conditions and concepts in the state aid rules. In the event of conflict between the text of the call and the state aid rules, the latter will take precedence.
- State aid may not be given to an undertaking that is subject to an outstanding recovery order following a formal decision by the EFTA Surveillance Authority or the European Commission stating that state aid received is illegal and incompatible with the internal market. Nor can the Research Council award state aid to an enterprise that is defined as an "undertaking in difficulty" under the state aid rules, unless the undertaking was not in difficulty as of 31 December 2019, but became an undertaking in difficulty in the period 1 January 2020 – 31 December 2021. It may in such case receive funding.
- We assume that the research will be carried out in effective collaboration as defined in our [General Terms and Conditions for R&D Projects](#).

If your project is granted funding, the following must be in place when you revise the application:

- If the project is awarded funding, the Project Owner is to draw up [collaboration agreement\(s\)](#) with all partners in the project. The collaboration agreement regulates the reciprocal rights and obligations of the Project Owner and project partners and ensures the integrity and independence of the research. It is also to ensure that no participating undertaking receives indirect state aid from a research organisation serving as Project Owner or from partners. The agreement must therefore include conditions for the collaboration which ensure compliance with Section 28 of

the [EFTA Surveillance Authority's guidelines for state aid for research and development and innovation](#).

- If the project involves doctoral research fellowships (PhD) and post-doctoral research fellows whose responsible university/university college institution is not participating in the application, a collaboration agreement must also be in place with the responsible/degree-conferring institution.
- The Research Council's requirements relating to allocation and disbursement of funding are set out in the [General terms and Conditions for R&D Projects](#). Projects awarded funding under this call are required to submit an annual project account report documenting incurred project costs and their financing.
- From 2022, all grant recipients that are research organisations or public sector bodies (Project Owners and partners) must have a [Gender Equality Plan \(GEP\)](#) available on their website. This must be in place when they sign the grant agreement for projects we have awarded funding. The requirement does not apply to the business sector, special interest organisations or the non-governmental sector.
- The Research Council requires full and immediate open access to scientific publications; see [Plan S – open access to publications](#).
- You must prepare a data processing plan for any research data that will be processed in the project. Research data must be made available in accordance with the FAIR principles (Findable, Accessible, Interoperable and Reusable).
- The Project Owner is responsible for selecting which archiving solution(s) to use for storing research data generated during the project.
- For medical and health-related studies involving human participants, the Research Council stipulates [special requirements and guidelines for prospective registration of studies and disclosure of results](#).

## Relevant thematic areas for this call

### Enabling technologies

TECHNOLOGICAL CONVERGENCE

## Practical information

### Requirements for this funding scheme

Applications must be created and submitted via My RCN Web. You may revise and resubmit your grant application form multiple times up to the application submission deadline. We recommend that you submit your application as soon as you have filled in the grant application form and included all mandatory attachments. After the deadline, it is the most recently submitted version of the

grant application that will be processed.

The application must meet the following requirements:

- The application and all attachments must be submitted in English.
- All attachments must be uploaded in PDF format.
- All mandatory attachments must be included.
- Requirements relating to the project manager and Project Owner (research organisation) must be satisfied.
- The project must start between 1 July 2023 and 1 July 2024.
- You must apply for funding from the Research Council for the year the project starts.

Applications that do not satisfy the requirements listed above will be rejected.

### **Mandatory attachments**

The designated template found at the end of the call for proposals must be used for all attachments.

- A project description, maximum 15 pages.
- The CVs of the project manager and key project participants, not exceeding four pages each, using the designated CV template at the end of the call. Applicants themselves decide which project participants are most important to include and in which cases it will be of significance to the review process to assess these participants' qualifications. Key project participants who are researchers can use the "Template for CV researchers". Other key project participants can use the "Template for CV".
- Letters of Intent from **all** registered research organisations participating as partners.
- Letters of Intent from **all** registered partners that contribute from the perspective of the business sector or other part of society.
  - See the example [Letter of Intent](#) in our guide.

### **Optional attachments**

Applicants are free to enclose a brief description of qualifications or propose up to three referees who are presumed to be qualified to review their grant proposal. We are not under any obligation to use the proposed referees, but may use them as needed.

All attachments must be submitted together with the application. We will not accept attachments submitted after the deadline for applications unless we have requested further information.

Attachments other than the mandatory and optional attachments specified above, as well as any links to websites in the grant application, will not be reviewed.

There is no technical validation of the content of the attachments you upload, so please make sure that you upload the correct file for the selected type of attachment.

Assessment criteria



We assess applications in light of the objectives of the application type in question and on the basis of the following criteria:

### **Excellence – potential for advancing the state-of-the-art and creating radical technology development**

The extent to which the proposed work is ambitious, novel, and goes beyond the state-of-the-art and leads to radical new technologies based on collaboration between established technological areas in the enabling technologies.

- Technological and scientific creativity and originality.
- Novelty and boldness of hypotheses or research questions.
- Potential for development of new knowledge beyond the current state-of-the-art, including significant theoretical, methodological, experimental or empirical advancement.

### **Excellence – quality of R&D activities**

The quality of the proposed R&D activities

- Quality of the research questions, hypotheses and project objectives, and the extent to which they are clearly and adequately specified.
- Credibility and appropriateness of the theoretical approach, research design and use of scientific methods. Appropriate consideration of interdisciplinary approaches.
- The extent to which appropriate consideration has been given to ethical issues, safety issues and gender dimensions in the research content. The extent to which the use of stakeholder/user knowledge is appropriate and the extent to which Responsible Research and Innovation (RRI) has been incorporated.

### **Impact**

Potential impact of the proposed research

- Potential for academic impact:

The extent to which the planned outputs of the project address important present and future technological and scientific challenges.

- Potential for societal impact:

The extent to which the planned outputs of the project address UN Sustainable Development Goals or other important present and/or future societal challenges.

- The extent to which the potential impacts are clearly formulated and plausible.

Communication and exploitation

- Quality and scope of communication and engagement activities with different target audiences, including relevant stakeholders/users.

### **Implementation**

The quality of the project manager and project group

- The extent to which the project manager has relevant expertise and experience, and demonstrated ability to perform high-quality research (as appropriate to the career stage).
- The degree of complementarity of the participants and the extent to which the project group has the necessary expertise needed to undertake the research effectively.

The quality of the project organisation and management

- Effectiveness of the project organisation, including the extent to which resources assigned to work packages are aligned with project objectives and deliverables.
- Appropriateness of the allocation of tasks, ensuring that all participants have a valid role and adequate resources in the project to fulfil that role.
- Appropriateness of the proposed management structures and governance.

#### Administrative procedures

We will assess the version of your grant application that you submit and will not take into account how an identical or almost identical application has been assessed in the past.

Please note that the evaluation process used for this call deviates from the process that was used to review applications for Collaborative Projects to Meet Societal and Industry-related Challenges submitted to the deadline 9 February 2022.

#### **Preliminary administrative review**

Once we have received the grant applications, the Research Council will conduct a preliminary administrative review to ensure that they satisfy all the stipulated formal requirements. Applications that do not meet the formal requirements will be rejected.

#### **The applications will go through a two-step evaluation process**

During the first step of the process, applications will be assessed solely on the criterium *Excellence – potential for advancing the state-of-the-art and creating radical technology development*. Referees participating in this step will combined have broad state-of-the-art competence within enabling technologies but may not have specialist competence in relation to each application. During this step, the referee panels will identify applications with potential to advance the research front and deliver radical new technologies. During this step we will ensure that only applications that meet a minimum requirement based on the objective of the call, will move to the next step and be subject to further assessment.

The threshold mark for this criterium is set to 5. This means that applications that receive the mark 4 or lower for this criterium will not be subject to further assessment and will not be eligible for funding.

During the second step of the evaluation process, the applications that are above the threshold mark will be assigned to referee panels based on the research content of the applications. During this step, the experts will evaluate the applications on the three criteria *Excellence - quality of R&D activities, Impact and Implementation*.

The peer review process described above will be used for all applications submitted to this call and applications submitted to the call *Researcher Project for Technological Convergence Related to Enabling Technologies*. Applications submitted to these two calls will all compete for the total budget of NOK 115 million.

#### **Prioritising applications for grants**

When considering which projects should be funded, the mark for the criterium *Excellence – potential for advancing the state-of-the-art and creating radical technology development* will be given most weight. The three remaining criteria will be weighted equally. We will use so-called randomised selection to distinguish between applications in intervals where the applications are considered to have the same level of quality. Applications with women project managers will be prioritised among applications where randomised selection is performed.

Please note that the amount available for funding in the call is an estimate, and the final amount granted may deviate somewhat from this estimate. We will take into account any changes in the financial or scientific framework set by the ministries.

The plan is for the portfolio board for Enabling Technologies to take their final funding decision in a meeting in June 2023. The application results will be published on our website after the meeting.

## Download templates



Template for Project Description - Collaborative Project for Technological Convergence 2022.docx




Template for CV researchers.docx



Template for CV.docx



★ MANDATORY ATTACHMENT

Download all templates 

## About the results of the application assessment process

<b>Total amount sought</b>	707 200 000
<b>Amount awarded</b>	30 000 000
<b>Total number of applications</b>	49
<b>Number of approved applications</b>	2

### Approved applications

Project no. ▾	Organization ▾	Project title ▾	Subject ▾	Sought ▾	Published ▾
342186	UNIVERSITETE T I BERGEN	XENOSENSE – developing a	Muliggjør ende	15 000 000	16.06.2023

## Approved applications

Project no. ▼	Organization ▼	Project title ▼	Subject ▼	Sought ▼	Published ▼
		cell-free biosensor for toxicity testing, environmental monitoring, and risk assessment	teknologier		
342040	NORCE Miljø/Klima NORD	Nano4CRISPR: Novel nanocarrier reagents for environmental delivery of CRISPR/Cas	Muliggjør endeteknologier	14 997000	16.06.2023

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Messages at time of print 29 May 2025, 05:08 CEST

No global messages displayed at time of print.