Project Description

for Proposals for

Quantum Austria - R&D Infrastructure

NON-ECONOMIC USE

1st Call

Version 1.1 – March 2022

|  |  |
| --- | --- |
| **Project title:** | *Project title (max. 120 characters)* |
| **Short title:** | *Acronym (max. 20 characters)* |
| **Applicant:** | *Name of organisation* |
| **Call/Topic:** | Call topic 1 (R&D projects and R&D Infrastructure)  Interface quantum computer and HPC-Infrastructure  Other R&D Infrastructure  Call topic 2 (HPC: update of infrastructure and transfer into regular operation) |
| **Owner of funded R&D infrastructure:** | *Address of organisation (branch or permanent establishment in Austria)* |
| **Location of funded R&D infrastructure:** | *Address of planned location of funded R&D infrastructure* |
| **Project partner(s):** | *Name(s) of organisation(s)* |
| **Duration of project:** | from *[MM.YY]* to *[MM.YY]* |
| **Project period:** | *[in months]* |
| **Depreciation period:** | *[in years]* |
| **Costs Module 1:** | Infrastructure acquisition: *[€]* |
| **Costs Module 2** | Start-up costs\*:*[€]* |
| **Total costs** | *[€]* |
| **Funding:** | *[€]* |
| \***SYNOPSIS (in English):**  *Please describe the planned R&D infrastructure, the objectives it is intended to achieve and the planned use with a maximum of 5 sentences.* | |

Module 2 Start-up costs are defined as sum of personal, travel and third party costs

# General

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## Checklist for submission

The information given in section 0 is designed to guide you through the application process and can be deleted in the final application document, which is uploaded as an annex via eCall.

### Checklist for formal check

The formal check serves to examine the proposal for accuracy and completeness. Please note: **If the formal requirements are not met and the deficiencies cannot be corrected, the proposal will be excluded from the further procedure and will be formally rejected without exception in accordance with the principle of equal treatment of applications.**

| **Criteria** | **Items checked** | | **Can deficiency be corrected?** | | | | **Consequence** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Completeness of project description** | |  | | |  | | | |
| The correct form has been used. (Instrument in eCall conforms with project description) | *Project description (see* [*Download Center*](http://www.ffg.at/quantum-austria) | | *no* | | | | Rejection for formal reasons | |
| Project description is complete and the correct language is used. | The Project Description form must be completed in full; alteration and addition of chapters or headings are not permitted!  Language: English | | *no* | | | | Rejection for formal reasons | |
| Obligatory annexes are available [can be rectified] | * CV of project manager (as pdf file in eCall under ”personal costs”) * At least 2 Letters of Intent (LOI) of potential users of the funded R&D infrastructure | | | *yes* | | Rectification via eCall after submission | |
| **Eligibility** | |  | | |  | | | |
| The applicants/partners are eligible to submit an application | Any legal entities, partnerships or sole proprietorships that are not part of the federal administration are eligible to receive funding, including but not limited to:   * **Research and knowledge dissemination organisation (research institutions)**   + Universities (universities and universities of applied sciences)   + Non-university research institutions   + Technology transfer institutions, innovation intermediaries and other research-oriented organisations (e.g. dedicated associations) * **Other non-commercial institutions**    + Autonomous administrative bodies   + Other institutions, e.g., non-profit organisations (NPO) | | | *no* | | Rejection for formal reasons | |
| Duration | Max. 36 months, | | | *no* | | Rejection for formal reasons | |
| Amount of funding, total costs of the project | **Focus 1: Research co-operation and infrastructure**  The project does not exceed the maximum funding limit of **EUR 10.000.000**.  Projects with **total costs** **less than** **EUR 650.000** are not eligible for funding under this funding scheme (total costs = costs of Module 1 plus costs of Module 2, if applicable)  **Focus 2: Update of infrastructure, software and transfer into normal operation**  The project does not exceed the maximum funding limit of **EUR 20.000.000**.  Projects with **total costs** **less than** **EUR 650.000** are not eligible for funding under this funding scheme (total costs = costs of Module 1 plus costs of Module 2, if applicable) | | | *no* | | Rejection for formal reasons | |
| Country of origin of R&D infrastructure owner | Owner of the funded R&D infrastructure has a permanent establishment or branch in Austria | | | *no* | | Rejection for formal reasons | |

### Costs and funding rate

| Costs | Funding is granted subject to the provisions of the [Cost Guidelines 2.1](https://www.ffg.at/recht-finanzen/kostenleitfaden/version-21)  Additional provisions:   * The acquisition costs of the R&D infrastructure (Module 1) are funded in full. The purchase order date of the R&D infrastructure must be within the funding period. No overhead costs can be charged for infrastructure acquisition (Module 1). * The "start-up" costs (Module 2) must not exceed 15% of the approved total costs and/or exceed the amount of EUR 500.000. In Module 2, funding is only granted for costs that are necessary for the start-up of the R&D infrastructure, but not for regular operation.   The following applies both for acquisition (Module 1) and start-up costs (Module 2):   * Funding applicants and funded partners must not act as subcontractors (third-party service providers). * Funding for non-Austrian partners must not exceed 20% of the total funding amount. |
| --- | --- |
| Funding rate | Max. 100% of eligible total costs |

### Format

Both the formatting requirements as well as the maximum number of pages (specified in the respective chapters) help the members of the evaluation committee to read and compare the proposals. If the application exceeds the maximum number of pages, the evaluation committee is free to decide how to deal with the matter based on the principle of equal treatment of all applicants. One option is that chapters exceeding the maximum number of pages will not be read and thus not evaluated.

| Format | * *Font: Calibri, 11 pt,* * *Line spacing: 13,5 Pt.* * *Colour: black.* * *Pages numbered* |
| --- | --- |
| Max. number of pages | * *Project description: max. 35 pages;*   *one additional page for each additional consortium partner (pages are counted from Section 1 "Quality of the Project" up to and including Chapter 4 “Relevance of the Project").*   * *Optional annex: supplements, overviews, graphical representations etc., max. 5 pages in total (1 additional page for each additional consortium partner)* |

### General Points

* Please adhere to the questions. **The questions, comments and notes marked in blue cannot/must not be overwritten (deleted).**
* Describe your project in sufficient detail for reviewers to form an accurate impression of your planned project. Try to keep your text precise and to the point.
* The maximum number of pages is NOT to be taken as a request to reach this limit. Applications should enable the reviewers to understand the topic and the benefits resulting from the proposed project. Quality is more important than quantity.
* In the event of any questions please refer to your contact person at the FFG (contact information is available in the call guidelines).

## Submission

Project proposals **must** be submitted **in full by the specified deadline by electronic submission via** [**eCall**](https://ecall.ffg.at/).

**Please see the detailed** [**eCall tutorial**](https://ecall.ffg.at/Cockpit/Help.aspx)**.**

The main proposal may only be submitted if **all partners** have previously **completed and submitted** their partner proposals via eCall.

A project proposal is considered to have been submitted if the **eCall application has been finalised** by clicking the “Submit“ (*Einreichung abschicken*) button. On successful submission a **confirmation** will be sent by e-mail. It is not possible to resubmit the proposal or parts of it or to revise the proposal after the submission deadline.

In the event of any questions about eCall please refer to your contact person at the FFG (contact information is available in the call guidelines).

It is **NOT required** to send a **duly signed copy of the proposal** submitted online.

All proposals submitted will only be made available to the persons involved in processing the call. All these persons are **subject to strict confidentiality**. In particular, the national and international experts who take part in the evaluation procedure must sign a declaration of confidentiality before they start their work.

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| **SUBMISSION DEADLINES:**  **Deadline: Proposals must be received via eCall no later than**  **for Call Topic 2: March 30th 2022, 12:00:00 noon (CEST / Central European Summer Time)!**  **for Call Topic 1: April 27th 2022, 12:00:00 noon (CEST / Central European Summer Time)!** |

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# Abstract

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Corresponds to summary from eCall project data (max. 1 page).

The abstract should be concise and include the following points:

* Initial situation and the need for the new R&D infrastructure
* Planned acquisition of R&D infrastructure
* Planned use of the new R&D infrastructure

<Text>

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# Quality of the project

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Describe the novelty (innovation content) and the added value of your project. Please refer to the state of the art on a national, European or international level. Refer to relevant existing alternative technologies, processes and approaches and describe the innovative nature of the approach proposed here.

Describe the research focus within the specified research topic in which the proposed project is located.

Describe how your project contributes to the fulfilment of the objectives of the Guidelines (see chapter 2).

<Text>

## Activities and results from funded projects

Please fully explain the differences to other projects carried out by the consortium partners in the past three years. Include in particular all submitted, ongoing and completed projects of thematic relevance. Special focus should be placed on the results you intend to use for your project and potential synergies. Use the description to underline that you have the expertise and experience to carry out the proposed project (supplementary to Section 2, Suitability of Applicant/Project Partners).

If these projects were funded by the FFG, please indicate the FFG project number and the project title. Use the following table to provide the relevant information:

**Existing results and deliverables from publicly funded projects, which provide the basis of or feed into the proposed project**

| **Funding provider** | **Project No (if FFG project)** | **Title** | **Description of results already obtained and relevant deliverables (verifiable results/products of R&D activities) with relevance to the proposed project** | **Location and type of documentation (e.g. link to homepage, publications, proceedings, interim report, final report, …)** |
| --- | --- | --- | --- | --- |
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## Quality of planning

### Overview and description of work packages

The number of work packages is limited to 10. The information given here should be consistent with the eCall.

**Work packages**

| **WP**  **No** | **Work package title** | **Duration**  **(in months)** | **Start MM/YY** | **End MM/YY** | **Planned result** |
| --- | --- | --- | --- | --- | --- |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| n |  |  |  |  |  |

List the milestones in chronological order and with reference to the relevant work packages. Key milestones include for example the results to be obtained at the end of a work step, but also important events such as the planned purchase date of the R&D infrastructure or events in Module 2 such as training courses, information events, workshops etc. Reports to be submitted to the FFG do not qualify as milestones.

**Milestones**

| **Milestone No.** | **Milestone title** | **Work packages involved** | **Expected date** | **Milestone is achieved when** |
| --- | --- | --- | --- | --- |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| n |  |  |  |  |

### Detailed description of work packages

Describe the planned activities of each work package, the expected results and the milestones. The **methods** and steps must be clearly and consistently defined and described (approx. 1 page per work package).

The table should be copied and completed separately for each work package (WP).

**Description of work package**

|  |  |
| --- | --- |
| **WP No.** |  |
| **WP title** |  |
| **Participating organisation (applicant/partner):** | |
|  | |

|  |
| --- |
| **Goals:** |
|  |

|  |
| --- |
| **Description of contents:** |
|  |

|  |
| --- |
| **Methods/Approaches:** |
|  |

|  |
| --- |
| **Milestones, results und deliverables:** |
|  |

### Work and time schedule (Gantt chart)

Insert a detailed graphical work and time schedule (e.g. permit procedure, acquisition, supply and assembly stages, regular operation, etc.). Please ensure that the work and time schedule is clear and easy to read.

<Text>

### Details on costs applied for

Briefly explain the relevance of the items listed in the cost plan for the R&D infrastructure project: Acquisition costs of the R&D infrastructure, personnel costs, costs of materials, third-party costs, travel costs (especially the purpose of travel)

<Text>

### Payment plan (if different from standard scheme according to call guidelines)

A deviation from the FFG payment plan is possible only in exceptional circumstances. In this case, the applicant is required to explain the reason and present a plausible payment plan which must be in line with the financial plan. Please note that the final instalment must be min. 10% of the total funding. The remaining instalments can be chosen freely but must be min. 5% of the total funding. All instalments are limited to a maximum of EUR 7 million per instalment.

|  |  |
| --- | --- |
| **Payment plan** | **Payment plan (%)** |
| Initial instalment (max. of EUR 7 million) |  |
| 2nd instalment (max. of EUR 7 million) |  |
| 3rd instalment (max. of EUR 7 million) |  |
| Final instalment (max. of EUR 7 million) |  |

## Quality of the concept of use

Present the concept of use (strategy of use, capacity planning, management of use) in a plausible manner based on the following points:

* Management of use (incl. personnel and resource plan)
* Demand and capacity utilisation
* Collaborative use by third parties
* Planned terms and conditions for transparent and non-discriminatory access for third parties
* Procedure used for calculating full costs including profit margin and market price
* Calculation of follow-up costs, operating costs and replacement investments, including a sustainable financing concept
* Regulation of the ownership structure
* if applicable: planned scope and assessment of preferential treatment of co-financing partners in term of infrastructure use

<Text>

# Suitability of funding applicants /project Partners

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## Expertise of the applicant / the consortium

### Overview

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Applicant** | | |  |  | |
| **Name of institution (acc. To company register extract)** | | **Type of organisation\*** | | | **Federal province\*\*** |
|  | |  | | |  |
| **Project partners** |  | | |  | |
| **Name of institution (acc. To company register extract)** | | **Type of organisation\*** | | | **Federal province\*\*** |
|  | |  | | |  |
|  | |  | | |  |
|  | |  | | |  |
| **Co-financing organisations** | |  | | |  |
| **Name of institution (acc. To company register extract)** | | **Type of organisation\*** | | | **Federal province\*\*** |
|  | |  | | |  |
|  | |  | | |  |

**\*Type of organisation:** please use the following abbreviations

| Microenterprise | KKU |
| --- | --- |
| Small enterprise | KU |
| Medium-sized enterprises | MU |
| Large enterprises | GU |
| University | Uni |
| University of applied sciences | FH |
| Competence centre | KompZ |
| Cooperative research institution | KoopFE |
| Non-university institution | AuE |
| Technology and start-up centres, clusters | TIZ |
| Others | Sonst |

**\*\*federal province:** please use the following abbreviations

B: Burgenland, K: Carinthia, NÖ: Lower Austria, OÖ: Upper Austria, S: Salzburg,   
ST: Styria, T: Tyrol, V: Vorarlberg, W: Vienna, A: Outside Austria

### Expertise of applicant and project partners

### Applicant

(max. 1 page)

Name of organisation

<Text>

Describe the relevant expertise and abilities of the organisation and the staff involved in the project (upload CVs of project managers as attachments to personnel costs via eCall).

<Text>

Description of know-how relevant to the project

<Text>

If applicable, describe any existing equipment and infrastructure relevant to the project and the potential use of these facilities in the planned project.

<Text>

### Project partners (if applicable)

This page is to be completed individually and separately for each project partner (max. 1 page per partner).

1. Name of organisation

<Text>

Describe the relevant expertise and abilities of the organisation and the staff involved in the project. (upload CVs of key persons as attachments to personnel costs via eCall). Describe task and role of the partner in achieving the project goals.

<Text>

Description of know-how relevant to the project

<Text>

If applicable, describe any existing equipment and infrastructure relevant to the project and the potential use of these facilities in the planned project.

<Text>

### Partners from outside Austria (if applicable)

Please explain how the partners from outside Austria meet the relevant funding criteria specified in the call guidelines. Describe what advantage the participation of the non-Austrian partner/s brings as compared to an Austrian organisation. Describe the benefits for Austria as a research location.

<Text>

### Third party expertise (if applicable)

Please describe the fields of expertise that are not covered by the consortium and must therefore be contributed by a third party (e.g. via subcontracts).

<Text>

## Composition of project team with regard to gender balance (gender mainstreaming)

Please describe why the gender balance in the project team is an improvement over current conditions in the sector. Alternatively, justify why it is not possible to achieve a better gender balance.

<Text>

# Use of the R&D-Infrastructure

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## Expected impact on future research performance

Describe the expected impact of the additional opportunities created by the new R&D infrastructure on future research performance in both quantitative and qualitative terms:

* Describe planned research projects and expected results of high scientific quality (results with a high degree of innovation and novelty)
* Describe how you plan to exploit the expected results (e.g. publications, patents,…)
* Increased international visibility of the applicant/consortium
* Benefit and unique selling proposition for Austria as a research location

<Text>

## Consideration of gender specific aspects in the project

If the research fields enabled by the new R&D infrastructure relate to persons please explain how and in what work packages gender-specific aspects have been taken into account in the methodological approach.

If in your opinion, the project does not involve gender-specific topics, please give clear reasons to substantiate your opinion.

<Text>

## Development potential

Describe the development potential expected by the additional opportunities created by the new R&D infrastructure. In particular, address the following points:

* Connectivity to existing research fields or research topics
* Contribution to the further development research fields or research topics
* Potential for new opportunities for collaboration with other research institutions, universities and with industry.

<Text>

# Relevance of R&D Infrastructure and Associated Research

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## Demand analysis

Describe the demand for new R&D infrastructure with reference to the planned R&D activities and areas of your organisation.

Please also refer to existing infrastructure resources in Austria and Europe.

Describe the relevance of the planned R&D infrastructure for the research location.

<Text>

## Contribution of funding to the implementation, acceleration, scope and range of the planned project

Describe the incentive effect of the funding: How does the funding change the project? What effects will the funding have that would not be achieved without this support?

* The funding will enable the project to be implemented in the first place
* Acceleration of the project

Explain to what extent and why the project can be completed in a significantly shorter period of time than possible without funding.

* The size of the project can be increased

Give reasons why the size of the project can be increased significantly compared to the project being carried out without funding (increase of total costs).

* Increase the scope of the project

Give reasons why the funding significantly expands the scope of the project (e.g. does it make the project more ambitious?). A higher level of ambition can mean that the project

* + is focussed on more radical innovation approaches
  + follows a more long-term (non-market oriented) and more R&D intensive approach (as opposed to market oriented and development intensive)
  + involves higher technical risks
  + involves higher market risks
  + leads to new or extended collaborations

Describe the incentive effect of funding according to the above criteria only for the points applicable to the project.

<Text>