Project description for proposals to Take Off

Call 2020

Version 2.4; 30.09.2020

Table 1: Key data of the project

|  |  |
| --- | --- |
| RTI Initiative: | *TAKE OFF* |
| Full title of the project: | *Project title (max.* *120 characters)* |
| Short title of the project: | *Acronym (max. 20 characters)* |
| Applicant: | *Name of the leading organisation* |
| Project partner(s): | *Name of partner organisation(s)* |
| Call topic covered: | 1. Österreichische Marktsegmente/ Nischen  2. Neue Luftfahrtforschungsthemen  3. Systemfähigkeit in der Luftfahrt  4. Automatisierte/ Autonome Luftfahrt |
| Research category: | Industrial Research (IR)  Experimental Development (ED) |
| Project duration: | * Start date: * End date: * Duration in months (max. 36): |
| Costs: | * Total costs in Euro: * Total funding in Euro (max 2 Mil): |
| PROJECT GOALS: | *Please present the goals and innovative contents of the project with a maximum of 5 sentences.* |
| Is this a re-submission of the project?  If so, please specify the project acronym and number: | *Please specify here.* |
| Is this project in cooperation with the German Federal Aeronautical Research Programme (LuFo)? | ☐ Yes  ☐ No  *If yes, please specify here (if already known) the LuFo project acronym, partners and total funding.* |

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# In General

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## Checklist for Submission

The information provided in Chapter 1 is designed to help you in your submission and can be deleted in the final Project Description to be uploaded as an attachment via eCall.

### Checklist for formal check

The formal check serves to check the application for formal correctness 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.**

Table 2: Checklist for formal check

| *Criterion* | *Requirements checked* | *Correctable?* | *Consequence* |
| --- | --- | --- | --- |
| Completeness of the application | Project Description: descriptive part of proposal (upload as .pdf file)  ***The Project Description form must be completed in full; alteration and addition of chapters or headings are not permitted!*** | *No* | Rejection as result of formal check |
| Use of correct form (Instrument in eCall is consistent with project description) | Project Description  (see. [Take Off Downloadcenter](http://www.ffg.at/takeoff/downloadcenter)) | *No* | Rejection as result of formal check |
| Language | *German or English* | *No* | Rejection as result of formal check |
| Duration | max. 36 month | *No* | Rejection as result of formal check |
| The applicant is eligible for submission of a proposal. | See guidelines for Cooperative R&D-Projects, chapter 1.4 | *No* | Rejection as result of formal check |
| The project partners are eligible for participation. | See guidelines for Cooperative R&D-Projects, chapter 1.2 | *No* | Rejection as result of formal check |
| Minimum requirements of consortium | See guidelines for Cooperative R&D-Projects, chapter 1.2 | *No* | Rejection as result of formal check |
| Funding amount | Total funding amount requested must not exceed EUR 2 million | *No* | Rejection as result of formal check |
| Call-specific supplementary information to be included in the form |  | *Yes* | Rectification via eCall is possible |
| Attachments to eCall project data  (upload as .pdf file) | Attachments to eCall project data  (upload as .pdf file) | *Yes* | Rectification via eCall is possible |
| Uploads to eCall master data  (upload as .pdf file) | Annual accounts (balance sheet, profit and loss account) of the last 2 financial years have been submitted | *Yes* | Rectification via eCall is possible |

### General points

* Adhere to the questions. Questions, comments and notes marked in blue in the form may be overwritten or deleted
* Please make sure, that the information provided in this form corresponds to the information in the eCall-systems. In case of differences, the information provided in the eCall-system is binding.
* A complete project proposal consists of the project description (presentation of the content) and a cost plan (presentation of costs)
* 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 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 announcement).

## Submission

Project proposals may only be submitted electronically via [eCall](https://ecall.ffg.at) within the submission deadline. Please see the detailed [eCall tutorial](https://ecall.ffg.at/Cockpit/Tutorial-Hilfe).

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 announcement). 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 the administration of 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.

| Submission deadline:  Proposals for funding must be received via eCall by 12:00:00 a.m. on 24.02.2021! |
| --- |

Kurzfassung

Kurzfassung auf **Deutsch** (max. 1 Seite), entspricht der Kurzfassung aus den Projektdaten im eCall

Die aussagekräftige Kurzfassung muss folgende Punkte beinhalten:

* Ausgangssituation, Problematik und Motivation zur Durchführung des F&E-Projekts
* Ziele und Innovationsgehalt gegenüber dem Stand der Technik / Stand des Wissens
* Angestrebte Ergebnisse und Erkenntnisse

Abstract

Summary in English (translation of "Kurzfassung") (max. 1 page), corresponds to English summary from eCall project data

# Quality of the project

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## State of the art – current level of technology/knowledge

(max. 7 pages)

Describe the current state of the art, i.e. current level of technology/knowledge, relevant to the project based on the following criteria:

* State of the art – current level of technology/knowledge
  + in the company or research institution itself
  + in the national innovation system
  + in Europe (including EU projects) and internationally
  + results of patent searches
* Relevant products, procedures or services that are already on the market
  + by the company/company group
  + by competitors
* Relevant alternative technologies, methods and approaches that are in competition with the proposed approach

### Results from other projects

Please explain the differences to other projects carried out by the consortium partners in the past three years. Include in particular all 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 Chapter 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 obtained from publicly funded projects that provide the basis of or feed into the proposed project**

Table 3: Results and deliverables from other projects

| Funding provider | Project number | Title | Description of results already obtained and relevant deliverables (verifiable results / products of R&D work) in terms of the basis for / differentiation from the proposed project | Location and type of documentation  (e.g. link to homepage, publication, conference proceedings, interim report, final report, …) |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## Degree of Innovation

(max. 8 pages)

### Problem and research need

Clearly point out the problem and/or unsolved scientific/technical questions giving rise to the need for a funded research and development project.

### Goals

Describe briefly and concisely the key qualitative and quantitative goals and expected results of the project. These goals should be clear, measurable, realistic and achievable within the project duration. They should also be consistent with the benefit and exploitation of the results.

### Degree of innovation and associated risk

Describe the degree of innovation with reference to the state of the art (current level of technology / knowledge) as well as relevant products, procedures and services presented in 2.1.

* How do the goals of the project go beyond the state of the art (current level of technology / knowledge):
  + in the company or research institution itself
  + at national level
  + at international level
* How does the project improve existing solutions, cause a technological leap or create the basis for the registration of IPRs?
* Please quantify the improvements to be achieved (e.g. higher efficiency, lower cost, faster throughput, enhanced functions, etc.), or explain why the degree of innovation can only be described qualitatively.
* Describe the technical and economic risk involved at project and/or partner level. Describe the provisions made to ensure that the funding has a high impact despite the high risk involved (risk management, risk and contingency plan). However, you should not limit yourself to describing the risk in terms of project management.
* Justify your classification for one of the research categories “Industrial Research” or “Experimental Development”. If necessary use the Technology Readiness Levels (TRL)

Please use the following table to provide a risk overview (you can insert additional rows by putting the cursor on the last row and selecting Table > Insert row below):

**Risk management table with quantitative statements**

Table : Risk management

| Risk ID | Risk | Effect | Work package | Responsible | Measures | Probability of occurrence (%) | | Impact (estimated damage (€)) | Risk value |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  |  |  |  |  | |  |  |  |
| 2 |  |  |  |  |  | |  |  |  |
| n |  |  |  |  |  | |  |  |  |

Both probability of occurrence and impact can be assessed quantitatively.

The probability of occurrence (POO) and the impact (IMP) are assessed qualitatively to calculate the risk value (RV). The probability of occurrence is estimated as a percentage for each risk separately. This is not always straightforward. If the probability of occurrence cannot be taken or derived from statistical/historical data (previous projects, FMEA (failure mode and effects analysis), etc.), however, the result will be a rough estimate.

Tips for assessing the probability of occurrence:

* take a look at past developments,
* use statistics (sick leave in different seasons, machine breakdowns, etc.),
* compare risks with each other.

Impact is the damage caused by the risk when it occurs. The key question here is: What is the cost of the damage?

Example 1: One of 2 production machines breaks down, resulting in a 50% reduction in production volume. This will in turn have an impact on turnover and profit – the value can be estimated.

Example 2: A computer programmer falls ill – what damage would this cause to the project? The absence of an employee will result in a delay in the project, which in turn will incur costs (= project costs because of longer project duration, potential penalty payment, etc.)

Once the impact and probability of occurrence have been assessed, the risk value can be calculated by multiplication. The risk value provides the basis for deriving appropriate measures.

RV = POO x IMP

Example: Risk A – machine breakdown

POO = 10%

IMP = EUR 100,000

This results in a risk value (RV) of EUR 10,000

Example: Risk B – illness of computer programmer

POO = 5%

IMP = EUR 10,000

This results in a risk value (RV) of EUR 500

The risk value helps you to:

* compare risks
* identify major risks
* assess risk management measures (e.g. the measure incurs costs of EUR 50,000, but reduces the risk value by only EUR 10,000 and would therefore not be reasonable, etc.).

But please note that there are also aspects such as image loss, environmental disasters or danger to life, which cannot be adequately included in the calculation. Even if these events are taken into account by assuming high damage costs and a very low probability of occurrence, this will still result in a low risk value. These risks should therefore also be duly considered when drawing up a risk assessment for your project.

## Quality of planning

### Overview and description of work packages

The Work Package (WP1) Project Management is mandatory. A maximum of 10 work packages are permitted. Please ensure consistency with the eCall data.

Please insert additional rows if necessary: place cursor in last row and select “Table -> insert -> row below” from the menu bar.

**Overview of work packages**

Table 5: Overview of work packages

| WP  No. | Work package title | Duration (month) | Start MM/YY | End MM/YY | Planned result |
| --- | --- | --- | --- | --- | --- |
| 1 | Project Management |  |  |  |  |
| 2 |  |  |  |  |  |
| n |  |  |  |  |  |

**Overview of milestones**

Table : Overview of milestones

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

### Detailed description of work packages

Describe the contents of the individual work packages, the results expected within the duration of the project and the milestones. The individual **methods** and steps must be clearly and consistently defined and/or described (about 1 page per work package).

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

**Description of work package**

Table 7: Description of work package - WP number and title

|  |  |
| --- | --- |
| WP No. |  |
| Title of WP: |  |

Table 8: Description of work package - Participating organisation and person months per organisation

| Participating organisation (A/Pn) and person-months per organisation: |
| --- |
|  |

Table 9: Description of work package - Goals

| Goals: |
| --- |
|  |

Table 10: Description of work package - Description of contents

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

Table 11: Description of work package - Method

| Method: |
| --- |
|  |

Table 12: Description of work package - Milestones, planned results and deliverables

| Milestones (to measure project progress), planned results and deliverables (verifiable results / products of R&D work) |
| --- |
|  |

### Work and time schedule (Gantt chart)

Insert a detailed work and time schedule. Please pay attention to readability.

### Description of cost plan

(max. 1 page)

Please explain the relevance of the items listed in the cost plan for the project: personnel costs, costs of infrastructure use, costs of materials, third-party costs and travel costs (especially purpose of travel).

**Please observe the regulations in the** [**Cost Guidelines 2.1**](https://www.ffg.at/recht-finanzen/kostenleitfaden/version-21)

### Third-party costs (if exceeding 20% of total costs per partner)

(max. 1/4 page)

Third-party costs should not exceed 20% of the total project costs per partner. Please justify any excess.

## Integration of gender-specific aspects

(max. 1 page)

If the project relates to people, please explain how and in which work packages gender-specific aspects have been taken into account in the methodological approach.

# Suitability of Applicant / Project Partners

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## Description of the Expertise of project partners

(max. 1 page per partner)

### Applicant (A)

* Company name / name of institution
* Relevant expertise of organisation and staff involved in the project.   
  Provide evidence of relevant expertise by uploading appropriate and current CVs of senior scientific and technical project staff in the “Ressource Pool/MitarbeiterInnen-Pool” section of the eCall-system and provide a list of the major (max. 5) publications relevant to the project.
* Description of know-how relevant to the project, e.g. market success, patents
* Description of existing infrastructure relevant to the project and other aspects indicating the applicant’s ability to perform the project

### Project partners (Pn)

This page is to be completed individually and separately for each project partner.

* Company name / name of institution
* Relevant expertise of organisation and staff involved in the project.   
  Provide evidence of relevant expertise by uploading appropriate and current CVs of senior scientific and technical project staff in the “Ressource Pool/MitarbeiterInnen-Pool” section of the eCall-system and provide a list of the major (max. 5) publications relevant to the project.
* Description of know-how relevant to the project, e.g. market success, patents
* Description of existing infrastructure relevant to the project and other aspects indicating the applicant’s ability to perform the project

## Capacity of the consortium to achieve the project goals

(max. 2 pages)

### Completeness and coordination of required expertise

Please use the following table and additional descriptions to illustrate that the chosen consortium structure is suitable for achieving the qualitative and quantitative goals and expected results within the planned project period. Show that the consortium has the scientific, technical and economic expertise required for the project.

**Main tasks of all project partners**

Table 13: Main tasks of all project partners

| Work package | Key expertise required for the work package | Name of partner contributing key expertise |
| --- | --- | --- |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| X |  |  |

If the consortium includes partners from outside Austria: explain why these partners are essential for the project and what advantage the participation of the non-Austrian partner/s brings as compared to an Austrian organisation. Describe the benefits for Austria as a business and research location. Describe the IPR regulations to be agreed with the partner/s from outside Austria.

### Third-party expertise required

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). Name the subcontractors and describe in what form they will contribute the relevant expertise.

The content of **every subcontract exceeding EUR 20,000** must be described individually and in detail. If the subcontractor is not known yet, describe the aim of the work to be subcontracted and the qualifications to be met by the subcontractor.

**General information about subcontractor**

Table 14: General information about subcontractor

| Relevant WP(s) |  |
| --- | --- |
| Subcontractor of A/Pn |  |
| Name of subcontractor |  |
| Content of subcontract |  |

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

(max. 1/2 page)

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.

# Benefit and exploitation

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(max. 4 pages)

## User benefit and exploitation potential

Describe the benefits of the project results and/or new technologies and planned innovations for users from the perspective of the partners involved in the project in both qualitative and quantitative terms (external benefit).

* What is the benefit for those applying the project results and the exploitation potential?
* What new knowledge can be gained from the project in the relevant scientific/technical target group?
* For whom are the results relevant?
* What are the USPs of the planned project results?
* For projects of the research Category Industrial Research:  
  How about the knowledge increase in the relevant scientific-technical target group?
* For projects of the research Category Experimental Development:
  + What are the specified users, markets and market segments? – How is this substantiated by turnover figures?
  + What is the turnover potential of the innovation or added value of market growth in relation to the planned project costs?
  + What resources are required to bring the results to the market?
  + On what facts are your estimates based?

## Impact and significance of the project results for the organisations involved in the project

Describe the strategic significance of the project results and/or new technologies and planned innovations for the organisations involved in the project in both qualitative and quantitative terms (internal benefit):

* Long-term increase in R&D capacities
* Securing or extending the organisation's R&D position
* Expansion of existing R&D activities to include new fields of application
* Development of R&D platforms
* Opening up of new business fields etc.

## Exploitation strategy

Describe the exploitation strategy for the project results for each individual partner involved in the project in qualitative and quantitative terms. Please also indicate any specific exploitation expertise the relevant organisation has. **If the exploitation of the results has a significant impact on people, please also indicate how gender-specific issues have been taken into account in the exploitation of the economic potential.**

Research-oriented organisations:

[Planned number of]: diploma and doctoral theses, publications in national and international journals (with or without review process), national and international conference papers, national, European and international patent applications, workshops, events and conferences, expert advisory boards, etc…

Companies and application-oriented organisations

* [Planned number of]: industrial property rights, licences, national, European and international patent applications (in selected countries)
* Exploitation via subsidiaries, distribution partners
  + based on competitive edge in fields such as production, expertise, trade secrets, market presence
  + collaborations with third parties aimed at development and exploitation
* Marketing strategy
* Sales strategy
* Business plans/models
* Investment plans

# Relevance of the Project

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(max. 2 Seiten)

## Relevance to the Call

* Please list the **call topic** (“Ausschreibungsschwerpunkt”) addressed by your project.
* Which **goals of the call** (“Ausschreibungsziele”) are primarily addressed by your project?
* Further explanation is not necessary.

## Incentive effect of funding (additionality)

Please explain how funding changes the project in terms of:

* **Enabling:** The project could not be carried out without funding.  
  Please explain why funding is necessary to enable the project.
* **Duration:** The project can be completed within a shorter period of time than possible without funding  
  Explain to what extent and why funding helps to speed up the completion of the project.
* **Size**: Size of the project can be increased compared to the project being carried out without funding  
  Give reasons why the size of the project can be increased compared to the project being carried out without funding.
* **Scope**: The scope of the project can be increased.   
  Give reasons why the funding makes the project more ambitious. A higher level of ambition can mean that the project
  + is focused on more radical leaps in innovation
  + follows a more long-term and research-intensive [as opposed to market oriented and development intensive] approach
  + involves a higher technical risk
  + involves a higher market risk
  + leads to new or more extensive collaborations

Please demonstrate the incentive effect of the funding in accordance with the criteria applicable to the project.

Call-specific supplementary information

The following supplementary information **must be annexed to this Project Description:**

* If applicable, and in case that there are no CVs in the employee pool: please upload them as ONE separate document with all CVs in eCall
* If applicable, the description of the qualification profile of any N.N.s

The following documents must be uploaded as **additional annexes to the eCall project data:**Declaration of SME Status (if no data are available in the Austrian Business Compass) (see [Take Off-Downloadcenter](https://www.ffg.at/takeoff/downloadcenter))

# Annex I: Additional information about classification of the project

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The project covers the following [United Nations Sustainable development goals](https://sdgs.un.org/goals) (SDGs), please select:

Table 15: Specification SDGs

| Sustainable development goals |
| --- |
| 1. No poverty  2. Zero Hunger  3. Good health and well-being  4. Quality education  5. Gender equality  6. Clean water and sanitation  7. Affordable and clean energy  8. Decent work and economic growth  9. Industry, innovation and infrastructure  10. Reduced inequalities  11. Sustainably cities and communities  12. Responsible consumption and production  13. Climate action  14. Life below water  15. Life on land  16. Peace, justice and strong institutions  17. Partnerships for the goals  None  I can not assess |