APPLICATION GUIDELINES

FNR-NFR SINGAPORE 2017 CALL

These guidelines provide practical information to potential applicants in preparing and submitting an application to the FNR’s ‘INTER FNR-NRF Multi-Annual Research Programme.

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New OPEN ACCESS Guidelines

As of 1 January 2017, costs for project related publications can be refunded through the FNR’s “Open Access Fund”, and if fulfilling the FNR requirements. This does not apply to conference proceedings, PhD theses, book chapters and scientific monographs, although the FNR recommends Open Access publishing whenever possible. Please refer to the Open Access Fund guidelines for details.
Note
Please carefully read the FNR-NRF Singapore call documents. They give indications about any call specific modifications, the submission and selection process. Please do not hesitate to contact the FNR staff for any further explanation.
1 Characteristics

1.1 Introduction

In 2016, FNR Luxembourg and NRF Singapore have signed a Memorandum of Understanding with the aim to foster bilateral research collaboration and strengthen networking activities and links between researchers at public research institutions from both countries. The cooperation agreement allows joint funding of bi-lateral research projects and is based on the Lead Agency principle: both agencies base their funding decision on the results of one single evaluation procedure managed by one of the funding organisations (the so-called Lead Agency). In general, this is done by the country where the main research effort in terms of human resources is accomplished. For the 2017 INTER FNR-NRF call, the agencies agreed on the FNR acting as the Lead Agency. The funding for the national research teams will be provided by the respective national agency (up to a certain limit).

The INTER FNR-NRF call provides research project funding and is dedicated to the cooperation between Luxembourg based research institutions and public research institutions and universities from Singapore.

The INTER FNR-NRF call 2017 is open to two disciplines: 1) Material sciences, with a particular focus on composite materials and 3D printing, and 2) Business analytics, with a particular focus on financial technologies.

Please note that the FNR general Guidelines apply for applicants under the AFR scheme, in particular the FNR Requirements for Principal Investigators and supervisors with FNR funded projects.

1.2 FNR’s Vision, Mission and Strategic Priorities

**FNR’s vision:** to establish Luxembourg as a leading knowledge-based society through science, research and innovation, thereby contributing to the country's economic diversification and future prosperity.

**FNR’s mission:** to set up a sustainable world-class research system in Luxembourg that will generate societal and economic impact in key strategic areas.

**FNR’s strategic priorities:** the FNR sees itself as a driving force for Luxembourg’s innovation capabilities and focuses on the three following strategic objectives to foster research with impact:

- **Attaining scientific leadership in key areas.** By setting the highest quality standards, the FNR contributes to establishing international research excellence in Luxembourg. By attracting and training the most talented scientists, the FNR helps to build critical mass in key research areas, thereby supporting economic development and societal progress.

- **Turning public research into a competitive advantage for Luxembourg.** The FNR supports the advancement of Luxembourg's knowledge-based economy by supporting industry-informed research, by reinforcing co-operation between public research and innovative industries and by facilitating the commercial exploitation of research results.

- **Anchoring Science and Research in Society.** The FNR promotes the active involvement of researchers and scientists in addressing current and future societal challenges. To ensure that research is established sustainably in the public
consciousness as an important pillar of Luxembourg’s knowledge society, the FNR supports an active exchange between scientists and the public at large.

2 General Principals

2.1 Eligibility

The aim of the INTER FNR-NRF call is to foster the cooperation between Luxembourg based public research institutions and one or several public research institutions from Singapore, eligible for NFR support, e.g.:

- National University of Singapore, NUS
- Nanyang Technological University, NTU
- Singapore Management University, SMU
- Singapore University of Technology and Design, SUTD
- Singapore Institute of Technology, SIT
- Agency for Science, Technology and Research (A*STAR)

In the INTER FNR-NRF call 2017, the FNR has the lead in the evaluation process. Therefore, joint proposals have to be submitted to the FNR by the Luxembourg research institution. In addition, the Singapore partner of the project has to complete a short application to the NRF in order to be eligible.

In this call, FNR and NRF will accept joint proposals in the following domains only:

- Material sciences, with a particular focus on composite materials and 3D printing, or
- Business analytics, with a particular focus on financial technologies.

Projects shall have a duration of 2 or 3 years. The financial support per project is limited to 500,000 € FNR contribution for the Luxembourg research part and S$ 500,000 NRF contribution for the Singapore research part.

2.1.1 Eligibility of beneficiary organisations

The following organisations¹ established within Luxembourg are eligible for financial support from the FNR under the INTER FNR-NRF programme:

1. Public institutions performing research in Luxembourg;
2. Non-profit associations and foundations performing research in Luxembourg having obtained a special authorization from the Ministry for Higher education and Research.²

Each Luxembourg entity has to be registered at the FNR in order to be able to submit proposals through the online submission system.

For each proposal, project partners designate a ‘Principal Investigator’³ (PI), who is the project leader responsible for submitting the proposal on their behalf. The formal submission of the proposal to the FNR is done by an official representative of the coordinating institution.

¹ FNR’s law dating May 31, 1999, art 3 (2).
² For more information, please consult the webpage on eligibility.
³ The PI is the researcher proposing the project idea and leading the project on a ‘daily basis’.
Each proposal must be accompanied by the approval of the person authorised to legally commit the institutions of the involved researchers.

‘Contracting Partners’ are institutions which are eligible for funding and which seek direct financial support from the FNR.

Among those, the PI’s host institution is referred to as ‘Coordinating Institution’.

‘Non-contracting Partners’/ ‘International Partners’ are organisations or individuals from the public or private sector (within Luxembourg or abroad) participating in the project without direct financial support from the FNR. The collaborating public research institution(s) from Singapore, has to be listed as non-contracting partner/international partner. In order to be eligible for the INTER FNR-NRF call 2017, the Singapore-based partner must be a public research institution eligible for NRF support. Private entities based in Singapore are not eligible for funding within this call.

‘Subcontractors’ are not considered partners (contracting or non-contracting) in the project.

2.1.2. Principal Investigator (PI)

The research consortium jointly nominates one researcher having the scientific lead of the project on a daily basis: the PI. He is responsible for controlling the technical direction and academic quality of the project, and for ensuring that the project is carried out in compliance with the terms, conditions, and policies of the FNR and those of the partner institutions. The PI is assumed to be the author of the proposal. As FNR has the lead in 2017 INTER FNR-NRF call, the PI has to be from an eligible Luxembourg institution. The PI's institution is referred to as 'Coordinating Institution'.

To be eligible for INTER FNR-NRF funding, the PI has to fulfil the following criteria:

- The PI must be employed at an eligible beneficiary organisation at the time of the start of the project and for the entire duration of the research project.
- The PI holds a doctoral degree at the date of the submission deadline for the proposal.
- The project requires substantial involvement of the PI's research effort.

Self-employed, retired and emerited persons are not eligible to apply as PIs, even if the beneficiary organisation can establish the contractual framework enabling the person to take the lead of a project within the institute. Such persons may only contribute to a project as non-contracting partners.

Furthermore, the FNR requirements for principal investigators and supervisors within FNR funded projects apply.

The Singapore partners will nominate a Co-PI, the person in charge of the project’s Singapore part. The Singapore Co-PI is the person responsible for submitting the joint proposal to NRF as well for the reporting (including the financial reporting) in Singapore to NRF.

2.2 Domain Coverage

The INTER FNR-NRF Call intends to support joint research projects in the domains of:

- Material sciences, with a particular focus on composite materials and 3D printing, or
- Business analytics, with a particular focus on financial technologies.
Applicants have to explain in a short paragraph how their proposal fits in one of the above domains. The domain coverage will be checked at eligibility stage and projects not fitting within one of the topics will be turned down without further evaluation.

2.3 Project Characteristics

The project must have a duration of **2 to 3 years**. In case funding for a PhD student is foreseen to be covered by the INTER FNR-NRF project budget, the project duration must be 3 years.

In case PhD candidates are foreseen on the project, the FNR offers the possibility of an up to one-year extension period to finalize their thesis. The costs for this extension have already to be requested at submission stage. Later applications for extensions for PhD candidates funding will not be considered.

The indicative funding per collaborative research project is up to 500,000 EUR by FNR and up to S$ 500,000 by NRF.

**Latest possible start** for projects is 1st December 2018. The FNR reserves the right to review its funding decision if the start of the project is delayed beyond this date.

A maximum of **two applications** per PI per call is allowed. However, applicants are recommended to concentrate on one application only.

All application documents have to be written in **English**.

2.4 Good practice in Research, Legal and Ethical Requirements

Research should respect fundamental **ethical principles**, including those described in the Charter of Fundamental Rights of the European Union.

Research in the framework of INTER is consistent with ethical and data protection standards and approved by the competent committees.

Institutions make available their ethical and data protection guidelines as well as guidelines for research integrity. Institutions ensure that candidates have adequate training in the rules concerning ethics and responsible conduct in research. Institutions ensure that supervisors take the prime responsibility for their candidates to conduct research according to the established standards of the research field.

**Legal and Ethical Requirements**

The **Ethical Issues Table** in the web-based online application of the proposal provides a guide to what are considered to be ethical issues. If the answer to any of the questions of the Ethical Issues Table is YES, the applicant must provide a brief description of the ethical issue involved and how it should be dealt with appropriately in section 1.5. of the Project Description.

**The following special issues should be taken into account:**

**Informed consent:** When describing issues relating to informed consent, it will be necessary to illustrate an appropriate level of ethical sensitivity, and consider issues of insurance, incidental findings and the consequences of leaving the study. Particular attention must be paid to properly inform study participants about the complex research procedures. If children
are involved in a research activity it is necessary to obtain their assent and the permission of their parents.

**Recruitment of patient cohorts:** For the recruitment of patient cohorts equitable selection of patients should be ensured. The inclusion/exclusion criteria as well as the power calculations underpinning the recruitment targets will need to be described.

**Collection and use of human derived material:** The type and amount of biological materials to be taken from study participants and the manner in which biological materials will be taken including safety and invasiveness of the procedures for acquisition need to be specified. The measures employed to protect the privacy of and minimize risks to participants the length of time the biological materials will be kept, how they will be preserved, location of storage, and process for disposal, if applicable need to be described. Any anticipated linkage of biological materials with information about the participant, if applicable will need to be described. One should note that downstream research on human derived material (such as somatic cells for the generation of iPS cells and derivatives) could also raise ethical concerns (e.g. large-scale genome sequencing may evoke concerns about privacy and confidentiality). Appropriate confidentiality protections and consent for the downstream use of the material will need to be ensured.

**Data protection issues:** Unnecessary collection and use of personal data needs to be avoided. The source of the data, describing whether it is collected as part of the research or is previously collected data being used will need to be described. Issues of informed consent for any data being used should be considerer. Anonymity of the participant must be ensured by adhering to state of the art anonymisation/pseudonymization protocols.

**Use of animals:** Where animals are used in research, the application of the 3Rs (Replace, Reduce, Refine) must be convincingly addressed. Numbers of animals should be specified. Describe what happens to the animals after the research experiments.

**Human embryonic stem cells:** Research proposals that will involve human embryonic stem cells (hESC) will have to address all the following specific points:

- the applicants should demonstrate that the project serves important research aims to advance scientific knowledge in basic research or to increase medical knowledge for the development of diagnostic, preventive or therapeutic methods to be applied to humans;
- the necessity to use hESC in order to achieve the scientific objectives set forth in the proposal. In particular, applicants must document that appropriate validated alternatives (in particular, stem cells from other sources or origins) are not suitable and/or available to achieve the expected goals of the proposal. This latter provision does not apply to research comparing hESC with other human stem cells;
- the applicants should take into account the legislation, regulations, ethical rules and/or codes of conduct in place in the country(ies) where the research using hESC is to take place, including the procedures for obtaining informed consent;
- the applicants should ensure that for all hESC lines to be used in the project were derived from embryos;
- the donor(s)’ express, written and informed consent was provided freely, in accordance with national legislation prior to the procurement of the cells;
- that result from medically-assisted in vitro fertilisation designed to induce pregnancy, and were no longer to be used for that purpose;
the measures to protect personal data and privacy of donor(s), including genetic data, are in place during the procurement and for any use thereafter. Researchers must accordingly present all data in such a way as to ensure donor anonymity;

the conditions of donation are adequate, and namely that no pressure was put on the donor(s) at any stage, that no financial inducement was offered to donation for research at any stage and that the infertility treatment and research activities were kept appropriately separate.

Other ethical issues: Other ethical issues may pertain to research conducted with/in developing countries such as through the use of local resources (genetic, animal, plant, etc) as well as research which may have an impact on the local communities (e.g. capacity building, access to healthcare, education, etc).

Dual Use research having direct military use or the potential for terrorist abuse also gives rise to ethical issues.

In case of multi-national projects, identify the countries where research will be undertaken and which ethical committees and regulatory organisations will need to be approached during the life of the project.

The application should specify any already existing authorisation or permission for the proposed work and include copies (the copies do not count towards the page limit).

The PI is advised to contact the department in charge of ethical issues in its research institution for support.

2.5 Consortium Agreement and Intellectual Property Rights (IPR) Management

Experience has shown that the signing of agreements governing intellectual property rights between all parties is a time consuming process. Therefore fully fledged agreements should only be signed when absolutely necessary. A Consortium Agreement and an Intellectual property rights agreement is mandatory in the following cases:

- If intellectual property goes beyond simple authorship rights and a protection via patenting of the project results is probable and/or there may be possible commercialisation of the project results;
- A company or private institution is part of the consortium;
- One of the parties involved explicitly requests such an agreement.

Consortium constellations that do not require fully fledged agreements:

- If intellectual property is limited to scientific publications (and data sets), the consortium (in this case the consortium is usually composed of universities and public research institutions in and outside of Luxembourg) should:
  - At least indicate in the relevant section of the project description, how the authorship of the publications and the management and access to the data sets are settled amongst the project partners;
  - Indicate any other statement agreed between the parties or;
  - Sign a consortium agreement (only if it is specifically requested by the parties).

Consortium agreement (CA): Agreement governing the approach and rights and obligations among the members of the consortium including authorship rights of publications.
**Intellectual property rights agreement (IPRA):** All rights to technical solutions, methods, processes and procedures, regardless of whether or not these are or may be patented, as well as all copyrights and other rights to trademarks, authorship rights of publications, design, plant species, databases, integrated circuit layout designs, drawings, specifications, prototypes, company-internal secrets and the like.

In order to shorten the proposals, the applicants should refrain from adding complete template versions of CA or IPRA but state only the principles that govern these agreements.

If the applicants have further questions to this issue, they should contact the administration of their host institution and the FNR.

### 2.6 Financial Aspects

#### 2.6.1 Funding

In the INTER NRF-NRF 2017 call there is a funding maxima defined of 500.000 € by the FNR and S$ 500.000 by the NRF. The project plan should be cost-efficient (see selection criteria) in relation to the intended outcomes. The funding may not have the purpose or effect of producing a profit for the beneficiary. The funding may in no case result in a duplicate funding of operating costs, acquisition costs or staff costs. The costs listed must be essential for implementation of the project.

#### 2.6.2 Eligibility of Costs

To be considered eligible, costs must be real or based on lump sums and flat rates. Certain types of costs may be indicated on a lump-sum basis (e.g. if they relate to operations routinely performed by the partner in question), provided the cost does not differ significantly from the actual cost and these operations are acceptable to the FNR. Where appropriate, calculations for lump sums need to be provided.

For future financial reporting the costs must be supported by evidence that they are real (recorded in the accounts of the beneficiary and supported by invoices for example), paid (supported by bank statements for example), and linked to the project.

The FNR distinguishes between direct costs (see chapter 5.4) and indirect costs (see chapter 5.5).

#### 2.6.3 Total Budget of a Project

Please also refer to these financial guidelines hereafter for specific rules concerning each budget heading.

The Total Budget of a project is defined as follows:

\[
\text{Total Budget of a project} = \text{FNR contribution} + \text{External financial contribution} + \text{Institution’s (*) own financial contribution}
\]

The FNR assumes that the difference between “the total budget” and “the FNR contribution plus the external financial contribution” is covered by the institution (Institution refers to the contracting partners).
The budget must be provided for each contracting partner, giving an estimate of the eligible costs required and the amount of funding expected from the FNR.

Additional justification and information should be given in the respective field in section 5.3. of the online application form. The FNR may decide to limit its funding if no satisfactory justification of the budget is provided.

### 2.6.4 Direct Cost

Direct costs are all those eligible costs which can be attributed directly to the project and are supported by an auditable record.

VAT is not an eligible cost in case the institute can recover VAT from the Luxembourg tax authorities in conformity with Luxembourg indirect tax regulation.

The defined FNR direct eligible costs categories are explained hereunder.

#### 2.6.4.1 Personnel Costs

This budget line refers to the personnel allocated to the project. The payroll costs of all staff, full or part-time, who directly work on the project, and whose time can be supported by a full audit trail, may be included. The concerned staff must have a work contract with the institution eligible at the FNR. The need for such staff should be justified in the application form. The FNR will not cover costs of persons already funded by the State or by other funding sources.

The FNR will only finance the profiles of the personnel indicated in sections 3.3 and 3.4 Human Resources of the Online Form. For each position type requiring less than 3 person*months, please group the different staff (e.g. technicians, administrative staff, students) in one single item. Changes of profile (e.g. Post-doc to technician) have to be requested in writing in advance and receive formal approval by the FNR. An amendment of the contract will be prepared if necessary.

Lump sums for staff categories may be used provided these are based on a real-figure calculation (which must be added and explained in the application form).

The salary of PhDs and associated costs (travel, consumables, overhead) may be covered by INTER FNR-NRF project funding provided that the PhD works 100% on the project during the whole project duration. Costs for PhD salary and related overhead costs (flat rate, see chapter 6.6), the project related conferences in Luxembourg can be claimed for up to one year after the INTER FNR-NRF project end. Costs for project related publications are not eligible for funding. Article processing fees for Open Access publications only can be refunded through the FNR's “Open Access Fund”, and if fulfilling the FNR requirements. This does not apply to conference proceedings, PhD theses, book chapters and scientific monographs, although the FNR recommends Open Access publishing whenever possible.

The INTER FNR-NRF project duration will remain the same as fixed in the project contract.

Other sources of funding for PhDs and Postdocs can be institutional funds or AFR grants. The FNR encourages the involvement of (Bachelor or Master) students in the project in order to strengthen their interest in research.

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4 Additional costs (overhead (flat rate), consumables, etc.) for externally funded PhDs and Postdocs are eligible project costs. For further information please refer to the [AFR Individual](#) and [AFR PPP](#) websites.
The FNR expects project staff to use timesheets so that their actual time is recorded against a project to form the basis of the costs charged. Where a person is contracted to work 100% of their time on a single project (whether they are working full-time or part-time), timesheets are not necessary as their costs can only be charged to that activity. In all other cases, timesheets or project time records are required. This includes those who may be contracted to work on two or more projects, since it is essential when charging to have a means of recording and verifying the actual time applied to each activity.

Please indicate for each research person working on the project (in section 3.3 and 3.4 of the online application form respectively):

- Name and first name;
- Function or staff category (post-doc, research nurse, PhD, etc.);
- How many person*months the person will work over the course of the project;
- Monthly salary (lump sums for staff categories may be used);
- Whether the person is already on the payroll or will be recruited specifically for the project;
- How much of the estimated amount is to be covered by the FNR.

### 2.6.4.2 Equipment

This budget line is for new equipment dedicated to the project. This includes, but is not limited to, laboratory/workshop equipment (including computers and servers), software and installation costs.

Please indicate in section 5 (Financial Part) of the online application form respectively:

- the precise nature of equipment with specific technical requirements;
- its unit cost and number of units;
- its relevance to the project;
- the necessity of the equipment taking into account the equipment currently available in the institution;
- its useful life according the institutions’ policy, the depreciation method (e.g. straight line)
- the portion of the equipment used on the project, the amount of use (percentage used and time) must be auditable
- its use beyond the project with the indication of the residual value (if applicable)
- its use by other national or international research groups/institutions (if applicable).

Large equipment which is more expensive than € 25,000 will only be funded to the pro-rata of its use within the project, duly taking into account the depreciation rules within the research organisation.

For example:

- project duration: 3 years
- equipment acquisition costs: € 50,000 in the first year of the project
- useful life: 5 years, straight line method (€ 10,000 per year) assuming a residual value of € 0,00
- portion of the equipment used on the project: 75% of time used (3 years in present example)
  
  Eligible costs (pro-rata) amount to € 22,500
  
  3 (remaining years) x € 10,000 (depreciation per year) x 75% (percentage use) =
For equipment which is to be developed during the course of the project, or sub-equipment which may not be functional if used individually (for tests, upgrading and trials) and where the development costs exceed € 25,000 (total costs, not individual assembly parts) it is recommended to foresee own institutional co-funding and to indicate the co-funding source for all equipment.

The FNR may decide to limit its funding on a case by case basis.

For equipment costs over € 100,000 (FNR part and own funding combined), a business and/or utilisation plan is required at submission stage.

The FNR will only finance equipment listed in the original proposal. Additional equipment has to be requested in writing in advance and receive formal approval by the FNR. This modification will not result in an amendment to the contract.

### 2.6.4.3 Consumables

This budget line is for consumables necessary for the project realization. Consumables are goods that can be consumed or spent. They are not individual parts of a prototype, upgrade, parts to extend existing equipment. The applicant needs to indicate the nature (chemicals, Glassware, etc.) of the consumables and justify the estimation of the total costs and requested budget in section 5 of the online application form. The total amount can be indicated as a lump sum in accordance with the institutions’ rules.

Lump sums for various consumable categories may be used provided these are based on reasonable assumptions.

### 2.6.4.4 Travel Cost

This budget line is for travel and related subsistence costs in relation to the project. The FNR will cover the real costs for travel, training, subsistence and conference participation fees. Expenditures should be in accordance with the institution’s own regulations.

To avoid administrative burdening at submission and in order to give the applicant team (including the PhD student) the necessary flexibility, the budget for travel costs, training, subsistence and conference participation fees is calculated on a lump sum basis: € 2,000 per year and per 12 person*months (in relation to the total project effort). For PhD students a maximum of € 6,000 (3 years * € 2,000) can be allocated.

It is therefore essential to provide the total person*months effort of all the people working on the project. If the project team requires a higher budget for travel, please justify in detail the amount in section 5 of the online application form.

The FNR expects that all researchers involved in the project (in particular the PhD students) may benefit from the travel and training lump sum provided by the FNR.

### 2.6.4.5 Subcontracting

This budget line is for costs related to services provided by subcontractors. Contracting partners may subcontract specific services (limited in time and scope) essential for the realisation of the project but not central to it, in case this work cannot be directly undertaken by one of the partners. It is understood that subcontracting cannot be provided by contracting or non-contracting partners of the project (see chapter 1.2.). This would be regarded as a direct scientific contribution to the project and should be budgeted for the partner in the
appropriate budget line. Sub-contracting to non-contracting partners is therefore explicitly not possible as it is considered a circumvention of the laws and regulations defining the direct beneficiaries of project funding by the FNR.

All subcontracting costs need to be duly justified. Please describe the service, indicate the price, the duration of the service and specify the reason why you revert to a third service in section 5 of the online application form.

The FNR limits the subcontracting costs to a maximum of 25% of the FNR requested funding (without indirect costs).

In addition:
1. The subcontractor (person and institution) has no IP rights;
2. The subcontractor has no publication rights on tangible project outputs;
3. Consultancy fees for scientific advisory boards set up by the PI are not eligible project costs.

### 2.6.4.6 Other Costs

This budget line is for costs that cannot be listed within one of the previous budget headings. They include, but are not limited to:

- Organization of Scientific Conferences held in Luxembourg;
- Scientific Publications (peer reviewed articles, monographs, conference proceedings as well as PhD publications) related to the project;
- Dissemination of research results in Open Access journals. FNR recommends Open Access publishing whenever possible.
- Documentation (not expected in institutional libraries);
- Initial submission costs for the protection of a patent, license, trademark, etc.;
- Costs generated by the use of existing equipment within partner institutions. This may include rental/access charges for equipment or analysis costs. Please specify in the application form:
  - The type of equipment in question.
  - Justification of the costs.
  - Information on whether the existing equipment was purchased by the State.
  - Its residual useful life, and details of the calculation on which the budget estimate figure is based.
- Field work/fees.
- Recruitment and advertising costs for staff directly employed on the grant.
- Equipment-related items, such as relocation, maintenance (external contracts/agreements).

Depreciation costs of equipment which has been completely funded by the FNR in other projects cannot be included here.

Equipment which is to be developed during the course of the project is not eligible under this heading (see chapter 5.4.2 Equipment).

The nature of the costs and their relevance to the project has to be explained in detail in section 5.3 of the online application form.

### 2.6.5 Indirect Cost (Overhead)

For all funded projects as of 1 January 2014, the FNR applies the Full Cost with Flat rate model (FCF), where direct costs are reimbursed on the basis of the actual incurred (real)
costs and overheads are reimbursed on the basis of a flat-rate (up to 25% of direct costs minus subcontracting). Overheads cannot be claimed by public administrations.

Indirect costs, also called overheads, are all the structural and support costs of an administrative, technical and logistical nature which are cross-cutting for the operation of the institution’s various activities and cannot therefore be attributed in full to the project.

The nature of an indirect cost is such that it is not possible, or at least not feasible, to measure directly how much of the cost is attributable to a single cost objective.

Examples might be, but are not limited to, costs related to the general operation of the institution such as maintenance, insurance, petty office equipment, … and costs related to horizontal services such as administrative and financial management, human resources, legal advice, etc.

<table>
<thead>
<tr>
<th>#</th>
<th>FNR eligible costs</th>
<th>Basis</th>
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<td>1</td>
<td>Personnel costs</td>
<td>YES</td>
</tr>
<tr>
<td>2</td>
<td>Equipment</td>
<td>YES</td>
</tr>
<tr>
<td>3</td>
<td>Consumables</td>
<td>YES</td>
</tr>
<tr>
<td>4</td>
<td>Travel costs</td>
<td>YES</td>
</tr>
<tr>
<td>5</td>
<td>Subcontracting</td>
<td>NO</td>
</tr>
<tr>
<td>6</td>
<td>Other costs</td>
<td>YES</td>
</tr>
<tr>
<td>A</td>
<td>(\sum(1-6)-5)</td>
<td>TOTAL</td>
</tr>
<tr>
<td>B</td>
<td>25% x A</td>
<td>Overheads</td>
</tr>
</tbody>
</table>

2.6.6 External Financial Contribution

Sources of funding outside of the INTER FNR-NRF programme and the contracting institution should be indicated. Other FNR grants are considered an external source of funding for the project. Please indicate the total of the projected grant support in the appropriate section. Other external financial contribution could be a donation by a charitable organisation, revenues from licenses, etc.

Contributions by non-contracting partners (i.e. the partner’s research effort in the frame of the project) are not considered as an external source of funding.

External financial contributions should be indicated in section 5.2 Overall costs of the project (FNR funding + other funding, including own contributions) for Coordinating Institution and Contracting Partners of the online application form.

2.6.7 Contribution by Non-contracting Partners

Please provide an estimation of the contributions of each of the ‘Non-contracting Partners’/’International Partners’ including International Co-funding partner(s) to the project in terms of person efforts and estimated budget in section 5.4. Budget Non-Contracting partners of the online application form.

The budgetary overview of the Singapore public research institution(s) has to be indicated here (in S$, no conversion to €).
2.6.8 Budget Summary

An Excel sheet named ‘INTER FNR-NRF Budget Form’ is available for guiding through the calculation of the project costs. An upload of that sheet is not required at application stage but a detailed justification of the costs is to be provided in section 5.3. of the online application form.

The worksheet ‘Budget Summary’ provides an overview of the budgetary and person*months efforts by each project partner.

Note that parts of the worksheet do not have to be completed manually but will be automatically populated with the data filled in the previous sheets.

3 The Selection process

3.1 Project Evaluation

The Peer Review process guarantees an independent state-of-the-art review with the objective of selecting research projects that reflect the highest scientific quality. All proposals are evaluated according to a set of selection criteria. The review process consists of several stages:

- Proposals undergo an administrative eligibility check,
- Eligible proposals are peer-reviewed by independent, international researchers,
- An expert panel rate the proposals and gives a funding recommendation,
- The FNR and NRF decision bodies select the projects to be funded based on the recommendation by the thematic expert panels,
- The funding decision is communicated to the applicants.

3.2 Administrative eligibility check

An administrative eligibility check is conducted. In order to be eligible, the proposals must fulfil all of the following criteria:

- Proposals must be submitted by an eligible FNR beneficiary organisation,
- Proposals must be submitted before the deadline,
- Proposals must be complete (i.e. all of the requested components and forms must be included). Proposals must respect the requested format and maximum length and have to be written in English,
- The proposed research topics must be in either one of the two domains detailed in section 2.2,
- PI must be an experienced researcher,
- The collaborating institution in Singapore must be a public research institution, eligible for NRF support,
- The full proposal (as pdf) and additional information must be submitted to NRF by the Singapore Co-PI no later than 5 working days after the call deadline.

Applications not conforming to one of these elements are rejected at this stage without further evaluation.
3.3 Peer-review process

Each eligible proposal is sent to at least three reviewers who are asked to complete a written evaluation according to the following selection criteria (see chapter 1.3.):

- Innovativeness of idea and scientific relevance
- Appropriateness of the approach
- General feasibility of the project
- Expected outcome and impact of results

In a second step an expert panel assesses each proposal based on the written evaluations and gives a funding recommendation. The panel summarises the main arguments which led to the funding recommendation in a report (Panel Conclusion).

In a last step, the FNR and NRF decision bodies select the proposals to be funded based on the recommendation of the expert panel.

After the funding decision, applicants receive feedback from the FNR together with the full anonymous written evaluations of their proposal and the Panel Conclusion.

The applicant has the possibility to send an email to the FNR with a list of maximum 3 experts who should not be contacted as reviewers for the specific project to submission@fnr.lu before the submission deadline. The email has to explain why this/these expert(s) should not be contacted. The FNR however reserves the right to make the final selection of the reviewers.

3.4 Evaluation Criteria

The INTER FNR-NRF Peer Review process guarantees an independent, state-of-the-art evaluation of the application which has the objective to select the research projects that reflect the highest scientific quality. The scientific merit of the proposal is assessed based on the following selection criteria.

**FP1. Innovativeness of idea and scientific relevance**

The FNR expects:

- High scientific quality, competitive at an international level,
- Research question(s) and/or hypotheses original and clearly formulated in the proposal,
- Project of high scientific relevance for the research field,
- Direct contribution to advancements of the current state-of-the-art,

By thus:

- Strengthening of the capacities of the research groups in their field of research,
- Increasing their international visibility within the research community.

**FP2. Appropriateness of the approach**

Methods proposed have to be:

- Sound,
- Rigorous,
- State-of-the-art, and
- Appropriate for the proposed investigation.
FP3. General feasibility of the project

- Project to be carried out and led by an experienced researcher with a proven track record in the field,
- Joint applicant team with the expertise and complementary knowledge required for the execution of the proposed project,
- Exchange between the partnering organisations in Singapore and Luxembourg to be efficient and well organised,
- Project plan needs to be efficient and ambitious, but feasible during the proposed timeframe,
- Allocated human resources and budget need to be appropriate,
- Main infrastructure necessary for the successful execution of the project should be available at the start of the project,
- PhD projects must be clearly described and feasible.

FP4. Expected outcome and impact of results

- Scientific publications,
- Patents (if applicable),
- Doctoral and other training: Supervisory skills and available learning environment for PhD or Post-doc training,
- Increased networking and scientific collaboration between Luxembourg and Singapore,
- Development of core competences of the research group in view of gaining international visibility and critical mass,
- Dissemination of the research results among the wider public,
- Planned strategies for disseminating and using results during and after the project as well as the description of how potential users are to be involved in the project in view of exploitation of the results (i.e. exploitation of intellectual property generated, raising of scientific awareness, improvement of quality of life, etc. only if applicable),
- Value of intended economic, environmental and societal impacts.

4 Applying for the INTER FNR-NRF 2017 Call

4.1 Submission Deadline

Proposals must be submitted by the coordinating institutions’ administrations (not by the PI) in electronic format to the online submission system (FNR Grant Management System) https://grants.fnr.lu no later than 14:00 (CET) on the 25 October 2017.

Singapore partners might need to submitted a full pdf of the application submitted to the FNR together with additional documents required (e.g. more detailed budget) to NRF, no later than 5 working days after the deadline.

4.2 FNR Grant Management System

All FNR grants, including the INTER FNR-NRF 2017 Call are managed through an online submission system (FNR Grant Management System) accessible via https://grants.fnr.lu. This system provides applicants a web services interface for automated submission and
further monitoring of completed grant applications and related services (acknowledgement emails, notifications and reminders).

The system guides the applicants through the different steps of the application procedure. All forms have to be filled in online and submitted in electronic format.

The font and page limitations indicated in the application forms should be respected, otherwise the FNR may decide to not further process the application or to shorten it to the indication page limit.

For technical questions regarding the ‘FNR Grant Management System’, please contact us by email at tech-support@fnr.lu or call our Help Desk at +352 26 19 25 45.

4.3 How to Apply

The INTER FNR-NRF application submission consists of 2 different steps:

- **Step 1: Completing the Online Application Form**
- **Step 2: Submitting the Online Application Form**

4.3.1 Step 1 Completing the Online Application Form

INTER FNR-NRF Applications consist of different elements:

- The ‘**Online Application Form**’ is completed in the FNR’s online ‘Grant Management System’ and contains the general administrative and budgetary details of the application.

- The ‘**Project Description Form**’ contains more detailed information on the proposed research project, i.e. on its scientific content as well as the organisation of the tasks to be undertaken. The ‘Project Description Form’ is part of a web-based online application and cannot be submitted alone.

  The page limits of each section should be respected; otherwise the FNR may decide to only forward the first pages within the page limits to the external evaluators. The format instructions given in the ‘Project Description Form’ have to be respected. After completion of the Word document, please convert it to PDF and upload it into the system (no scanned PDF version). Only PDF files can be uploaded!

  To replace a file already uploaded, the old file should be REMOVED before uploading the new file to the system.

  Ideas and/or text belonging to others must be properly referenced, based on international standards. All applications are checked for plagiarism and any misconduct may result in the immediate disqualification of the application.

  A template for the Description of the Work Packages and a Gantt chart representation are available on the FNR’s webpage.

- **Recent CV of the PI** (no template provided)
  Please upload a recent Curriculum Vitae of the Principal Investigator (PI) and indicate career breaks if relevant (in English) (max. 3 pages/CV in one PDF File).

  The following information has to be included:

  1. The number and outcome of supervised doctoral dissertations as supervisor.
  2. List of 10 most recent accepted publications.
  3. List of 5 most important publications.
4. List of most relevant ongoing and completed projects as principal investigator (or main scientific contact) including funding source.
5. List of own most relevant patents, if applicable.

- **Recent CV of the Main Researchers** in the Project (no template provided)
  Please upload a recent Curriculum Vitae of the Main Researchers in the project and indicate career breaks if relevant (in English) (do not include CVs from support staff).

  The following information has to be included:
  1. The number and output of supervised doctoral dissertations as supervisor.
  2. List of 10 most recent accepted publications of each of the main researchers.
  3. List of most relevant ongoing and completed projects as principal investigator (or main scientific contact) including funding source of each of the main researchers.
  4. List of own most relevant patents.

  If the name of the researchers is not known at the time of the submission, please include a short description of their profiles (max 1 page/profile).

- **The Project Plan** contains the graphical representation of the project plan including human resources planning:
  Please upload the ‘**INTER FNR-NRF Project Plan (gantt chart)**’ into the system.
  The ‘Project Plan’ gives an overview of the project planning and presents graphically the different implementation steps described in section 2. Project Plan of the ‘Project Description’. The graphical representation has to be coherent with the text description of the workplan and permit monitoring of the progress during the implementation of the project.

  The following elements have to be included in the graphical representation:
  - interdependencies between implementation steps;
  - timing for the different steps;
  - personnel involved in each step;
  - deliverables for each step.

- For completing the **Financial Section**, please carefully read the Financial Aspects in section 1.7. within the application process document describing the rules for eligibility of costs to be respected.
  An Excel sheet named ‘**CORE Budget Form**’ is available for calculating the project costs. An upload of that sheet is not required at application stage but a detailed justification of the costs is to be provided in the appropriate section below. The feasibility of the project will be evaluated by reviewers based on that information.

- **International Co-Funding: NRF**
  The Singapore partner has to download the additional documents which are necessary for the NRF. Please complete all necessary forms, convert them to PDF and merge them into one single PDF file and upload them.

- **If applicable, Letter of acceptance (PhD supervisor)**
  In case PhD candidates are foreseen in the project and the supervisor is mentioned in the proposal, he/she has to provide a letter of acceptance indicating the willingness to supervise the candidate. Such a letter is only required for PhD supervisors which are not members of the consortium, i.e. are not employed at the coordinating institution or the contracting partners.
• Declaration

Please check “We/I hereby declare that this proposal conforms to the call guidelines and the ‘FNR Research Integrity Guidelines’.”

To validate this section and jump to the next one, click the button ‘Save draft and continue to next section’!

If you have finished filling in the different sections of your ‘Online Application Form’, please click on the button named ‘Form fully completed and ready for PDF generation’. You may as well choose to modify the entered data by clicking on the button named ‘Enter more details now’.

Finally, press the button ‘Done’ to validate the completion of the task and make it disappear from your ‘To Do’ list.

Ensure that you correctly filled all sections of the application form. The system partially warns you of mandatory sections but put a special attention on the completeness of documents that need to be uploaded.

The last task of step 1 is to generate a PDF document which contains all the information of your ‘Online Application Form’. Click on the hyperlink named ‘Generate PDF’. The PDF document will appear in the documents list on the right side of the screen. If the document named ‘Generated PDF’ does not appear in the list after a few minutes, please click on the refresh button of your browser.

If you need further advice and support, please contact your FNR Programme Assistant.

4.3.2 Step 2 Submitting the Online Application Form

The submission of the ‘Online Application Form’ consists of 2 stages:

• Submission by the applicant
• Validation and submission by the Coordinating Institution

After having generated the application in PDF format, please open the document and check if it is complete and correct. Especially ensure that the right uploads have been attached. When everything is correct, please click the button ‘Submit for Institutional Check’.

The report will now be accessible to the administration of the ‘Coordinating Institution’ in Luxembourg. The administration has the possibility to amend and validate your ‘Online Application Form’ and/or return it to you for changes.

Please note that the ‘Coordinating Institution’ has to respect the deadline for the final submission of the Proposal.

Incomplete applications, and/or late submissions will make the application non eligible and the application will be turned down without further evaluation!

If you need further advice and support, please contact your FNR Programme Assistant. Information on how to prepare the proposal is given in ANNEX 1 and 2 in blue italic characters inside the forms.
Annex 1: Online Application Documents

Step 1 of the INTER FNR-NRF Application consists of 3 different tasks, which are presented as a ‘To Do’ list:

- Task 1: Online Application Form – INTER FNR-NRF
- Task 2: Download the Project Description Form and the Project Plan from the FNR Website
- Task 3: Generate PDF

After completion of each task, press the button ‘Done’ to validate the completion of the task and remove it from your ‘To Do’ list.

A click on the hyperlink of the first task named ‘Online Application Form – INTER FNR-NRF’ brings you to the Application Form (labelled Smartform), which contains the administrative and budgetary details of your project. The ‘Online Application Form’ is divided into 6 sections which can be accessed individually:

- Section 1. Principal Investigator and Coordinating Institution
- Section 2. Research Project
- Section 3. Research Project Consortium and Human Resources
- Section 4. Legal and Ethical Requirements
- Section 5. Financial Part
- Section 6. Attachments

The form may be saved at any time and you may come back to it later on. Before you may submit the completed form however you need to make sure that all mandatory questions (marked with *) have been filled out. Please also ensure that all data is correct before submission.

Please note that a scanned PDF version will not be accepted.

1. Principal Investigator and Coordinating Institution

Section 1.1. Principal Investigator (PI)

- Application ID: Generated automatically
- First Name: * Given name of the PI. May only be modified through your profile.
- Family Name: * Surname of the PI. May only be modified through your profile.
- Gender: * Male/Female
- Title: * e.g. Dr, Prof., etc.
- Category of Position: * e.g. Head of Unit, Head of Department, Assistant Professor, etc.
- Do you hold a Doctorate (PhD): * Select Yes/No
- Discipline of Doctorate (PhD): * If no doctoral title please write ‘none’
- University/Institution Issuing the Doctoral Certificate: * If no doctoral title please write ‘none’.
- Date of the Doctoral Certificate:
- Email: * May only be modified through your profile.
- Phone Number:
- Date of Birth: *
- Nationality: *
Section 1.2. Coordinating Institution

- Name of Coordinating Institution: *Name of the Luxembourghish institution where the PI works and who will serve as a contact for the FNR throughout the application process and possible later project implementation. Please select your Institution from the dropdown list.
- Department: *Official name (and acronym) of the department and research group.
- Website of Group: *

Section 1.3. Authorship of proposal

- Author and co-authors of proposal: *Indicate who made contributions to preparing this research proposal and what these contributions consisted in.

To validate this section and jump to the next one, click the button 'Save draft and continue to next section'!

2. Research Project

Section 2.1. Research Project

- Project Title: *Should not be longer than 200 characters.
- Project Acronym: *The short title or acronym will be used to identify your proposal. Should not be longer than 10 characters.
- Project Start: *Suggested start of the project is 1 January 2018.
- Project Duration (in months): *Insert the project duration as stated in the “INTER FNR-NRF Project Plan”. Note that projects should have a duration of 2-3 years. In case a PhD is foreseen to be covered by the INTER FNR-NRF project budget, the project duration must be 3 years (see 5.4.1 Personnel Costs).
- Resubmission or Follow-up: *Select ‘Yes’ if the project is a resubmission or a follow-up of a previous project!
- If “yes”, provide more details: funding period and reference
- Application to other funding bodies: *Select Yes/No (If applicable, please indicate other funding instruments (also inside your institution) where this proposal, or a modified version of it, has been submitted. Applicants have to inform FNR about the status and outcome of the evaluation being carried out other than FNR
- If “yes”, provide more details: *(If applicable, please indicate other funding instruments (also inside your institution) where this proposal, or a modified version of it, has been submitted. Applicants have to inform FNR about the status and outcome of the evaluation being carried out other than FNR

Section 2.2. Project Summary

- Key words Characterizing the Research Project: 3-8 key words that you consider sufficient to characterise the scope of your proposal.
- Publishable Project Abstract (max. 0.5 page) Write a scientifically oriented executive summary. This abstract should provide a clear understanding of the prime objectives of the proposal and how they will be achieved. It may be used as the short description of the proposal during the evaluation process, i.e. for external scientific experts. It will not be published without your approval.
Section 2.3. Primary and Secondary Domains of the Research Project

- **Life Sciences (LS)**
  - LS1 Molecular and Structural Biology and Biochemistry
  - LS2 Genetics, Genomics, Bioinformatics and Systems Biology
  - LS3 Cellular and Developmental Biology
  - LS4 Physiology, Pathophysiology and Endocrinology
  - LS5 Neurosciences and neural disorders
  - LS6 Immunity and infection
  - LS7 Diagnostic tools, therapies and public health
  - LS8 Evolutionary, population and environmental biology
  - LS9 Applied life sciences and biotechnology

- **Mathematics, Physical Sciences, Information and Communication, Engineering, Universe and Earth Sciences (PE)**
  - PE1 Mathematical foundations
  - PE2 Fundamental constituents of matter
  - PE3 Condensed matter physics
  - PE4 Physical and Analytical Chemical sciences
  - PE5 Materials and Synthesis
  - PE6 Computer science and informatics
  - PE7 Systems and communication engineering
  - PE8 Products and process engineering
  - PE9 Universe sciences
  - PE10 Earth system science

- **Social Sciences and Humanities (SH)**
  - SH1 Individuals, institutions and markets
  - SH2 Institutions, values, beliefs and behaviour
  - SH3 Environment and society
  - SH4 The Human Mind and its complexity
  - SH5 Cultures and cultural production
  - SH6 The study of the human past

A list with the descriptions of the Domains (Subdomains) is provided on the FNR website.

To validate this section and jump to the next one, click the button ‘Save draft and continue to next section’!

3. Research Project Consortium and Human Resources

Section 3.1. Contracting Partners (only institutions different from the Coordinating Institution)

A ‘Contracting Partner’ is an institution which is eligible for funding and which is seeking financial support from the FNR, e.g. public institutions performing research in Luxembourg or non-profit associations and foundations performing research in Luxembourg having obtained a special authorization from the Ministry for Higher education and Research. Do not add the Coordinating Institution here as this information has already been communicated under 1.2.

Mandatory information:
- Institution
- Department
- Researcher in Charge
Click the ‘Add’ button to validate and/or add new partners.

Section 3.2. Non-contracting Partners / International Partners

A ‘Non-contracting Partner’ is an organisation or individual from the public or private sector (from Luxembourg or abroad) participating in the project without financial support from the FNR, e.g. foreign university or company. The Singapore partners have to be listed here.

Mandatory information:
- Institution ‘Name of the Non-contracting Partner’
- Department
- Researcher in Charge
- Web Address.

Click the ‘Add’ button to validate and/or add new partners.

Section 3.3. List of Main Researchers working on the Project

The table should show all the researchers working on the project, listed by importance for the project. The items in the table should be filled in for each researcher position (not including support staff). In case PhD candidates are foreseen, their funding for 48 months must already be requested at this stage. Later applications for extensions for PhD candidates funding will not be considered.

<table>
<thead>
<tr>
<th>Institution(s)</th>
<th>Position type</th>
<th>Qualification level</th>
<th>Name(s) of researchers hired for this type position</th>
<th>Person* months financed by FNR</th>
<th>Total estimated amount of the salary costs to be covered by FNR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution where the researchers will be working</td>
<td>Group leader, MSc, PhD, Professor, etc.</td>
<td>Name(s) of the researchers, N.N. if the name is not available yet</td>
<td>Person* months on project</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 3.4. List of Support Staff working on the Project

The list should show the required support staff for the project (i.e. technicians, secretaries, researchers in charge of labs or instruments supporting the project but not directly involved in the research team etc.). The items in the table should be filled in for each human resource position. For each position type involving less than 3 person*months per project, the different persons have to be grouped into one single item (e.g. three technicians working each 1 person*month on the project should be grouped in one line).

<table>
<thead>
<tr>
<th>Institution(s)</th>
<th>Position type</th>
<th>Qualification level</th>
<th>Name(s) of researchers hired for this type position</th>
<th>Person* months</th>
<th>Person* months financed by FNR</th>
<th>Total estimated amount of the salary costs to be covered by FNR</th>
</tr>
</thead>
</table>
Section 3.5. PhD Training

For each PhD candidate, please fill in the following items:

- First Name of PhD Candidate *For already known candidates, otherwise write N.N. The FNR is aware that this may change over time.*
- Last Name of PhD Candidate
- Title of Thesis *or draft title*
- Name of Academic Supervisor *Name of the Professor who will supervise the PhD (if available)*
- Institution Issuing the PhD *Name and country of the institution.*
- Expected Award Date *Approximate date when candidate will be awarded his/her PhD.*
- AFR Grant Code *(if applicable)*

Click the ‘Add’ button to validate each candidate.
To validate this section and jump to the next one, click the button ‘Save draft and continue to next section’!

4. Legal and Ethical Requirements

Section 4.1. Legal and Ethical Requirements

- Does the Project give rise to Ethical Issues? *Yes/No*
- Does the Project need to be submitted to the ‘Commission Nationale de la Protection des Données (CNPD)’ and/or ‘Comité National d’Éthique de Recherche (CNER)’ for approval? *Yes/No. More info on [www.cnpd.lu](http://www.cnpd.lu) and [www.cner.lu](http://www.cner.lu)* If applicable, approval(s) is/are required before the start of the project.
- If ‘Yes’, how will Ethical Issues be addressed? *If the project gives rise to ethical issues, please briefly indicate what they consist in and how they will be addressed. Ethical issues are not limited to issues handled by the ‘Commission Nationale de la Protection des Données’ and/or the ‘Comité National d’Éthique de Recherche’ (see section Ethical Issues). The PI should contact the department in charge of ethical issues in its research institution for support.*

To validate this section and jump to the next one, click the button ‘Save draft and continue to next section’!

5. Financial Part

For completing the sections below, please consult the financial aspects in chapter 5. of the OPEN application guidelines describing the rules for eligibility of costs to be respected. In addition an Excel sheet named ‘INTER FNR-NRF Budget Form’ is available for calculating the project costs. An upload of that sheet is not required at application stage but a detailed justification of the costs is to provided in the appropriate section below. The feasibility of the project will be evaluated by reviewers based on that information.
Section 5.1. Funding requested from FNR (Coordinating Institution and Contracting Partners)

For the Coordinating Institution and each Contracting Partner, insert the amounts for the following items: *Provide an estimation for each cost category. Do not use points or commas as decimal separators. Make sure that the indicated numbers are correct and well justified since they form the basis for the evaluation and the possible later negotiation.*

<table>
<thead>
<tr>
<th>Cost category</th>
<th>Coordinating Institution</th>
<th>Contracting Partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel Costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total of direct costs</td>
<td>Automatically filled in</td>
<td>Automatically filled in</td>
</tr>
<tr>
<td>25% Overheads (indirect costs)</td>
<td>Automatically filled in</td>
<td>Automatically filled in</td>
</tr>
<tr>
<td>Total of direct costs plus overheads (not including subcontracting)</td>
<td>Automatically filled in</td>
<td>Automatically filled in</td>
</tr>
<tr>
<td>Subcontracting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Costs</td>
<td>Automatically filled in</td>
<td>Automatically filled in</td>
</tr>
</tbody>
</table>

Requested Funds from FNR Automatically filled in (sum of the total costs of each contracting partner)

Please note that overheads (indirect costs) cannot be claimed by public administrations (see chapter 5.5. Indirect Costs). The amount for the overhead costs indicated for public administrations in the table above will be deducted from the total by FNR after submission.

Section 5.2. Overall costs of the project (FNR funding + other funding, including own contributions) for Coordinating Institution and Contracting Partners

For the Coordinating Institution and each Contracting Partner, insert the amounts for the following items: *Provide an estimation for each cost category. Do not use points or commas as decimal separators. Make sure that the indicated numbers are correct and well justified since they form the basis for the evaluation and the possible later negotiation.*

<table>
<thead>
<tr>
<th>Cost category</th>
<th>Coordinating Institution</th>
<th>Contracting Partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumables</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Section 5.3. Justification for the requested funding

Common justification for the requested funding for equipment; consumables; travel, other costs and subcontracting: **Justify the project’s costs in detail.** The FNR may not fund all costs if the justification is not precisely given. Explain the distribution of costs amongst the partners and the different cost categories. A detailed explanation on the personnel involved is to be provided in section 4 of the project description.

### Section 5.4. Budget Non-contracting Partners / International Co-funding Partner (NRF)

For each ‘Non-contracting Partner’ insert the following items:

<table>
<thead>
<tr>
<th>Name of non-Contracting Partner</th>
<th>Overall project costs for each non-contracting partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel (total person*months)</td>
<td></td>
</tr>
<tr>
<td>Total Costs</td>
<td></td>
</tr>
</tbody>
</table>

### Section 5.5. Overall Budget

- Requested Funds from FNR: * The funds you intend to request from FNR. Do not use points or commas as decimal separators. For control purposes, please copy to this section the figure automatically calculated by the system in the table in section 5.1.
- Overall project costs (for all contracting partners): * Total budget of the project for the contracting partners. Do not use points or commas as decimal separators. For control purposes, please copy to this section the figure automatically calculated by the system in the table in section 5.2.
- Overall project costs (including non-contracting partners): * Total budget of the project for all partners, contracting and non-contracting. Do not use points or commas as decimal separators. For control purposes, please copy to this section the figure automatically calculated by the system in the table in section 5.4., if applicable.
• Total Effort (Person Months) (All Partners): * ‘Person*months’ is the metric for expressing the effort (amount of time) PIs and other personnel devote to a specific project. The effort is based on the presumption that each fulltime member of staff can work 12 person*months per calendar year. Please give a total person*months needed for the duration of the project.
• Total Effort (person/months) to be financed by FNR * person*months for which you intend to request FNR funding.
• Total Effort PI (Person Months) * The total person*months you intend to work on the project as PI.

To validate this section and jump to the next one, click the button ‘Save draft and continue to next section’!

6. Attachments

Section 6.1. Project Description

The ‘Project Description Form’ is a Word document that can be downloaded by clicking on the respective hyperlink in the FNR online submission system. The document may be saved to the applicant’s desktop and completed offline.

The ‘Project Description Form’ is part of a web-based online application and cannot be submitted alone. The page limits of each section should be respected; otherwise the FNR may decide to only forward the first pages within the page limits to the external evaluators. The format instructions given in the ‘Project Description Form’ have to be respected. After completion of the Word document, please convert it to PDF and upload it into the system (no scanned PDF version). Only PDF files can be uploaded!

If you want to replace the file already uploaded, please REMOVE it first, before uploading the new file to the system.

Ideas and/or text belonging to others must be properly referenced, based on international standards. All applications will be checked for plagiarism and any misconduct may result in the immediate disqualification of the application.

Please find hereafter the explanation of the different fields of the ‘Project Description Form’:

1. Description of the Proposed Research Project. (max. 7 pages for 1.1. - 1.4.)

1.1 Introduction

   Short introduction to intended research project. In case of a follow-up project, please indicate the title and code of the project, specify the link between both projects and justify the need for a follow-up project.

1.2 Relevant state-of-the art and your own contribution to it

   Based on a thorough and up-to-date literature survey, please describe the current scientific state-of-the-art and ongoing developments in fields relevant to your proposal including your own previous work. Provide an assessment of further research needs (what are the main ideas that led you to propose this work?).

1.3 Hypotheses, project objectives and contribution to knowledge development in the research field

   Outline your project's contribution to the research needs identified above. State your (testable) hypotheses. Clearly define the objectives to be achieved by the project in a realistic and, as far as possible, measurable form.

1.4 Methods and approach
Describe the methods and procedures you will use in order to reach the objectives defined above. Summarise/analyse the underlying theory/theories.

1.5 Ethical considerations (if applicable, max. 2 pages)
If the project gives rise to ethical issues, please briefly indicate what they consist in and how they will be addressed. Outline the benefit and burden of such research, the effects it may have and how the ethical issues will be managed. Ethical issues need to be considered for the whole project and not only for the activities executed in Luxembourg. Ethical issues are not limited to issues handled by the ‘Commission Nationale de la Protection des Données’ and/or the ‘Comité National d’Éthique de Recherche’

2. Project Plan (3 to 10 pages)
Present a detailed work plan, suitably broken down into an appropriate number of steps (work packages, milestones, scientific objectives or other) which would permit the monitoring of progress during the implementation of the project.

Start with a brief description of the whole project plan (max 1 page) followed by a more detailed explanation for each step.

For each of the steps in the work plan:
- Indicate timing for its completion,
- Provide a brief description of the work to be undertaken (including methods to be applied where appropriate) making reference to the previous sections wherever necessary to avoid redundancy within the text,
- Clearly identify the partners and personnel involved and specify their contributions,
- List, specify and quantify deliverables (e.g. prototype, survey results) and milestones (e.g. prototype tested, patient cohort established),
- Describe how you intend to assure the quality of your work (e.g. definition of milestones for measuring project progress, regular joint progress evaluation, cross-checking of intermediate reports or results, etc.) and how you will monitor and mitigate risks identified for the project.

A suggestion on how you could structure your project is provided in Annex 1 (description of Work packages) and as download from http://www.fnr.lu/funding-instruments/open. In any case, all the information has to be provided within this section, respecting the given page limit.

In addition, provide a detailed overall risk assessment and mitigation strategy directly related to you proposed project. Review the risks identified and describe how you will monitor and mitigate them. Mention any significant external factor (assumptions = positively phrased, risks = negatively phrased) that are not under the control of the project and may determine whether the intended project 1) may start as planned, 2) may be implemented as planned and/or 3) may achieve its intended objectives. (Example for an assumption: “Delayed equipment delivery.”). In this section you should go beyond the description of how you want to tackle risks emerging in the project, e.g. regular consortium meetings.

Moreover, a graphical representation (e.g. Gantt Chart) of the structured work plan described here (including the personnel involved and timing) needs to be uploaded to section 6.4 of the Online Application Form.

For a suggestion on how the work plan could be presented, please consult Annex 1.2 or the OPEN website.

3. Risk Management and Quality Assurance (max. 1 page)
Describe how you intend to ensure the quality of your work (e.g. definition of milestones for measuring project progress, regular joint progress evaluation, cross-checking of intermediate reports or results, etc.). Review the risks identified and describe how you will monitor and mitigate them. Mention any significant external factor (assumptions = positively phrased, risks = negatively phrased) that are not under the control of the
The FNR strongly advises applicants to implement a scientific steering committee with internationally renowned experts for each project.

Please note: If serious risks exist (i.e. risks that could cause strong negative impacts and whose probability of occurrence is high), the project design should be reconsidered and/or a “plan B” should be elaborated.

In this section you should go beyond the description of how you want to tackle risks emerging in the project, e.g. regular consortium meetings.

4. Project Outputs

4.1 Impact of research results (max 2 pages)

Describe:

- your scientific dissemination strategy (provide a realistic overview of the envisaged scientific peer-reviewed publications, international conference participations as well as other tangible outputs (e.g. prototypes, software development). The list should address the type of publication category as well as the targeted level of publication – please note that if the intended outlet is much better than the average journal the applicant team has published in so far, the PI should explain why they think they can publish there now but have not done that before);

- how you will involve potential stakeholders from the national and/or international private and public sector (if applicable);

- the planned strategy for exploitation (economic or socio-economic) of your results, if applicable (e.g. What are the expected results? What will be the strategy of protection (patent, trademark, design, copyrights)? What will be the strategy of exploitation (licensing, start-up, etc.)? What is the project’s potential to generate intellectual property and the possible exploitation of the IPR? (only applicable for research projects intending economic valorisation in the short-to-medium term);

- the outreach activities foreseen in order to increase public awareness among the general public and the understanding of the research topic by a wider (lay) audience (e.g. publications, public conferences, interactions with pupils, and other activities).

By thus:

- Describe the contribution to the advancement of the development of the involved researchers and the partners’ organisations.

The above should be considered in short as well as in the medium to long term.

Please keep in mind that the outputs described in this chapter should be realistic in relation to the size of the project (funding and staff effort). Nevertheless the outputs should be ambitious (within the level of risk that is inherent to a challenging research project) and at an international level of standard in your scientific domain.

The intended outputs described will serve as measure to assess the ambition of the project during peer review and as a benchmark for evaluation in the final report.

4.2 PhD student supervision and research lines (only if applicable; 1 page/PhD candidate)

Provide a short description of the PhD project(s) by making reference to the project description and work plan.
Include the following information:
- title of the PhD project;
- research question;
- methodology;
- envisaged outcome;
- number of publications foreseen (at least one 1st author publication expected);
- academic PhD supervisor and degree awarding institution (including details about how the supervision and training of the candidate is organised);
- description of the profile of the candidate you wish to employ for this PhD position.

In case the PhD supervisor is known and mentioned in the proposal (and is not a member of the consortium), a letter of acceptance is to be attached.

5. Project Participants and Management

5.1 Description of the consortium, communication and decision-making (max. 1 page)
For each participating research group in the proposed project, provide a brief description of the group, the responsibilities within the proposed project, as well as the previous experiences qualifying participants for the task at hand. Describe how the participants collectively constitute a consortium capable of achieving the project objectives, amongst others, by highlighting the complementarities between them. Explain how communication (channels, methods etc.) between all partners will be organised and how decisions will be taken (especially for projects with large consortia). In addition, describe how the compatibility of data, and the accessibility of results for all members of the consortium will be ensured. (CVs of members of the consortium (main researchers only) are to be provided in the attachment of section 6.3 of the ‘Online Form’).
If new staff needs to be hired for the project, explain how you will make sure that these people are in place at the start of the project (or of their planned starting date). In addition, provide a short description of the profile of the staff to be hired.

5.2 Summaries (term sheets) of the Consortium agreement and/or the Intellectual Property Rights (IPR) agreement (max 1 page)
It should summarise the essential terms of the required agreement (see chapter 1.8 ‘Consortium agreement and Intellectual Property Rights (IPR) management’ for more details). Please indicate how the authorship of the publications and the management and access to the data sets are settled amongst the project partners. Note that each PhD within a CORE project is expected to publish at least one peer-reviewed paper. In projects with a potentially commercial orientation, the possibility of using the IPR through patenting or others should be envisaged. Applicants are advised to contact the administration of their institution and the FNR if they have further questions to this issue.

5.3 Track record of PI and applicant team (competence in the domain, publications, past fundings as PI)
Explain the competence of the PI and the applicant team in the proposed research domain by including supporting information regarding publications, past and running funding in Luxembourg or abroad.

6. Comments on Resubmission (only if applicable, max. 1 page)
Summarise the changes/modifications in comparison to the former application and address points raised in the FNR panel conclusion (or by the external reviews). If case specific issues have not been integrated in the project description, make sure that you justify them here. Please remind that reviewers assess this point with special attention.

7. Bibliography / References (max. 3 pages)
Please indicate the relevant papers concerning your research question and methodology, as well as the main literature. Please highlight the most relevant 20 publications (by printing them in bold).
Each reference must include the names of all authors (at least the first 3 authors), the article and journal title, book title, volume number, page numbers, and year of publication. If the document is available electronically, the website address should be mentioned, too.

Section 6.2. CV of the PI (no template provided)

Please upload a recent Curriculum Vitae of the Principal Investigator (PI) and indicate career breaks if relevant (in English) (max. 3 pages/CV in one PDF File).

The following information has to be included:
1. The number and outcome of supervised doctoral dissertations as supervisor.
2. List of 10 most recent accepted publications.
3. List of 5 most important publications.
4. List of most relevant ongoing and completed projects including funding source.
5. List of own most relevant patents, if applicable.

Section 6.3. CVs of other main researchers (no template provided)

Please upload a recent Curriculum Vitae of the main researchers in the project and indicate career breaks if relevant (in English) (max. 2 pages/CV in one PDF File).

The following information has to be included:
1. The number and output of supervised doctoral dissertations as supervisor.
2. List of 10 most recent accepted publications of each of the main researchers.
3. List of most relevant ongoing and completed projects including funding source of each of the main researchers.
4. List of own most relevant patents.
If the name of the researcher is not known at the time of the submission, please include a short description of their profiles (max 1 page/profile).

Section 6.4. Project Plan

Download the Excel workbook named ‘OPEN Project Plan (Gantt Chart)’ from the FNR website.
The ‘Project Plan’ gives an overview of the project planning and presents the work packages (WPs) and tasks. It contains one single worksheet named ‘Project Plan’.
The completion of this separate spread sheet is described in chapter 4.

Section 6.5. International Co-Funding (NRF)

The Singapore partner has to download the additional documents which are necessary for the NRF. Please complete all necessary forms, convert them to PDF and merge them into one single PDF file and upload them.

Section 6.5. Letter of acceptance (PhD supervisor), (if applicable)

In case PhD candidates are foreseen in the project and the supervisor is mentioned in the proposal, he/she has to provide a letter of acceptance indicated the willingness to supervise the candidate. Such a letter is only required for PhD supervisors which are not members of the consortium, i.e. are not employed at the coordinating institution or the contracting partners.
Section 6.6. Declaration

Please check "We/I hereby declare that this proposal conforms to the call guidelines and the 'FNR Research Integrity Guidelines'."

To validate this section and jump to the next one, click the button ‘Save draft and continue to next section’!

If you have finished filling in the different sections of your ‘Online Application Form’, please click on the button named ‘Form fully completed and ready for PDF generation’. You may as well choose to modify the entered data by clicking on the button named ‘Enter more details now’.

Finally, press the button ‘Done’ to validate the completion of the task and make it disappear from your ‘To Do’ list.

Ensure that you correctly filled all sections of the application form. The system partially warns you of mandatory sections but put a special attention on the completeness of documents that need to be uploaded.

The last task of Step 1 is to generate a PDF document which contains all the information of your ‘Online Application Form’. Click on the hyperlink named ‘Generate Full Proposal PDF’. The PDF document will appear in the documents list on the right side of the screen. If the document named ‘Generated PDF’ does not appear in the list after a few minutes, please click on the refresh button of your browser.

The submission of the ‘Online Application Form’ consists of 2 stages:

- Submission by the applicant
- Validation and submission by the Coordinating Institution

After having generated the application in PDF format, please open the document and check if it is complete and correct. Especially ensure that the right uploads have been attached. When everything is correct, please click the button ‘Submit for Institutional Check’.

The report will now be accessible to the administration of the ‘Coordinating Institution’ in Luxembourg. The administration has the possibility to amend and validate your ‘Online Application Form’ and/or return it to you for changes.

Please note that the ‘Coordinating Institution’ has to respect the deadline for the final submission of the Proposal.

Incomplete applications, and/or late submissions will make the application non eligible and the application will be turned down without further evaluation!

If you need further advice and support, please contact your FNR Programme Assistant.
ANNEX 2 Workplan and Work Packages

Annex 2.1 Description of Work Packages

One possibility of structuring a project is by defining different work packages, as in the example provided below. While the use of the work package structure below is not required, **having a good structure allowing monitoring of the project is mandatory** for all INTER FNR-NRF applications.

A template of the work package structure below can be downloaded from the INTER webpage.

<table>
<thead>
<tr>
<th>Work Packages (WPs) and tasks (1 page/WP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present the work packages (consistent with the Gantt chart in the ‘Project Plan’) in detail, using the table provided below. Use one table per work package (please copy the table as many times as you need it). The explanations included in the table have to be sufficient for justifying the proposed effort and allow for progress monitoring.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WP number</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>WP title</td>
<td>Only 1 person</td>
</tr>
<tr>
<td>WP leader</td>
<td></td>
</tr>
<tr>
<td>Start date</td>
<td></td>
</tr>
<tr>
<td>End date</td>
<td></td>
</tr>
</tbody>
</table>

**Objective**

Provide a general description of the work to be undertaken (including methods to be applied where appropriate), identify the partners involved and specify their contributions.

**Tasks**

Break the work package down into major tasks. Explain the sequence of tasks and explain interdependencies between tasks where necessary.

**Interdependence with other work packages**

Provide a narrative description or/and a graphical presentation of interdependencies between the present work package with other work packages.

**Deliverables and milestones**

A deliverable represents a verifiable output of the work package. Normally, each work package will produce one or more deliverables during its lifetime.

List, specify and quantify deliverables (e.g. prototype, survey results). State the project month of delivery (measured in months from the first month the project started).

Milestones represent a scheduled event signifying the completion of a major deliverable or a set of related deliverables (e.g. prototype tested, patient cohort established). State the project month of delivery (measured in months from the first month the project started).

**Human resources**

<table>
<thead>
<tr>
<th>Name of researcher</th>
<th>Partner</th>
<th>Qualification level</th>
<th>Person*months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><em>PhD, Professor etc.</em></td>
<td></td>
</tr>
</tbody>
</table>
Annex 2.2 Graphical Overview of the Project Plan (Gantt chart)

The ‘Project Plan’ gives an overview of the project planning and presents graphically the different implementation steps described in section 2 (Project plan) of the ‘Project Description’. The graphical representation has to be coherent with the text description of the workplan description as it will be used for monitoring the progress of the project (if this is accepted for funding by the FNR).

This is a suggestion on how a workplan could be structured. Please note that it is possible to structure the workplan differently as long as it is suited for allowing the proper monitoring of the project. An Excel workbook named ‘INTER FNR-NRF Project Plan (Gantt Chart)’ containing one single worksheet named ‘Project Plan’ is available, if this structure is to be used.

The suggested form is self-explaining and contains several examples. The Excel workbook is write-protected and only white cells can be filled out.

The first part of the form contains the following mandatory fields:

- Project Acronym
- PI Name
- Coordinating Institution
- Start Date
- End Date
- Reference Date (As Of) Insert the date of your submission
- Instance (Phase) Select Submission

The second part of the form lists the Work Packages (WPs) and planned outputs and presents them in time. It contains the following fields:

- Work Package WP number
- Related tasks Task number
- Name of Work Packages and related tasks Should be short enough to enter the available space. Extensive descriptions of the WPs and tasks are already in the ‘Full Proposal Form’.
- Planned start and end date For each WP and task enter the relevant dates in the format ‘dd/mm/yy’ or ‘dd.mm.dd’. The Excel input and output formats depend on your system and MS office regional settings.
- Actual start and end date Used later for annual and final reports
- Gantt Chart Will be displayed when you insert the dates.
- Deliverables Just list them without description
- Milestones Just list them without description
- Status Select ‘Not started’ in the drop down list
- WP or Task Leader One single name per WP and task

The worksheet must contain all work packages and tasks you describe in the Project Description Form. In any case, mention for any output the number(s) of the work packages leading to its completion.

If necessary, you may add additional tasks and work packages. Please refer to the procedure for adding additional WP2 described under the help flag in row 96.