

# Guidelines for Grand Solutions 2018

Green Growth (bioresources, energy, environment, water, climate, transport and construction)  
Better health and clinical research  
New technological opportunities  
The future society  
Open call

**Application deadline for GS18-I:** Green growth, better health and clinical research and new technological opportunities (I): **Tuesday, February 20, 2018 at 12:00 CET**

**Application deadline for GS18-II:** New technological opportunities (II), the future society and open call: **Tuesday, August 14, 2018 at 12:00 CET**

**Guidelines published: November 29, 2017, revised February 28, 2018**

# Guidelines for Grand Solutions 2018

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# 1. Introduction and reader's guide

## 1.1 About Grand Solutions

Innovation Fund Denmark's (IFD) purpose is to advance research, development, testing and validation of innovative solutions for the benefit of growth and employment in Denmark as well as to solve societal challenges.

IFD therefore invests in projects across the entire value chain, from strategic research to implementation.

Grand Solutions projects are characterised by their high risk profile and focus on ambitious results with high value creation whether in the form of new knowledge, improvement of/or new processes, systems, products or solutions to societal challenges.

The Project must create societal value and/or economic value in Danish public and private companies and/or for beneficiaries in society e.g. citizens, the state, regions and municipalities. It is therefore advantageous if beneficiaries of the results of the project and other key stakeholder are active participants in the development and duration of the project. A beneficiary can be an end user of the innovation, but can also be a public or private investor willing to invest in the project after IFD's involvement has ended. The breadth of Grand Solutions projects means that the number and type of project participants will vary considerably from project to project.

Similarly, IFD's investment will typically vary from DKK 5-30 mill. The typical duration of the projects is two to five years.

## 1.2 Reader's guide and contact persons

The present guidelines set out the general rules and constraints applicable to applications for Grand Solutions calls in 2018. The guidelines apply to the Grand Solutions calls in 2018 listed in Section 1.4. Appendix 1 of these guidelines is an overview of the electronic application form from e-grant. Appendices 2 and 3 contain definitions (TRL and SRL) to be used when preparing the application.

This guidance document is also available in a Danish version at: <http://innovationsfonden.dk/da/investeringstype/grand-solutions>. In the event of any discrepancy between the Danish and English versions, the Danish version prevails.

In addition to these guidelines, applicants will require:

1. The relevant call text(s) describing the specific framework for applications. In addition, applicants should consult the material referred to in the call texts e.g. IFD's investment strategies (in Danish only) and Guidelines for e-grant.
2. The templates to be used in preparing the application (budget, partner motivation and key persons). These must be attached to the application form in the e-grant electronic application system ([www.e-grant.dk](http://www.e-grant.dk)). An overview of the application form in PDF format can be found on the IFD website referred to below.

The relevant documents are available to applicants on the IFD website: <http://innovationsfonden.dk/en/investment/grand-solutions>.

In case of queries concerning calls and guidelines, please contact the contact persons listed on IFD's website (see link above) for with the specific calls.

In case of technical queries concerning use of the e-grant application system, please contact [support.e-grant@fi.dk](mailto:support.e-grant@fi.dk) or tel. + 45 33 92 91 90 (open 9.00-12:00 noon on weekdays).

### 1.3 News for 2018

Please note the following significant change compared to the 2017 guidelines:

- Direct project-related costs for staff salaries in private companies must be calculated according to the actual salary costs and not a fixed hourly rate. The maximum investment rates for the overall company direct project-related costs are increased by 15%. Overheads cannot be included in the overall company direct project-related costs. In addition to salary costs, direct project-related costs still include the following cost types: equipment (equipment, materials etc.), other costs (events, travelling, accommodation etc.), external services (e.g. consultancy and other services) and indirect costs that are not included in the overhead calculations.

Revised version as of February 28, 2018

- Choice of using flat rate of pay per hour if in compliance with the EU Commission de minimis rules for state aid (section. 3.4.1)
- Specification of calculation of gross pay per hour for public sector institutions in Denmark and abroad (section 3.4.2) and GTS institutes (Approved Technological Service Institutes) (section 3.4.3)

### 1.4 Investment opportunities

IFD has allocated approx. DKK **495 mill.** for Grand Solutions GS18-I calls, divided across the calls listed below:

<b>Calls – GS18-I:</b>	<b>Economic frame</b>
Green Growth (bioresources, energy, environment, water, climate, transport and construction)	DKK 211 mill.
Better health and clinical research	DKK 148 mill.
New technological opportunities (I)	DKK 136 mill.

IFD has allocated approx. DKK 190 mill. for Grand Solutions GS18-II calls.

<b>Calls – GS18-II:</b>	<b>Economic frame</b>
New technological opportunities (II)	DKK 70 mill.
The future society	DKK 30 mill.
Open call	>DKK 90 mill.

**Call texts for GS18-II will be published at the end of February 2018.**

**Note:**

- IFD can decide to allocate parts of the funds for thematic calls and open calls for specific themes and/or challenges as well as for international collaborations.

These guidelines are set out pursuant to Section 18 subsection 2 (1<sup>st</sup> sentence) of the Act on Innovation Fund Denmark no. 306 of March 29, 2014, amended in Act no. 384 of April 26, 2017 and Executive Order no. 1150 on awarding of grants etc. by Innovation Fund Denmark of October 25, 2017.

## 2. Application process

### 2.1 Funding opportunities

Applications may be submitted under the thematic calls, i.e. investment in projects within themes under the National budget 2018 and the 2018 Agreement on Allocation of the Research Reserve as well as under open calls.

### 2.2 Who can apply and receive funding?

Any legal entity (such as an enterprise, a research institution or a public institution) in or outside Denmark, directly involved in the project activities, is eligible to apply or participate and receive funding from IFD. For details of the maximum investment rate for the different types of participants, see Section 3.

One of the Danish project participants must act as the applicant organisation, and the project participants must in addition specify the person who, during the application process, acts as contact person between IFD and the project participants. The person submitting the application will automatically be registered as contact person. The may be changed from the application page in e-grant.

### 2.3 Application process

The application process is a single-phased process. The application must focus on the value creation of the project as well as the operationalisation. As value creation and operationalisation are particularly important to IFD, the application must clearly display and define the value creation, as well as show how it is measured and guaranteed. See section 2.6 for further details on the assessment criteria.

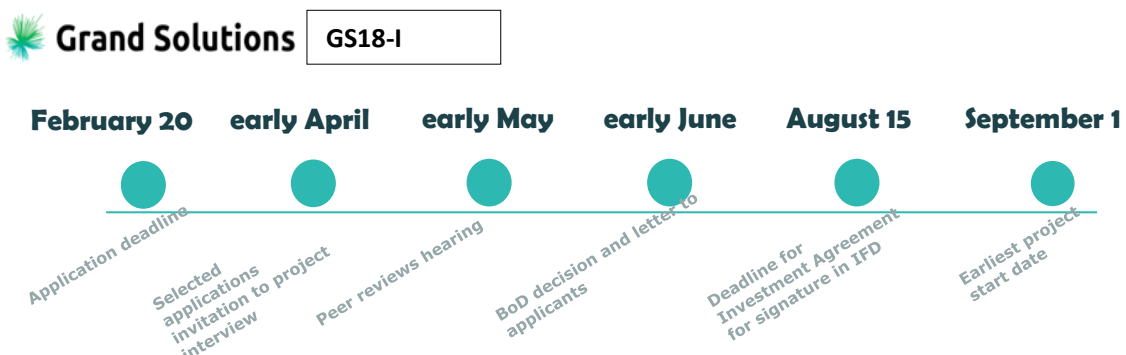
### 2.4 Application deadline and other important deadlines

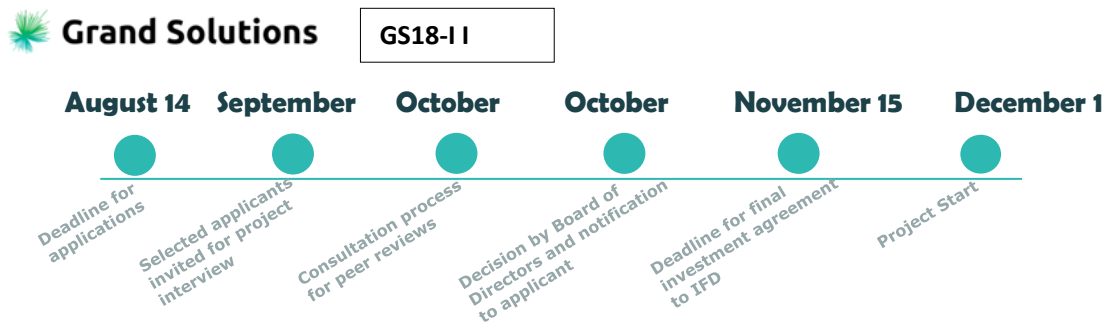
Applications for GS18-I must reach IFD, i.e. be submitted via the e-grant application system, no later than **12:00 CET on Tuesday, February 20, 2018.**

Applications for GS18-II must reach IFD, i.e. be submitted via the e-grant application system, no later than **12:00 CET on Tuesday, August 14, 2018.**

It will not be technically possible to submit applications after the deadline.

The application processes for the calls: GS18-I and GS18-II are listed below.





**Project interviews** with selected applicants for **GS18-I** will take place in the period of May 2-17, 2018. Invitations to the project interviews will be sent early April 2018.

**Project interviews** with selected applicants for **GS18-II** will take place in October 2018. Invitations to the project interviews will be sent early September 2018.

## 2.5 Assessment process

Applications are assessed based on the criteria in section 2.6. The IFD Board decides which applications are sent to peer review and which applicants are invited to an interview at IFD. Applications that are not sent to peer review and not invited to project interviews will receive a letter containing the reason for rejection via the e-grant system.

The peer reviews are sent to the applicant via the project contact person in a consultative procedure.

Based on an **overall assessment** consisting of internal strategic and scientific/technical assessments, external peer reviews and any comments from the consultation process, and project interview, the IFD Board decides which projects to invite to negotiations for an investment agreement. Please note that while the peer reviewers solely make a scientific/technical assessment of the applications, IFD and its Board also take into consideration elements such as the strategic importance of the project and its value creation, cf. the assessment criteria in section 2.6 of the present guidelines.

In early June the IFD Board is expected to decide which applications for the GS18-I calls are invited to negotiate an investment agreement. At the end of October the IFD is expected to decide which applications for the GS18-II calls are invited to negotiate an investment agreement.

The IFD Board decision will be sent in writing, with an invitation to negotiate an investment agreement.

## 2.6 Assessment criteria

Applications for Grand Solutions are assessed on the basis of three main criteria:

- Quality of research and innovation
- Value creation
- Efficiency and implementation

In the assessment of the three main criteria particular emphasis will be placed on the following aspects.

### 2.6.1 Quality

- Clear objectives in accordance with the call
- Clear well-argued description of the needs and challenges addressed by the project
- State-of-the-art (SoA) of research and innovation and quality of the question(s) investigated by the project as well as the quality of the solution and its method(s) in the project
- The research and innovation excellence in terms of originality, project use or combination of new methods as well as the ability to create synergy among the project participants.
- Partner composition and inclusion of relevant competencies and qualifications that together contribute to the idea, solution and value creation of the project, including potential involvement of relevant international partners

### 2.6.2. Value Creation

- The relevance of the project for growth and employment in Denmark created through knowledge, innovation and technology
- How the project benefits Danish society and/or contributes to solving tangible societal challenges
- The value of the project for society as well as beneficiaries in relation to state-of-the-art in the short, medium and long term
- How the project seeks to accommodate an unmet or latent need or to explore an opportunity
- The value creation for the project partners in the short, medium and long term, including commercial potential if relevant
- The project has one (or more) beneficiary(ies) or particularly important stakeholders involved in the project
- The readiness of the market/society in terms of the solution(s) of the project, including the actions undertaken to ensure a match between project solution(s) and market/society
- Link of the project to national or international strategies and Danish positions of strength
- The fit of the project with the general IFD strategy and/or the specific strategy in the field
- The project results may lead to innovation in other fields

### 2.6.3 Efficiency and implementation

- A clear, shared vision of the idea of the project and value creation by project partners
- Description of actions undertaken to ensure the partners' ownership of the project
- Feasibility and organisation:
  - i) Detailed risk assessment and risk management
  - ii) Interdependencies between work packages and results, incl. milestones and stop/go-criteria
  - iii) Efficient decision-making processes in the project
  - iv) Any legal, ethical and regulatory aspects
- Economic efficiency, including resource optimisation in the project and “financial gearing”, e.g. other grants and/or investments which could be generated **after** the end of the project
- The commitment by public and private companies including co-financing of the project



### 3. Finances and budgeting

The application (assembled pdf-file) must include a simplified budget for the project's total costs over the project period. The budget must be broken down into project participants (i.e. enterprises/institutions) and works packages and specify, for each party, the investment being sought from IFD and from the project participants. The budget for the individual participants must be divided into fixed cost categories and specify whether the research to be conducted is "Industrial Research" or "Experimental Development", cf. the description in Section 3.4.1.

The budget must be made in accordance with the budgetary rules and description using the budget template (Excel format). The excel file will form part of the application. The budget template is found in the application form in e-grant.

Applicants, whose project is invited to enter negotiations for an investment agreement, must consider budget adjustments in connection with the investment agreement.

#### 3.1 Innovation Fund Denmark's maximum investment rates

IFD will cover a maximum of 75 % of the project's total costs. In addition, there is a cap on the IFD coverage of the costs of each individual participant. The maximum investment rates are shown in the summary of the budgetary rules for the different organisation types under Section 3.4.

It must be emphasised that all investment rates are maximum values. The individual participants may contribute a larger share of co-financing or finance the whole of their commitment themselves. IFD generally welcomes a high degree of financial participation in the form of co-financing from public and private companies.

#### 3.2 Co-financing – including financing from other sources

IFD requires the participants to invest in the project themselves, and therefore expects co-financing from all participants of a project. Project participants' co-financing may be made in kind, e.g. as the value of labour, or in cash, where the participant pays e.g. for direct expenses incurred by the project.

The budget may also include financing from other sources. In order to ensure compliance with the EU rules on state aid, the co-financing may **not** include funds from public sector subsidisation schemes within the EU or EU Member States, including Denmark, unless this has been explicitly sanctioned by IFD. In this connection, enterprises must observe that the EU's scope of legal state aid comprises the total funds from public sector subsidisation schemes regarded as state aid.

#### 3.3 Main budgeting principles

The budget must include all direct project costs, i.e. costs directly attributable to the project, regardless of whether the applicant is seeking to have those costs covered by IFD, or whether they will be borne by the project participants themselves or by a third party. Costs must be calculated in accordance with the rules set out in Section 3.4 for the different organisation types ("Industrial Research" or "Experimental Development").

Direct costs are typically salaries for staff working on the project, including project management and project administration for project in question, any costs of equipment necessary for carrying out the planned activities, and other direct project-related costs such as purchasing of materials, consultancy support, contract-based research, and travel and meeting costs. If the equipment is used for the project for

only part of its lifespan, the depreciation costs during the project duration alone may be included in the budget. The depreciation costs must be calculated in accordance with normal accounting practice.

The budget may **not** include indirect costs for companies.

A separate overhead, calculated from a fixed percentage of all direct costs, is added to universities and other types of institutions. The rates are set out in section 3.4.2.

The costs are calculated in accordance with the rules provided in Section 3.4 for each of the organisation types. The total project costs are divided across the project participants based on the principle that the entity defraying a given expense must include it in its own budget. For salaries this means that the institution/enterprise paying the salaries during the project period must include this cost in its own budget.<sup>1</sup> Please note that PhD-Students can participate in the project as staff and may be included in the budget and financial reporting, but only for the time they spend on the project.

For each project participant the costs must be divided into the following categories: salaries, equipment (equipment, materials, etc.) and other project-related costs (events, transportation, travel, accommodation/catering, communication), external services (consultancy costs or services), costs, that are not included in relevant overhead calculations as well as - for public sector units – any overhead, cf. the rules provided in Section 3.4.2).

The costs must furthermore be divided into “Industrial Research” or “Experimental Development”, respectively. “Industrial Research” focusses on generating new knowledge, whereas “Experimental Development” focusses on using existing knowledge. This split is necessary, among other things, because the investment rates of the activity types are different for companies. Section 3.4.1 includes a link to the EU’s definitions of “Industrial Research” and “Experimental Development”.

### 3.4 Budgetary rules

**The maximum investment rate for the full project is 75%, i.e. 75% of the overall project costs of the project partners.**

#### 3.4.1 Budgetary rules for enterprises in Denmark and abroad

**Salaries:** The calculated actual gross hourly salary applies to all staff groups.

**Other direct project-related costs:** Must be stated as actual, anticipated costs.<sup>2</sup>

**Overheads:** Overheads cannot be added for the individual company.

#### Calculation of actual direct salaries for companies

##### *Direct salary costs for companies*

Direct salary costs include salary costs for scientists, technicians and other staff working on the project.

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<sup>1</sup> When a project participant is employed by more than one institution/enterprise, these entities will be responsible for determining how the project hours are divided between them. Each entity will thus include salaries for that entity’s share of the project hours in its own budget.

<sup>2</sup> Note Section 2.2 regarding equipment and depreciation costs.

Direct salary costs include actual salary costs, calculated on the basis of the annual gross salary, incl. pension, insurance, holiday pay etc. To calculate the gross hourly salary an annual total of 1,628 man hours for a full time employee is used. The calculated gross hourly salary per employee must not exceed DKK 1,000.

All project partners are obligated to ensure time registration of the employees participating in the project. Compensation of costs for overtime, sick pay, leave of absence etc. may not be included in the calculation.

**Maximum investment rate:** The maximum investment rate for enterprises (i.e. the maximum share of an enterprise's project costs that may be covered by IFD) depends partly on whether the enterprise is an SME (small and medium-sized enterprises), partly on whether the activities under the project count as *Industrial research*, where the focus is on acquisition of *new knowledge* and skills and their utilisation, or as *Experimental development*, where the focus is on utilisation of *existing knowledge*. Cf. link to EU definitions below.

The maximum investment rates are:

*Small and medium-sized enterprises (SMEs)*

Industrial research:	75 %
Experimental development:	50 %

*Large enterprises*

Industrial research:	65 %
Experimental development:	40 %

It is furthermore a requirement that the project complies with the EU State Aid rules definition of "effective collaboration" or wide dissemination of the project results, cf EU's General Block Exemption Regulation Article 25, subsection 6 (b) i.e. one of the following condition must be fulfilled:

- a) The project involves effective collaboration:
  - between undertakings among which at least one is an SME, or is carried out in at least two Member States, or in a Member State and in a Contracting Party of the EEA Agreement, and no single undertaking bears more than 70 % of the eligible costs, or
  - between an undertaking and one or more research and knowledge-dissemination organisations, where the latter bear at least 10 % of the eligible costs and have the right to publish their own research results;
- b) the results of the project are widely disseminated through conferences, publication, open access repositories, or free or open source software.

If none of the above conditions are fulfilled, the maximum investment rate for the company will be 15 percentage points lower than the above mentioned rates.

SMEs have fewer than 250 employees. In addition, it is a requirement *either* that the enterprise's annual turnover does not exceed EUR 50 mill. *or* that its balance sheet does not exceed EUR 43 mill. In addition, there are certain requirements regarding the enterprise's autonomy. For details, see "[The new definition of small and medium-sized enterprises – User guide and declaration](#)" or contact IFD for more information.

The EU's definitions of industrial research and experimental development, respectively, are provided in the EU's General Block Exemption Regulation at: <http://eur-lex.europa.eu/legal-content/DA/TXT/PDF/?uri=CELEX:32014R0651&from=EN> (see in particular, definitions in 85 and 86, Article 2, page 25).

***Investment in enterprises is awarded within the EU General block exemption Regulation:***

Investments in enterprises are awarded within the constraints of IFD's notification to the European Commission pursuant to the General block exemption Regulation (Commission Regulation (EU) No 651/2014 of 17 June 2014 cf. above link declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty Text), Chapter 1 (definitions in Articles 1-12) and Articles 25 and 30.

*Added in revised version of January 19, 2018*

***Choice of using flat rate of pay per hour if in compliance with the EU Commission de minimis rules for state aid***

Enterprises applying for an investment under EUR 200.000 (equivalent of approximately DKK 1.5 mill.) can choose to use a flat rate of pay per hour of DKK 750 when budgeting, instead of an hourly pay rate based on the actual salary costs. This will require that the enterprise meets the conditions to receive the investment based on the EU Commission de minimis rules for state aid, i.e. COMMISSION REGULATION (EU) No 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid, published December 24, 2013 in the Official Journal of the European Union.

At the latest when the investment agreement is signed with IFD, the enterprise will need to submit a Solemn Declaration that the enterprise fulfils the rules for de minimis aid in the period in question. This means that the enterprise must comply with the requirement of maximum de minimis aid of 200,000 EUR in total in the current and the two preceding financial years.

The budget in applications with application deadline on 20 February 2018 must state which enterprises in the project that have used flat rate of pay per hour. In the partner sheet (P1-P60) in the budget the comments field must state if the enterprise has used the flat rate of pay per hour in connection with the calculation of the project salary costs of the enterprise. For applications with application deadline on 14 August 2018 the change will be implemented in the budget master data section in the partner sheets (P1-P60).

***Specific regulations for certain sectors***

Companies within the sectors fisheries and aquaculture, primary production of agricultural products or road haulage (paid by third party), cannot apply according to the de minimis rules, but must use the actual salary costs when budgeting as described in section 3.4.1.

For investments using a flat rate of pay per hour the maximum investment rates are:

Small and medium-sized enterprises (SMEs)

Industrial research:	60 %
Experimental development:	35 %

Large enterprises

Industrial research:	50 %
Experimental development:	25 %

***Investment in profit and non-profit organisations:***

Trade organisations, interest organisations, and organisations and enterprises performing economic activities, typically by offering products or services in a market, must observe the rules for state aid to enterprises cf. Section 3.4.1, including the IFD's maximum investment rates.

Insofar as the organisation in question performs non-economic activities, IFD, following a specific assessment, may choose to increase the maximum investment rate. Please contact IFD in such matters well in advance of the application deadline.

### **3.4.2 Budgetary rules for public sector institutions in Denmark and abroad – incl. foreign research institutions and government-funded Danish institutions**

It is a prerequisite that applicants carry out non-profit activities, including independent research and development. The maximum investment rate represents the part of the project costs, which can be covered by IFD.

**Salaries:** Must be stated as actual, anticipated costs.

*Added in revised version of January 19, 2018*

#### **Specification of calculation of gross pay per hour for public sector institutions in Denmark and abroad**

Salary costs include staff costs for scientists, technicians and other staff participating in the project.

Direct salary costs include actual salary costs, calculated on the basis of the annual gross salary, incl. pension, insurance, holiday pay etc. To calculate the gross hourly salary an annual total of 1,628 man hours for a full time employee is used. The calculated gross hourly salary per employee must be not exceed DKK 1,000.

All project partners are obligated to ensure time registration for the employees participating in the project. Expenses in connection with extra hours, sick leave, leave of absence etc. cannot be included in the calculation and will not be covered.

**Other direct project-related costs:** Must be stated as the actual, anticipated price.

#### **Maximum investment rate:**

- |  |      |
|--|------|
| • State institutions, municipalities, regions and public hospitals in Denmark, Greenland and the Faroe Islands | 90 % |
| • Danish research institutes   | 90 % |
| • Foreign research institutes  | 90 % |

**Overhead:** For certain types of institutions, a separate overhead factor applies as a fixed percentage of all direct costs. The rates are as follows:

- |   |       |
|---|-------|
| • Danish institutions (including universities and sector research institutes) subject to the rules on subsidised research activities under the Danish Ministry of Finance's budgetary guidelines and thereby authorised to carry out subsidised research activities | 44 %  |
| • Foreign universities (including universities in Greenland and on the Faroe Islands)   | 20 %  |
| • Other Danish and foreign institutions, which are non-profit institutions with no direct commercial use in view, where any proceeds cannot be distributed to the owners, and which have performance of research as a main purpose                                  | 20 %  |
| • Public hospitals in Denmark, in Greenland and on the Faroe Islands and state-accredited Danish museums (under the Museum Act) and national museums in Greenland and on the Faroe Islands  | 3.1 % |
| • All other entities in Denmark and abroad, e.g. municipalities, regions and government agencies  | 0 %   |

### 3.4.3 Budgetary rules for GTS institutes (Approved Technological Service Institutes)

**Salaries:** Must be stated as the actual, anticipated salaries per hour during the project period multiplied by the cost factor for the institute concerned, as documented and approved by the Danish Agency for Institutions and Educational Grants. This cost factor applies to the full duration of the project period.

*Added in revised version of January 19, 2018*

#### **Specification of calculation of gross pay per hour for GTS institutes (Approved Technological Service Institutes)**

Salary costs include staff costs for scientists, technicians and other staff participating in the project.

Direct salary costs include actual salary costs, calculated on the basis of the annual gross salary, incl. pension, insurance, holiday pay etc. To calculate the gross hourly salary an annual total of 1,628 man hours for a full time employee is used. The calculated gross hourly salary per employee must not exceed DKK 1,000.

All project partners are obligated to ensure time registration for the employees participating in the project. Expenses in connection with extra hours, sick leave, leave of absence etc. cannot be included in the calculation and will not be covered.

**Other direct project-related costs:** Must be stated as the actual, anticipated cost.

**Overheads:** Overheads may not be itemised separately.

**Maximum investment rate:** IFD will cover a **maximum** of 60 % of GTS institute project costs for non-profit research activities. In that connection IFD requires that the results of the research conducted are published or, by other means, made publically available to all on equal terms.

GTS institutes can concurrently with non-profit research activities perform activities on market terms by e.g. providing consultancy support. In such cases the budgetary rules for private sector enterprises in Section 3.4.1 apply.

### 3.4.4 Budgetary rules for subcontracting and equipment above 500.000 kr.

Some projects will depend on large-scale services purchased from external suppliers. Subcontracting must be including under the participant needing the subcontracting. As a rule a subcontractor is not a partner in the project. In exceptional cases, if an entity in the same project is a project participant as well as a subcontractor the costs for the subcontractor must not exceed the market based cost price of the supplier for the subcontracting in question.

However, Danish research institutions may include purchase costs for the equipment in the budget – if approved by IFD before the purchase.

### 3.4.5 Budgetary rules for undistributed funds

In order to ensure flexibility over the course of a project, especially in large-scale and long-term activities, a small proportion (max 10 %) of IFD's budgeted investment can be left undistributed among the individual partners at the start of the project. However, the budget must clearly state for which activities the undistributed funds are intended to be used. Applicants wishing to make use of this option must list a "partner" in their budget, calling it "Undistributed funding". The subsequent use of undistributed funds continues following approval by IFD.



#### **4.4 Figures, pictures, tables – application Appendix A**

Appendix A must contain relevant tables, figures, graphs etc. e.g. time plan with an overview of the main timelines and deadlines in the project, e.g. in a Gantt chart format.

Appendix A must not exceed 5 A4-pages in total. A front page of the appendix must be filled in and used. The front page is not part of the page total. The appendix must be uploaded in PDF-format.

#### **4.5 Partner motivation – application Appendix B**

The key competences of each project participant as well as motivation in relation to the project activities must be described.

#### **4.6 Key persons – application Appendix C**

The front page of Appendix C is an overview of the time the key project participants expect to spend on the project, stating expected time consumption and specific qualifications. A template for the front page is available for download from IFD's website.

Following the front page, applicants must attach CVs for the project's key individuals, i.e. individuals central to the success of the project, such as research-/development managers for the main activities/sub-projects as well as the project manager.

Each CV must not exceed one A4 page.

The front page with the estimated time consumption of the key participants as well as all relevant CVs must be compiled into a single PDF document with each CV starting on a fresh page. The PDF document must be saved and attached to the application in the e-grant system. Note that the file name must not exceed 45 characters.

## **5. Process for investment agreement**

### **5.1 Investment and collaboration agreements**

To receive investment from IFD the project participants and IFD must sign an investment agreement for the project no later than 60 days after the written invitation to the Investment Agreement negotiations. The investment period and thereby start of the project applied for under the GS18-I calls can commence approximately on September 1, 2018 or earlier provided the investment agreement between the partners and IFD has been finalised and signed. Start of projects applied for under the GS18-II calls can commence approximately December 1, 2018 or earlier provided the investment agreement between the partners and IFD has been finalised and signed. The project must start no later than 60 days after the investment agreement has been signed by all parties. IFD can demand reimbursement of part of the investment if the agreed conditions are not complied with.

IFD attaches great importance to collaboration in the project, and it is therefore a prerequisite that the participants have entered into a collaboration agreement, before an investment agreement can be signed. The collaboration agreement is an exhibit of the investment agreement. In the collaboration agreement



the participants decide how to use background and foreground knowledge, distribution of the project results, who will gain access to the project results, rules for publication, the process for project participants leaving the project etc.

Negotiating the collaboration agreement is often time-consuming. We recommend that the project participants start negotiations as soon as possible after receiving the invitation to the Investment Agreement negotiations.

IFD's standard Investment Agreement from 2017 as well as an "inspirational draft" for preparation of a collaboration agreement can be found at: <https://innovationsfonden.dk/en/grand-solutions-2017-material-investment-agreement-negotiations>. Furthermore "General Terms and Conditions for Grand Solutions", stating general terms and conditions for investments, can be found at the IFD website.

Please note, that when entering into the Investment Agreement it is possible to divide the project participants into "project partners" and "project contributors", respectively. The division is especially relevant for projects with many participating institutions and enterprises. The project partners will in this case be the main institutions and enterprises in the collaboration. They are part of the steering committee and appoint the project manager and administrator, cf. the conditions of the Investment Agreement. The project contributors are not part of the steering committee nor can they appoint the project manager and administrator. Project partners or project contributors have the same right to receive funds from IFD and the same obligations to IFD with respect to reporting etc.

## 5.2 Active follow-up on investments

IFD is committed to being an active partner in all Grand Solutions and will to that end engage in proactive interaction with the project for its duration. Specifically, IFD appoints one or more investment manager(s) to safeguard its interests in the project. The project follow-up will be evident from the investment contract between IFD and the individual projects.

IFD requires that the project undertakes thorough reviews in the project period, typically once a year, and reserves the right to collect information about results and effects for a period of five years after the termination of the project. In addition, IFD reserves the right to terminate projects which are deemed to have made insufficient progress or considered futile, or are unable to meet the goals on which IFD based its investment in the project. Conversely, projects that document especially promising results and potential will be invited to apply for supplementary funding.

IFD requires a data management plan in the investment agreement and will annually request follow-up on this by the project. This is also the case for IFD's follow-up on open access, which follows the guidelines for green open access. IFD will compile statistics for all projects' compliance with this.

## 6. Other matters concerning processing of applications etc.

### 6.1 Registration of information

The **e-grant** application system registers certain data automatically. When you set yourself up as a user, e-grant registers your identity, your IP address and the time and date on which you entered or edited your data.

## 6.2 Applicant's responsibility

It is the applicant's responsibility to ensure that the information provided in the electronic application is accurate, that the required appendices have been attached to the application, that the content of the appendices is correct, and that the application is submitted before the application deadline for that specific call.

The applicant is under obligation to notify IFD immediately in the event of any subsequent material changes affecting the information submitted, including the amount of funding for the activities or parts thereof received from other sources.

## 6.3 Technical disclaimer

The Danish Agency for Institutions and Educational Grants, responsible for e-grant, has a duty to notify system users of errors causing e-grant to be inaccessible to the point where it affects the applicant's access to submit an application by a given deadline. Updates on any system disruptions will be posted here: <http://ufm.dk/en/research-and-innovation/funding-programmes-for-research-and-innovation/e-grant/operational-status>.

In extremely exceptional cases, IFD may extend the application deadline for all affected applicants. This will likewise be announced at: <http://ufm.dk/en/research-and-innovation/funding-programmes-for-research-and-innovation/e-grant/operational-status> and at: <http://grandsolutions.dk/>.

IFD and the Danish Agency for Institutions and Educational Grants disclaim all and any liability for erroneous information ensuing from faults in software, computation errors, transmission faults and similar faults, and in respect of any claim for damages ensuing from incorrect use of e-grant.

## 6.4 Rectification of application data

After the application deadline it is not possible to rectify the content of the application aside from rectification of any personal data.

## 6.5 Disqualification from participation in applications for Grand Solutions

An enterprise that has not met a demand for reimbursement of funding, which has been declared illegal by the European Commission in an earlier decision, and is incompatible with the common market cannot participate in Grand Solutions.

Furthermore, *enterprises in difficulty*, as defined in Article 2, point 18 of the European Commission's General block exemption Regulation no. 651/2014 <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0651&from=EN>, cannot participate in applications for Grand Solutions.

## 6.6 Rejection of applications without substantive consideration

In the event of failure to comply with formal requirements or deadlines, the application may be rejected without substantive consideration. This includes among other the following formal requirements and deadlines:

- The application must be submitted via the e-grant application portal by the deadline stated in Section 2.4 of the present guidelines.
- The electronic application form must contain all the required information; cf. the instructions on the form.
- The electronic application form must be appended with exactly the appendices specified in Section 4 of the present guidelines, and the scope of the appendices must be as stipulated.
- Application Appendix B must be completed on the correct appendix template, and Appendix C must contain a front page with overview of the time the project's key individuals expect to spend on the project as well as CVs for the project's key participants. All appendices must be written in English and comply with the form and content requirements stipulated in the present guidelines.
- Appendices must not be password-protected or otherwise locked, and must total no more than 20 MB in size.
- As part of the application the completed budget for the project must be uploaded using the budget template from e-grant).

### 6.7 Procurement of other information

In the event that funding for the activity has been or will be sought from other sources, IFD reserves the right to obtain information as to whether any such amount has been granted.

### 6.8 Disclosure

IFD will publish a list of the projects that will receive investments, and the participants of the project may in that connection request a short popular description of the project to be used for publication. In addition, the title, name, place of employment and email address of the project leader, the names of the participating parties, the title and duration of the project, key figures and the size of the investment may be published in the Danish National Research Database ([www.forskningsdatabasen.dk/en](http://www.forskningsdatabasen.dk/en)), on the IFD project gallery and website ([www.innovationsfonden.dk](http://www.innovationsfonden.dk)) and in IFD publications.

Applicants should bear in mind that information may be disclosed in the event that an application is filed for access to information pursuant to the Danish Access to Public Administration Files Act ("Offentlighedsloven"). Access to information may, for example, be granted in the form of lists of who has applied and for what purpose (applicant names, application titles and amounts applied for). Applicants should therefore take care that their application title does not contain information about activities which are to be kept out of the public domain. With regards to the application, IFD in dialogue with the applicants (enterprises etc.) will ensure that no commercially sensitive data is disclosed, as well as any other information which, with reference to the law, may not be disclosed.

### 6.9 Open access

Applicants are advised that IFD has adopted the rules laid down in "Open Access policy for public-sector research councils and foundations". This means that published scientific articles, which are the result of full financing or co-financing from IFD, are to be made freely available to the public via Open Access, if the publisher consents. See the complete wording of the policy here: "[Open Access policy for public-sector research councils and foundations](#)".

### 6.10 RRI and the Danish Code of Conduct for Research Integrity

IFD attaches importance to Responsible Research and Innovation (RRI), which seeks to advance greater coherence between research and innovation processes and results and societal values and needs. IFD promotes RRI in both its overarching strategies and via its projects, and abides by the European Commission's definition and implementation of RRI. You can read more about RRI and the requirements of IFD at: <http://innovationsfonden.dk/en/requirements-responsible-research-and-innovation>.

Note that one of the requirements is that the projects in which IFD invests must involve all relevant parties and institutions in the research and innovation processes. One aspect hereof is that projects which have or may have a significant impact on society and/or the individual citizen, ethically or technologically, will enter into direct dialogue with the general public in order to facilitate dissemination of information and relevant debate in society. This can e.g. be done through relevant public meetings. IFD reserves the right to make specific demands for the projects in which the fund invests. If a project concerns technologies or processes that may have a significant impact on society, the consequences of the technology or processes must be evident from the application. It is therefore expected that such projects include all relevant competences and methods, and socially relevant research perspectives, e.g. anthropology or similar, should be integrated.

Similarly, IFD endorses the policies laid down in the Danish Code of Conduct for Research Integrity and expects the projects it invests in to comply with RRI and the Code of Conduct. Read the Code of Conduct at: <http://ufm.dk/publikationer/2014/the-danish-code-of-conduct-for-research-integrity>

### 6.11 Data Management

With reference to EU's "Guidelines on FAIR Data Management in Horizon 2020" (Version 3.0, July 26, 2016) among others, IFD wishes to raise the level of data management in projects and requirements for this will be included in future investment agreement.

## Appendix 1 – Overview - The application template for Grand Solutions 2018

Please find below an overview of items required for the electronic application form for Grand Solutions to be found in the e-grant portal: [www.e-grant.dk](http://www.e-grant.dk). The overview is listed in the order of the menu to be found on the left hand side of the application form.

A detailed application template for Grand Solutions 2018 with guide text can be downloaded in a separate pdf-file on the homepage of Innovation Fund Denmark [www.grandsolutions.dk](http://www.grandsolutions.dk).

### **Title and applicant**

### **Summary**

### **Previous applications**

### **Aim**

Please give a short description of the specific aim and objectives of the project. Objectives should be clear, measurable, realistic and achievable within the duration of the project.

State in which part of the value chain this specific project is placed.

Estimate the time-to-market or time-to-Implementation for the final product or solution.

Describe if the project creates new knowledge, if it is based on new knowledge, if it combines knowledge or known techniques in a new manner or if will the implementation of the project leads to further new products, processes, ways of organizing work or enables new innovations?

### **Unmet need**

Explain the specific industrial, economic or social unmet need your project will address, or the business opportunity to be taken advantage of. (If relevant, e.g. in terms of market size, target customer segmentation). Explain why it has not yet been solved or offered and why it can be offered through your project. Also, identify if the need is urgent, articulated or latent and by whom.

If relevant, state the Danish and global magnitude of the unmet need, including estimated market size or level of societal need.

Include the expected future changes of the unmet need.

### **State-of-the-art**

Please describe the state-of-the-art of the theoretical and practical field at a national and international level. Include the scientific and technical knowledge base, main competitors and their solutions, direct competing or adjacent technologies and solutions when relevant.

Describe how society, the competitors or competing solutions try to solve the unmet need. If possible in relation to your project, include the time perspective in the description of evolving competing technology development.

### **Strategic relevance of the project**

Describe your project aim in direct relation to the needs, competing solutions and state-of-the-art.

Explain what differentiates your projects outcome and provides the highest added value for potential customers and/or society in short and/or long term.

List the specific and quantitative value propositions for the product or solutions when ready for launch or implementation. If relevant, describe the unique selling points for the final result of the project. Further, if relevant, list the value proposition (quantitatively if possible) for society of improved or new processes and services. The value propositions could be expected performance/impact on defined needs, including e.g. costs, environmental benefits, ease-of-use and any other relevant benefit or added value for end users or potential clients compared to alternatives solving the same or similar problems.

Describe how the project relates to specific Danish and global strategies, Danish positions of scientific, technical, industrial or social strengths or otherwise fits to the Danish society.

### **Project description**

Provide an overall description of the project plan. The project description can include choice of methods.

This is particularly relevant for social sciences and humanities. You can upload relevant figures or tables in exhibit A. Avoid repeating information already stated in any of the other sections.

### **Work plan**

Provide an outline of the overall structure of the work plan.

Systematically list the project work packages, the deliverables from each work package, and the milestones in the plan.

Please refer to the project chart in the attached project budget scheme, which includes timing of the different work packages and their components, dependencies and estimated cost and risk. Use the same numbering of e.g. WP's as in the text description.

List the estimated changes in TRL (technology Readiness level) and SRL (Societal readiness level) in the overall project and also for work packages, where possible.

Give full details. Base your account on the logical structure of the project and the stages in which it is to be carried out. Include details of the resources to be allocated to each work package. The number of work packages should be proportionate to the scale and complexity of the project. It is important, that you give enough detail in each work package to justify the proposed resources to be allocated and also quantified information so that progress can be clearly monitored and assessed by the project leader, project steering committee and the Innovation Fund Denmark, in case of an investment.

It is advisable that the project consortium makes a thorough analysis of the projects strengths, weaknesses, opportunities and threats, prior to filling out this section. The SWOT analysis may be included. The following definitions may be helpful:

- “Work package” means a major sub-division of the proposed project.
- “Deliverable” means a distinct output of the project, meaningful in terms of the project's overall objectives and constituted by a physical item, a prototype, software, a technical diagram, a document, a report, or an activity benefiting society etc. Preferably, the deliverables should have well defined acceptance criteria, defining the transfer to the next work packages or as a final outcome from the project.
- “Milestones” mean control points in the project that help to chart progress. Milestones may correspond to the completion of a key deliverable, allowing the next phase of the work to begin. They

may also be needed at intermediary points so that, if problems have arisen, corrective measures can be taken. A milestone may be a critical or “go/no go” decision point in the project where, for example, the project group and project steering committee must decide which of several technologies or solutions to adopt for the further development or eventual closure of the project.

### **Readiness levels (technology and society)**

State the project’s expected start and end readiness levels. (Find definitions i retningslinjernes bilag 2 og 3).

### **Risk management**

Please identify, assess and prioritize the most important risks in the project with reference to the listed milestones.

Describe briefly the plan to mitigate the specific risks and reduce the projects overall risk profile. Critical milestones should be defined and distributed to reduce the risk profile in the most efficient way.

Where possible, distinguish between risks you can control and risks which are outside your control.

### **Legal, ethical or regulatory demands**

If relevant, please describe possible legal, regulatory or ethical issues and considerations, including required standards or authorization requirements (production standards, quality systems, scientific ethics, data handling and security, and the use of animals or other) and handling of health, environmental or ethical issues associated with the project.

Also, if relevant describe if changing legal or regulatory demands will influence the outcome of the project negatively or positively.

### **Value creation - growth and employment**

Please describe the estimated and expected value creation of the project in terms of quantitative and/ or qualitative measures, based on expected launch or implementation into society.

Describe the expected value creation in the specific project in terms of quantitative and/ or qualitative measures.

State how the value will be created over time. With reference to the placement in the value creation section, which implementation, business or sales model do you expect will be relevant and optimal?

You should make it absolutely clear where your project is positioned in the value chain. Will the project terminate at a specific value inflexion point, which will be attractive for the next investor or project recipient? A value inflexion point is a plateau in the value chain, where the value has changed significantly. This could be after finishing e.g. a proof of principle study, a prototype, an animal toxicity study. The value inflexion point is often coinciding with the TRL or SRL.

An investment from Innovation Fund Denmark shall ultimately result in significant value creation in the form of growth, employment or solutions to societal challenges. Note that value creation resulting from the project and the innovation can also be more broadly described in the form of e.g. domestic or export revenue, new permanent jobs, reduced cost for society, reduced environmental or resource foot print, improved quality of life, optimized processes, etc..

Please note that examples of measures or specific assessment criteria may be stated in the specific calls.

**Project outcome recipients**

Who will benefit directly or indirectly from the projects outcome after the investment period?  
Who will use, invest in or own/ manage the project outcome once the investment from The Innovation Fund has ended?

**Implementation**

Explain how the results of the project are implemented. E.g. how and when it is brought to market or how the project results are implemented into the society. Please refer to the project's position in the value chain and expected timeline. If the project is close to implementation, the timeline, business model and go-to-market strategy should be more concrete and specific. If the project is positioned earlier in the value chain, e.g. a strategic research project, the path and timeline to implementation can be more sketched. State the estimated necessary cost and competencies, necessary Intellectual Property, technologies or systems belonging to others and potential other barriers – e.g. regulatory, ethical, socio-cultural, geographical or legal – which will be relevant for the societal adaptation and general implementation.

**Intellectual Property Rights**

If relevant describe if and how the project results should be protected. Also, intellectual Property rights barriers or relations to others' intellectual properties shall be described here, including e.g. a brief summary of your freedom to operate analysis.

**Financial gearing**

Clearly state how much e.g. industries, public or private funds or others have invested resources into this project in the form of e.g. in-kind payment, instruments, knowledge, cash or other resources.  
Will our investment attract or initiate funding from other sources?

**Governance and leadership**

Briefly describe the proposed governance model. The governance model should be balanced with respect to the overall project complexity, budget and size. It is recommended to have a steering committee with representatives from the various partners, and/or those who will benefit from the project's value creation. It is recommended that the proposed project leader's specific qualifications for leading the project should be clearly described. The emphasis should be on the leadership qualifications, more than management experience. Also, the members should have enough decision power to be able to resolve e.g. resource conflicts in the project and should not be a part of the daily project management. For more information look at the investment agreement."

**Competitors**

Name the most important scientific or commercial competitors, competing on e.g. technology development or market application.



**Peer review**

You can suggest up to five peer reviewers relevant for this project or this scientific, technical or specific market. If possible, list a few keywords to each peers' specific competencies. If necessary, also list unwanted peers (max. three).

**Budget**

From here you can download the budget template and submit the filled in budget.

**Budget information**

The amounts and dates displayed below have been transferred from the uploaded budget (xlsx).

**Attach appendices**

All appendix templates are available here.

**Review application**

From here you will be able to retrieve a compiled PDF of your whole application as an e-mail.

**Confirmation**

## Appendix 2 – Technology readiness levels (TRL) definition according to HORIZON 2020

Technology Readiness Levels (TRL) comprise a measurement system used to assess the maturity level of a particular technology. TRL 1 is the lowest and TRL 9 is the highest.

- TRL 1 – basic principles observed
- TRL 2 – technology concept formulated
- TRL 3 – experimental proof of concept
- TRL 4 – technology validated in lab
- TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- TRL 7 – system prototype demonstration in operational environment
- TRL 8 – system complete and qualified
- TRL 9 – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

## Appendix 3 – Societal Readiness Levels (SRL) defined according to Innovation Fund Denmark

Societal Readiness Level (SRL) is a way of assessing the level of societal adaptation of, for instance, a particular social project, a technology, a product, a process, an intervention, or an innovation (whether social or technical) to be integrated into society. If the societal readiness for the social or technical solution is expected to be low, suggestions for a realistic transition towards societal adaptation are required. Naturally, the lower the societal adaptation is, the better the plan for transition must be. SRL 1 is the lowest and SRL 9 is the highest level.

### Levels

SRL 1 – identifying problem and identifying societal readiness

SRL 2 – formulation of problem, proposed solution(s) and potential impact, expected societal readiness; identifying relevant stakeholders for the project.

SRL 3 – initial testing of proposed solution(s) together with relevant stakeholders

SRL 4 – problem validated through pilot testing in relevant environment to substantiate proposed impact and societal readiness

SRL 5 – proposed solution(s) validated, now by relevant stakeholders in the area

SRL 6 – solution(s) demonstrated in relevant environment and in co-operation with relevant stakeholders to gain initial feedback on potential impact

SRL 7 – refinement of project and/or solution and, if needed, retesting in relevant environment with relevant stakeholders

SRL 8 – proposed solution(s) as well as a plan for societal adaptation complete and qualified

SRL 9 – actual project solution(s) proven in relevant environment

**Stages SRL 1-3** reflect the early work in a research project, including suggesting and testing on a preliminary basis a technical and/or social solution to a technical or a societal problem. Here reflections about the general societal readiness towards the idea and its proposed solution(s) are required, including identifying relevant stakeholders and how to include them (such as end users, the right communities, etc.).

**Stages SRL 4-6** represent the actual solution(s), the research hypothesis, and testing it/them in the relevant context in co-operation with relevant stakeholders, while keeping a focus on impact and society's readiness for the product. In these stages expectations on the societal adaptation must be described in specific terms and, to the extent possible, be part of the test phase.

**Stages SRL 7-9** include the end stages of the research project, including refining the solution(s), implementation and dissemination of results and/or solution(s). Here the plan for addressing the societal readiness on a practical level to gain impact, creating awareness, disseminating results, etc., will be carried out.