Menu card

About IFD

Offerings

What we are looking for

The good application

Discussion

Quantum computing (image source: WSU)
It is an investment (not a donation or support)
Knowledge-based growth

We invest in innovative projects with significant potential to create new knowledge, increase growth, create good jobs and address societal challenges.
IFD in numbers

- > 8 bn DKK active portfolio
- 1800 active projects
- >1.3 bn DKK (expected)
- 3300 project proposals*
- 3 investment schemes
- >40 int. programmes

* >8 bn DKK in 2016
Innovation Fund Denmark – our profile

• Value from Research
• An active investor
• Scientific expertise and market insights
• To the point
• Transparent
• Rapid feedback
• Close follow-up and support
• Available and supportive
Focus across the entire value chain

University

Research

Company (public and private)

Market
Investment strategies to guide us

Law on Innovation Fund Denmark

Investment strategies for all major areas

Take a look at our publication: “vækst og beskæftigelse gennem Innovationsfonden”
Investment strategies
The opportunities
Grand Solutions – characteristics

• A tool targeting long term perspectives
• The entire value chain
• Larger investments – typically 5-30 mio DKK
• Ambitious – makes a difference
Grand Solutions
Purpose and focus

Tangible **value creation** based on science

- Turnover and growth
- New jobs
- New knowledge across the entire value chain
- Solutions to societal challenges

Examples:
- New products
- New manufacturing processes
- New methods
- New services
- New processes
- New technology platforms to the benefit of entire sectors
- Combinations of technologies
- Intelligent use of data
- Prevention in the health sector
- Reduction of environmental impact
- Better use of bioresources
- New business models
- Energy saving solutions
- More efficient solutions in the public sector
- Etc.
Grand Solutions
Target groups

• Universities
  • Danish and foreign

• Companies
  • Small and large
  • Private and public
  • Danish and foreign

• GTS

• Authorities

• Regions and municipalities
Grand Solutions 2017 – what’s the news?

Fast answer - 100 days to decision

Single phased application

Decision within 100 days

Two application rounds
  • Spring: Thematic- GS1
  • Summer: Open call - GS2

Clear emphasis on value creation

Societal readiness level
## Grand Solutions 2017

<table>
<thead>
<tr>
<th>Call</th>
<th>Theme</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme</td>
<td></td>
<td>Mio. DKK.</td>
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<tr>
<td>Bioresources, Food, Health and Lifestyle</td>
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<tr>
<td>IKT, production and materials (Strategic Growth Tech.)</td>
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<td>120</td>
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<tr>
<td>Space technology and drone research</td>
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<td>25</td>
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<tr>
<td>Health and clinical research</td>
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<tr>
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<td>Environmental technology</td>
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<tr>
<td>Welfare and education</td>
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<td>29</td>
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<tr>
<td>Innovation in the area of knowledge work</td>
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<td>10</td>
</tr>
<tr>
<td>Open call</td>
<td></td>
<td>&gt; 150</td>
</tr>
</tbody>
</table>
Grand Solutions

Process

• Deadline February 20 and primo June, 2018

• Selected projects are reviewed by external peers

• Selected applicants are invited for interview - opportunity to pitch the project and present the team behind

• Decisions are made by BoD
The good application
The GS Application
The Innovation - 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 desired 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?
The GS Application
The Innovation - 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 costumer 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.
The GS Application

The Innovation - 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.
The GS Application

The Innovation - 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.
The GS Application
The triangle of unmet need, state of the art and project objectives

- Strategic relevance of the project
  - Keep it short and specific
  - SOA – is not just your research
  - Unmeet need or latent need
The GS Application
The Innovation - 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.
• 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 over

• “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. With 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.
The GS Application
Operational plan – made by the project partners – not only by the applicant

• The operational plan:
  • Workshop?
  • Vision?
  • Right partners?
  • SWOT analysis?
  • Gantt chats
  • Critical paths?
  • Dependables?
  • Costs – sharing?
  • Risk management
  • Define succes criteria
  • Method of teamwork?
  • Communication?
  • Foreign partners
  • IP and publication strategy?
The GS Application
Operational plan - 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.
The GS Application
Operational plan - 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.
The GS Application

Value creation - growth and employment - #1

• 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 footprint, improved quality of life, optimized processes, etc..
• Please note that examples of measures or specific assessment criteria may be stated in the specific calls.
The GS Application
Value creation - Project outcome recipients

• Who will benefit directly or indirectly from the project's 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?

Relate to placement in the innovation value chain
The GS Application
Value creation - 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 relevant for the societal adaption and general implementation.
The GS Application
Value creation - 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**.
• 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?

Hands on the hot plate
Show commitment
(and gets the value in return?)
The GS Application
The project team - Partner and contributors qualifications, competencies and motivation

• Fill in the names of the 10 most important project partners or contributors
• Name the key persons from each institution essential for the success of the project and their time allocation to this project.
• List the qualifications, competencies and motivation for each of the most important partners or contributors for this specific project. Synergies between partners should be highlighted.
•
• Please attach a one page CV for each key person in PDF format, in the upload exhibit section.
•
The GS Application

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•
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The GS Application
The project team - Governance and leadership

• Briefly describe the governance model. The governance model should be balanced with respect to the overall project complexity, budget and size. Please align with the guideline for recommended governance structure.
• The proposed project leader’s specific qualifications leading the project should be clearly described.

Hands on the hot plate
+ gain the value
+ essential for implementation

Not easy to find..
• Steering Committee is the projects BoD
PL is the CEO of the project
The GS Application
Competitors and peers

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

Peer review
• Please suggest at least 3 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. 3).

Help us to avoid competitors or your worst enemies

(We often select other peers)
You get to see the external peers report – if you are selected
Grand Solutions
2016
Distribution of partners
Catalyst for global cooperation – large IFD investments in 2016

NUMBER OF PROJECTS

- 5 England
- 4 China
- 4 Germany
- 4 Switzerland
- 4 USA
- 3 Austria
- 3 Canada
- 3 Netherlands
- 3 Norway
- 3 Sweden
- 1 Australia
- 1 Belgium
- 1 Czech Republic
- 1 France
- 1 Hong Kong
- 1 Ireland
- 1 Japan
- 1 Singapore
Universities receive 57% of the IFD funds

- Companies: 21%
- Universities: 57%
- GTS: 5%
- International: 5%
- Other: 4%
- Other public: 6%
- Hospitals:
Grand Solutions 2016

Investments in a value chain

**Research**

- 79 mio. €

**Development**

- 26 mio. €
Grand Solutions 2016 – participation from universities

<table>
<thead>
<tr>
<th>University</th>
<th>ANTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danmarks Tekniske Universitet</td>
<td>23</td>
</tr>
<tr>
<td>Aarhus Universitet</td>
<td>18</td>
</tr>
<tr>
<td>Københavns Universitet</td>
<td>15</td>
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<td>Aalborg Universitet</td>
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<td>Syddansk Universitet</td>
<td>4</td>
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<tr>
<td>Roskilde Universitet</td>
<td>2</td>
</tr>
<tr>
<td>Copenhagen Business School</td>
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</table>
Pasteur – Executive programme on Harvard Business School
Let's go!