

# SSF Call for Proposals: Industrial Research Centres

The Swedish Foundation for Strategic Research announces SEK 400 million in a national call for proposals for long term problem- and application driven Industrial Research Centres (IRC:s) that meet the highest international scientific standards. The call aims to stimulate truly collaborative research between industry, research institutes, and academia.

Each Centre will be granted approximately MSEK 50 to 100 in total for a period of 6-8 years, i.e. approximately MSEK 6 – 17 per year, including overheads. Funding for the last three-four years will be contingent upon a successful midterm evaluation. SSF will approve up to 8 Centres.

## **Background**

Sweden has very successful and research intensive industrial sectors. During the last 10-20 years attempts have been made to promote collaboration opportunities between industry and the Swedish universities that now are successfully striving to become more complete academic environments, interacting with society.

Our research and innovation system need both "push" by innovative scientific environments and "pull" by demand driven innovative value creators. Other agencies fund so called competence centres, with varying degree of industry lead, for many years and the effects/impact and experiences have been well documented. SSF has supported Strategic Research Centres between 2002 and 2012.

# Scope of the present call

The purpose of the present call is to boost long term problem- and application driven research centres encompassing truly collaborative research ecosystems between industry, research institutes, and academia. This "boost" must fit into the long term business plan of all industrial partners at highest management level. The Centre should be strategically defined around explicitly formulated industrial needs with corresponding formidable research challenges and the research problems should be defined and pursued together by the industrial and academic partners. The scope of the IRC must be concentrated on disruptive innovation including new enabling technologies and/or emerging technology shifts in a long-term perspective.

The Centre is focused on pushing the limits of the needs driven research challenges, by the use of scientific methods, technology transfer, and promotion of next-generation technology. Development of present/near implementation technology platforms are outside the scope of this call.

### **Eligibility**

An Industrial Research Centre consists of preferably 2-5 industrial partners (companies) together with 1-5 partners from academia (departments) or research institutes. At least one of the partners must be a department at a Swedish university, which becomes the administering organisation for the grant.

The IRC is characterised by collaboration between several research groups from different organisations. The IRC has a Board consisting of 3-5 industry persons (representing the industrial partners in the Centre) and a Centre Director from academia or research institute. The board, with a chair from industry, will have the mandate to recommend SSF to terminate the funding as whole or parts, if they are not satisfied with the development of the IRC, or to change the management of the IRC.

Each of the applying partner may be represented <u>in only one application</u> to SSF. The reason for this is to ensure that all partners in an application have prioritized their efforts into the most promising area of research and future market (long term market). Partner in this case is meant company, research institute, public authorities, and university institution/department. SSF thus expects to receive few, but well elaborated, applications since only up to eight Centres will be approved.

The grant can be used for, e.g., salaries (senior researchers, postdocs, PhD students, etc.), research tools, and running costs according to the needs of the Centre. All industry partners must fund their own participation in the IRC with a combination of in-kind and cash by a minimum of 20 % of the total budget of the Centre. The application must, besides demonstrating how the SSF grant will be distributed, clearly display all co-funding (in-kind, cash, lab usage, etc.) from the industrial partners. The amount of co-funding will be an important criteria in the review of the proposals, demonstrating the level of engagement from the industrial partners and thus the feasibility of the Centre.

The application must be elaborated jointly by all the partners in the Centre and submitted by the Centre Director (main applicant). The main applicant must be a prominent researcher employed by a Swedish university or research institute and must be prepared to assume operative responsibility for the Centre during the entire grant period. Coapplicants are the researchers from (i.e. employed by) the collaborating partners, industry, public authorities, research institutes, and university departments. The research plan must clearly demonstrate the roles of all the co-applicants in the Centre. International research organisations (partners) may participate only on their own budget, apart from international researchers that becomes employed in the Centre through the participating Swedish partners. It is also important to prove the strategic relevance for each partner at the highest management level in the application, e.g., in forms of letter of intent.

The companies shall normally be registered in Sweden, or so close to Sweden that the exchange can work practically and be justified strategically for Sweden. Instead of a company, the industrial party may also be a hospital if the Centre involves clinical research, e.g., implementing medical technologies.

Since the IRC:s differ greatly depending on the scientific and commercial areas the parties must themselves propose a concise set of long/short term key performance indicators (KPI) upon which the Centre can be evaluated in the midterm evaluation. These indicators must concern scientific, managerial, and business qualities and substance as well as strategic relevance impact. Each of these should be elaborated in the research plan and tightly connected to the goals of the Centre.

The IRC must also assign an international scientific advisory committee (SAC), proposed already in the application.

For the organization and operations of the Centre, the gender equality has to be managed and integrated, respectively (composition of board, SAC, applicants, etc.).

A maximum of 25% of the overall grant may be used for salaries for the Main applicant and/or for the Co-applicants (i.e. these individuals) taken together. However, no more than 25% of the salary of each applicant (i.e. the same individuals) may be covered from the SSF grant.

A Centre Agreement signed by all partners will be required from the consortium of the application, if and when it is selected for a hearing. The period for this contract is recommended to be at least 3 years.

Funding for the last three-four years will be contingent upon a successful midterm evaluation. The budget allocation from SSF will be a decision of 300 million in conjunction with the Centre's start and 100 million will be decided and distributed by SSF after the mid-term evaluation.

Applications not conforming to these conditions will not be considered. It is the responsibility of the main applicant to inform all the co-applicants and to check the proposal for compliance before submission.

# Proposal and submission

A complete application must contain, among other data specified in the portal, a full description of the research plan and details of the relevant and complementary expertise of each of the participating groups. It should also contain a clear account of the strategic significance of the research, including an IPR plan and plan for utilisation/exploitation of the results in Sweden during the Centres lifetime as well as for up to 10 years after completion of the Centre.

Each proposal shall clearly describe the international state of the art within the area(s) addressed. It is also important for the proposal to give a clear picture of the resources available and to demonstrate that the proposed constellation of all partners (industry, research institutes, and universities) will be effective in view of its objectives.

The application must be signed by the vice chancellor of the administering organisation, the Centre Director, and all of the board members, i.e. all partners.

All partners must attach letters of intent from the highest management level (head of research, or the equivalent).

The proposal must be written in English and submitted via the SSF portal at: <a href="http://apply.stratresearch.se">http://apply.stratresearch.se</a>. Note that in order to get a complete view of all data required for submission it is necessary to consult the portal. Please log on to the portal well in advance of the deadline. Please also submit the application in due time before the deadline. When the application is submitted, the system will reject it if some data field is missing. As long as this is done before the application deadline it is possible to submit and re-submit as many times as necessary. Use FAQ-document at SSF www to look for additional clarifications during calls for proposals. This FAQ will be regularly updated.

All applications must be submitted by **14:00 hours (2:00 pm CET) on 4 May 2016**. No additional material will be considered after this deadline, unless explicitly asked for by the Foundation.

#### **Evaluation**

Applications will be assessed by an evaluation committee consisting of national and international experts from industry, academia, and research institutes as well as by external international peer review.

The applications will be reviewed using the following criteria:

- Conformity to the scope and eligibility as outlined above
- International state of the art of science and relevance for industry. Also plans for international scientific and/or industrial cooperation should be included.
- Governance and management including gender aspects and cooperation plan
- IP management (as part of the Centre Agreement)
- Realistic, feasible, and true collaboration added value of the centre
- Level of engagement/focus from industry, amount of co-funding
- Scientific quality; originality, strengths, weaknesses, degree of interdisciplinarity and feasibility of the research plan
- Strategic relevance to Swedish industry and/or society as well as explicit long term impact of the proposed research
- Qualifications of the applicants, previous scientific and technological achievements, international experiences, and networks, and leadership/management of research teams.
- Evidence of anchoring of the application to top management within all parties (including Lol).

#### **Timetable**

- Last date for applications: 4 May 2016, 14:00 CET at the latest
- The application will be evaluated in two stages:

Stage 1: Selection of up to 15 applicants for hearing. All other applications will be rejected. Finished not later than June 2016

International peer-review. Not later than September 2016

Hearing: September-October 2016

Stage 2: Selection of up to 8 application to be funded. Not later than October-November 2016

- Decision by the SSF Board: End of 2016
- Centre start: From January 2017, but not later than July 2017.

Please note that the Foundation is subject to the Principle of Public Access to Official Records (Offentlighetsprincipen). Thus, applicants should avoid submitting material that they do not wish to be made public, e.g., information that could prevent patenting.

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