

Terms of Reference

May 2018

Introduction & Background

Based on Article 7 paragraph 3 of the Federal Act on the Promotion of Research and Innovation (RIPA),¹ the Commission for Technology and Innovation (CTI) and the Swiss National Science Foundation (SNSF) have jointly established the BRIDGE programme. The goal of BRIDGE is to foster knowledge transfer in the critical precompetitive phase when a vision of potential applications of a scientific result exists, but further efforts are needed to bring the corresponding product, technology or service to a marketable form.

The basic principles of BRIDGE are defined in the present *Terms of Reference for the programme BRIDGE*, approved by the CTI Board on 25 February 2016 and by the Presiding Board of the SNSF Research Council on 4 May 2016, adapted in May 2018 upon the change of CTI to the Swiss Innovation Agency (Innosuisse).

¹ 420.1 Federal Act on the Promotion of Research and Innovation (RIPA) of 14 December 2012

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1. Goals of the program

The goal of BRIDGE is to foster knowledge transfer in the critical precompetitive phase when a vision of potential applications of a scientific result exists, but further efforts are needed to bring the corresponding product, technology or service to a marketable form. Consequently, BRIDGE strives to promote the transfer of scientific knowledge into innovation. Contacts between research and implementation partners will be encouraged to start early in the projects. Cooperation between Universities, the Swiss Federal Institutes of Technology, research institutes, and Universities of Applied Sciences (UAS) will be facilitated.

To achieve these goals, the following funding opportunities have been established:

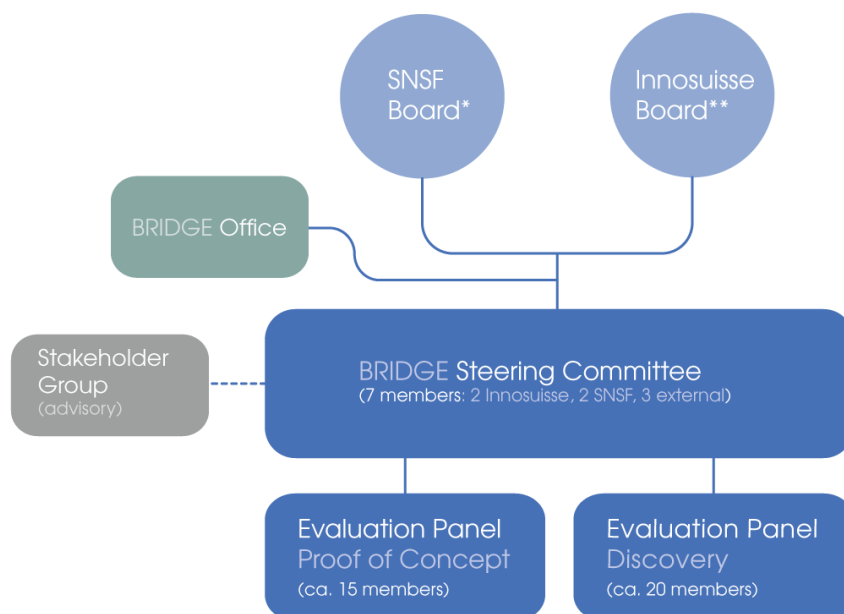
- **BRIDGE Proof of Concept** projects support young researchers who aim to develop an application or service based on their own research findings. These projects may feature any type of innovation or research field.
- **BRIDGE Discovery** projects aim to facilitate interactions between basic and applied research in order to realise the innovation potential of the research findings. Submitted projects must be focused on technological innovations but should also demonstrate the societal and/or economic impact of the innovation to be developed.

2. Budget

The 2017-2020 budget for BRIDGE amounts to CHF 70 Mio:

- CHF 35 Mio are assigned to the SNSF and CHF 35 Mio to the Innosuisse.
- Both budgets are earmarked and separate from budgets for existing instruments of Innosuisse or SNSF.

3. Governance structure



* SNSF Presiding Board of the National Research Council

** Innosuisse Board of Directors

3.1. Roles of the SNSF Presiding Board and Board of Directors of Innosuisse

The SNSF Presiding Board of the National Research Council (hereafter SNSF Presiding Board) and the Board of Directors of Innosuisse have the overall responsibility for BRIDGE and assume the following tasks:

- Decide on the governance structures and competences
- Decide on the Terms of Reference
- Appoint the members of the Steering Committee
- Regularly follow the progress of the program and validate the yearly reports submitted by the Steering Committee.

Both Board of Directors of Innosuisse and SNSF Presiding Board can request yearly reviews of the governance structure. They can agree on modifications of the governance based on the conclusions of this yearly review.

3.2. Steering Committee (SteCo)

The SteCo is a key factor in the development of a common culture for BRIDGE. It is composed of 7 members: 2 representatives of the SNSF, 2 representatives of Innosuisse, and 3 external members. SNSF and Innosuisse representatives rotate every two years as chair of the SteCo. Each Evaluation Panel is chaired by one of the representatives of the SNSF or Innosuisse in the SteCo. This structure ensures that the same “BRIDGE culture” is present in the different decisional bodies.

The SteCo has the following competences:

- Monitors BRIDGE
- Decides on the regulations specific for BRIDGE
- Appoints the members of the Evaluation Panels
- Allocates yearly budgets to each funding scheme
- On the basis of the recommendations of the Evaluation Panels, decides on the funding of projects according to available budgets
- On the basis of the recommendations of the Evaluation Panels, decides on the interruption of Discovery projects or the extension of PoC projects
- Decides on events or activities related to BRIDGE
- Communicates on BRIDGE in coordination with the SNSF Presiding Board and the Board of Directors Innosuisse or the offices
- Reports yearly and informs the SNSF Presiding Board and the Board of Directors of Innosuisse

The SteCo may propose changes to the structure of the EPs prescribed in these Terms of Reference. Both the SNSF Presiding Board and the Board of Directors of Innosuisse have to decide on eventual changes.

Furthermore, the SteCo ensures a comparison with other similar existing Swiss funding initiatives in order to avoid redundancies and to eventually coordinate synergies.

3.3. Evaluation Panels (EPs)

The evaluation and monitoring of the PoC and Discovery projects are undertaken by two separate EPs since the two types of projects require different evaluation competences. Each panel will however include experts in a broad range of research and innovation areas and types.

3.3.1. EP PoC

- Structure: The EP PoC is composed of a group of approximately 15 members with experts from the SNSF, the Innosuisse and external persons (industry and research). Further competences can be called in depending on the expertise needed to evaluate the proposals submitted in that particular call.
- Fields of expertise: The EP PoC is composed of members with complementing experience in applied research in the relevant fields, and in industrial or societal implementation of scientific results.
- Competences: EP PoC members evaluate the submitted proposals, interview candidates, rank projects according to their value, and prepare recommendations for the SteCo. They monitor project progress and, if requested and suitable, recommend an extension of projects to be decided by the SteCo.

3.3.2. EP Discovery

- Structure: The EP Discovery consists of approximately 20 members with experts from the SNSF, the Innosuisse and external persons (industry and research, national and international).
- Fields of expertise: The EP Discovery is composed of members with complementing experience in basic and applied research in the relevant fields, and in industrial and/or societal implementation of scientific results.
- Competences: EP Discovery members evaluate submitted proposals, interview candidates, rank projects according to their value and prepare recommendations for the SteCo. They monitor project progress and, if necessary, recommend interruption of projects failing to meet pre-determined milestones.

3.4. BRIDGE Office

The BRIDGE Office is the scientific secretariat of BRIDGE and manages all funding activities of the program. It supports the SteCo in its tasks and acts in coordination with it. The BRIDGE Office is financed by SNSF and Innosuisse and supervised by the offices of both organisations.

3.5. Stakeholder (or Advisory) Group

The SteCo regularly consults stakeholders on the development of the program BRIDGE.

4. Scope and framework of the projects

4.1. Proof of Concept projects (PoC)

PoC projects can cover any type of innovation or research field.

4.1.1. Eligibility

The PoC scheme is designed to support researchers on their way to entrepreneurship or their efforts to implement and apply their research results with an economic and/or social partner. The submitted projects must be based on the applicant's own scientific results or on findings to which the applicant has made a substantial contribution. The underlying science must have been peer-reviewed (e.g. bachelor or master or doctoral thesis) or documented by publications or another record of achievement (e.g. patent application). Researchers who fulfill the following requirements are eligible to submit PoC project proposals:

- Bachelor or master's degree with a proven personal research experience at a University, ETH, or University of Applied Sciences (UAS), within 4 years after the last degree
- Doctoral students at a Swiss University, ETH or UAS within 6 months prior to graduation
- Postdoctoral researchers within 4 years after graduation (extension is possible if justified)

4.1.2. Information to be provided in support of the request

- A 5 pages project description and a CV of the applicant (including potential applications or future steps towards commercialization)
- A reference letter from the present advisor detailing the applicant's experience
- A commitment letter from the future host institution detailing the support to be provided to the project, with the CV of the hosting lab's head

4.1.3. Duration and budget

- Duration: 12 months, with a possible extension of up to 6 additional months if recommended by the EP and validated by the SteCo
- Maximum budget: CHF 150'000 per year including investigator's salary and research expenses, including max 15% overhead contributions paid to the institution
- Free participation to Innosuisse Start-up Training Courses courses
- Facilitated access to initial start-up coaching of Innosuisse
- Support of half-day patent searches conducted by the Federal Institute of Intellectual Property (IPI) financed by Innosuisse

4.2. Discovery projects

Discovery projects must be centered on technological innovation but should also demonstrate the societal and/or economic impacts to be developed. Clinical trials are excluded.

4.2.1. Eligibility

The Discovery scheme targets researchers such as faculty members or teaching and research staff employed at a higher education research centre (e.g. Universities, ETHs, UAS) or a non-commercial research centre outside the higher education sector.

4.2.2. Information to be provided in support of the request

- A 21 page project proposal including descriptions of:

- the current state of the research and innovation, and planned research activities in the innovation area
- the innovation potential of the technology, with an indication of potential applications and the corresponding societal and/or economic impact
- other (financial) support available to the project
- A project plan with goals and outcomes detailing clear milestones and deliverables
- A project organization stating the responsibilities of the various partner groups and project collaborators (including complementarity and expected synergies between the collaboration groups)

4.2.3. *Duration and budget*

- Duration: up to 4 years
- Maximum budget: CHF 1 Mio for 4 years for a single group or CHF 3 Mio for 4 years for small consortia (max. 3 groups), including max 15% overhead contributions paid to the institution. Typically, budgets may include salaries for scientific or non-scientific personnel and research expenses. The standard salary granted within the BRIDGE budget will not cover the salary of the applicants.² Large equipment may be funded under the condition that the hosting institution provides a financial contribution (50:50). Preclinical studies are eligible as part of a project up to an amount of CHF 100k.
- Market research or IP strategy by independent advisors cannot be funded.

5. Submission procedures and project selection

5.1. Proof of Concept projects (PoC)

5.1.1. *Evaluation procedure*

There will be up to 4 calls per year for PoC projects, with the evaluation and decision-making procedure to be completed within 3 months. All submitted projects that fulfill the formal requirements are evaluated by the EP PoC. Promising applicants are interviewed before the funding decision is taken. The final evaluation and the ranking of the projects take place during the EP PoC panel meetings.

5.1.2. *Evaluation criteria*

- Innovative potential: Projects should provide a credible vision for a new product or service which offers a significant competitive advantage to Swiss economy or has an important societal impact.
- Applicant's competence: Applicants should demonstrate an appropriate level of innovation-based competence, entrepreneurial and management competence, and a willingness to cooperate with implementation partners or plans to found a start-up.

5.2. Discovery projects

² Successful BRIDGE applicants at an UAS or from CSEM can apply for a complement of their own salary granted by Innosuisse. The salary complement request must be submitted together with the associated Discovery project proposal.

5.2.1. Evaluation procedure

There will be up to 2 calls per year for Discovery projects, the evaluation and decision-making process to be completed within 7 months. To plan the evaluation procedure, the SteCo may ask for Letters of Intent (LOI). All submitted projects that fulfill the formal requirements are evaluated by the EP Discovery. Apart from EP members, projects may be evaluated by external and/or international experts. Promising applicants are interviewed before a funding decision is taken. The final evaluation and the ranking of the projects take place during the EP Discovery panel meetings.

5.2.2. Selection and evaluation criteria

- **Science:** The project's scientific objectives must be of high quality and realistic, providing a clear added value to the current state of the art. The proposed methods must be sound and relevant to the objectives. The objectives should be related to the intended innovation rather than to a continued basic research.
- **Innovation:** The applicants must demonstrate a credible vision of the potential technological, economical or societal impacts and benefits of the innovation and its possible implementation.
- **Competence and entrepreneurial intention of applicants:** The applicants should demonstrate individually and as a team an appropriate level of scientific and innovation-based competence and a willingness, and intention, to collaborate with implementation partners or plans to found a start-up. If applicable, the complementarity between partner groups as well as project collaborators and their potential for cooperation should be demonstrated.

6. Project monitoring and reporting

The project progress is monitored in a goal-oriented, non-bureaucratic way. Only projects making progress will continue to receive funds.

6.1. Proof of Concept projects (PoC)

- Individual projects are closely accompanied by a member of the EP PoC.
- After 9 months a project review takes place to evaluate its progress. An extension for 6 months may be recommended if justified and in case of a positive review.

6.2. Discovery projects

- Project progress is evaluated during a site visit organized during the third semester.
- Projects are terminated by the SteCo if milestones are not reached and no convincing alternative plans are presented.

7. Project support and involvement of implementation partners

The following measures are implemented:

- In consultation with Innosuisse Start-up, Training courses are offered to project applicants if suitable.
- Innosuisse Start-up serves as an entry point for obtaining services of coaches.
- Access to patent search support by the Federal Institute of Intellectual Property (IPI) is funded by Innosuisse.

- BRIDGE events are organized every year to bring together implementation partners, project investigators, investors, and BRIDGE committees and panels.

8. Program monitoring

A concept for the continuing evaluation of BRIDGE will be developed by the BRIDGE Office and the offices of Innosuisse and SNSF in collaboration with the SteCo. This includes an evaluation of the governance structure, procedures and principles one year after the start of the program (first half of 2018). The concept requires approval by the SNSF Presiding Board and the Board of Directors of Innosuisse.