

1st Call for Bridge Discovery proposals

20 December 2016

Description of the Bridge Programme

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 *Terms of Reference for the Bridge programme*, approved by the CTI Board on 25 February 2016 and by the Presiding Board of the SNSF Research Council on 4 May 2016.

Bridge includes two types of activities:

- **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 economic impact of the innovation to be developed.

With the adoption of the *Terms of Reference*, the SNSF and the CTI appointed the seven-member **Bridge Steering Committee** (Annex 1), which is responsible for developing, launching and monitoring Bridge. The Steering Committee is also responsible for appointing the members of the evaluation panels, for allocating annual budgets to the Bridge funding schemes and, based on the recommendations of the evaluation panel members, for taking formal decisions concerning the funding, continuation or rejection of projects in keeping with available budgets.

Bridge proposals are evaluated by two different evaluation panels, one for each funding line. The evaluation panels are composed of experts with complementing experience in applied research and in the industrial or societal implementation of scientific results. They evaluate the submitted proposals, interview applicants, rank proposals according to their quality and draft recommendations for the attention of the Steering Committee concerning the funding, rejection or continuation of projects.

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

The SNSF and the CTI have also established a common **Bridge Office** that will provide administrative support to the programme and carry out lifetime management for projects.

Based on the *Terms of Reference for the Bridge programme*, the Steering Committee issues the following call for Discovery proposals.

1. General

Article 1 Goal and basic principles

¹ Under the funding opportunity "Bridge Discovery", grants are awarded to qualified researchers who intend to conduct a research and innovation project with the clear goal of developing a future technological application or service.

² Bridge Discovery supports interactions between basic and applied research to realise the innovation potential of scientific results.

³ Bridge Discovery projects must focus on technological innovation that has a positive impact on society and the economy.

⁴ Calls for Bridge Discovery proposals are announced periodically. Up to 2 calls may be announced per year.

Article 2 Duration of grants

¹ Bridge Discovery grants are awarded for a maximum of 4 years.²

² It is possible to apply for a shorter funding period.

2. Formal requirements

Article 3 Personal requirements

¹ Applications may be submitted by faculty members or teaching and research staff employed at a research institution such as a Swiss University, a Federal Institute of Technology, a University of Applied Sciences or any other research institution as defined in Articles 4 and 5 of the RIPA.

² Applicants must be in a position to carry out research projects under their own responsibility and to lead scientific and non-scientific project staff.

³ Applicants must make a substantial contribution to the proposed project and must be able to work independently.

⁴ Applicants must be able to show that

- a. they are conducting their research activities together with any scientific teaching activities to an extent equivalent to at least 50% of a full time equivalent (FTE);

² In general, Bridge Discovery grants are not extended beyond the maximum duration of 4 years. Exceptionally, extensions for a maximum of one year may be granted without additional funding if one or more of the reasons stated in Clause 7.3 paragraphs 3 and 4 of the General implementation regulations for the Funding Regulations of the SNSF apply.

- b. they are employed at a research institution that is eligible for research funding (see Article 3, paragraph 1) at least for the duration of the project, or they can demonstrate that they have been given assurance of such employment in writing;
- c. the necessary research infrastructure is at their disposal.

⁵ Members of the Bridge Steering Committee are excluded from participating in the Bridge Discovery calls. Bridge Discovery Evaluation Panel members may participate in the Bridge Discovery calls. The usual rules regarding conflicts of interest and recusal (according to the Federal Act on Administrative Procedure³) apply.

⁶ Applicants may only submit one Bridge Discovery application per submission date.

Article 4 Requirements for the planned research

¹ Bridge Discovery projects must focus on technological innovation but should also demonstrate the societal and economic impact of the technical innovation to be developed.

² Clinical studies are not supported under the Bridge Discovery scheme.

Article 5 Applicants and implementation partners

¹ Bridge Discovery proposals are submitted by a single applicant or a small consortium consisting of a maximum of 3 applicants.

² In the case of more than one applicant

- a. each applicant must meet the eligibility requirements for the submission of applications;
- b. each applicant must be a member of a different independent research group;
- c. each applicant takes personal responsibility for the project;
- d. the applicants must designate one person (principal investigator) to coordinate and represent all applicants vis-à-vis the Bridge Office, which representation shall be legally binding.

³ Applicants may choose to involve implementation partners (e.g. industrial collaboration) in their Discovery project to provide specific expertise or infrastructure. However, implementation partners are not eligible to receive financial support within the scope of Bridge.

Article 6 Letter of intent

All applicants who intend to submit a Bridge Discovery proposal must announce their participation in the form of a letter of intent to the Bridge Office (bridge_discovery@snf.ch) until 27 February 2017. In the letter of intent the applicants outline their planned Discovery project. They are expected to provide the following information:

- a. title, applicants and institutions involved, duration and foreseeable budget (1 page)
- b. description of the project (1-2 pages)

The template for the letter of intent is available on the Bridge website (www.bridge.ch). The letter of intent itself is not evaluated but is a prerequisite for the submission of a Discovery project proposal. It enables the Bridge Office to make preparations for the forthcoming evaluation and planning of the call. Upon submission of their letter of intent, applicants receive an acknowledgment that their letter has been received.

³ <https://www.admin.ch/opc/en/classified-compilation/19680294/index.html#a10>

Article 7 Formal requirements for the application

¹ Bridge Discovery proposals must be submitted via the electronic application platform⁴ by 10 April 2017, 17:00 Swiss local time.

² The proposal must be written in English and contain the following information and documents:

- a. administrative information as per the requirements set out on the online submission platform;
- b. a project description (20 pages plus maximum 1 page summary), provided in the template made available on the online submission platform;
- c. the CV of the applicant(s) (maximum 2 pages);

³ The project description (paragraph 2 letter b, above) is structured as follows:

- a. summary (max 1 page);
- b. current state of research and innovation in the field;
- c. innovation potential of the technology, with an indication of potential applications, planned steps towards commercialisation, and the corresponding societal and/or economic impact;
- d. detailed project plan with goals, methodology, approach and outcomes;
- e. project organisation with a timeline, milestones and deliverables as well as the responsibilities of the project participants (including complementarity and expected synergies between collaborating groups).

Article 8 Other forms of funding

¹ At the time of submission or during an ongoing Bridge Discovery project, applicants may also receive grants under all SNSF or CTI funding schemes as long as the funded projects are thematically different.

² However, it is not permissible to have more than one ongoing Bridge Discovery project.

³ Parallel submissions of the same project proposal are not accepted.

⁴ Funding obtained or requested from other sources that is directly related to the project must be declared in the project proposal.

3. Proposal evaluation procedure

Article 9 Non-consideration

¹ Proposals that do not meet the formal requirements laid out in Chapter 2 will not be considered for evaluation unless the shortcomings can be resolved by taking minor corrective measures.

² Applicants of non-considered proposals are informed in the form of a written appealable ruling signed by the Bridge Office.

⁴ <https://bridge.mysnf.ch>

Article 10 Evaluation criteria

The following criteria are applied during the evaluation of Bridge Discovery projects:

- a. Scientific content and innovative potential
 - The project's scientific objectives must be of high quality and realistic, providing a clear added value with respect to the current state of the art. The proposed methods must be suitable, sound and relevant to the objectives. The evidence should be related to the intended innovation rather than to continued basic research.
 - The project must present a credible vision of the potential technological, economic or societal impact and benefits of the innovation as well as its possible implementation.
 - The project must be feasible and goal-oriented according to its work plan and defined milestones, and must include a realistic budget.
 - The project must contain a convincing roadmap outlining the envisaged steps towards implementation.
- b. Qualification of applicants:
 - The applicants demonstrate an appropriate level of scientific and innovation-based competence as well as entrepreneurial and management competence.
 - In projects with more than one applicant, their competences must be complementary and their collaboration must deliver a clear added value. Moreover, the applicants must be able to show that they are capable of organising the consortium and establishing appropriate project-internal communication and decision processes.

Article 11 Evaluation procedure

¹ The Discovery Evaluation Panel members evaluate all proposals that meet the formal requirements.

² Bridge Discovery grants are awarded after a two-level selection procedure.

³ Level 1 – Pre-selection: The Evaluation Panel assesses the submitted written proposal documents according to the criteria outlined in Article 9. It may take into account the opinions of external experts consulted during the evaluation. Candidates for the second assessment level are selected on the basis of these evaluation results.

⁴ Level 2 – Final selection: The Evaluation Panel invites the applicants admitted to the second level for a personal interview in English, in which they present their project and innovation plans and answer questions. In exceptional cases (e.g. long distance of travel) and upon written request, the interview can be held as a video conference.

⁵ Based on the assessment of the written documents and the oral presentation, the Evaluation Panel ranks the projects according to their quality.

⁶ The Evaluation Panel submits its funding or rejection recommendations to the Steering Committee for all evaluated proposals.

Article 12 Decision

¹ Based on the recommendations of the Evaluation Panel, the Steering Committee decides to either fund or reject each project in line with the budget.

² All decisions taken by the Steering Committee are communicated to the principle investigators in the form of an appealable ruling signed by the Bridge Office.

³ The ruling states, in particular, the reasons for the decision, the amount of funds allocated to the project and the conditions or requirements to be fulfilled before the project starts or once it is underway.

⁴ As of the submission deadline of the proposals, the evaluation and decision-making process is generally completed within 5 months.

Article 13 Right of appeal

The applicant may appeal against the ruling before the Swiss Federal Administrative Court pursuant to Article 8 paragraph 2 and Article 11 paragraph 2.

4. Eligible costs

Article 14 Eligible costs

¹ Bridge Discovery grants may be used to cover the following costs:

- a. The salaries of scientific and technical staff designated for the research project within the salary scales prescribed by Bridge (Article 16);
- b. Research costs that are directly related to the research work, namely material of enduring value, expendable items, field expenses, travel costs or third-party charges;
- c. Direct costs incurred through the use of research infrastructure linked to the research work;
- d. Costs and fees of scientific open access e-publications produced within the scope of the funded research;
- e. Additional costs may be covered if required for the success of the project.

² The maximum amount of eligible costs must not exceed CHF 850,000 for four years for a single applicant or CHF 2.55 million for four years for small consortia (maximum of 3 applicants). The efficient use of a realistic budget is an essential criterion in the evaluation of the project.

³ The costs must be applied for and quantified in the proposal.

⁴ The grant is awarded as a lump sum. Reallocations within funding categories are possible.

⁵ The funding of larger infrastructure (> CHF 100,000) is possible under the condition that the host institution covers at least 50% of the costs.

⁶ Preclinical studies may be funded up to a maximum amount of CHF 100,000.

⁷ Market research or Intellectual Property (IP) strategy by independent advisors cannot be funded.

⁸ The salaries of the applicants cannot be covered with the Bridge Discovery grant. Applicants fulfilling special conditions may however obtain support from the CTI (Article 15).

Article 15 Salary complement for applicants fulfilling special conditions

¹ Applicants who fulfill the two following conditions may apply for a complement of their own salary granted by the CTI:

- a) They are employed on a part-time or full-time basis at a university of applied sciences or the Centre Suisse d'Electronique et de Microtechnique (CSEM);
- b) The employing research institution is largely dependent on third party funding to support research activities of its staff.

² The amount of the salary complement must be applied for in a separate form and quantified on the basis of the actual contribution to the project. Instructions and forms are available on the Bridge website.⁵ Regulations in force at the CTI apply for the calculation of the CTI contribution.

Article 16 Salary scales

¹ Institutions may apply their normal salary scales to the envisaged project staff, such as scientific staff or technicians. The maximum salary for postdoctoral students (incl. social security contributions by the employer) is set at CHF 130,000.⁶

² Doctoral students are remunerated according to the minimum annual gross salaries of the SNSF.⁷ They must devote at least 60% of an FTE to their doctoral thesis.

³ The requested percentages of employment for project staff must correspond to the actual planned time requirement for the project.

5. Grants and grant management

Article 17 Legal consequences of the award

¹ On the full or partial approval of a Discovery proposal (award), the applicants become grantees of a Bridge Discovery project.

² Grantees must:

- a. use the grant in accordance with the conditions set out in the ruling;
- b. comply with the provisions stipulated in this call and all other rules that apply to the grant;
- c. carry out the project work with due care, while respecting the rules of good scientific practice and upholding the relevant principles of the discipline in question, in particular its ethical guidelines.

³ In case of a single applicant, the grantee becomes the principal investigator. In a consortium with more than one applicant, one grantee becomes the principle investigator (according to Article 5, paragraph 2d) of the project and assumes its coordination, including scientific, administrative and financial aspects.

⁵ <https://bridge.mysnf.ch>

⁶ Rates for social security contributions: http://www.snf.ch/SiteCollectionDocuments/allg_doktorierende_e.pdf (chapter 4)

⁷ Salary scales for doctoral students of the SNSF: http://www.snf.ch/SiteCollectionDocuments/allg_doktorierende_e.pdf

Article 18 Grants start and administration

- ¹ The earliest possible starting date of Bridge Discovery grants is 2 October 2017.
- ² The grants are transferred in annual instalments.
- ³ Principle investigators of Bridge Discovery projects shall have the latter administered by a grant administration office of the host institution that is recognised by the SNSF or the CTI.
- ⁴ The principle investigators must request the transfer of funds and start their project within one year of the date on which the ruling was issued.
- ⁵ The Bridge Office approves the release of funds if the conditions for release as defined in the ruling are met.
- ⁶ The principle investigators must provide the Bridge Office with a written summary of the planned project that is understandable to non-experts (lay summary). They must also provide thematic keywords for the Bridge, CTI and SNSF websites.
- ⁷ The lay summary and keywords must be submitted on receipt of the funding decision, but no later than on submission of the release of funds request.
- ⁸ Once the grant has been released, the lay summary and keywords will be made available to the public.
- ⁹ Once the funded project has been completed, principle investigators will be required to update the lay summary by including the results of the project. Such updates are a mandatory requirement for the approval of the project activity report (Articles 24 to 27).

Article 19 Changes to research plan

Substantial changes to the work, tasks and milestones described in the project proposal and/or set by the Steering Committee as conditions for financing may only be made if requested in writing and approved by the Bridge Office.

Article 20 Project withdrawal or termination

- ¹ Applicants who withdraw their Bridge Discovery project or are forced to terminate it prematurely must inform the Bridge Office in written form stating reasons.
- ² Any unused funds must be reimbursed.

Article 21 Other project support

- ¹ Additional support during the project such as access to patent search support by the Swiss Federal Institute of Intellectual Property (IPI) may be offered to Bridge Discovery grant beneficiaries upon recommendation by the evaluation panel.
- ² Other types of project support may be offered to grantees in the course of the project.

Article 22 Overhead

Bridge grants are eligible for an overhead of a maximum of 15%. The overhead is paid to the host institution of the principle investigator.

Article 23 Sanctions

In general, the Steering Committee is responsible for deciding on potential sanctions and demanding reimbursements. In the event of suspected breaches of the terms of this call, of terms applicable to Bridge or of research integrity or good research practice in connection with the application or the use of the grant, the regulations in force at the SNSF apply.^{8,9,10}

6. Reporting and project conclusion

Article 24 Reporting duties, principles

¹ Bridge Discovery grantees must report their activities and achievements. In particular, they must submit:

- a. a progress report generally 18 months after the start of the project;
- b. output data generally 18 months after the start of the project;
- c. annual financial reports and a final financial report at the end of the funding period (Article 25);
- d. a final project activity report upon conclusion of the project (Article 27).

² The Evaluation Panel may define different reporting periods if necessary.

³ The duty to regularly provide output data remains in place after completion of the final report and ends three years after its submission date.

⁴ In consortia, the principal investigator coordinates the reporting duties of all grantees and submits the reports to the Bridge Office.

⁵ If the requirements are met, the Bridge Office will approve the reports and send the principal investigator a confirmation. If this is not the case, the Bridge Office will return the reports to the principal investigator for revision.

⁶ Grantees are required to provide information to evaluate the impact of the Bridge programme.

Article 25 Financial reports

¹ Financial reports provide a detailed account of how the funding was used and must be submitted annually no later than 3 months after each instalment.

² A final financial report summarising the use of the funding must be submitted no later than 3 months after the end of the funding period.

³ Financial reports are compiled by the grant administration office of the principle investigator. They must be reviewed, signed and sent to the Bridge Office via the Bridge grant online platform in good time.

⁸ Funding Regulations of the SNSF, chapter 7

⁹ General implementation regulations for the Funding Regulations, chapter 10

¹⁰ Regulations on scientific misconduct (Research Integrity Regulations) of 12 July 2016.

Article 26 Mid-term evaluation

¹ Bridge Discovery projects will be subject to a mid-term evaluation carried out by the Evaluation Panel on the basis of the written progress report (Article 24, paragraph 1a) generally no earlier than 18 months after the start of the project.

² Based on the progress made in the project, the Evaluation Panel may recommend its continuation, termination or reorientation.

³ Projects can be terminated by the Steering Committee if milestones are not reached and convincing alternative plans are not presented.

Article 27 Project activity report

¹ Bridge Discovery principal investigators must submit a final report consisting of a financial and a final project activity report via the Bridge grant online platform no later than 3 months after the end of the funding period.

² The following information must be included in the project activity report:

- a. summary;
- b. main scientific achievements and results;
- c. main achievements towards the planned innovation;
- d. future challenges for the implementation phase;
- e. possibilities for creating a start-up or for collaborating with an economic partner;
- f. next steps.

7. Research results and intellectual property

Article 28 Research results and intellectual property

¹ The rights to the research results obtained in the course of research work funded by Bridge are owned by the grantees or their employers.

² Grantees are obliged to define such rights together with their employers in the form of an agreement before the start of the project. A written confirmation of the existence of such an agreement must be submitted to the Bridge office before the first instalment of the grant can be paid.

³ In Bridge Discovery projects that involve grantees from more than one institution who contributed to the research results, the institutions involved shall agree among themselves on ownership, rights and commercialisation strategies.

⁴ The SNSF and the CTI waive any reimbursement of grants or shares in the profits.

Article 29 Open access

¹ Grantees have a duty to publish research results in digital form on free Internet publication sites (open access publication). Grantees may be released from these obligations should publication not be advisable

for confidentiality reasons, particularly in relation to the acquisition of patents or due to a contractual commitment to observe confidentiality.

² Should any implementation partner wish to participate in the project, their commitment to the general rules of open access to research results of the SNSF¹¹ will be required.

¹¹ see Funding Regulations of the SNSF, Article 47

Annex 1: Members of the Bridge Steering Committee (as of December 2016)

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