

**Swiss Confederation** 

Innosuisse - Swiss Innovation Agency

# Flagship Initiative

# Launch of the first call

# Guide for applicants

This document describes the details of the application for the 1st call for proposals within the framework of the new Innosuisse Instrument "Flagship Initiative" on the basis of Articles 3 to 13 of the Innosuisse Funding Ordinance of 20 September 2017 (SR 420.231).

The call for pre-proposals will close on Wednesday, 31 March 2021 (12 noon Central European Summer Time / CEST)

#### Contact

Innosuisse – Swiss Innovation Agency Programme Funding Einsteinstrasse 2 3003 Bern

E-Mail: programme@innosuisse.ch

Tel.: +41 (0)58 469 20 04

Bern, 07.01.2020

# **Table of contents**

Gloss	Glossary and acronyms4		
1	The new funding instrument "Flagship Initiative"	5	
2	Call Announcement	8	
2.1	Flagship topics of the first call	8	
2.2	Eligible structure and specifications	9	
2.3	Dates and deadlines in 2021	10	
3	Finances	11	
3.1	General principles	11	
3.2	Eligible costs	11	
3.3	Financing conditions	11	
4	Submission and Evaluation of an application	11	
4.1	Pre-proposal	12	
4.2	Proposal	12	
4.3	Evaluation criteria		
4.4	Formal conditions of the application		
4.5	Communication to applicants	14	
5	Contract	15	
6	Dissemination	15	
7	Support	15	
8	Monitoring and evaluation	16	
8.1	Progress report and midterm review	16	
8.2	Financial audit	16	
8.3	Payments	16	
8.4	Schedule monitoring	16	

# List of figures

Figure 1: Organisation of the Flagship Initiative	5
Figure 2: Example of a schematic view of interrelated and interdependent subprojects forming a	
flagship	6
Figure 3: Structure of a consortium executing a flagship.	6
Figure 4: Evaluation process pre-proposal	12
Figure 5: Evaluation process proposal	13

# **Glossary and acronyms**

Abbreviation	Meaning
Consortium	A consortium consists of at least three research partner, of which at least one is a UAS, and at least two implementation partners.
Flagship	Closely linked and interdependent subprojects conducted by a consortium, which consists of several research and implementation partners from different disciplines.
Flagship initiative	The Flagship Initiative is the new funding instrument from Innosuisse. Within this instrument, Innosuisse defines flagship topics, in which consortia can submit a proposal for the realization of a flagship.
Flagship representative	The flagship representative is the contact person for Innosuisse and signs the pre-pro- posal and proposal.
Flagship topic	Innosuisse defines flagship topics for the Flagship Initiative. Within a flagship topic, consortia can submit a proposal for the realization of a flagship.
HEI	Higher Education Institution: ETH/EPF, cantonal university, universities of applied science
Host institution	This is a higher education institution HEI or non-commercial research institution outside the university sector that acts as an applicant vis-à-vis Innosuisse and on behalf of the consortium. The host institution assumes responsibility vis-à-vis Innosuisse for processing the flagship. Among other things, the host institution is responsible for the coordination of a flagship.
MTR	Midterm Review
NTN – Innovation Booster	National Thematic Networks – <u>Innovation Booster</u>
p-pr	Pre-proposal
pr	Proposal
UAS	University of Applied Sciences

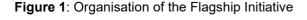
### 1 The new funding instrument "Flagship Initiative"

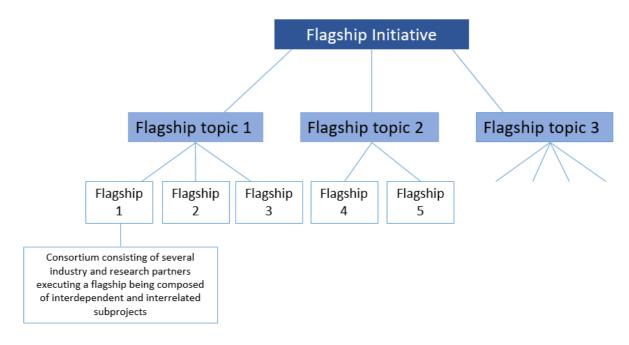
The purpose of this new funding instrument is to stimulate innovation in areas relevant to a large part of the economy or society and to promote transdisciplinary project collaborations. This new funding instrument is complementary to the purely bottom-up oriented and well-established regular Innosuisse innovation projects. The Flagship Initiative strives for solutions to current or future challenges, which concern several actors and/or can only be solved by collaborative work.

The overall objective of the Flagship Initiative is to strengthen the competitiveness of the Swiss economy and/or contribute to the well-being of society by creating new value along the value chain, whereby digital transformation as well as the structural change of society and economy are important aspects.

This new funding instrument provides specific incentives, through given topics, to address issues that are of particular interest for the future well-being of the country and require new solutions and business models.

Within the framework of the Flagship Initiative, Innosuisse invites consortia to submit a proposal for the realization of a flagship (Figure 1). The proposal consists of closely linked and interdependent subprojects (Figure 2) and is submitted by a consortium of several research and implementation partners from different disciplines (Figure 3).





**Figure 2**: Example of a schematic view of interrelated and interdependent subprojects forming a flag-ship.

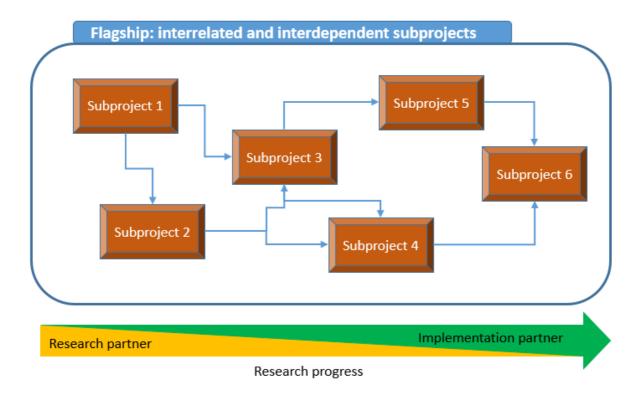
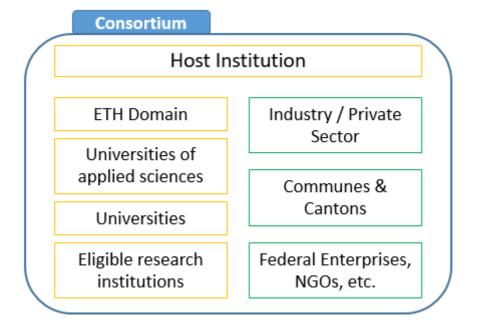


Figure 3: Structure of a consortium executing a flagship.



Flagships have a systemic perspective, are transdisciplinary and look for solutions that can be applied in practice. A special attention is paid to **systemic innovation**. Consequently, flagships are less aimed at incremental improvement of an existing system (e.g. increasing the efficiency of a drive system, improving the properties of materials), but rather aim at **improving a system in the long term** (e.g. integrated mobility management, circular economy). It is not necessarily the results of an individual flagship subproject by itself that will lead to major changes of an existing system, but the combination of the interdependent subprojects will contribute to a system change. Hence, a specific focus is placed on **transdisciplinary** flagships in which partners from academia and industry across different disciplines, for example technological and socioeconomic, work together.

The systemic approach of a flagship is key. This means that the individual subprojects of a flagship may have an economic or societal benefit, but the sum of the individual innovations contributes to a system change. Consequently, unless the overall systemic result is more than the sum of the individual subprojects, the consortium cannot be considered.

#### **Definition of systemic innovation**

Systemic innovation is a type of innovation where value can only be derived if it is synergistically integrated with other complementary innovations, going beyond the boundaries of a single organization. Systemic innovation requires multiple innovations to be coordinated. Consequently, the different contributory innovations and organizations are organized together into a whole system, where the overall success of the emergent innovation cannot be attributed to just one sub-innovation or participating organization.<sup>1</sup>

#### **Definition of transdisciplinarity**

Transdisciplinary research provides contributions to the solution of socially relevant problems. It is inevitably interdisciplinary and connects different scientific disciplines. In addition, it involves non-scientific actors in the problem area in its research in order to arrive at feasible recommendations for action.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> E.g. Teece, 1986; Chesbrough and Teece, 2002; Kano, 2000; Gopalakrishnan and Bierly, 2001; Taylor and Levitt, 2004; Maula et al, 2006; Andersen and Drejer, 2008; van den Ende et al, 2008; Alin et al, 2013; Mlecnik, 2013; Takey and Carvalho, 2016)

<sup>&</sup>lt;sup>2</sup> nachhaltigewissenschaft.de/2013/04/09/heisst-transdisziplinaritaet-15735108/

#### 2 Call Announcement

#### 2.1 Flagship topics of the first call

The Flagship Initiative aims to foster systemic innovation that helps to master major challenges for economy and society. For its first call, Innosuisse has chosen **two topics** that take into account of the effects caused in economy and society by the Covid-19-pandemic. Pandemic induced restrictions on physical and social contacts and on international travel are likely to remain in place for a longer period. These restrictions have had and will continue to have a big impact on social interactions, mobility behaviour and any form of cooperation.

The pandemic has undoubtedly accelerated **digital transformation**. Whole industries and many sectors of the society have to rethink their business models and their ways of action. Innovative digital solutions may in many cases not only offer a suitable answer to societal and business challenges, but they may as well path the way to a more sustainable world and contribute to the achievement of the Sustainable Development Goals (SDGs) of the UN's 2030 Agenda.

The Covid-19 pandemic also drastically showed the vulnerability of economy and society, their infrastructures and overall functioning to natural and human made hazards. Innovation can offer once more solutions for a more resilient and sustainable world.

The two flagship topics of the first call therefore are:

#### I. Coping with COVID-19 induced acceleration of digital transformation

The proposals within this topic must concentrate on the following focus areas:

- 1. Education, learning and teaching
- 2. Tourism and travel industry
- 3. Real estate and urban planning
- 4. Healthcare and medtech

Almost all actors of economy and society are facing the need for significant transformation. Challenges are in particularly manifold in the above focus areas. Changed human needs (for example forms and contents of lifelong learning), changed human behaviour and lifestyle (for example new forms of (international) tourism and business travel) and structural changes in society (for example merging of work and living or new forms of elder care) ask not only for new service offers but also for new production methods for these offers. These challenges affect whole industries. Apart from that, they offer as well incumbents and newcomers, for example also private actors in the educational sector, unprecedented business opportunities in new fields.

This flagship topic aims to create the necessary incentive to bring research and implementation partners together in order to tackle the challenges of accelerated digital transformation holistically.

# II. Improving resilience and sustainability and reducing vulnerability of society, infrastructure and processes

The proposals within this topic must concentrate on one of the following focus areas:

- 1. Demographic shift
- 2. Supply chain
- 3. Resilience of ICT infrastructures
- 4. Decarbonisation

Technological innovations, globalization of goods, services, information and people have dramatically increased the general prosperity of society as well as its vulnerability. Climate change, natural hazards such as heat waves, human made risks such as cyberattacks, but also demographic shifts (caused by the aging population and by migration) are affecting the well-being of society and the stability of the economy and infrastructure. Solutions need to be found to create a more sustainable and a more resilient world.

This flagship topic encourages and supports innovative flagships, which aim at mitigating and controlling these risks and improving the resilience as well as sustainability of society, infrastructure and processes through highly innovative solutions and new approaches.

### 2.2 Eligible structure and specifications

#### **Partners**

- The invitation to tender is addressed to consortia of research<sup>3</sup> and implementation<sup>4</sup> partners. The consortium consists of more than two research partners, of which at least one is a university of applied sciences, and at least two implementation partners. Innosuisse does not prescribe how the consortium should organize itself, but one representative of a HEI or a non-commercial research institution outside the university sector<sup>5</sup> has to act as host institution.
  - New partners may join the consortium or partners may withdraw from the flagship as long as the originally formulated objectives are not affected negatively and the contractually stipulated conditions are fulfilled. Such changes must be approved by Innosuisse in advance. Modifications of objectives or contractual conditions are possible upon request and prior written approval by Innosuisse.
- The consortium defines a host institution (one of the research partner). The host institution defines a representative, who is the contact person for Innosuisse and who signs the flagship proposal. All involved partner sign a specific power of attorney. By signing the power of attorney, the signatory agrees with the contents of the pre-proposal and proposal.

<sup>&</sup>lt;sup>3</sup> Definition of research partner according to Art. 3 Funding Ordinance

<sup>&</sup>lt;sup>4</sup> Implementation partners are private or public institutions or companies that ensure implementation, Art. 3 Funding Ordinance

<sup>&</sup>lt;sup>5</sup> Art. 5 FIFG

#### **Duration**

There are no conditions regarding the length of a flagship. However, we assume that a flagship will be longer compared to an average Innosuisse innovation project due to the systemic approach and transdisciplinarity.

#### **Budget**

The rules for the Innosuisse innovation projects apply.

#### **Proposal**

- The proposal must be submitted in English, German, French or Italian.
- Mandatory proposal forms must be used and submitted in accordance with the information on the Innosuisse homepage (www.innosuisse.ch/flagship).
- The submission process is divided into two phases: A pre-proposal and proposal. A pre-proposal must have been submitted in order to be eligible to submit a proposal.

#### 2.3 Dates and deadlines in 2021

Date	What	Who
January	Launch of the call 2021	Innosuisse
17 February	Submission of questions in written	Applicants
End of February	Publication of answers on webpage	Innosuisse
31 March	Deadline pre-proposal	Applicants
	(noon Central European Summer Time / CEST)	
May	Feedback to applicants	Innosuisse
13 August	Deadline proposal	Applicants
	(noon Central European Summer Time / CEST)	
October	Feedback to applicants	Innosuisse
October	Contracts sent to applicants	Innosuisse
End of 2021	Start of funded flagships	Applicants

#### 3 Finances

#### 3.1 General principles

Innosuisse funds cover the wage costs of the research partners (incl. overhead and employer contribution) as well as material costs. Moreover, a certain amount of the funding budget can be allocated for the management and coordination of the overall flagship.

#### 3.2 Eligible costs

#### **Personnel costs**

Personnel costs are funded according to the Innosuisse funding ordinance<sup>6</sup> (articles 5 to 8) and the implementing provisions for innovation projects<sup>7</sup> (articles 5 and 6). Innosuisse funds cover the effective wage costs of the research partners incl. overhead and employer contribution.

The personnel costs are calculated either with payroll statements or the applicable notional hourly rates according to article 6 of the implementing provisions for funding innovation projects.

#### **Material costs**

Material costs are funded according to the implementing provisions for funding innovation projects (article 7). Only costs that are actually incurred and are absolutely necessary for the proper execution of the flagship are taken into account.

All the planned material costs need to be included in the proposal. Certain coordination tasks like organising workshops between partners as well as the midterm review can be covered within this category.

#### 3.3 Financing conditions

Innosuisse covers a certain amount of the direct costs of a flagship. The legal basis allows an Innosuisse contribution of 50%. The implementation partners contribute to the total costs of the flagship as well, which must at least correspond to the project contributions of Innosuisse. A reduced participation by the implementation partners is possible in accordance with Article 30 Research and Innovation Promotion Ordinance RIPO<sup>8</sup>.

The implementation partners' contribution consists of own work and services as well as financing (cash amount) to the research partner. The financial (cash) contribution is at least 10 per cent of the funding contribution made by Innosuisse.<sup>9</sup>

# 4 Submission and Evaluation of an application

The application process is competitive and will be a 2-step procedure (Figure 4 and 5): preproposal and proposal.

<sup>&</sup>lt;sup>6</sup> Innosuisse funding ordinance

<sup>&</sup>lt;sup>7</sup> Implementing provisions for innovation projects

<sup>8</sup> Art. 30 RIPO

<sup>&</sup>lt;sup>9</sup> Art. 7 para. 4 Innosuisse funding ordinance

#### 4.1 Pre-proposal

First, a pre-proposal must be submitted and only then a proposal. The submission of a pre-proposal is mandatory to be eligible to submit a proposal.

The **pre-proposal** contains the following information:

- Information on flagship partners (competencies, track record of the partners, existing infrastructure)
- General information (title, background, first results)
- Added value of the consortium (transdisciplinary, collaborative work of several stakeholder, etc.)
- Description of the flagship (goal, milestones, deliverables, rough project plan)
- Intended budget request without a concrete financial plan

The mandatory pre-proposal forms must be used (provided for download at <a href="https://www.inno-suisse.ch/flagship">https://www.inno-suisse.ch/flagship</a>).

Based on the evaluation, the Innosuisse secretariat will provide the applicant with a recommendation to submit or not submit a proposal.

Figure 4: Evaluation process pre-proposal



#### 4.2 Proposal

The **proposal** contains the following aspects:

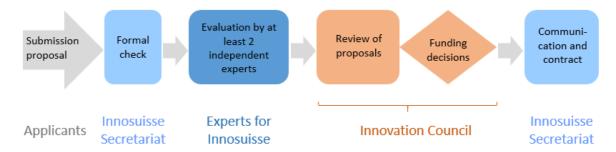
- Information on flagship partners (competencies, track record of the partners, existing infrastructure)
- General information (title, background, first results)
- Added value of the consortium (transdisciplinarity, collaborative work of several stakeholder, etc.)
- Detailed description of the flagship
  - Added value of the flagship: business model, competitive situation, USP, market size, planned revenue and profitability development
  - Innovative solution/approach: state of development, innovative content, systemic view, wider interest in/applicability of research results, risk and ambition (e.g. technology readiness level)
  - Concrete implementation plan (feasibility/implementation of the results)

- Detailed project plan including a schedule: work packages, milestones, deliverables, quantitative and qualitative goals, risk analysis, possible date for the mid-term review (this must be defined in accordance with the work plan, first important milestones must be reached by then and the deliverables must be available)
- Budget request with a concrete financial plan: wage costs, material costs, contribution of implementation partner, minimum 10% cash contribution.

The mandatory proposal forms must be used (provided for download at <a href="https://www.inno-suisse.ch/flagship">https://www.inno-suisse.ch/flagship</a>).

IMPORTANT: If the central objective(s) and / or research question(s) are different from the ones presented in the pre-proposal, the proposal will be rejected on formal grounds, since the submission of a pre-proposal is mandatory.

Figure 5: Evaluation process proposal



#### 4.3 Evaluation criteria<sup>10</sup>

- **Innovation degree**: Is the scientific and economic/societal approach new? Is it not only «incremental» but also «systemic» innovation, which means, does the scientific and economic/societal approach contribute to change a system in the long term?
- Value creation and sustainability in Switzerland: Does the implementation of the research results on the market have a positive influence on the competitive situation of the implementation partner(s)?
  - Does successful implementation demonstrably reduce (social) costs and/or create economic benefit (e.g. reducing poverty, increasing the quality of life, improving the quality of education, reducing injustice, increasing biodiversity), which leads to a positive impact on the future well-being of the country?

#### Project set-up

- Methodological quality: What is the quality of the project structure (e.g. are the goals and milestones realistic? Is the exchange between the project partners guaranteed and expected?)
- Competencies of the project partners: Do the project partners have the necessary competences for the execution and the intended implementation on the market? Is the consortium well positioned across disciplines (transdisciplinarity)?

<sup>&</sup>lt;sup>10</sup> Art. 4 Innosuisse Funding Ordinance

## 4.4 Formal conditions of the application

Innosuisse will conduct a formal check of all pre-proposals and proposals. The following formal criteria need to be fulfilled. Proposals that do not meet all formal criteria will be returned for revision.

Important formal conditions (non-exhaustive list)	Will be checked at p-pr / pr-stage*
Has the proposal been received before the deadline set in the call?	p-pr and pr
Has the proposal been signed by the flagship representative?	pr
Have all partners submitted a specific power of attorney?	pr
Does the consortium consist of more than two research partners?	p-pr and pr
Has the consortium chosen a topic?	p-pr and pr
Has the consortium chosen a focus area?	p-pr and pr
Is at least one of the research partners a university of applied sciences?	p-pr and pr
Does the consortium consist of at least two implementation partners (based in	p-pr and pr
Switzerland)?	
Are the research partners eligible for funding?	pr
Does a representative of a HEI or a non-commercial research institution out-	p-pr and pr
side the university sector act as the host institution?	
Has the proposal been submitted in English, German, French or Italian?	p-pr and pr
Have all the mandatory proposal forms been used and submitted?	p-pr and pr
Have all questions of the form been answered?	p-pr and pr
Has the character limit been respected?	p-pr and pr
Have the financial conditions been met?	pr

<sup>\*</sup>p-pr = pre-proposal; pr = proposal

## 4.5 Communication to applicants

The recommendations and decisions of Innosuisse with regards to the pre-proposal and proposal will be communicated to the consortium in writing.

Pre-proposal		
Recommendation	Innosuisse recommends, based on the evaluation of the pre-proposal, a submission of the proposal.	
No recommendation	Innosuisse does not recommend, based on the evaluation of the pre-pro- posal, a submission of the proposal.	

Proposal		
Rejection	The application does not fulfil the evaluation criteria (see also chapter 4.3) or does so only insufficiently.  The application has been assessed as less suitable, with regards to the evaluation criteria, for a flagship compared to the other applications.	
Promotion	The application for a flagship will be promoted and the contract will be sent to the applicants. Requirements can be imposed which must be fulfilled during the flagship.	
Non-consideration	The formal criteria (see also chapter 4.4) have not been fulfilled.	

#### 5 Contract

The final contract will be sent to the successful applicants by the Innosuisse secretariat. A sample contract will be published on the Innosuisse homepage in May 2021 at the latest.

#### 6 Dissemination

A reference to Innosuisse is requested in publications, exhibitions, lectures, success stories, press information, etc. concerning results of the flagship.

## 7 Support

To ensure that all applicants have the same level of information, we ask you to send all questions regarding the call, the funding instrument or other topics to Innosuisse by **17 February 2021** via e-mail (<a href="mailto:programme@innosuisse.ch">programme@innosuisse.ch</a>). The answers to all questions will be published on the webpage of Innosuisse (<a href="https://www.innosuisse.ch/flagship">https://www.innosuisse.ch/flagship</a>). Information will of course continue to be provided after this date.

### 8 Monitoring and evaluation

#### 8.1 Progress report and midterm review

The purpose of the scientific progress report and evaluation of the flagships is to determine whether the status of the activities is in line with the plans submitted with the proposal and to ensure a successful completion of a flagship.

In general, Innosuisse evaluates the flagship's progress of activities once. Depending on the flagship's duration, financial volume and complexity, more than one evaluation (midterm review) may take place. The midterm review consists mainly of three components: a written scientific progress report, a review meeting and an intermediate financial report.

The templates for the scientific report and intermediate financial report will be published on the homepage of Innosuisse.

At least two experts, who evaluated the proposal (if possible) will accompany a flagship. These experts will, among other things, review any requirements and will be present at the midterm review. At the latest after half of the duration of a flagship a midterm review will take place. The midterm review consists of the evaluation of the previously submitted progress report, the audit of an intermediate financial report and an on-site evaluation (incl. presentations). Therefore, two months prior to the midterm review, the flagship partners must send in a progress report. Consequently, first relevant milestones must be reached before the submission of the progress report and the corresponding deliverables must be sent in as part of the report.

Based on the result of the midterm review, Innosuisse will decide whether the flagship should continue its activities with/without specific requirements or whether it should be aborted.

The experts summarise the results of the midterm review in an evaluation report. They have the possibility to define another midterm review at a later stage or define the submission of additional deliverables to be evaluated.

If the flagship partners and experts disagree on the conditions to be fulfilled or if the experts recommend the termination of the flagship, the IC takes the final decision.

#### 8.2 Financial audit

Each flagship must regularly submit financial reports over the term of the contract. Innosuisse specifies the frequency in the contract and the level of detail by providing the corresponding templates.

The aim of the financial monitoring is to ensure the appropriate use of research funds, the financial compliance and to obtain the financial data for the expert evaluation.

#### 8.3 Payments

Usually forty percent of the funds are paid out at the beginning of a flagship, followed by payments specified in the contract.

#### 8.4 Schedule monitoring

The deadlines for scientific and financial reports and the midterm review will be defined in the contract as well as other dates for mandatory reports.