Call for proposals – General guidelines

Type of funding: seed money

The NTN Innovation Booster in Robotics calls for applications for financial support of new technological development or a concept with high innovation and economic potential.

The Proposal has to incorporate a viable innovation idea which should show practical potential and take into account customer needs, feasibility and profitability from the very beginning. As much as practicable, such viable innovation idea should address an identified or identifiable issue or specifically contextualises a defined opportunity for improvement.

A support of up to maximum 25'000.- CHF is offered to winning teams at each round. NTN support enables the conduct of feasibility studies for innovation ideas creating new processes, products, services, concepts and business models in robotics. The NTN Innovation Booster Robotics support the selected innovation teams with funding specifically for testing and verifying concrete hypotheses that are valuable for the evaluation of the ideas. In this way, teams can develop the basis for improving the idea, reorienting it or terminating the project in a qualified manner.

Additionally, the NTN offers free access to coaches to accompany the development of the technology to become a product or service and support teams to seek further **larger financial support** beyond the six months of development.

The NTN encompasses a very wide network of industrial and academic partners. Winning teams join this network and receive invitations to future **events** that enable further networking.

Topics

Projects may fall under any of the two key areas below:

The second call for proposals is open **until September 15th and focuses on key areas 1) Mobile Robots and Manipulators and 2) Medical and Biomedical Robots.** Applications addressing (1) drone robotics and (2) construction robotics are particularly welcome for this call, however other topics are welcome too.

Key area 1. **Mobile robots and manipulators**: this includes drones, mobile ground robots, underwater vehicles, robotic arms and hands, and any combination of these; furthermore this includes any application of industrial, service or field robotics (e.g. automotive industry, logistics, maintenance, transport industry, farming, forestry, space, S&R, construction, industrial I&M, domestic, etc).

Key area 2. **Medical/Biomedical Robots**: this includes all autonomous, assistive, and interconnected robotic devices for rehabilitation, medical and surgical robotics; this also includes wearable devices and neurotechnology, and related areas and applications.

Innovations are sought along the following (non-exclusive) list of themes:

- Development and/or application of **novel approaches for control and/or perception and interconnection** of robots for new or existing industrial products and services; this includes all **AI-based** approaches to control and perception.
- Application and development of **novel robot design and hardware**, e.g. through soft and deformable material, miniaturization of actuators and sensors, for new or existing industrial products.
- Evaluation of **robotic use-cases, and/or of deployment of novel robotic products in existing or novel areas of the industrial and public sector**; this includes use-case evaluation on site (at industrial partner) and in mock-up lab settings, evaluation of use of robots in the public domain (city centers, roads, etc); it can also include studies and evaluation of economic impact for the particular industrial partner(s) or for the industrial sector;
- Evaluation of **use and deployment of robots in existing industrial or societal sectors**; this includes all *economic, societal, medical, ethical and legal evaluations* of the impact of robotics for a particular sector; it also includes evaluation of the deployment and use of novel robots in support to education, rehabilitation, surgery, and to other societal and medical contexts; evaluation of the ethical and legal aspects related to the use and deployment of mentioned technology.

Who can apply

Teams must be composed of *at minimum two partners* from two different entities in Switzerland. Teams of three and more partners are possible. **PLEASE NOTE THERE MUST BE AT LEAST ONE RESEARCH/ACADEMIC PARTNER INVOLVED.** If you are a start-up and have a great idea for funding but do not need to involve a research partner, you might consider other fundings at this time available through Innosuisse.

The following type of partnerships are possible:

- *One or more industrial partners (corporation, SME, incorporated start-up)* ***PLUS*** *one or more academic partners (EPFL/ETH, Universities and Universities of Applied Sciences).* Each industrial partner must contribute a matching fund *in cash*: minimum 4000.- CHF.
- *One or more start-ups and one or more other industrial partner* ***PLUS*** *one or more academic partners (EPFL/ETH, Universities and Universities of Applied Sciences).* The industrial partner must contribute a matching fund *in cash*: minimum 4000.- CHF. The start-up may be exempted from contributing to the matching funds. In this case, indicate the request for being exempted with the confirmation of the other industrial partner for contribution of funding.
- *Partnerships between two or more academic institutions* ***PLUS*** *a governmental (city, canton, federal department, etc) or non-profit organization (NGO, Foundation, etc)*

are possible too. The governmental or non-profit organization must contribute a matching fund *in cash*: minimum 4000.- CHF.
- If you are unsure what does the above mean for the mix of your teams, please contact Innovation Booster Robotics for eligibility checks.

Important note:

Overall, there must be minimum one research partner and minimum one implementation partner:

Research partner(s) can include university research institutes, non-commercial research centres outside the university sector, departmental research institutions with their own research projects and federal research institutes. **Implementation partner(s)** are those actors who implement the innovation ideas, thus creating economic added value. These can be start-ups, SMEs or larger companies that offer products or services or implement processes. However, they can also be non-profit organisations such as municipal administrations that can generate societal benefits and reduce public costs through the implementation of innovations.

Funding conditions

Funding supports development over a period of **up to six months**. Funding can support salaries of employees, purchase of required hardware (no more than 10% of total fund), travel cost (no more than 5% of total costs). Total costs include NTN funding and the matching funds. The project must be started within 1-3 months of announcement of winning teams.

Selection criteria

Projects will be evaluated according to the following criteria:
- Innovative aspects of the technology
- Potential of economic impact on the Swiss Economy
- Quality and Relevance of team's expertise
- Project's feasibility (within the timeframe and budget constraints)

Further details on selection criteria:

- Innovative aspects of the technology:

How innovative is this idea; is it radical in terms of innovation; is there a strong case for possible future developments?

- Potential of economic impact on the Swiss Economy

Is there future value creation for the Swiss economy in terms of job creations and financial growth stemming from this idea?

- Quality and Relevance of team's expertise

What is the quality of the team? Is the mix between research partner and implementation partner relevant? What is the novelty of the team (exploratory phase with a new team with potential vs. continuation of existing projects (modifications) by established robotics stakeholders)

- Project's feasibility (within the timeframe and budget constraints)

How doable is this project within the given timeline and budget within the context of a feasibility study ?

When to apply

The call runs twice a year. Next 2022 application deadline is **September 15th** . First 2023 call`s deadline is April 28th, 2023. Matchmaking and Ideation workshops to support in matchmaking and application preparation will be held throughout the year as part of ongoing robotics events in the ecosystem.

Frequently asked questions

- The NTN IB Robotics calls are for Swiss Institutions and Swiss-based industrial partners.
- Basic funding per team is 25000.-CHF stemming from the booster, added to that would be third party funding from industrial partners (co-funding) in the amount of 4000.-CHF min. Hence, total funding of 29,000 CHF.
- Any and all Intellectual Property Rights on the Results which are conceived, made, reduced to practice or learnt by the Participant as part of the Project during the Feasibility Study (Foreground IPR) are solely governed by the Team Rules agreed upon by the Team Members.
- IP and confidentiality matters are to be discussed among partners as part of their agreed Team Rules.

How to apply

Please download the template of the website of https://ntnrobotics.com/en/call-for-proposals/ . E-mail the template to contact@ntnrobotics.com

How to contact us:

For any inquiries, please e-mail for inquiries please contact: