

Fighting COVID- 19 Open Call 2020 under the DIH-HERO Innovation Action

Applicant guide

Please note that this applicant guide may be used for information purposes only. The information given in this guide is subject to revision. Please visit our website www.dih-hero.eu to ensure that you have the latest version. Proposals will have to be submitted using the online application form provided at www.dih-hero.eu

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1. About DIH-HERO

The major objective of the DIH-HERO project (Digital Innovation Hubs in Healthcare Robotics) is to establish a broad-based pan-European network of Digital Innovation Hubs specialized in Healthcare Robotics. The network will focus on providing services which connect business and healthcare stakeholders in developing innovative products and services for the healthcare market. It will establish channels between healthcare and technology providers that reduce barriers to adoption and create strong mutual understanding between robotics technology innovators and healthcare professionals. Each hub partner delivers both technical and medical expertise to the DIH-HERO consortium through their pre-existing operational relationships with hospitals and healthcare facilities. This initiative unites expertise in business development, access to finance and innovation to robotics technology and healthcare expertise in a network of hubs that will connect and stimulate robotics innovation in all aspects of healthcare. DIH-HERO is built on concrete plans to sustain the network beyond the time span of the project and to provide a long-term network for innovators in healthcare. The network of Digital Innovation Hubs created and supported by DIH-HERO will ensure that robotics innovation in healthcare is accelerated, that SME can develop global reach and that the advantages of robotics-based healthcare can be propagated across Europe.

2. General Description of the COVID-19 Call (COVID-19-2020)

2.1 Purpose of the COVID-19 call

Currently we are facing a global pandemic and the DIH-HERO consortium, together with its extensive Robotics in Healthcare European network, are fighting against COVID-19 and wish to support healthcare professionals and save lives. Therefore, the DIH-HERO consortium has decided to open an additional short call for funding directed at robotics-based technologies that bear the potential to contribute in the fight against COVID-19 in the short-term. The COVID-19 call is targeted at supporting robotic technologies and solutions in the later stages of development that can be deployed in the healthcare sector to support healthcare professionals in the fight against COVID-19, satisfying a current clinical demand or need.

This applicant guide provides detailed information concerning the DIH-HERO COVID-19 Open Call 2020. It should be noted that; proposals will only be considered for funding if they achieve an evaluation score of at least 12 and that the generally maximum funding that can be applied for per proposal, is indicative up to €100,000. This call will be open for proposal submission from the 10th of April 2020 until the 17th of April 2020, 23:59 CEST. After that date the evaluation will take place.

2.2 Who can apply?

Only legal entities being **SMEs or slightly larger companies** and operating in the healthcare and/ or robotics sector within the <u>EU and its associated countries</u> (EEA) are eligible for FSTP funding. This means that **SMEs** that fulfill the criteria of the general SME definition stated in article 2 of the annex to Recommendation 2003/361 EC, are allowed to apply for the call. These criteria can be summarized as follows:

"To count as an SME, your organization must be engaged in an economic activity and must have:

- fewer than 250 employees
- an annual turnover of no more than €50 million and/or a balance sheet of no more than €43 million

Furthermore, the term "slightly larger companies" can be defined as follows:





"To count as a "slightly larger company", your organization must be engaged in an economic activity and must have:

- fewer than 500 employees and
- an annual turnover of no more than €100 million.

Whether you count as an SME or a slightly larger company may depend on how you count your workforce, turnover or balance sheet. Please note that you must take into account any relationships you have with other enterprises. Depending on the category in which your enterprise fits, you may then need to add some, or all of the data. For more details: Regulation 2003/361/EC – see "Annex" for a full definition of an SME." (European Commission, 2019)

2.3 Type of activity qualifying for financial support and major application domains

This call is focused on supporting healthcare professionals in fighting COVID-19. Proposals can address any one of the five application areas identified by DIH-HERO:

- Diagnostic Robotics
- Interventional Robotics
- Rehabilitation Robotics
- Robotics supporting patients
- Robotics supporting healthcare professionals

Proposals are expected to address existing robotic solutions in later development stages, rather than feasibility studies or desk-based research, and to result in progress towards impact in a real healthcare setting.

2.4 Conflict of interest

DIH-HERO core partners cannot receive any financial support from the FSTP calls provided under the current innovation action. Applicants cannot include DIH-HERO core partners in their project consortia.

2.5 Start date of the COVID-19 projects and duration

This short call is designed to accelerate existing technical development that can directly add value in the fight against COVID-19 as such it is expected that proposals accepted for funding will, subject to contract, be ready to start within one week after approval. The first demonstrators are expected to be finalized preferably within 4 weeks, while the whole project is expected to be completed within preferably 8 weeks.





3. Eligibility

3.1 General eligibility criteria

All of the following eligibility criteria will have to be fulfilled for a TTE project to be funded:

- 1. Third parties receiving financial support must be a legal entity, being an SME or slightly larger companies from EU / EEA countries;
- 2. The proposal must clearly state the relevant clinical demand and the healthcare problem related to COVID-19 to be solved by the intended robotic solution and the added value of the solution;
- 3. The proposed solution must be an already existing technology that is in the later stages of development and deployable by the healthcare end-users in the fight against COVID-19;
- 4. The proposal must fit to the call text;
- 5. A third party may not receive more than 300k FSTP for the entire action duration;
- 6. Proposal must be written in English and submitted via the portal before the deadline;
- 7. There must be no conflicts of interests with DIH-HERO consortium partners.
- 8. Third parties receiving financial support should be financially healthy (they have to sign a declaration of no financial problems).

3.2 Eligible cost categories

Costs incurred in the following cost categories will be regarded as being eligible for reimbursement according to EC guidelines:

- Direct personnel costs
- Direct costs of subcontracting

whereas,

- o subcontracting has to be necessary to implement the action.
- subcontracting may cover only a limited part of the action.
- awarding of subcontracts must be done ensuring the best value for money or, if appropriate, the lowest price principle.
- o any conflict of interests must be avoided.
- Other direct costs
 - o travel costs and related subsistence allowances
 - o equipment costs
 - costs of other goods and services
 - o indirect costs (25% of direct personnel costs and other direct costs)

Please note that it is only possible to include infrastructure hardware in the budget that is needed to demonstrate a working solution, as this call focuses on the deployment of a working solution.

4. Payment terms and funding rates

The funding rate in this call will be 100%. The payment structure for the COVID-19 solutions is defined as follows:





- ∉ 70% of the payment will be released at contract signature
- € 30% of the payment will be released after acceptance of the final report.

5. The application process

5.1 Proposal preparation

5.1.1 Proposal language

Any proposal for the technology transfer experiment call under the innovation action DIH-HERO will have to be prepared and submitted in English language. Proposals prepared in another language will not be taken into consideration.

5.1.2 Proposal contents

Any COVID-19 proposal should at least contain the following information (see also Annex I for an example of the online submission form):

- 1. Administrative Data (to be filled-in in the online submission form)
- 2. Description of the COVID-19 solution
 - Short Abstract of approx. 10 -15 lines
 - Statement on the COVID-19 announcement for publication (checkbox)
 - Application domain to be targeted (drop-down)
 - Current TRL level and the expected advance resulting from this proposal
 - Duration of execution of action for deployment (indication of timeframe)
 - Clinical Problem related to COVID-19 aimed to be solved by the solution
 - Clinical letter of support
 - Definition of the robotic solution, the support it offers and its impact in the fight against COVID-19
 - The source and level of current investment in the technology and why funding from the COVID-19 call is being sought.
 - Specific requirements and processes needed to bring the innovation to market
 - o Implementation plan/ Plan of Approach
 - Resource planning/ budget (template to be uploaded in the form)
- 3. Declaration of honour (signed, saved as pdf and uploaded in the online form)
- 4. <u>Signed declaration of informed consent for data processing</u> (signed, saved in pdf format and uploaded in the online form)
- 5. Questions for statistical purposes (to be answered in the online form)

5.2 Proposal submission

Eligible proposals are to be submitted via the DIH-HERO online portal http://dih-hero.eu. Generally, proposals submitted by any other means will not be taken into consideration. However, to ensure the accessibility of the submission form to anyone it is in exceptional cases also possible to request the submission form by sending an email to dih-healthcare@utwente.nl. Once the proposal has been submitted it cannot be edited or updated anymore.

Please note that the maximum possible financial support for any SME or slightly larger company is limited to €300,000 for the entire duration of the DIH-HERO project. In addition, it is not possible to have the same proposal content funded twice. Shortly after proposal submission, an automatically





generated acknowledgement of receipt will be sent to the applicant's email address. Please note that this acknowledgement of receipt does not imply that the proposal has been accepted as eligible for evaluation. A survey may be conducted during the course of the project among all applicants.

5.3 Proposal evaluation and selection

5.3.1 The different reviewing and evaluation phases

Phase 1: Eligibility check (approx. 2 days)

Basic eligibility checks according to the eligibility criteria stated in section 3.

• Phase 2: Review panel (internally) (approx. 3 days)

Three experts of the DIH-HERO consortium will be engaged in evaluating the proposals, ensuring that there is no conflict of interest. Each proposal will be assessed concerning its excellence (weight 30%), impact (weight 40%) and the implementation plan (weight 30%). Each evaluator will rank the proposals by a score from 0 to 5 for each criterion, administered in an Individual Evaluation Report. The final score will be calculated as the sum of the individual assessments provided by the Evaluators. The default threshold for individual criteria (Excellence, Impact and Implementation) is 3. The default overall threshold (the weighted sum of the three individual scores) is 12.

Scores from 0 - 5:

0	The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.		
1	Poor. The criterion is inadequately addressed, or there are serious inherent weaknesses.		
2	Fair. The proposal broadly addresses the criterion, but there are significant weaknesses.		
3	Good. The proposal addresses the criterion well, but a number of shortcomings are present.		
4	Very Good. The proposal addresses the criterion very well, but a small number of shortcomings are present.		
5	Excellent. The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.		

All proposals will be evaluated based on the following impact and excellence criteria:

Impact Criteria:

Proposals are expected to:

- 1) Progress existing technology that is in the later stages of development to be introduced in the market preferable in the coming 4 weeks
- 2) Demonstrate that the applicant is committed to starting the project within one week after approval of the proposal
- 3) Provide tangible demonstration of effective impact and added value on solving the identified clinical demand or need
- 4) Demonstrate a credible path to realize the identified impact in a healthcare or related setting
- 5) Indicate the status of the necessary foreground and background IP in relation to the clinical use of the proposed technology.





Excellence Criteria:

Proposals are expected to:

- 1) Address a well-defined current clinical demand or need directly related to the fight against COVID-19
- 2) Demonstrate novelty and inventiveness in the proposed approach and solution
- 3) Demonstrate sound engineering and scientific knowledge and expertise
- 4) Provide a clear understanding of the current state of the art and the contribution made by the proposal to advancing it.
- 5) Demonstrate a clear understanding of the clinical or healthcare impact of the proposal

Phase 3: Consensus & Ranking (approx. 2 days)

Individual Evaluation Reports will be combined and discussed on a consensus meeting, where the reviewers will be present. The outcome of the evaluation will be a ranked list of all proposals that at least reached the default overall threshold of 12, based on the scores obtained by each proposal and the final discussions of the evaluators at the consensus meeting. The highest ranked short-term deployment proposals are selected for a short video interview to learn more about the robotic solution proposed and a final go/no go decision will be taken. Dependent on the number of proposal submissions, quality of the proposals and the budget requirements of the different proposals the amount of proposals granted may vary between 0 and n proposals, whereas the maximum budget reserved for this call is €1,000,000.

6. Ethics

The Research activities in Horizon 2020, and hence in DIH-HERO, shall respect fundamental ethical principles, particularly those outlined in "The European Code of Conduct for Research Integrity". Personal data must be protected and processed in compliance with the applicable EU and national law on data protection (including authorizations or notification requirements), under Regulation No 45/2001 for the purposes of implementing, managing and monitoring the or protecting the financial interests of the EU (including checks, reviews, audits and investigations). This regulation is from the European Parliament and the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data (OJ L 8, 12.01.2001, p. 1). Ethical issues might refer to research with respect to e.g. humans, protection and processing of personal data, animals, environmental protection, and safety, etc. If any ethical issues apply to the TTE prior to its starting date, they must be addressed in the proposal. On request, additional information on ethical aspects will be provided by the applicants, allowing DIH-HERO to perform an ethics review. If any ethical issues arise during the run time, they must be immediately communicated to DIH-HERO by sending an email to: dih-healthcare@utwente.nl A checklist summarizes any potential ethical issues that a proposal could raise and gives guidance on how the issues should be briefly described and how measures should be implemented.

7. Contracting

Once an applicant has been awarded funding for a COVID-19 solution, a funding agreement will be signed between the awarded SME or slightly larger company and the coordinator of the DIH-HERO innovation action, representing the DIH-HERO consortium members.





8. Monitoring and Reporting

The reporting will take place via the DIH-HERO portal. The final reports will be produced by third parties will be evaluated by a review team consisting of the assigned innovation coach plus two innovation coaches of other projects.

9. Possibility for participation in the different DIH-HERO open calls

SMEs and slightly larger companies also have the possibility to participate in different DIH-HERO open calls to apply for financial support for travel vouchers, technology demonstrators as well as technology transfer experiments during the course of the DIH-HERO innovation action. However, the maximum possible financial support for any SME or slightly larger company is limited to €300,000. In addition, the applicant is not allowed to hand-in multiple proposals within the different Digital Innovation Hubs Projects Trinity, DIH2 and RIMA. Proposals may be cross-checked in this regard.

10. Support to applicants

For further information and questions regarding the calls under the DIH-HERO innovation action, the applicable eligibility criteria and the evaluation or in case of any technical problems concerning the submission of the proposal via the online portal, please contact the project coordinator by sending an email to: dih-healthcare@utwente.nl

When contacting the Helpdesk, please include the following:

- a. Your username, telephone number and email address
- b. Detailed description of the specific problem
- c. If possible, screenshots of the problem.







Fighting COVID-19 Open Call 2020 under the DIH-HERO innovation action

Please note that this proposal template may be used for information purposes only. The information given may be subject to changes. Proposals will have to be submitted using the online application form provided at www.dih-hero.eu





Appendix 1: Online application preview

WELCOME TO THE FIGHTING COVID-19 OPEN CALL 2020 FOR **HEALTHCARE ROBOTICS!**

Currently, we are facing a global pandemic, and we as DIH-HERO together with our extensive Robotics in Healthcare European network are fighting against COVID-19 to support healthcare professionals and save lives.

With the current emergency call to support the fight against COVID-19 DIH-HERO is aimed to explore which medical needs robotics can meet with existing solutions that can be deployed timely, rather than on developing new solutions.

The COVID-19 call is targeted at supporting robotic technologies and solutions in the later stages of development that can be deployed in the healthcare sector quickly, to support healthcare professionals in the fight against COVID-19, satisfying a current clinical demand or need. (the applicant should be aimed to finalise the first demonstrator within 4 weeks, while the whole project must be completed preferably within 8 weeks).

Call duration: 10th of April 2020 - 17th of April 2020



1 2 3 4 5 6 7

To be eligible for taking part in the Fighting COVID-19 Open Call 2020 within the DIH-HERO project all of the following criteria must be fulfilled:

- a. Third parties receiving financial support must be a legal entity, being an SME or a slightly larger company from EU/EEA countries;
- b. The proposal must clearly state the relevant clinical demand and the healthcare problem related to COVID-19 to be solved by the intended robotic solution and the added value of the solution;
- c. The proposed solution must be an already existing technology that is in the later stages of development and deployable by the healthcare end-users in the fight against COVID-19, quickly:
- d. The proposal must fit to the call text;
- e. A third party may not receive more than 300k FSTP for the entire action duration:
- f. The Proposal must be written in English and submitted via the portal before the deadline:
- g. There must be no conflicts of interests with the DIH-HERO consortium partners.
- h. Third parties receiving financial support must be financially healthy (they have to sign a declaration of no financial problems).

For further information and requirements please see the Applicant Guide.

If you are sure to fulfil all the criteria given above, please continue with the next section.

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REQUIRED INFORMATION

The following information will be required in the submission form:

- Administrative Data: Basic contact data (e.g. full name of legal entity, type of company, company registration number, place of registration, address, company website, as well as the name, telephone number and email address of the main contact person of the SME or slightly larger company);
- Key Data of the of the COVID-19 Project: (e.g. full title of the COVID-19 solution; short name; short abstract (approx. 10-15 lines); targeted application domains; current TRL; project duration; Statement on the COVID-19 announcement for publication (checkbox given in the online form)
- COVID-19 Project Description (e.g. a description of the clinical problem to be solved, clinical letter of support the added value of the solution, the expected impact, a detailed description, an implementation plan and financial resource planning)
- Signed Declaration of Honour saved in pdf format and uploaded in the online form:
- Signed Declaration of informed Consent for Data Processing saved in pdf format and uploaded in the online form;
- 6. Questions for statistical purposes (given in the online form)

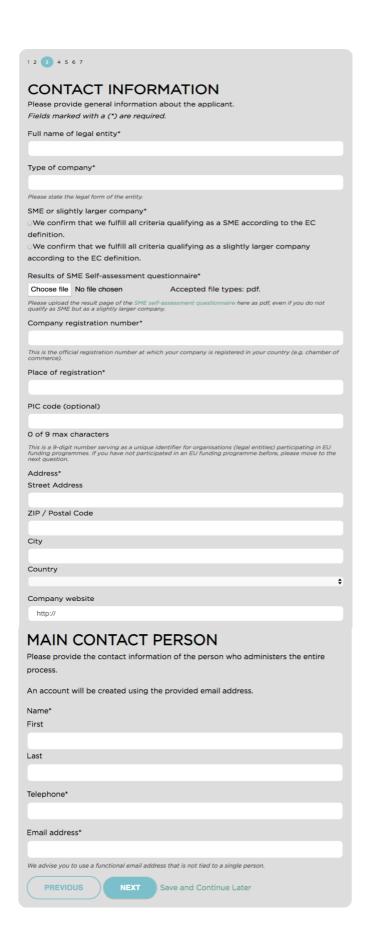
PREVIOUS

NEXT

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2. THE COVID-19 PROJECT Please provide the general information about the COVID-19 solution here. Fields marked with a (*) are required.
Key Data
Full title of the COVID-19 Solution*
Short name of the COVID-19 Solution*
Abstract about the COVID-19 Solution*
O of 3000 max characters Approximately 10-15 lines Major healthcare robotics application domain to be targeted* Diagnostic Robotics Interventional Robotics Rehabilitation Robotics Robotics supporting patients Robotics supporting patients Robotics supporting healthcare professionals Please choice the major healthcare robotics application domain targeted by the COVID-19 project. Major healthcare robotics application category* Law enforcement Home delivery Health Logistics Disinfection Telepresence Telemedicine Patient handling Shortage in supply Other category Starting TRL*
O of 1000 max characters Please give the TRL the innovation has at the start of the COVID-19 project and explain briefly why you consider your innovation to be at the current TRL. Expected duration of the COVID-19 project proposed*
Expected TRL to be reached at the end of the COVID-19 project proposed*
Statement on publishing the key data of the COVID-19 project* The COVID-19 key data can be published after approval of the financial support. Statement on publishing the COVID-19 project abstract* The COVID-19 project abstract can be published at the end of the project and after the delivery of the public abstract. Description of COVID-19 Solution Clinical problem / need to be addressed by the COVID-19 solution, preferably in the coming 4 weeks*
0 of 3000 max characters



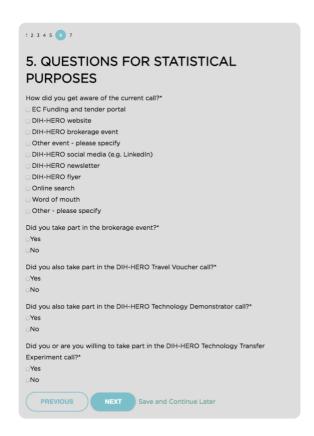


Description of your solution in the fight against COVID-19.*
0 of 3000 max characters
Please provide a detailed description about your solution in the fight against COVID-19.
Clinical letter of support that confirms the need for the COVID-19 solution* Choose file No file chosen
Please upload the clinical letter of support which confirms the need for the COVID-19 solution here. Added value of your solution in the fight against COVID-19.*
0 of 3000 max characters
Please describe the added value and the support offered by your innovation in the fight against COVID-19. Impact of your solution in the fight against COVID-19.*
0 of 3000 max characters
Please provide a description about the effective impact your innovation has in solving the identified clinical demand or need.
Implementation plan for the proposed action*
i.
O of 3000 max characters Please provide a description the needs and requirements and the steps to be taken in order to implement the
Please provide a description the needs and requirements and the steps to be taken in order to implement the proposed projects in the next couple of weeks. Source and level of current investment in the technology*
0 of 3000 max characters
Please provide a description of the current investment in your technology to be applied in the fight against COVID-19
COVID-19 project budget estimation* Choose file No file chosen
Please upload the estimated budget, using the budget template.
PREVIOUS NEXT Save and Continue Later















Appendix 2: DIH-HERO Consortium Members

- 1. Universiteit Twente (UT)
- 2. Universitätsklinikum Aachen (Aachen)
- 3. Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. (FhG-IPA)
- 4. Commissariat à l'énergie atomique et aux énergies alternatives (CEA)
- 5. Scuola Superiore di Studi Universitari e Perfezionamento Sant'Anna (SSSA)
- 6. Politecnico di Milano (POLIMI)
- 7. Fondazione Istituto Italiano di Tecnologia (IIT)
- 8. Fundacion Tecnalia Research & Innovation (TECNALIA)
- 9. Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR)
- 10. Imperial College of Science Technology and Medicine (Imperial)
- 11. Teknologisk Institut (DTI)
- 12. Interuniversitair Micro-electronica Centrum (IMEC)
- 13. Elektrotehnički fakultet, Univerzitet u Beogradu (ETF)
- 14. Eidgenössische Technische Hochschule Zürich (ETH Zürich)
- 15. Fundacja Rozwoju Kardiochirurgii im. prof. Zbigniewa Religi (FRK)
- 16. Fundacio Eurecat (EURECAT)
- 17. iTechnic GmbH (iTechnic),





Appendix 3: Declaration of honour

Declaration of honour

Name of orga	nisation:	
☐ The under	signed, hereby declares and confirm	s the following:
	We have read, understood and will or requirements.	comply with the open call details and
	All information provided in the DIH-F 2020 proposal submitted by our enti	IERO Fighting against COVID-19 call by is correct and complete.
		s legal status submitted is correct (e.g. respect to the SME or slightly larger
		withdraw the DIH-HERO technology time, and we will not be penalised for
	Our company is not in any situation, financial support for third parties.	which would exclude us from receiving
•	Our company is not under liquidation	or in financial difficulty.
	Our company is not subject to a concascade funding.	flict of interest in connection with the
	We will inform the DIH-HERO conso considered a conflict of interest or w	rtium, without delay, of any situation nich could raise a conflict of interest.
	We will process any personal data ir national law on data protection.	compliance with the applicable EU and
Name entity represent	ative Date	Signature





Appendix 4: Declaration of informed consent for data processing

Declaration of informed consent for data processing and storage

Na	me of organisation:
	The undersigned, hereby declares and confirms the following:
	We have read and understood the open call details and requirements.
	 We aware of the fact that the contact and company details provided in the proposal submission form will be processed by the DIH-HERO consortium for the purposes of the open call for technology transfer experiment under the DIH-HERO innovation action.
	 We are aware of the fact that the data provided may be shared with the Coordination Support Action RODIN in order to cross-check if multiple proposals with the same content have been submitted or if the 300k limit is reached.
	 We aware of the fact that the contact and company details provided will be stored by the DIH-HERO consortium for reporting purposes to the European Commission.
	 I am aware of the fact the any personal data obtained in the framework of the DIH-HERO technology transfer experiment call will be processed in compliance with the Regulation (EU) 2016/679 General Data Protection Regulation.



Name entity representative

Signature

Date