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# Digital Innovation Hubs in Healthcare Robotics

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## COVID-19 RESPONSE AND DEPLOYMENT OPEN CALL



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**DIH-HERO COVID-19 Response Open  
Call 2021**



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***Purpose & Framework of the DIH-  
HERO COVID-19 Response and  
Deployment Call***

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# DIH-HERO COVID-19 Response Open Call 2021



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## Purpose

- ◆ Accelerate the **embedding of robotic applications** in healthcare-related settings
- ◆ Enable the **smooth deployment** of new, effective robotic-based solutions
- ◆ Stimulate **technology pull** from the healthcare-related settings by removing barriers boosting fast, high quality, impactful large-scale deployment of robots in clinical environments, satisfying a current clinical demand or need
- ◆ Focused on **broad solutions and robotic applications** related to the current situation including **COVID-19 response, recovery** and support in daily challenges still existing due to the pandemic as well as **post-COVID-19 challenges**.

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## Major objective

- ◆ Launch **4 project pilots in 4 different countries**
- ◆ Embed **robotic applications in healthcare-related environments** (excl. disinfection since disinfection robots have already been funded under other European Initiatives), **satisfying a current clinical demand or need** related to COVID-19.

# Major application domains



## Diagnostic Robotics

Human function analysis; Automated imaging Robotics,...

## Interventional Robotics

Surgical robotics, Image guided Robotics, Training robots,...

## Rehabilitation Robotics

Wearable exoskeletons, Stationary devices, Mobile training devices,...

## Robotics supporting patients

Functional support robots, Robot Assistants, Communication robots,...

## Robotics supporting healthcare professionals

Ergonomical robots, Telepresence robots, Workflow optimization,...

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## Framework

- ◆ Legal entities being an SME or slightly larger companies from EU (incl. associated countries) / EEA countries are eligible to receive funding.
  - ◆ Proposals must clearly state the **relevant clinical demand** and the healthcare problem related to COVID-19 to be solved by the proposed robotic system and the added clinical value of the solution.
  - ◆ The proposed solution must be an already existing robotic system that is in the **later stages of development (TRL7-8)** and deployable by the 4 healthcare end-users in 4 different countries.
  - ◆ The proposal must fit to the call text.
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## Framework (2)

- ◆ A third party may not receive more than €300k total grant funding from the DIH-HERO FSTP calls.
- ◆ Proposal must be written in English and submitted via the portal before the deadline.
- ◆ There must be no conflicts of interests with DIH-HERO consortium partners.
- ◆ Third parties receiving financial support must be financially healthy (a financial declaration must be signed as a condition of the award).

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## Framework (3)

- ◆ The proposal must describe how the services / expertise of the DIH-HERO network will be used during the execution of the project.
- **During the 9 months** project duration the robotic application must be deployed in **4 healthcare related settings located in 4 different countries.**
- The minimum possible deployment phase is 6 months spread over the 4 different end-users; however, **the deployment period must be maximized to the extent possible.**



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***How to form a Project consortium?***

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## Consortium formation

The project consortium must at least consist of:

- ◆ 1 SME or slightly larger company and 4 end-users (e.g. hospitals) from 4 different EU (incl. associated countries) /EEA countries.

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## General Definition of an SME

- ◆ According to the general SME definition stated in article 2 of the annex to Recommendation 2003/361 EC
- ◆ “To count as an SME, your organisation must be engaged in an economic activity and must have:
  - ◆ fewer than 250 employees and
  - ◆ an annual turnover of no more than €50 million and/or a balance sheet of no more than €43 million
- ◆ Whether you count as an SME may depend on how you count your workforce, turnover or balance sheet. Please note that you must take account of any relationships you have with other enterprises.

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## General Definition “Slightly larger company”

- ◆ To count as a slightly larger company than an SME, your organisation 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 a slightly larger company than an SME may depend on how you count your workforce and turnover. Please note that you must take account of any relationships you have with other enterprises.

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***How to prepare your proposal?***

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## Proposal content

### 1. Administrative Data

- ◆ Basic contact data of the project partners
- ◆ Full title of the project
- ◆ Short name of the project
- ◆ Brief description (short abstract of approx. 8 -12 lines)
- ◆ Targeted application domain
- ◆ Current TRL
- ◆ Project duration (max. 9 months)

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## Proposal content (2)

### 2. Description of the Project (Proposal Template)

The following sections also described in the proposal template will serve as the primary evaluation criteria:

*Excellence (weight 20%) (max. 2 Pages)*

- ◆ Clear definition of the **current clinical demand or need** related to COVID-19 (direct COVID-19 and post-covid-19 challenges) **addressed** by the robotics solution is given
- ◆ There is a clear description of the **ambition** for the proposed deployment.
- ◆ The **soundness of the technical approach** is elaborated on.
- ◆ There is a **clear demonstration of the novelty and inventiveness** in the proposed approach and solution.

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## Proposal content (3)

- ◆ The applicant shows a **clear understanding of the relevant current state deployment** and the contribution made by the proposal to advancing it
- ◆ The applicant shows a clear understanding of the **clinical or healthcare relevance** of the proposal.

### *Impact (weight 40%) (max. 4 Pages)*

- ◆ A clear description of the healthcare **impact and added value** of the solution and its deployment is provided.
- ◆ How **successful deployment** of the robot in the clinical settings can be recognised (what does success look like from the applicant's perspective?) is clearly described.
- ◆ The **impact on healthcare professionals and healthcare processes** is defined.



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## Proposal content (4)

- ◆ A **risk assessment** of robot deployment in the proposed clinical settings and mitigations is provided.
- ◆ The **potential to up-scale** the solution is identified.
- ◆ There is an elaboration on the **benefits to the end-user**.
- ◆ There is an elaboration on the **financial impact of deployment** for the end-user.
- ◆ A business model and funding plan for **large scale deployment** is outlined.
- ◆ The necessary **standards and regulatory compliance** needed for successful deployment are described.
- ◆ The **contribution** made to the **EU wide adoption** of Robotics in Healthcare is explained.
- ◆ There is evidence that the robotic application proposed has **not yet been deployed on a larger scale** in the clinical setting (deployed in less than 2 European countries (TRL 7-8))

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## Proposal content (5)

*Implementation (weight 40%) (max. 4 Pages)*

- ◆ The **involvement of end-users** in the implementation and deployment processes is clearly explained in **4 different deployment work packages**.
- ◆ The **process of deployment** at each end-user site is clearly explained.
- ◆ The deployment **challenges** are clearly identified.
- ◆ The **team capabilities** and management capacity needed to achieve the outcomes are explained.
- ◆ A **work plan**, specifying the work division among partners (incl. deliverables and milestones) has been developed.
- ◆ There is a description of the **resource utilization** and efficiency.

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## Proposal content (6)

- ◆ The **resources and training needed at the end-user sites** for successful deployment are clearly identified.
- ◆ The approvals and consent needed to operate successfully at each of the end-user sites and the timeline to acquire them are clearly documented.
- ◆ There is a description of the **management and monitoring** approach used to track project and deployment progress, especially at the end-user sites.
- ◆ *Partner profiles (max. 0.5 -1 page per partner)*
- ◆ *Ethical considerations (max. 2 pages)*

Please note: The robotic application must be deployed in 4 healthcare-related settings located in 4 different countries. The minimum possible deployment phase is 6 months spread over the 4 different end-users. However, the deployment period must be maximised to the extent possible. Each deployment trajectory must be described in a separate work package.

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## Proposal content (7)

3. Budget estimation

4. Signed declaration of honour

5. Signed declaration of informed consent for data processing

6. Questions for statistical purposes

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## Eligible cost categories:

- ◆ Direct personnel costs
- ◆ Direct costs of subcontracting (maximum of 15% of the total estimated budget).
- ◆ Other services and goods
  - ◆ Direct travel and subsistence cost
  - ◆ Equipment
  - ◆ Other goods and services
- ◆ Indirect costs (25% of direct personnel costs and other direct costs)

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## Eligible costs

The basic criteria for costs to be generally eligible are:

- ◆ Costs must be actually incurred by the awarded third party
  - ◆ Costs must be necessary for implementing the project
  - ◆ Costs must have been incurred within the project duration of the project
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- Please note that it is only possible to include infrastructure hardware in the budget that is needed to embed a working solution in the healthcare-related setting, as this call focuses on the deployment of a working solution. In addition, the majority of the budget must be distributed to the SME/ slightly larger companies, whereas it is allowed to allocate some budget for cost coverage to the end-users.

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## Eligible costs (2)

- ◆ Costs must be identifiable and verifiable and recorded in the accounts of the awarded third party, in accordance with the accounting standards applicable in the country where the awarded third party is established and with the awarded third party's usual cost accounting practices.
- ◆ Costs must comply with the applicable national law on taxes, labour and social security.
- ◆ Costs must be reasonable and justified and must comply with the principle of sound financial management, in particular regarding economy and efficiency (Best-value-for-money principle).

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## Ethical considerations

- ◆ 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”.
- ◆ Ethical issues might refer to research with respect to e.g. humans, protection and processing of personal data, animals, environmental protection, and safety, etc.



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## *The evaluation process*

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## Proposal Evaluation

- ◆ Phase 1: Eligibility check
- ◆ Phase 2: External Review
  - Each proposal will be reviewed by three independent reviewers. Each evaluator will rank the proposal by a score from 0 to 5 for each criterion. 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 10.
- ◆ Phase 3: Consensus
  - All Individual Evaluation Reports will be combined and discussed at a consensus meeting where all reviewers will be present. The outcome will be a ranked list of all proposals, based on the scores obtained by each proposal and the discussions of the reviewers at the consensus meeting.

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## Proposal Evaluation

### ◆ Phase 4: Hearings

- The applicants whose proposals have been ranked under highest 20 proposals during the consensus meeting will be invited for hearings. The outcome will be a ranked list of proposals based on the hearings.

### ◆ Phase 5: Final Ranking

- DIH-HERO is aimed to award up to 8 of the highest-ranked proposals, provided that they have a score above threshold. If a consortium is chosen to be awarded, it will only receive the requested amount as mentioned in their respective budget estimation.

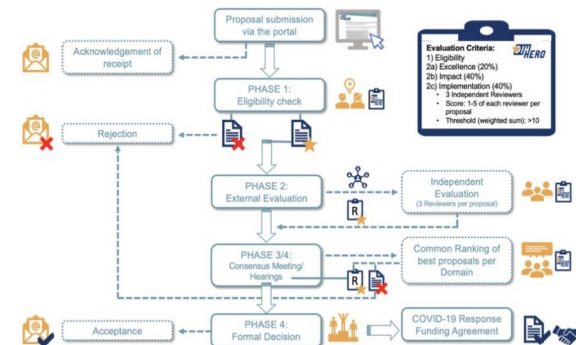
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## Review phases and estimated timeline

### ◆ Call deadline: 15<sup>th</sup> of January 2022

- ◆ Pre-submission completeness check
- ◆ Eligibility check (approx. February)
- ◆ External Review (approx. March)
- ◆ Consensus and Ranking (approx. April)



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*After awarding*

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## Agreements and Contracting

- ◆ Once a proposal has been awarded funding, a funding agreement will be signed between the awarded SME/ slightly larger company (as coordinator of the project, representing the partners) and the coordinator of the DIH-HERO innovation action, representing the DIH-HERO consortium members.
  
- ◆ The project partners will have to sign a partner / collaboration agreement

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## Payment schedule

- ◆ The payment structure will be for the projects is defined as follows:
  - ◆ 40% of the payment will be released when the contracts with the clinical partners are signed.
  - ◆ Final payment will be made based on the achievements/ finalization of the different Deployment Work Packages.

The reimbursement rate for the eligible costs incurred is 100%.

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## Clinical deployment support

- ◆ For each project a tailored package of clinical deployment support will be offered by the DIH-HERO consortium, based on the project proposal.



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## Important links and Information for proposal preparation

Call documents and templates:

<https://dih-hero.eu/covid-19-response-open-call-2021-for-healthcare-robotics/>

Expression of interest for call participation:

<https://dih-hero.eu/expression-of-interest-for-clinical-deployment/>

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# IMPORTANT DATES

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- ◆ Clinical Deployment call deadline: 15th of January 2022
- ◆ Opening Technology Demonstrator Call: Beginning of 2022

**If you have further questions,  
please do not hesitate to contact us!**



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## *Questions & Answers*