

# Call for Expression of Interest

Solutions for rapid improvements in understanding, mitigating and responding to COVID-19 pandemic

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## Actions in response to Covid-19 pandemic

- Common EU approach for the use of mobile applications and mobile data for the gradual lifting of coronavirus containment measures
- EU toolbox for the use of mobile applications for contact tracing and warning in response to the coronavirus pandemic
- AI-ROBOTICS vs COVID-19 collection of ideas on deployable AI and robotics solutions
- Exscalate4CoV project using supercomputers to research drug therapy against COVID-19
- EU initiatives and projects working on computer based modelling to estimate the scale and duration of outbreak, help monitoring, support mitigation measures etc.



## Second call for an Expression of Interest -Background

- Societal Challenge 1 (Health) part of the H2020 Work Programme
- First expression of interest published in January 2020, led to funding of 18 projects in March 2020: <u>ec.europa.eu/info/sites/info/files/research\_and\_innovation/research\_by\_area/documents/ec\_rtd\_cv-projects.pdf</u>
- First expression of interest focused on advancing the knowledge on SARS-CoV-2 and its impact on infected persons, efficient patient management etc.
- Second expression of interest complements the first one, so does not target new diagnostics, therapeutics or vaccine compounds or solutions



## Second call for an Expression of Interest

- Calling for innovative and rapid health-related approaches to respond to COVID-19 and to deliver quick results for society for a higher level of preparedness of health systems
- Aiming at rapid delivery of innovative solutions to contain and mitigate the outbreak and to better care for patients, survivors, vulnerable groups, frontline (health) care staff and their communities
- 5 different topics covering the areas of adaptive production methods and innovative mature technologies to address immediate needs in health care provision; practical evidence-based guidelines on containment and mitigation measures; identification of factors influencing the susceptibility to infection and therapeutic response



## Scope of the Call – Common to all topics

- Strong involvement of end-users
- Making healthcare systems and societies more resilient to pandemics in terms of prevention, protection and treatment of the population and COVID-19 patients
- Faster, more impactful, cost-effective and larger scale implementation of innovative solutions to respond to the COVID-19 pandemic
- Gender-related issues
- Complete and deploy readily available solutions



- A. Repurposing of manufacturing for vital medical supplies and equipment *total budget EUR 23 million*
- B. Medical technologies, Digital tools and Artificial Intelligence analytics to improve surveillance and care at high Technology Readiness Levels – total budget EUR 56 million
- C. Behavioural, social and economic impacts of the outbreak response *total budget EUR 20 million*
- D. Pan-European COVID-19 cohorts total budget EUR 20 million
- E. Networking of existing EU and international cohorts of relevance to COVID-19 total budget EUR 3 million



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#### Innovation Actions – two categories

Innovation Actions of one of the following two categories to:

1) Support solutions that are close-to-market (TRL7) in one of the areas mentioned below and that have already received, or are about to receive, the CE marking to proceed to large scale testing, piloting and deployment operations in critical healthcare areas (or wherever else is relevant) (type 1);

2) Support market innovation (from lab-to-fab) for further developing and maturing innovative solutions that have already been validated in lab environments (TRL 6-7 or higher) with the aim to help accelerate developments and achieve conformity assessment (CE marking) (type 2).



#### For whom?

- Consortia consisting of innovative technology providers, including SMEs, and/or organisations that can offer the range of activities required to address the objectives of the topic.
- The innovative technology providers can be either **members** of the applicant consortia or selected through **open calls** organised by the consortium using financial support to third parties.
- The support offered could include access to product development, accelerator, incubator and technical services and capabilities such as testing and experimentation facilities together with expertise, prototyping, design, engineering or pilot manufacturing services as necessary, as well as providing support for medical certification and clinical validation. Any use of third party grants must result in minimal administrative burden for participants, and allow the fastest possible launch of the projects.



#### Area(s) to be addressed

The proposals should address **one or more** of the following areas:

**a)** fast, cost-effective and easily deployable sampling, screening, diagnostic and prognostic systems, including new methods for screening of lungs, using for example AI or advanced photonics solutions, to detect the presence of the pathogen related parameters especially in an early stage of infection;

**b)** environmental surveillance (sewage, air, etc.) systems and data analytics as a sentinel for viral (re)emergence and spread in communities, based for example on optical biosensors or genetic detection;

**c)** low cost sensors, smart wearable devices and robotics/AI for telemedicine, telepresence and continuous remote monitoring of patient parameters;



#### Area(s) to be addressed

**d)** protection of healthcare practitioners and the general public improving for example the wetting and filtering properties of fabrics used for face masks; sensors, sterilisation, including robotics and AI solutions, for disinfection and social distancing in environments such as healthcare, public spaces and buildings;

**e)** innovative data-driven services and tools combining data assets from various relevant privately held and/or publicly available sources. These could include AI-based solutions exploiting such data and possibly additional sensor-based signals, for diagnostics, prevention, treatment, or rehabilitation. Where appropriate, privacy, data protection and anonymity in the use of mobile warning and prevention applications, as referred to in the Commission Recommendation C(2020) 2296 of 8 April 2020 on a common Union toolbox for the use of technology and data to combat and exit from the COVID-19 crisis, should be ensured.



#### **Expected** impact

- To contribute to the public health preparedness and response in the context of the ongoing epidemic of COVID-19 and to ensure the availability of critical technologies and tools.
- To contribute to the acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, coverage, and sustainability of diagnosis and clinical management of patients and survivors of COVID-19.
- To contribute to proposing recommendations for changes that would allow a fast recovery and a better preparedness, including in the health care systems, for future health emergencies.
- To accelerate the deployment and market uptake of mature health technologies for the prevention and optimised treatment of the COVID-19 disease, by delivering results within 3-24 months to end-users at scale.



#### Expected EU contribution per proposal

- Between EUR 2 and 5 million funding per proposal
- specify which type of category 1) or 2) above they are addressing; at least one proposal will be selected in each category.
- For proposals with financial support to third parties (FSTP), up to EUR 10 million may be requested.
- maximum duration is 2 years.



#### Financial support to third parties (FSTP)

- For FSTP see <u>part K of the General Annexes</u> of the Work Programme; typically in the order of EUR 20.000 to 100.000 per third party. The support to third parties may only be provided in the form of grants.
- Details on the FSTP to be included in Section 4.3 of the proposal: objectives and results to be obtained with the FSTP; closed list of activities that qualify for financial support; criteria for awarding financial support and for calculating the amount of the financial support, etc.
- Applicant consortia planning to launch competitive calls should be ready within a month with fast-track proposal selection and launch; provide evidence how to reach a very large number of potentially interested organisations; demonstrate that they can handle actions of this kind and scale (e.g. through a proven track record).



## Don't forget... some practical tips

- Respect the page limits in your proposal 45 pages for Sections 1-3 of Part B
- Make sure you address and submit under the correct topic
- Consider if a stand-alone IA project or one with third-party funding is more appropriate
- Get somebody who was not involved to read your proposal "it was so obvious to the proposers what they were planning that they forgot to mention it"
- Check the PDF conversion of your proposal
- Call deadline is June 11 at 17:00 Brussels time but please do not wait until the last minute (or even the last day) to submit; submit early and update as necessary







# A. Repurposing of manufacturing for vital medical supplies and equipment

- B. Medical technologies, Digital tools and Artificial Intelligence analytics to improve surveillance and care at high Technology Readiness Levels
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#### Repurposing of manufacturing for vital medical supplies and equipment (IA)

- Repurposing, adaptation and ramp-up of production lines to quickly adjust to new and urgent production needs, notably medical equipment (e.g. personal protective equipment, ventilators), diagnostic technologies already deployed based on advanced materials and/or biotechnologies, as well as service systems and automated systems of disinfection,
- Demonstrate flexibility models for the supply chain for the repurposing of production lines and proper risk management in case of disruption of supply chains (or other necessary means for enabling production, such as energy feedstock),
- Automation technologies that are less dependent on work force present in factories, certification/calibration/accreditation of production lines that have been repurposed or restarted after a shutdown,
- Qualification of operators/technicians for new/repurposed production lines.

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# Behavioural, social and economic impacts of the outbreak response (RIA)

Proposals are expected to develop guidelines and best 'next practices', and implement interventions to mitigate impacts and boost wellbeing.

Proposers are encouraged to integrate multiple medical, social sciences and humanities disciplines, in order to

- analyse and compare outbreak responses across Europe and impacts on human behaviour and social dynamics by different regions and countries;
- address the immediate and long-term mental health impact in relation to, for example, confinement and social isolation.



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# Pan-European COVID-19 cohort(s) united against the pandemic (RIA)

Population-based COVID-19 cohort with non-infected and infected individuals, to rapidly identify risk and protective factors; deliver evidencebased recommendations; identify the most successful clinical management options and treatments

# Networking of existing EU and international cohorts of relevance to COVID-19 (CSA)

Pooling of data from multiple existing cohorts to provide evidence-based recommendations for health policies in preventive strategies, protective actions, and disease management; creating a cohort framework to rapidly address pandemics in the future.



#### Funding & Tenders Portal

- SC1-PHE-CORONAVIRUS-2020-2A Repurposing of manufacturing for vital medical supplies and equipment <u>https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/sc1-phe-coronavirus-2020-2a</u>
- SC1-PHE-CORONAVIRUS-2020-2B Medical technologies, Digital tools and Artificial Intelligence (AI) analytics to improve surveillance and care at high Technology Readiness Levels (TRL) <u>https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/sc1-phe-coronavirus-2020-2b</u>
- SC1-PHE-CORONAVIRUS-2020-2C Behavioural, social and economic impacts of the outbreak response
  <u>https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/sc1-phe-coronavirus-2020-2c</u>
- SC1-PHE-CORONAVIRUS-2020-2D Pan-European COVID-19 cohorts
  <u>https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/sc1-phe-coronavirus-2020-2d</u>
- SC1-PHE-CORONAVIRUS-2020-2E Networking of existing EU and international cohorts of relevance to COVID-19
  <u>https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/sc1-phe-coronavirus-2020-2e</u>

This is the only official source of information concerning the topics. Any changes will be reflected here.





