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| Logo of the European Commission | EUROPEAN COMMISSIONDIRECTORATE-GENERAL FOR RESEARCH & INNOVATIONDirectorate TF - European Innovation Council**TF.2 - Innovation ecosystems** |

EU R&I hackathon against COVID 19

**“EU United Against the Virus” Hackathon**

**#EUvsVirus**

Innovators, start-ups and makers of all sorts in Europe are working to develop innovative solutions to be deployed in the short-term to alleviate the negative consequences of the corona crisis. This work complements what researchers are doing in areas such as vaccines. There are five areas that have been identified as targets for these innovative solutions: Health & Medicine, Business Continuity, Social Cohesion, Protection of Risk Groups, and Education.

We all know that hospitals and elderly residences are having problems with supplies in health material, from respirators to masks. Business continuity is also disrupting the economy in many European Member States. Students are moving into e-learning without a transition phase. All these issues need urgent short-term solutions that only innovators and startups can provide in a fast an efficient way.

Many online hackathons have been organised across Europe since the beginning of March. There have been hackathons in Estonia, Finland, Poland, Italy, Belgium, and many more are also planned to take place in the coming weeks. The largest hackathon has been the one organised in Germany on 20 March for 48 hours with 42869 participants who developed 800 projects.

**#EUvsVirus - The pan European hackathon**

Together with European society, the European Commission is looking for solutions to challenges related to the coronavirus. Between 24 and 26 April, the first pan-European hackathon is organised to address the very acute problem of COVID-19. The Pan-European hackathon *#EUvsVirus* is a joint event between the European Commission and actors from similar national initiatives from Member States on whose experiences the EU hackathon is building. It is expected a participation of 60k European citizens to #EuvsVirus hackathon.

Innovators from all industries, as well as committed citizens, are invited to take part in this important event. Participation is possible on the dedicated website <https://euvsvirus.org/> and on Twitter at *#EUvsVirus.* The hackathon offers a common organizational and technical framework in which the participants can get involved online and develop working prototypes and solutions for technically, politically and socially relevant issues with regard to the corona crisis. It aims at commonly developing innovative solutions, e.g. high tech, low tech, hardware, software, etc., using biotech, digital tech, societal science and other innovation domains.

The event will be open to the European community of innovators, startups, makers, retailers, public and private buyers, end users etc. The overarching purpose of this event is to match-make and connect innovators, partners, buyers across Europe for the benefit of addressing imminent corona crisis issues (e.g. fast production of equipment, scaling up production capabilities, knowledge and solutions transfer from one country to another) and across various technological fields.

#EUvsVirus will allow for the submission of ideas and creation of teams in all EU languages. This means that there will be teams composed of individuals from several EU Member States and others where the participants will come exclusively from one MS. We do not want to miss any good idea simply because it is not in English.

**EU Institutions and European organisations engagement**

In addition, to the European Commission (with the EIC as leading service) other EU institutions are also interested in supporting #EUvsVirus Hackathon, notably European Parliament and the Committee of the Regions. European associations such as European Universities Association, European Clusters Association, EUTechAlliance, Medecins Sans Frontiers and others EU associations representing innovators and civil society will be also part of the partners that will support this panEU hackathon.

**What after?**

One of the main concerns related to the hackathons organised until now is the difficulties to follow up on the best projects stemming from the hackathon. To this aim, the pan European hackathon will provide avenues for uptake by end-users or follow-up development. The best solutions will be invited to join the European Innovation Council (EIC) Community Platform that will facilitate connections with end users (e.g. hospital) and will also provide access to investors, foundations and other funding opportunities from the EIC and other EU financial support mechanisms. It will also be a starting point of a much longer collaboration between the European Commission and the ecosystems of innovators, makers and startups across Europe in relation to the corona crisis. In addition, it will strengthen the overall ability of Europe to act together and respond to critical situations, such as the corona crisis.

**Detailed information**

The web site of the #EUvsVirus panEU hackathon was launched on Friday April 3rd. It includes now 27 countries (24 MSs plus 3 associated countries to H2020) in the group of National curators. The organisers of the national hackathons related to coronavirus are the partners of the European Commission on this pan European hackathon and are part of the group of National curators. In some cases, in addition to the organiser of the national hackathon the government has nominated a person to be in contact with the Commission about the daily activities related to the#EUvsVirus. The detailed list of national curators is included in Annex 1.

The ambition of #EUvsVirus is to get 60k participants in teams of 6-10 participants per team. It requires a strong IT infrastructure and a clear definition of the process. Consequently, all processes will be fully automated (see Annex 3). The hackathon will follow a 7 phases approach: sign up, choose challenge, the hacking, solution submission, voting and follow up (see Annex 4).

The teams will be composed of professionals from any sector of the economy and the society at large. Contrary to hackathons that are traditionally focused on IT, #EUvsVirus hackathon is positioned at the crossroad of the civil society and innovation ecosystem. It is designed as a new way of policy making and citizens engagement.

#EUvsVirus hackathon will be structured around 7 categories of problems that need short term solutions in relation to coronavirus. Each category will be split into 5/6 specific challenges that help the teams to focus their projects and ideas. Eventually, each challenge will be split into 5/6 tracks. Each track will describe a very specific problem that needs to be solved. The teams will chose the track that they want to address with the project. A first set of categories and challenges is detailed in Annex 2.

**ANNEX 1. Countries represented in the National Curators Group**

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| Austria | Italy |
| Belgium | Latvia |
| Bulgaria | Lithuania |
| Croatia | Malta |
| Cyprus | Netherlands |
| Denmark | Poland |
| Estonia | Portugal |
| Finland | Romania |
| France | Slovenia |
| Germany | Spain |
| Greece | Sweden |
| Hungary | Turkey |
| Ireland | Ukraine |
|  | Switzerland |

**Annex 2. Set of categories and challenges**

**1. Health & Life:** Address and scale a range of health initiatives, including hardware, supporting frontline health workers, scaling telemedicine, contact tracing/containment strategies. It should also address fragmentation of current efforts. e.g., how to ensure that all countries can locally produce one ventilation machine instead of the 65+ open versions currently being designed/built?

*Challenges:*

**Ventilator challenge** **–** e.g. easy-to-build ventilators, easy to fix ventilators, easy to convert ventilators, easy to transport ventilators to treat COVID19.

**Protective equipment challenge** – e.g. fast producing and scaling of protective materials for medical staff and patients.

**Remaining safe** for front line medical personnel **challenge –** e.g. robots assisted tele-presence of medical staff in intensive care units, automatic sterilization systems of ICUs, early and remote detection of infections.

**Direct contact of citizens with medical personnel remotely challenge – e.g**. Remote Medical Assistance, Preventive Medicine, Telemedicine, Drone, Facilitating Clinical Procedures, App, Metadata, Home Help

**Platform for the availability of necessary pharmaceuticals and their remote shipment challenge**

**Proof of immunity for people with COVID-19 antibodies** – e.g serological test that indicate that a person is not susceptible to COVID-19 and thus able to return into society safely for him/her and others.

**Others –** e.g applications, methods, hardware relevant for this category. The above challenges are just suggestions. Feel empowered to get creative!

**2. Support quarantined people or at risk.** It is about supporting quarantined or self-isolated people to remain safe and sane.

*Challenges:*

**Assisting people in need** **challenge** avoiding risk exposure for those helping – e.g remote medical controllers for personal health of those isolated, food delivery systems, cabin fever relieve, applications for reporting symptoms.

**Assisting people in need** with *economic and social issues* **challenge** – e.g. fast accommodation solutions for those in domestic conflicts distress, basics providing for those with no financial possibilities. Apps for the public to inform themselves about the Covid situation and to report symptoms would also be useful.

**Reaching vulnerable communities challenge** – e.g. the elderly or people with pre-existing health conditions, and maintain their safety during the crisis.

**Psychological distress assistance challenge –**e.g. easy communication and fast intervention in case of need, senior communication spaces where elderly can connect to a variety of interactions and services witht heir loved once.

**Others –** e.g applications, methods, hardware relevant for this category. The above challenges are just suggestions. Feel empowered to get creative!

**3. Remote working and education** Address the critical issues, which put under high stress people due to the remote working and remote education

*Challenges:*

**Remote working easy making** **challenge** – e.g. make it easier to be productive at home and not be isolated, improve ways of communicating or find ways to make it easier for people to complete their role outside their offices.

**Remote education challenge – e.g. a**lternative learning environments and tools for pupils, teachers, and entire school systems with consideration also for the parents needs and high daily stress.

**Childminding for toddlers and preschool children**

**Others –** e.g applications, methods, hardware relevant for this category. The above challenges are just suggestions. Feel empowered to get creative!

**4. Businesses**: Address the set of problems that businesses are facing to stay afloat, collaborate effectively, restructure, re-profile and move online.

*Challenges:*

**Demonstrate purpose challenge–** by which companies need to figure out how to support response efforts, e.g. by shifting production to create medical equipment.

**Find & fit a solution challenge –** e.g. harvest the solutions that are immediately available and scalable to be provided urgently to hospitals.

NB. Projects at the ideation stage are not helpful as the capacity of hospitals to absorb new ideas is currently very limited.

**Protecting employees challenge**– e.g. design a plan to support employees that is consistent with the most conservative guidelines that might apply and has trigger points for policy changes

**Stay close to your customers challenge –** e.g. ways to move online as part of the push for omni-channel distribution.

**Startups & SMEs cashflow challenge –** e.g. solutions to manage risk and cash flow? When consumers are not spending, how would you reach them- online or offline?

1. **Arts & Entertainment.** With 30% of the world’s population under lockdown, virtual classes/ shows and even online pub quiz are taking over.

*Challenges:*

**Restore citizen’s trust when attending future cultural events.** This is a challenge post-lockdown, but worth to start thinking about how to ensure people will go again to museums, bars etc.

**Cultural agenda’ dissemination.** Many cultural events are taking place virtually, but  not everyone is aware of them. How to ensure it arrives to a great audience?

1. **Social & political**

*Challenges*

**Locating the vulnerable population challenge –** mapping the situation of people **in vulnerable situations**

**Mitigating fake news spreading challenge –** e.g automatic systems for filtering fake news.

**7. Other:** Any other challenge related to the COVID crisis, which can find a solution inside the pan-European hackathon. Feel empowered to get creative!

**Annex 3. Detailed users map: before, during and after the hackathon**



**Annex 4. 7 phases of the hackathon**

