



PERISCOPE

Pan-European Response to the Impacts of COVID-19 and future Pandemics and Epidemics

Short description

3 December 2020



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The impact of the COVID-19 pandemic has been deep and wide, and the timeframe for transitioning out of the emergency is still uncertain as of November 2020, almost a year after the first known cases. In spite of unprecedented efforts to understand the nature of the disease and its causative virus SARS-CoV-2, months after the first cases in Europe emerged significant knowledge gaps persist. While scientists from different disciplines are developing new research to shed light on the dynamics of the outbreak and the most effective possible containment and mitigation measures, governments are faced with the need to adopt urgent decisions. In the absence of therapies or vaccines, so far non-pharmaceutical measures (social distancing, protective measures, travel measures) have been the only available options. These measures have had broad and significant impacts on individual liberties, the economy, and the health and well-being of individuals and society.

The health and socio-economic effects of the COVID-19 pandemic are still largely unknown: policy measures have been adopted in the absence of consolidated evidence, especially for what concerns the medium- to long-term impacts.

Policy making has been made more difficult by the spread of disinformation and the lack of reliable data, further contributing to chaos and affecting fast policy learning. Wide distrust in science impinges on key measures to address the pandemic. When effective vaccines will become available, their actual use may be threatened by increased reluctance or outright refusal to get vaccinated. Several academics and institutions have tried to “pierce the veil” by collecting worldwide data and started to track public policy measures. Among researchers, a very large number of publications have been produced in record time, in the attempt

Problems in the “chain of command” across different levels of government unveiled the cost of economic fragmentation and a lack of agility of governments in finding new ways to support citizens and businesses.

to anticipate the evolution of the outbreak and its overall impact on health and the economy. Increasingly, other important impacts of the pandemic are emerging, including negative consequences of the prolonged lockdown on mental health; impacts on vulnerable and over-exposed groups such as doctors and nurses employed on the frontline of the pandemic; chronic patients, the elderly and adolescents, forced into isolation and (in the latter case) constant online presence; impacts on other vulnerable groups, such as migrants and seasonal workers, as well as severe consequences in terms of employment and

education gaps. Social distancing, quarantine and isolation have also affected the democratic process and public opinion, and so have massive waves of cyberattacks and disinformation campaigns. Importantly, the EU27 (like other countries and regions around the world) has proven to be insufficiently prepared, despite evidence that the outbreak was not only foreseeable but had actually been anticipated. Problems in governance and outstanding challenges in regulatory delivery have unveiled at once the “latency” connected with disrupted global supply chains, and the lack of agility of governments in finding new ways to reach out to citizens and businesses to ensure their survival.

Against this background, PERISCOPE plans to contribute to a deeper understanding of the dynamics of the outbreak, by means of intense multi-disciplinary research, both theoretical and experimental, and the consideration of different viewpoints: clinic and epidemiologic; humanistic and psychologic; socio-economic and political; statistical and technological. PERISCOPE will leverage the power of existing research by merging several data sources and research findings, and providing an unprecedented platform for modelling and analysis, triggering the identification of recurrent patterns, successful policy mixes, as well as best and worst practices. The goal is to develop a comprehensive, user-friendly, openly accessible COVID Atlas, which should become a reference tool for researchers and policymakers, and also a dynamic source of information and data visualisation to disseminate to the general public, thanks to PERISCOPE’s stakeholders and affiliated media outlets.

PERISCOPE will develop a comprehensive, user-friendly, openly accessible COVID Atlas and will guide policymakers and health authorities on promoting resilience and sustainability in the face of pandemics and epidemics.





PERISCOPE: MAIN STRUCTURE AND GOVERNANCE

PERISCOPE is funded entirely with public resources from the Horizon 2020 programme for research and innovation. It started on 1 November 2020 and will last three years. The project counts on 32 partners (see the full list at the end of this document) and is structured around five main clusters:

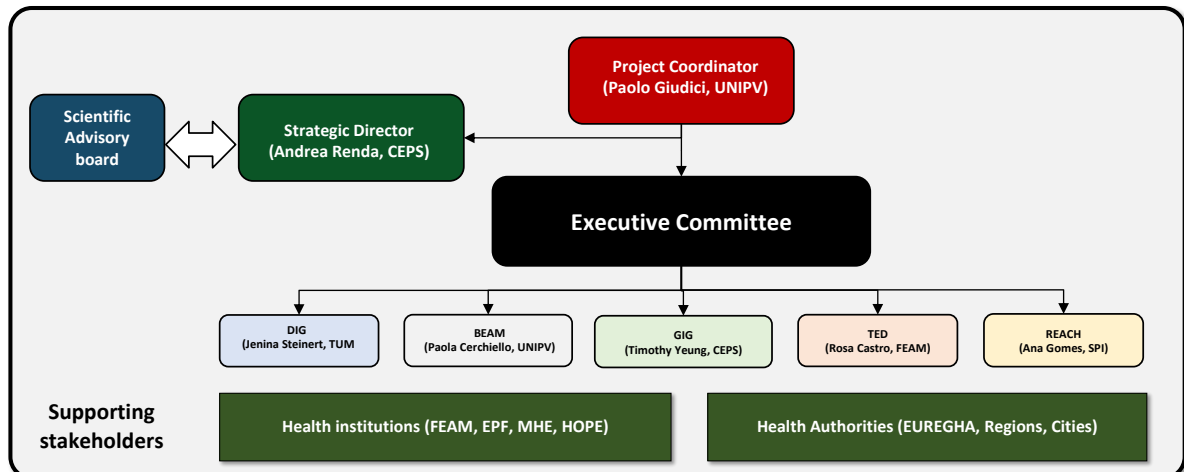
- **DIG (Data, Impacts and Government responses cluster)**. This cluster is dedicated to the collection of data on impacts and government responses. We will rely on a variety of method and existing repositories to collect comprehensive data on social, economic and behavioural impacts, as well as a first assessment of the policy measures adopted at all levels of government during the pandemic. Important streams of our research will be dedicated to the mapping of mental health impacts, health inequalities, and the impact on the capacity and resilience of health systems.
- **BEAM (Behaviour, Experiments, Atlas and Modelling cluster)**. Here we will build an unprecedented COVID Atlas, which will be complemented by sentiment data analysis and behavioural experiments, as well as statistical modelling including dynamic SIR models, correlation network models and Bayesian decision making models. This will allow us to identify patterns and good practices, to be translated into concrete guidance for policymakers.
- **GIG (Governance, Innovation and Guidance cluster)**. This cluster will select innovative solutions emerged during the pandemic, through a call for good practices and an “Innovation Challenge”; and will reflect on how to improve governance at the local, subnational, national, EU and global level, so to promote resilience and sustainability. This will lead us onto a journey full of digitally enabled governance solutions, as well as stronger coordination across levels of government. All our findings will be translated into an interactive guide for policymakers, which will build on a pre-existing software tool called PERSEUS.
- **TED (Testing, Education and Deployment)**. This cluster combines the concrete deployment of innovative solutions with the development of *ad hoc* training sessions for specific stakeholders (e.g. nurses, health authorities, policymakers), based on the key findings of the first three clusters of PERISCOPE.
- **REACH**. This cluster is dedicated to the dissemination of our research results, as well as to the communication of our activities to institutions, stakeholders and the general public.

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The governance of PERISCOPE is shown in the picture below.

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PERISCOPE: LIST OF PARTNERS

UNIVERSITA' DEGLI STUDI DI PAVIA (UNIPV)	Italy
CENTRE FOR EUROPEAN POLICY STUDIES (CEPS)	Belgium
SOCIEDADE PORTUGUESA DE INOVAÇÃO (SPI)	Portugal
FEDERATION OF EUROPEAN ACADEMIES OF MEDICINE (FEAM)	Belgium
JOHANN WOLFGANG GOETHE-UNIVERSITÄT FRANKFURT (GUF)	Germany
DELFT UNIVERSITY OF TECHNOLOGY (TU DELFT)	Nederland
POLITECNICO DI MILANO (POLIMI)	Italy
LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE (LSE)	United Kingdom
UNIVERSITA' DI TRENTO (UNITN)	Italy
UNIVERSIDAD POLITÉCNICA DE MADRID – LIFE SUPPORTING TECHNOLOGIES (UPM)	Spain
ASSISTANCE PUBLIQUE - HOPITAUX DE PARIS (ASSISTANCE PUBLIQUE – AP-HP)	France
POLICLINICO SAN MATTEO (IRCCS OSM)	Italy
ISI FOUNDATION (ISI)	Italy
TECHNICAL UNIVERSITY OF MUNICH (TUM)	Germany
EUROPEAN REGIONAL AND LOCAL HEALTH AUTHORITIES ASBL (EUREGHA)	Belgium
FÉDÉRATION EUROPÉENNE DES HÔPITAUX ET DES SOINS DE SANTÉ (HOPE)	Belgium
AGÈNCIA DE QUALITAT I AVALUACIÓ SANITÀRIES DE CATALUNYA (AQUAS)	Spain
PREDUŽEĆE ZA INFORMACIONE TEHNOLOGIJE I ELEKTRONSKO TRGOVANJE BELIT D.O.O. BEOGRAD (BELIT)	Serbia
MODEFINANCE SRL (MODEFINANCE SRL)	Italy
GENEGIS GI S.R.L. (GENEGIS GI SRL)	Italy
EUROPEAN PATIENTS FORUM (EPF)	Belgium
EHESP SCHOOL OF PUBLIC HEALTH (EHESP)	France
MENTAL HEALTH EUROPE – SANTE MENTALE EUROPE (MHE-SME)	Belgium
NATIONAL INSTITUTE OF MENTAL HEALTH (NUDZ)	Czech Republic
AGORA S.A. (AGORA)	Poland
KAROLINSKA INSTITUTET (KI)	Sweden
STOCKOLM SCHOOL OF ECONOMICS (SIR)	Sweden
UNIVERSITÀ DELLA SVIZZERA ITALIANA (USI)	Switzerland
GHENT UNIVERSITY (UGENT)	Belgium
EQUIPE DE RECHERCHE EN EPIDÉMIOLOGIE SOCIALE, INSTITUT PIERRE LOUIS D'EPIDÉMIOLOGIE ET DE SANTÉ PUBLIQUE (INSERM)	France
INSTITUT FÜR HÖHERE STUDIEN – INSTITUTE FOR ADVANCED STUDIES (IHS)	Austria
INSTITUTE OF VIROLOGY STEFAN S. NICOLAU (IVN)	Romania





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