

INNO4COV-19

Boosting Innovation for COVID-19 Diagnostic,
Prevention and Surveillance.

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This project has received funding from
the European Union's Horizon 2020
research and innovation programme
under grant agreement N°101016203.

INNO4COV-19 at a Glance



€6.188.612,50



24 months



11 partners



Coronavirus Global Response initiative from the European Commission

ACCELERATED UPTAKE OF INNOVATIVE TECHNOLOGIES TO TACKLE COVID-19 AND FUTURE PANDEMICS IS MOST NEEDED!

bioef

berrikuntza + ikerketa + osasuna eusko fundazioa
fundación vasca de innovación e investigación sanitarias

 **BioKeralty**
Research Institute

 **Fraunhofer**
FEP



 **INL**
INTERNATIONAL TUBERCULOSIS
NANOTECHNOLOGY
LABORATORY

 **JOANNEUM**
RESEARCH

 **LEITAT**
managing technologies

 **Obelis**
GROUP

 **Trinity College Dublin**
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin



 **vito**



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Project Aim and Objectives

The mission of INNO4COV-19 is to **create a lab-to-fab platform** and a collaboration resource where companies and reference laboratories will find the tools for **developing and implementing innovative technologies - from idea assessment to market exploitation**. The project is committed to supporting the commercialization of more than 30 new products for combatting COVID-19 over the next 2 years.

Innovative diagnostic and screening systems

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.

Protective equipment for People and safer Public

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.



Environmental surveillance

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.

Sensors & Devices for Telemedicine and Telepresence

Low cost sensors, smart wearable devices and robotics/AI for telemedicine, telepresence and continuous remote monitoring of patient parameters.



Project Aim and Objectives

- 1 Improve Healthcare systems capacity
- 2 Help industry, SMEs and users to fully develop, scale-up, produce and validate “KET-COV-19 products
- 3 Provide support to KET-COV-19 products and subsequent pilot production

Operational Objectives

- 4 Promote an Open Call with two cut-off dates during the 1st year of INNO4COV-19 project
- 5 Define new assessment methodologies and propose adapted/revised standards and regulatory pathways for emergency situations
- 6 Deepen the understanding of the whole Product Life Cycle
- 7 Engage with specialized consultants and regulators early on
- 8 Offer a robust Health Technology Assessment (HTA) and technology horizon scanning to the applicants
- 9 Prove the robustness and efficacy of the Innovation Platform
- 10 Build an extensive Network of stakeholders to be captured into a living database
- 11 Create realistic exploitation and business plans, both for external users and for the sustainability of the INNO4COV-19 platform



Project Concept

Five test cases representative of the addressed technology domains

Technologies developed by the INNO4COV-19 partners and that will allow to obtain a pool of lessons for the external projects to be supported.

Support market innovation for innovative solutions through **cascade funding**

Min. 30 Selected projects will have a year to test, scale, undertake pilot production and market introduction with assistance from the project.



INNO4COV-19

Open Innovation Platform: a lab to fab model



Technical, Regulatory & Business Support

Clinical Validation and testing in real conditions

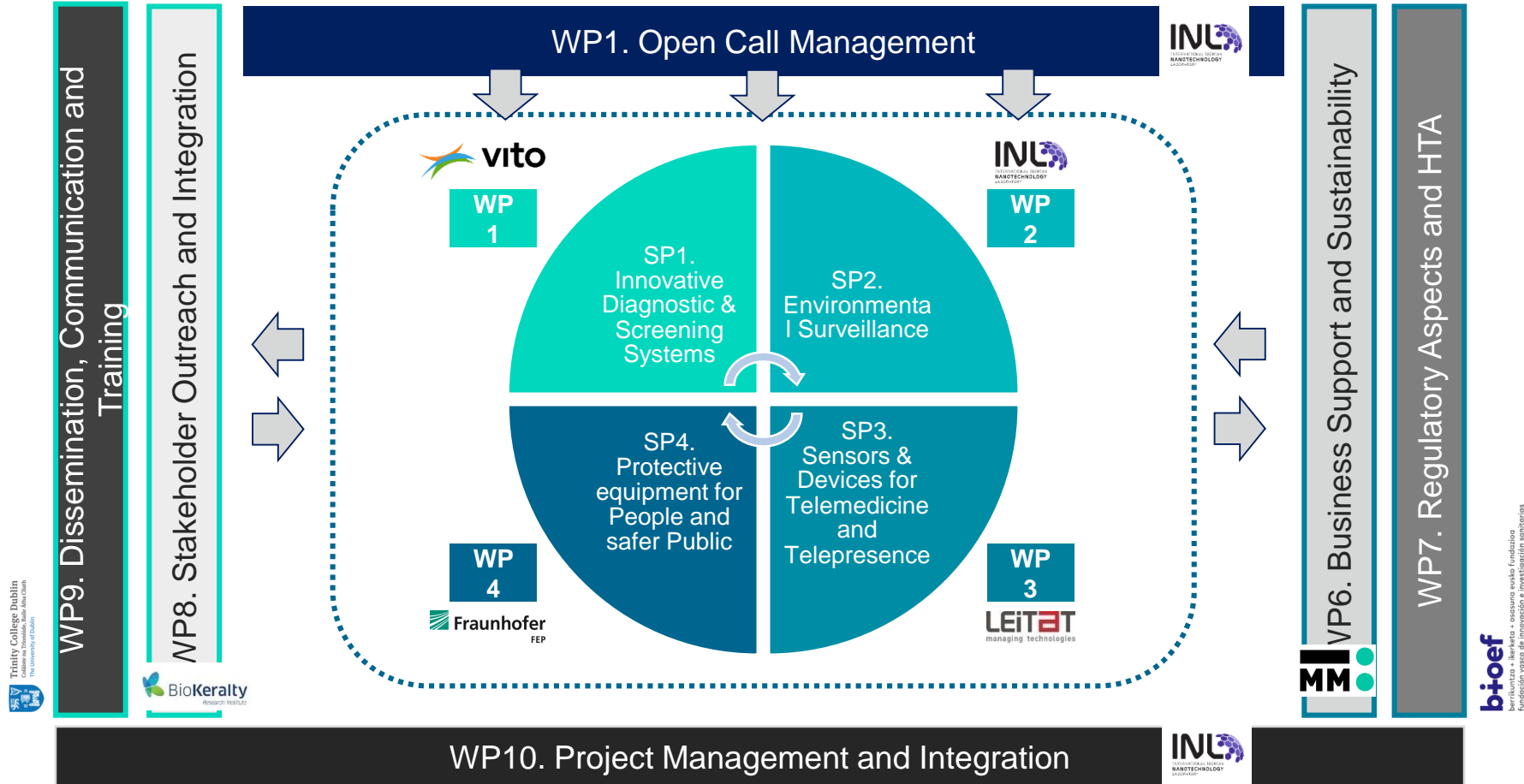


2 cut-off dates
3 Million Euros (up to 100 M€/project)



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Project Methodology



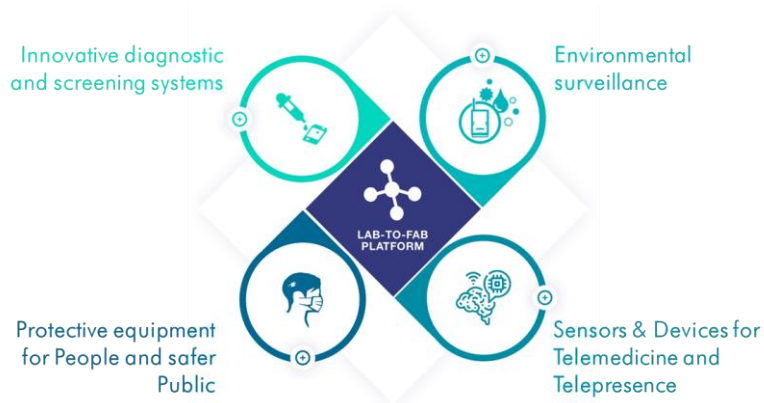
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INNO4COV-19 Third Parties



What?

INNO4COV-19 Open Call aims at **accelerating the development and commercialization of innovative solutions to tackle COVID-19** that have already been validated in lab environments (TRL6-7 or higher) and that focus on one of the 4 technological domains



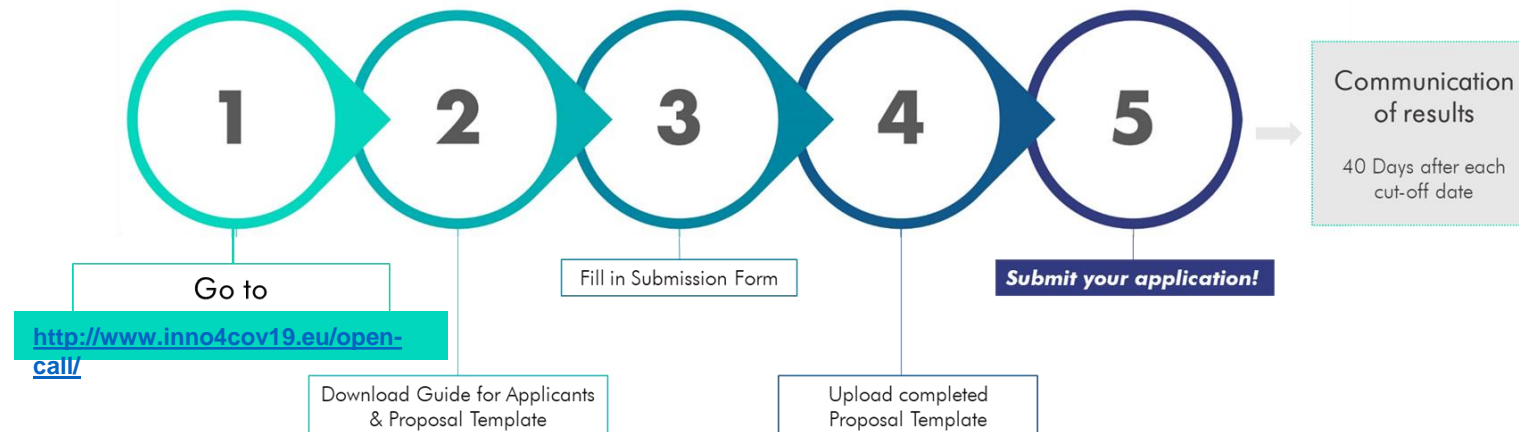
When?

Deadlines	
1 st cut-off	Nov 30, 2020
2 nd cut-off	April 30, 2021

Why?

- Financial support - up to €100K (100% funded)
- Access to specific facilities and infrastructure
- Tailored support and guidance - technical, regulatory, business development and market introduction strategy
- Media exposure

How?



Evaluation Process – Main Figures

Main Figures of the 1st and 2nd cut-off

	1 st cut-off	2 nd cut-off	Total
Submitted applications	135	290	425
Eligible applications	112	182	294
Applications invited for interviews	37	19	56
Selected applications	18	12	30
Overall financial support request (EUR)	1,770,802.30	1.194.632	2,965,434.30
Number of Evaluation Committees	9	15	24

INNO4COV-19 Open Call (applications, proposals selected for

30 Countries with applications submitted

9 Countries with proposals being funded

Country	Eligible		Selected for interview		Selected for funding	
	1 st cut-off	2 nd cut-off	1 st cut-off	2 nd cut-off	1 st cut-off	2 nd cut-off
Austria	1		1		1	
Belgium	2	6	1			
Bulgaria	2	1				
Cyprus	1	1				
Denmark		2				
Estonia	1	1				
Finland	2	3		1		1
France		4		1		1
Germany	6	10	1	1	1	1
Greece	3	2	1	1		
Ireland		4		1		
Israel	1	5				
Italy	42	54	13	2	7	1
Latvia		2				
Lithuania		3				
Luxembourg	2	1				
Norway	2					
Poland		2				
Portugal	6	21	3	1	1	
Romania	2		1		1	
Serbia		1				
Slovakia		1				
Slovenia	1	1				
Spain	33	38	14	5	7	4
Sweden	1	0	1			
Switzerland		4		2		
The Netherlands		2				
Turkey		1				
Ukraine		2				
United Kingdom	4	10	1	4		4

Selected Projects for funding

- APTAKIT – **Lateral Flow test** for SARS-CoV-2
- iAMP4COV-19 - **rapid molecular disposable test**
- PAIRUS - **AI Risk unified stratification/clinical identification & prediction tool**
- XVS – **AI-based application to analyse chest x-rays and CT scans**
- Breathspect – Breath test using **spectrometry technologies to analyse volatile organic compounds**
- Workplace PCR – **Screening test for asymptomatic employees** using non-invasive specimen types (gargle/saliva/swab)
- PANORAMA – **Screening platform** powered by AI & SERS technology
- POC-LIT-COV – **PoC test** of **leukocyte** function using LIT

- TRACKER – **tracking and predictive geographic information systems** for pandemic management for public health authorities.
- AutoMuVariant – web-based platform for population-wide surveillance providing **automated analysis of sequencing data derived from patients**
 - City Sentinel V-SENSE – monitor and predict the **viral and variant incidence in wastewaters**
 - BIAFTS – **air-borne monitoring** using **PCR tests**, viral titration and others
 - FAST TRACK COVID 19 – User-friendly methodology for using **PCR as a field-deployable detection method against SARS-CoV-2**, for frequent environmental monitoring and surveillance



- GRAPH-EU – Face mask made with **graphene nanoplatelets-enhanced fabrics**
- antivir-R2R – Roll-to-roll **atmospheric plasma spray technology for antiviral coatings**
- CB-20: **ANTIVIRIC TEXTILES – treatment to fight bacteria, viruses and fungus**
- EVERFILTER – Active photocatalytic nanostructured **reusable filter** for half and full-face masks
- INNOCOP – **Self-cleaning nanocopper based composite** for the prevention of SARS-CoV-2
- I-ON AIR – **UVC disinfection monitoring** using advanced MOS and Laser sensors
- SmartTrack4Covid – IOT Platform for **Industry 4.0 Worker Safety** during Covid-19 sanitary emergency
- VIRTUOSO – **Ventilation system for the isolation of hospital rooms** hosting contagious patients.
- MiniVHP – Mini Vaporised Hydrogen Peroxide (VHP) **decontamination system**
- ANTIVIS – **self-adhesive films** conferring antiviral protection on touch
- Mr. Clean – **Robotic Autonomous solution** for disinfection and sanitation

- MyHealth-COV – **Telemedicine platform** for continuous remote monitoring
- SENTINEL – Sensing Territorial Network of **Health PODs**
- TeMeLu – **vibro-acoustic sensors** and machine learning algorithms to monitor **lungs functioning**
- TOM – **tracking platform for Outbreak** Management
- ValueREAD – **Rapid Test AI-based Reader platform** for COVID-19
- Vital4Cov-19 – **single wireless medical in-ear device** (c-med° alpha) for continuous monitoring of vital signs



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BACK TO A HEALTHY FUTURE

MONTH

SEP

DAY

22-23

YEAR

2022

DESTINATION

BRUSSELS

POWERED BY





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