

Horizon 2020 Calls

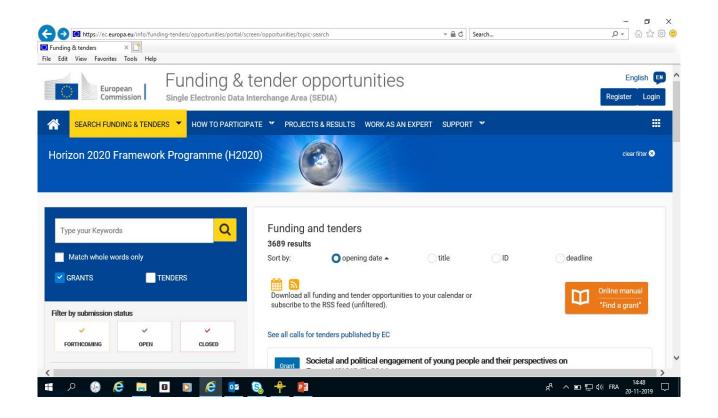
Francisco J. Ibáñez

DG CONNECT

European Commission



Horizon 2020

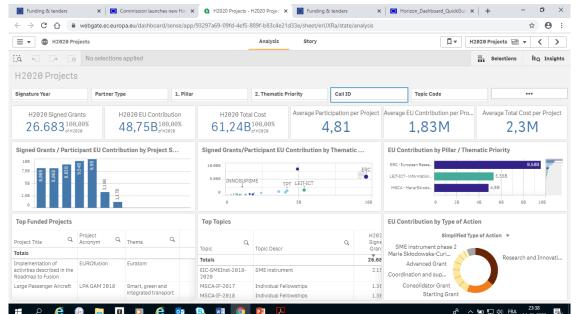


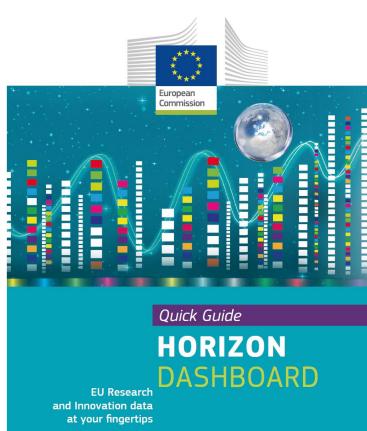
https://ec.europa.eu/info/funding-tenders/opportunities/portal



H2020 Dashboard

https://ec.europa.eu/info/fundingtenders/opportunities/portal/screen/op portunities/horizon-dashboard







Workprogramme 2020

Transition towards Horizon Europe (maximising impact)
Research and Development but also proof-ofconcept prototypes, demonstration, assessments,
platform-building activities and pilots.

They will contribute to:

- overcome the acceptance barrier
- increase trust and convince potential users
- express additional value benefits for diversified communities
- provide seeds for new projects of the proposers
- develop mechanisms for facilitating value creation in the real economy



Focus areas in WP2020

Technology convergence cutting across the programme boundaries.

Building a low-carbon, climate resilient future

Connecting economic and environmental gains – the Circular Economy

Digitising and transforming European industry and services

Boosting the effectiveness of the Security Union



Photonics calls in ICT Workprogramme 2020

ICT-36-2020 <u>Disruptive</u> photonics technologies

ICT-37-2020 <u>Advancing</u> photonics technologies and application driven photonics components and the innovation ecosystem

DT-ICT-04-2020* Photonics Digital Innovation Hubs

* Digitising and transforming European industry and services: digital innovation hubs and platforms



ICT-36-2020 Disruptive photonics technologies

Research & Innovation Actions [47.5 M€]

- 3D light field and holographic displays
- ii. Packaging and module integration for photonic integrated circuits (PIC)
- iii. Light to Fuel
- iv. Next generation biophotonics methods and devices as research tools to understand the cellular origin of diseases



ICT-37-2020 Advancing photonics technologies and application driven photonics components and the innovation ecosystem

Research & Innovation Actions [30 M€]

- i. Flexible Farm-to-Fork Sensing
- ii. Novel Photonics Integrated Circuit (PIC) Technology building blocks

Innovation Actions [15 M€]

iii. Smart Photonic Sensing for Environmental Pollution Detection



DT-ICT-04-2020: Photonics Innovation Hubs

Innovation Actions [19M€]

The challenge is to provide a **sustainable ecosystem** of research and innovation support for the benefit of SMEs facilitating a broad uptake and integration of photonics technologies.

These Photonics Innovation Hubs will help speed up the uptake of photonics technologies in order to make European industry more competitive and foster new business and business models.

Business cases must be industrially relevant and should include industrialisation steps to TRL of 7 - 8



Digital Innovation Hubs

One-stop-shop access, supported through a network of competence centres, to services and capabilities such as expertise, training, prototyping, design, engineering, business support, financing advice,... pilot manufacturing for first users and early adopters enabling the wider up-take and deployment of technologies in innovative products.



DT-ICT-12-2020: Al for the smart hospital of the future

Actions 7-10 M€

Innovation Actions [40 M€]

Piloting at scale is needed to prove the transformative impact of AI.

Pilots should enable or support diagnosis and treatment, carried out with clinical outcomes comparable to human delivered procedures.

Proposal should be developed with **health and** care facility partners



Future and Emerging Technologies Pro-active

Neuromorphic computing technologies 15 M€

FETPROACT-09-2020 (RIA)

Emerging paradigms and communities 50 M€

FETPROACT-EIC-07-2020 (RIA)



FETPROACT-09-2020: Neuromorphic computing technologies

Research & Innovation Actions [15 M€]

...to create neuromorphic technologies that can outperform current systems in terms of size, scalability, connectivity, power consumption, ease of training, flexibility, reliability or any other relevant metrics

...including hardware, related algorithms and programming framework



FETPROACT-EIC-07-2020 : FET Proactive: emerging paradigms and communities

Research & Innovation Actions [50 M€]

Cutting-edge high-risk / high-reward research and innovation projects that aim to demonstrate a new technological paradigm

Sub-topics:

- a. Future technologies for social experience
- b. Sub-nanoscale science for nanometrology
- c. Digital twins for the life-sciences



Thank you!



Francisco.Ibanez@ec.europa.eu



https://ec.europa.eu/info/fundingtenders/opportunities/portal/screen/prog rammes/h2020