

Anna Puig-Centelles,Ph.D.

Technologies & Systems for Digitising Industry, DG CNECT/A2, European Commission

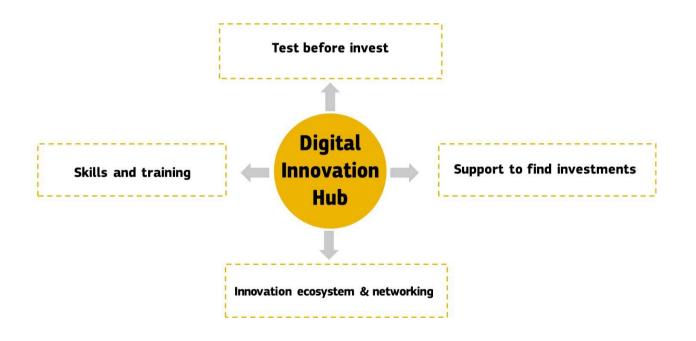






"A Digital Innovation Hub (DIH) is a single organisation or a coordinated group of organisations with complementary expertise and a not for profit objective that support companies – especially SMEs and mid-caps – and/or the public sector in their digital transformation."

DIHs offer services such as:







Focus area "Digitising and transforming European industry and services"

✓ ○ DT-ICT-01-2019: Smart Anything Everywhere (SAE)

OT-ICT-02-2018: Robotics – Digital Innovation Hubs

o DT-ICT-03-2020: I4MS (phase 4) - uptake of digital game changers

o DT-ICT-04-2020: Photonics Innovation Hubs

o DT-ICT-05-2020: Big Data Innovation Hubs

✓ ○ DT-ICT-06-2018: Coordination and Support Activities for Digital Innovation Hub network

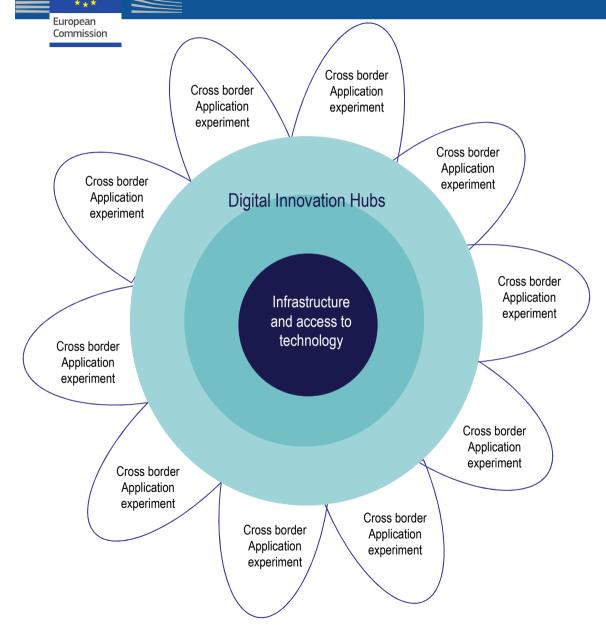
✓ o In SC2: DT-RUR-12-2018: ICT Innovation agriculture – Digital Innovation Hubs for Agriculture (DG AGRI budget) – 20M€

What are you looking for?

European Commission

- Consortia should be deeply rooted in regional/national innovation ecosystems.
- Critical mass of highly innovative, cross border experiments. At least 50% of the budget should directly benefit SMEs or slightly bigger companies. Financial Support to Third Parties may be used.
- Activities should aim at long-term sustainability and include a business plan for the DIHs, a plan to attract investors, to address training and skills development needs and dissemination. Established networks reaching out to SMEs like the Enterprise Europe Network and the NCP network should be used.
- Selected projects are expected to collaborate on building a network of Digital Innovation Hubs, covering most regions in Europe.

Critical Mass of Cross-Border Highly Innovative Application Experiments



Develop novel products or services, improve processes with digital technologies.

Bring together actors along value chain.

Suppliers to assist new users in customising and applying digital technologies in their environment

All proposed innovation actions may involve financial support to third parties (typically in the order of EUR 20000 – 100000 per third party)



What do you not want?

- Participants that are **not** embedded in a regional ecosystem and that have no natural way to be sustained after the end of the project.
- Participants that want to develop for themselves new products and services. Only customisation of some existing platform and technology is foreseen, main support should go to SMEs using existing platforms/technologies.

Is this new or has it been called before?

• "FOF-12-2017: ICT Innovation for Manufacturing SMEs (I4MS)"

Current project porfolio

• <u>https://i4ms.eu/projects</u>

Who are the leading players?

• RTOs like CEA, Fraunhofer, VTT, etc

DIHNET.EU Community

- Articles & Announcements
- Events

European Commission

- Matchmaking
- Q&A
- Real-time chat
- Surveys, guidelines & templates



Innovation Actions – 70 M€ + CSA – 1 M€ 13 November 2019 17h00

Accelerate design, development and uptake of advanced digital technologies by European industry – especially SMEs and mid-caps. Manufacturing SMEs and mid-caps need support in using secure digital technologies in production processes, products and business models to enable personalised products and to facilitate cost-effective smallscale production

Innovation Actions

- Digital Innovation Hubs that strengthen European SMEs and mid-caps by experimenting and testing in one or more areas. Identify area of centre of gravity
- Cover manufacturing sector at large
- If appropriate, building ecosystems around digital industrial platforms driven by European actors should be supported
- Minimising entry barriers and demonstrating added value of technologies, making SMEs and mid-caps more competitive by transferring innovative solutions into the wider manufacturing community. Special attention should be given to security considerations and to the development of skills.

Innovation Actions – 70 M€ + CSA – 1 M€ 13 November 2019 17h00

Innovation Actions, Areas

- Smart modelling, simulation, and optimisation for digital twins
- Laser based equipment in advanced and additive manufacturing
- Innovative Artificial Intelligence in manufacturing
- Cognitive autonomous systems and human-robot interaction
- Widening Digital Innovation Hubs

Up to 8 M€ would be appropriate

At least one IA for each area, with the exception of the Widening Digital Innovation Hubs area, for which one IA is supported

Innovation Actions – 70 M€ + CSA – 1 M€ 13 November 2019 17h00

Coordination and Support Actions

- Support network of Digital Innovation Hubs, help achieve broad coverage in technological, application, innovation, and geographic terms, and link up with regional/national innovation initiatives, and other Digital Innovation Hubs
- Build on previously developed tools and innovation portal and aim to further improve them for the benefit of new Innovation Actions
- Help in sharing best practices, dissemination, brokering between users and suppliers, leveraging investment and training, and organise events
- Cooperation with EFFRA, and with relevant CSAs

Up to 1 M€ would be appropriate

Innovation Actions – 70 M€ + CSA – 1 M€ 13 November 2019 17h00

Expected Impact

- Attract a significant number of new users of advanced ICT in the manufacturing sector, and more innovative technology suppliers, in particular SMEs and mid-caps
- A sustainable network of Digital Innovation Hubs, providing European added value to investments done at national and regional level in Digital Innovation Hubs and reaching a high leveraging effect on other sources of funding, in particular regional and national funding

S+T+ARTS



A new perspective on Innovation at the nexus of Science, Technology, Arts



DT-ICT-03-2020 IA - Cognitive autonomous systems and human-robot – *"including partners that facilitate the creation and experimentation with and by the arts to ensure human acceptance of digital technologies in manufacturing and to stimulate new products and services."*

- Proposals in this area are invited to build on activities developed as part of the STARTS initiative in DG CONNECT (www.STARTS.eu).
- STARTS is an initiative of the European Commission for integrating the Arts as a catalyst for the conversion of scientific and technological results into novel products and services, and disruptive approaches. STARTS has four pillars for linking art and technology:
 - STARTS Prize giving visibility to successful art technology collaboration
 - STARTS Residencies embedding artists in technology institutions
 - STARTS Lighthouse pilots projects tackling concrete industrial challenges
 - STARTS Academy teaching digital skills to artists and citizens
- Proposals must demonstrate having experience in science, technlogy and art collaboration, in light of digital innovation and transformation of industry and society.
- Proposals must describe credidible models how to engage artists and to bridge the goals of Digital Innovation Hubs with the STARTS goals.
- Additional contacts: Ralph.Dum@ec.europa.eu and Peter.Friess@ec.europa.eu





• Digital Innovation Hubs

https://ec.europa.eu/digital-single-market/en/digital-innovation-hubs

Brochure on Digitising European Industry

https://ec.europa.eu/digital-single-market/en/news/digitising-europeanindustry-2-years-brochure

Catalogue of Digital Innovation Hubs

http://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool

Digital Europe Programme

https://ec.europa.eu/commission/publications/connecting-europefacility-digital-europe-and-space-programmes_en



- ICT Proposers' Day 2019, 19-20 Sept 2019, Helsinki
 - <u>https://ec.europa.eu/digital-single-market/en/news/digital-excellence-</u> <u>forum-ict-proposers-day-2019</u>
- European Research & Innovation Days, 24-26 Sept 2019
 - <u>https://ec.europa.eu/info/research-and-innovation/events/upcoming-</u> events/european-research-and-innovation-days_en
- World Manufacturing Forum, 25-27 Sept 2019, Cernobbio
 - <u>https://www.worldmanufacturingforum.org/</u>
- Manufuture 2019, 30 Sept 1 Oct 2019, Helsinki
 - <u>https://www.dimecc.com/events/save-the-date-manufuture-2019-</u> conference-in-helsinki/
- DEI Stakeholder Forum, 13-15 Nov 2019, Madrid
 - <u>https://ec.europa.eu/digital-single-market/en/news/digitising-european-industry-stakeholder-forum-2019</u>



Thank you!

Contacts



Anna.Puig-Centelles@ec.europa.eu Anne-Marie.Sassen@ec.Europa.eu

Follow the latest progress and get involved



@DigitiseEU #DigitiseEU
@DSMeu



bit.ly/DigitiseEUpillars bit.ly/futuriumdei



Photonics DT-04-2020: Photonics Innovation Hubs

Anna Pelagotti A4 Unit – Digital Industry and Artificial Intelligence – CNECT – EC



DT-04-2020: Photonics Innovation Hubs Innovation Actions

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 technology and market readiness levels of 7 - 8



Photonics calls in ICT Workprogramme 2020

DT-04-2020: Photonics Innovation Hubs Innovation Actions

Open access to Photonics 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 photonic technologies in innovative products.





DT-04-2020: Photonics Innovation Hubs Innovation Actions

Actions must **build on relevant previous European initiatives** and **existing infrastructure at European and regional level**, demonstrate a record of accomplishment in supporting industry, in particular SMEs.

Actions should also address **skills development** as well as support to the development of **new innovation hubs**



Photonics calls in ICT Workprogramme 2020

DT-04-2020: Photonics Innovation Hubs Innovation Actions

Budget: Two possibilities:

- a range of photonics technologies: contribution from the EU of up to EUR
 9.5 million
- the greatest possible range of photonics technologies: contribution of the EU of up to EUR 19 million

Proposals **may** envisage to use EU funding for financial support to **third parties** with a maximum amount of EUR 150.00091 per third party



DT-04-2020: Photonics Innovation Hubs Innovation Actions

impact.

- Significantly improved uptake of photonics technology by end-user industry, in particular SMEs, enabling a demonstrably more competitive European industry.
- Creation of a **sustainable networ**k of Digital Innovation Hubs, providing European Added Value to investments done at national and regional level in Digital Innovation Hubs and reaching a high **leveraging effect** on other sources of funding, in particular Regional and National funding.





Network of Digital Innovation Hubs:

<u>https://ec.europa.eu/digital-single-market/en/digital-innovation-</u> <u>hubs</u>

Catalogue of Digital Innovation Hubs

https://ec.europa.eu/futurium/en/content/digital-innovationhubs-catalogue-project-0

http://s3platform.jrc.ec.europa.eu/digital-innovation-hubscatalogue

Photonics example projects towards DIH: **APOLLO, LASHARE, ACTPHAST,..**

Photonics



PILOT LINES



Pix4life PICs for health & food 8.5 M€ funding 15 partners

PI-SCALE



PiScale

OLEDs on flexible substrates 14 M€ funding 14 partners

MIRPHAB

MirPhab

Analytical MIR sensing 13 M€ funding 18 partners



PixAPP

PICs assembling and packaging 15.5 M€ funding 18 partners



InPULSE

Indium-Phosphide PICs 15 M€ funding 16 partners



ActPhast

Access Center for Photonics Innovation Solutions and Technology Support 8 M€ funding 23partners



DT-ICT-03-2020: I4MS (phase 4) - uptake of digital game changers

Innovation Actions

- Laser based equipment in advanced and additive manufacturing
- [1 out of 6 topics with total budget of 72 M \in]





For more information







DT-ICT-05-2020 Big Data Innovation Hubs (IA)

- 1. What are you looking for?
 - break the "data silos" and simulate sharing, re-using and trading of data assets
 - > promote new business opportunities esp. for SMEs
 - > second-generation data-driven innovation hub to
 - federate data sources, digital infrastructures, tools...
 - bring to the market new solutions and services
 - launch innovation experiments for data driven services and tools to reshape the media value chain, including social media





DT-ICT-05

2. What do you <u>NOT</u> want?

- re-submitted proposals from previous Work Programmes (ICT-14 data incubators)
- research-focused proposals





DT-ICT-05 – topic evolution

3. Is this new or has it been called before?

- Builds on "data incubator" projects selected from ICT-15-2014 Big Data and Open Data innovation and take-up; and ICT-14-2016-2017 - Cross-sectorial and cross-lingual data integration and experimentation
- Links with CSAs of ICT-51-2020 and ICT-13-2018; and with projects selected from topics ICT-14-2016-2017 and ICT-18-2016
- Moving towards DIH concept:
- Federating and networking with the relevant actions and initiatives, especially digital innovation hubs (including national and regional hubs)
- Developing data-driven business concepts, best practices, communication and training activities, standardization, interoperability...
- Engaging more citizens for user generated content, as well as artists and the creative sectors (link with ICT-44-2020 and www.STARTS.eu)





DT-ICT-05 – topic evolution

- 4. Unique instructions for evaluators on this WP topic? Excellence, Impact and more
- Specific focus on
 - impact: leverage of funding to SMEs, dissemination
 - implementation: financial support to third parties





DT-ICT-05 – topic evolution

5. Current project portfolio

- ODINE (ended)
- Data Pitch

ed)				
	47	13	89	€11.7m
	companies	Countries	Jobs	Impact
	Number of selected companies in seven rounds of applications so far	Number of different countries of origin of the accelerated companies	Number of people employed by Data Pitch companies	Total amount of sales, investments and efficiences unlocked by accelerated

companies

• European Data Incubator





DT-ICT-05 – key actors

- 6. Who are the leading players?
- SMEs, web entrepreneurs, start-ups
- industrial/personal data providers
- IT solution providers
- compliance, training, support service providers
- journalists, artists and creative sector
- 7. Is there a key group of actors (eg. cPPP or other) driving this?
- Big Data Value Association (BDVA) <u>http://www.bdva.eu/</u>
- NEM Initiative New European Media
 <u>https://nem-initiative.org/</u>





DT-ICT-05

8. Additional / background documents

Fifth meeting of the Working Group on Digital Innovation Hubs: Big Data and Artificial Intelligence, 7 November 2018

Presentations, highlights and position statements: <u>https://ec.europa.eu/digital-single-market/en/news/fifth-meeting-working-group-digital-innovation-hubs-big-data-and-artificial-intelligence</u>





Future Outlook

This topic is of relevance for **Digital Europe Programme**:

- Strategic Objective 2 "Artificial intelligence" Sub-objective 2.1 "Creation of common European Data Spaces that aggregate public information across Europe and become a data input source for AI applications"
- Digital Innovation Hubs





Upcoming events / information days

- Digital excellence forum Horizon 2020 Proposers' day 19-20 Sep 2019 in Helsinki <u>https://ec.europa.eu/digital-single-market/en/news/digital-excellence-forum-ict-proposers-day-2019</u>
- European Big Data Value Forum 14-16 Oct 2019 in Helsinki
 <u>https://www.european-big-data-value-forum.eu/</u>





Boost rural economies through crosssector digital service platforms DT-ICT-09-2019

Brussels 17/07/2019

Jan Komarek - Programme Officer – Internet of Things DG CNECT - European Commission

WP 2018-2020 Topics pan- ropea platform-building and piloting

Focus Area 'Digitising and transforming European industry and services', Platforms and Pilots

LEIT-ICT

DT-ICT-07-2018-2019: Digital Manufacturing Platforms for Connec Smart Factories	ted 95 M€
DT-ICT-08-2019: Agricultural digital integration platforms	30 M€
DT-ICT-09-2020: Digital service platforms for rural economies	30 M€
DT-ICT-10-2018-2019: Interoperable and smart homes and grids	30 M€
DT-ICT-11-2019: Big data solutions for energy	30 M€
DT-ICT-12-2020: The smart hospital of the future	25 M€
DT-ICT-13-2019: Digital Platforms/Pilots Horizontal Activities	4 M€

SC1:

• DT-TDS-01-2019: Smart and healthy living at home 60 M€

IA in digital service platforms for rural economies

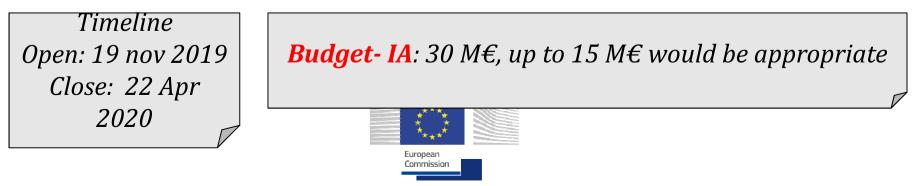


DT-ICT-09-2020 Specific Challenges:

- Attractiveness of rural areas via jobs and services.
- Increase connectivity and digitization of rural areas.
- Limited interoperability between object/service platforms supporting applications and sharing data.
- Create a marketplace for service/applications providers and platform operators supporting an ecosystem

Nota bene

Part of Focus Area, so Introductory texts "Platforms and Pilots" are applicable, in addition to specific topic texts



IA in digital service platforms for rural economies



Scope: Proposals are expected to develop and demonstrate cost-efficient and flexible cross-domain applications through large-scale pilots addressing all of the following aspects:

- 1. Integration of data across different platforms for efficient service provision (where appropriate based on AI).
- 2. Develop open marketplace for cross-cutting services.
- 3. Reference implementations (proof-of-concept, demonstrators).
- 4. Develop Pilots demonstrating benefits in rural areas
- 5. Create innovation ecosystems for novel applications





Pilots could be developed in the following application areas:

- Public services;
- Energy;
- Autonomous robotics transport;
- Logistics;
- Education,
- Tourism;
- Health and care.

The application should support the implementation of the smart village concept





Smart village: the concept



Smart Villages are communities in rural areas that develop smart solutions to deal with local challenges and opportunities for a sustainable development



- Use existing strengths and opportunities
- Participatory approach to develop and implement strategic initiatives
- Social and/or digital innovation
- More on: <u>https://enrd.ec.europa.eu/smart-and-competitive-rural-</u> <u>areas/smart-villages/smart-villages-portal_en</u>



IA in digital service platforms for rural economies



Expected impacts (specific to DT-ICT-09):

- Validate the brokerage platforms illustrated by an increase of crosscutting applications and services
- Demonstrate and show-case cross-sectorial platforms interoperability.
- Demonstrate the benefits of data sharing across platforms from different sectors.
- Exploration and validation of new industry and business processes and innovative business models validated in the context of the pilots.
- Overcome the digital divide between rural and urban areas, and to develop the potential offered by connectivity and digitisation of rural areas.
- Improve quality of life in rural areas, higher standard of living and services for citizens.
- Creation of opportunities for entrepreneurs, notably SMEs, by promoting new market openings, providing access to valuable datasets and direct interactions with users, creating new businesses in rural areas.



IA in digital service platforms for rural economies



Expected impacts (generic to platforms but still applicable):

- Increased prospects future digital industrial platforms
- Strengthened links with other programmes and initiatives
- Increased number of services/applications by European companies
- Significant, measureable contribution to standards
- Increased number of platforms, applications, business processes and innovative business models validated via large-scale piloting
- Emergence sustainable ecosystems around digital platforms





THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

HORIZ (2020)

Topic AI for the smart hospital of the future (DT-ICT-12-2020)

Call Digitising and transforming European industry and services: digital innovation hubs and platforms (H2020-DT-2018-2020)

Work programme Information and Communication Technologies

Jointly funded topic with the Health, demographic change and wellbeing part of WP

Cécile Huet, PhD Reza RAZAVI, PhD Deputy Head of Unit A1 Robotics & AI e-Health, Wellbeing and Ageing (H3)

Directorate-General for Communications Networks, Content and Technology (DG CONNECT) – EUROPEAN COMMISSION



Information and Communication Technologies

Artificial Intelligence and Technologies for Digitising European Industry and Economy		Open	Close
ICT-46-2020	Robotics in Application Areas and Coordination & Support	19-11-2019	22-04-2020
ICT-47-2020	Research and Innovation boosting promising robotics applications	19-11-2019	22-04-2020
ICT-48-2020	Towards a vibrant European network of AI excellence centres	09-07-2019	13-11-2019
ICT-49-2020	Artificial Intelligence on demand platform	19-11-2019	22-04-2020
ICT-38-2020	Artificial intelligence for manufacturing	09-07-2019	16-01-2020
European Data Infrastructure: Big Data and Cloud technologies			
ICT-51-2020	Big Data technologies and extreme-scale analytics	09-07-2019	16-01-2020
5G			
ICT-52-2020	5G PPP – Smart Connectivity beyond 5G	19-11-2019	22-04-2020
ICT-53-2020	5G PPP – 5G for Connected and Automated Mobility (CAM)	09-07-2019	13-11-2019
Next Generation Internet (NGI)			
ICT-56-2020	Next Generation Internet of Things	09-07-2019	16-01-2020
ICT-44-2020	Next Generation Media	09-07-2019	16-01-2020
Digitising and	transforming European industry and services: digital innovation		
hubs and platforms			
DT-ICT-03-2020	I4MS (phase 4) - uptake of digital game changers	09-07-2019	13-11-2019
DT-ICT-05-2020	Big Data Innovation Hubs	09-07-2019	13-11-2019
DT-ICT-09-2020	Boost rural economies through cross-sector digital service platforms	19-11-2019	22-04-2020
DT-ICT-12-2020	AI for the smart hospital of the future	19-11-2019	22-04-2020



AI - in H2020 - ICT-2018-2020

IA Topic DT-ICT-12-2020: AI for smart Hospital of the future

Call H2020-DT-2018-2020: Digitising and transforming European industry and services: digital innovation hubs and platforms

Work programme H2020-2018-2020: Information and Communication Technologies

Submission deadline: 22 Apr 2020





future

1. What are we looking for?

Proposals need to address all of the following four activities (applying to all "Platforms and Pilot projects")

Platform building

proposals need to develop next-generation digital platforms, which build on the state-of-the-art, reuse what is available, and integrate different technologies, such as IoT, AI, robotics, cloud and Big Data

Large-scale piloting

pilots are set up that make use of the digital platforms, develop prototype applications on top of the platforms, and validate the platforms in both reduced, controlled environments and in real-life use cases

Ecosystem building

expanding the ecosystem of players

Standardisation

contributions should be made to suitable standardisation bodies or pre-normative activities

Commission





- Proposals should contain an outline business case and industrial exploitation strategy. They also need to define clear business models and justify how the results support those business models.
- Beneficiaries may strengthen their activities by providing financial support to third parties (FSTP) in line with the conditions set out in part K of the General Annexes of the Work Programme.
 - Maximum 20% of the EU funding can be allocated to FSTP
 - Consortia need to define the selection process of organisations, for which financial support will be granted (typically in the order of EUR 50 000 – 150 000 per third party)





- In-facility pilot demonstrators
- Innovative AI-based solutions in a health and care setting (hospital, primary care facility or care home)
- Enable or support clinical, diagnosis and treatment, etc. carried out with clinical outcomes comparable to human delivered procedures and with comparable results
- Address any aspect of health facility operations across their range of functions, such as diagnostics, treatments, logistical aspects, measured against health and care metrics



European Commission



- Demonstrate both digital and physical based impacts and the integration of digital into physical and vice versa. Physical systems are the primary data gatherers and physical systems in turn are driven by data analytics based on that data. The integration of digital and physical is essential to the smart hospital of the future.
- Integrate health and care partners
- Access to the relevant operational environment
- Link to DIH in robotics healthcare
- Demonstrate likely "at scale" benefits in efficiency or cost reduction
- Identify opportunities for the development of European standards that enable wide spread adoption and new market creation



- European-led AI based pilots for the smart hospital of the future, enabled by open system platforms
- Effectiveness of AI based technologies, such as smart robots, in a range of healthcare tasks, developing deployable applications
- Engagement of healthcare policy makers, investors, stakeholders
- Reaching a high leveraging effect on other sources of funding, in particular regional and national funding
- Trust and acceptance building in the AI technology among all stakeholders (including patients, their formal and informal caregivers, decision makers, etc.)
- Budget Innovation Action: 7-10mln EUR (TOTAL 40mln EUR)



DT-ICT-12-2020: AI forms mart Hospital of the future

- 2. What do we NOT want?
- Don't rebuild the wheel! Pilots may adapt platforms to specific application needs and validate their relevance for such needs, in order to foster take-up and large scale deployment
- Focus on one area of medicine with narrow impact.
- Solutions that do not scale or are fundamentally incompatible with existing healthcare infrastructures
- Purely technology based proposals that do not consider the real deployment of systems
- Proposals that fail to understand the context and integration into a working healthcare environment.



DT-ICT-12-2020: AI forms mart Hospital of the future

- 2. What do we NOT want?
- Purely academic consortium, disconnected from industrial needs
- Proposals not describing with clarity and substantiation what should be deployed, scaled-up or demonstrated, how (methodology and workplan), by whom (Consortium), etc.
- Not adequately aligned with the topic
- Closed proprietary systems
- Privacy concerns
- Security concerns





DT-ICT-12 Topic evolution

3. Is this new or has it been called before?

- This call builds on the DT-ICT-2 (Robotics-Digital Innovation Hubs)
- Proposals must seek to align with the European Digital Innovation Hub networks and platforms funded under DT-ICT-02-2018: Robotics - Digital Innovation Hubs (DIH).

DT-ICT-2 Robotics-Digital Innovation Hubs (Healthcare)





DT-ICT-12-2020: AI formsmart Hospital of the future

4. Unique instructions for *evaluators PROPOSERS* on this WP topic? Excellence, Impact and more

- Credibility of the approach to maximize the impact (clear objectives (with KPIs), convincing approach)
- Maximise deployment of AI-based solutions & visibility of benefit AI can bring
- Good balance between technical and medical aspects
- Good understanding of the unique challenges that healthcare innovation presents
- Address multiple aspects of healthcare within the pilot
- Have clear outreach activities to both citizens and clinicians.



European Commission



DT-ICT-12-2020 Topic evolution

- 5. Current project portfolio (1/2)
- Various platform development activities at EU or national level, e.g. the Reference Architectural Model Industrie 4.0 (RAMI 4.0) and the Industrial Data Space. To develop the next-generation digital platforms, proposals need to bring various initiatives together and act as linking pins





DT-ICT-12-2020 Topic evolution

5. Current project portfolio (2/2)

EU SC1 Projects (finished and ongoing) <u>https://ec.europa.eu/digital-</u> <u>single-market/en/content/benefiting-personalised-care</u>

Robotics & AI Projects

- MURAB MRI and Ultrasound Robotic Assisted Biopsy
- EurEyeCase Use Case for European Robotics in Ophthalmologic Micro-Surgery
- EDEN2020- Enhanced Delivery Ecosystem for Neurosurgery in 2020
- ENDOVESPA Endoscopic Versatile robotic guidancE, diagnoSis and theraPy of magnetic-driven soft-tethered endoluminAl robots
- CyberLegPlusPlus The CYBERnetic LowEr-Limb CoGnitive Orthoprosthesis Plus Plus
- An.Dy Advancing Anticipatory Behaviors in Dyadic Human-Robot Collaboration
- MOVECARE Multiple-actOrs Virtual Empathic CARgiver for the Elder
- DREAM Development of Robot-Enhanced therapy for children with AutisM spectrum disorders
- <u>https://www.eu-robotics.net/sparc/projects/robotics-projects-funded-by-horizon2020.html?changelang=2</u>



6. Who are the *leading players*?

Community



7. Is there a key group of actors (eg. cPPP or other) driving this?

DIH-HERO partners and key technical-medical groups. euRobotics and BDVA.





DT-ICT-12-2020: AI formsmart Hospital of the future

8. Are there any additional / background documents?

Policy documents:

- European AI Strategy: <u>EC Communication April 2018</u>
- Coordinated plan on AI between EC and the Member States: <u>EC Communication Dec. 2018</u>
- Transformation of Health and Care in the Digital Single Market: <u>EC Communication April 2018</u>

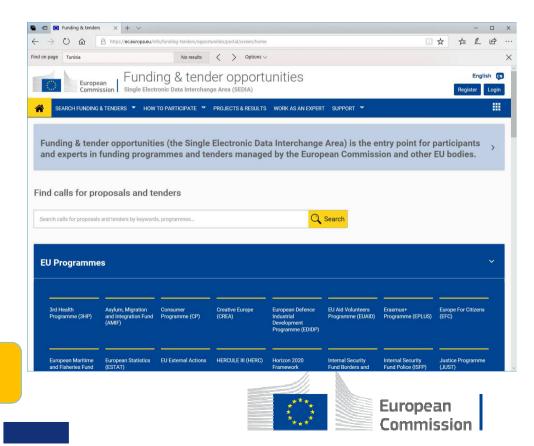




DT-ICT-12-2020: AI for smart Hospital of the future

8. Are there any additional / background documents?

- Call topics
- NCPs
- Expert registration
- Documents
- FAQs
- Rules for participation
- Upload project reports

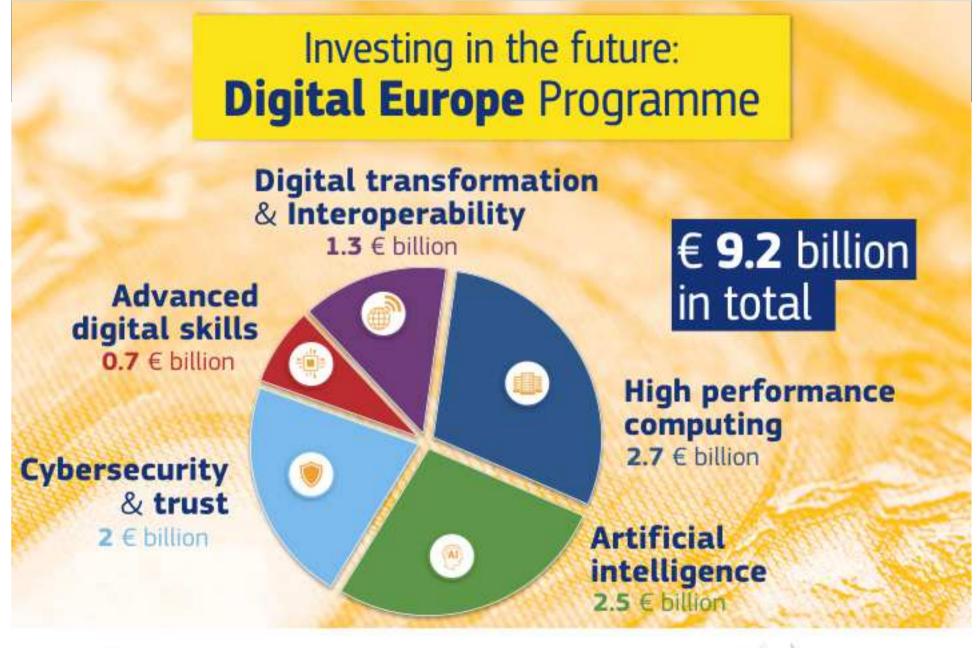


https://ec.europa.eu/info/fundingtenders/opportunities/portal/screen/home



9. Do you have information a bout future trends, emerging initiatives, roadmaps, key players in this area? How are you bridging to Horizon Europe?





#EUBudget #DigitalEurope



DIGITAL IN THE NE

Digital in Horizon Europe

- 1. Digital under "global challenges"
 - Digital and industry cluster
 - Digital in other clusters health, mobility, energy, environment,..
- 2. FET Open under Open Innovation

vith share

€3 Bn

mmissi

 Research Infra under O Science

MFF: OVERVIEW

Digital Europe Programme

- 1. High Performance Computing (HPC)
- 2. Artificial Intelligence (AI)
- 3. Cybersecurity
- 4. Advanced digital skills
- 5. Digital transformation and interoperability

€9.2 Bn

CEF - Digital

Connectivity

- Synergies with Transport /Energy
- WIFI/BB 4EU
- 5G roll out

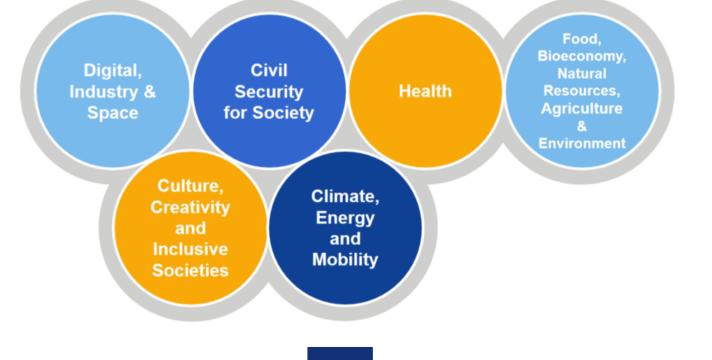
MEDIA under Creative Europe within Cohesionand Values

- Distribution of works
- Creation

€1.1 Bn

Horizon Europe – Plär Clusters on Global Challenges & Corpean Industrial Competitiveness

 Boosting key technologies and solutions underpinning EU policies & Sustainable Development Goals Commission proposal for budget: € 52.7 billion



Upcoming events/info day

ICT proposers day - SEPTEMBER 20th

European Commission

QUESTIONS: <u>CNECT-H3-H2020-TOPICS@ec.europa.eu</u>

FAQs: FUNDING & TENDER OPPORTUNITIES

Twitter: @eHealth_EU Facebook: <u>EU.ehealth</u>

Subscribe to our newsletter 'eHealth, Wellbeing & Ageing' via *bit.ly/eHealthinFocus* Twitter: @RoboticsEU



