



# Horizon 2020

**Digital innovation and Digital transformation:**

**what is in it for me?**

# ICT in H2020 > LEIT-ICT

## Excellent Science

Frontier Research (ERC)

Future and Emerging Technologies (FET)

ICT

Skills and career development (Marie Skłodowska-Curie)

Research Infrastructures

ICT

## Industrial Leadership

Leadership in enabling  
and industrial technologies

ICT

ICT

ICT

Nanotech., Materials, Manuf. & Processing

Biotechnology

Space

ICT

Access to risk finance

Innovation in SMEs

## Societal Challenges

Health, demographic change and wellbeing

ICT

Food security, sustainable agriculture,  
and the bio-based economy

ICT

Secure, clean and efficient energy

ICT

Smart, green and integrated transport

ICT

Climate action, resource efficiency,  
and raw materials

ICT

Inclusive, innovative and reflective societies

Secure societies

ICT

ICT

# ICT in Industrial leadership



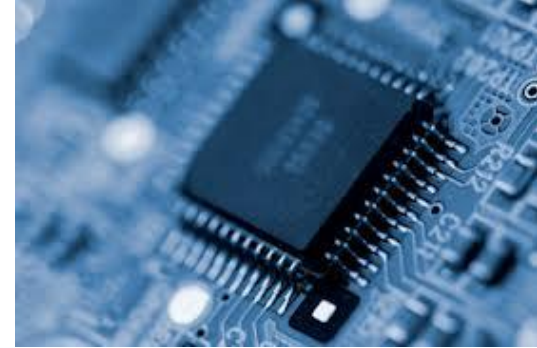
# Approach to WP2018-20



What's  
new?

- **Focus** and **align** with high-level **political priorities**
  - Digitising and transforming European industry and Services (including AI)
  - European Data Infrastructures (HPC, Big data and Cloud)
  - 5G Action plan and Connected and Automated Mobility
  - Next Generation Internet
  - Cybersecurity
- Support **core ICT industries** through **roadmap-based cPPPs**
  - Stronger synergies between cPPPs
- **Integrate digital technologies** across all parts of H2020
- Continued focus on **innovation**

# Industrial Leadership - ICT



## **Call – Information and Communication technologies**

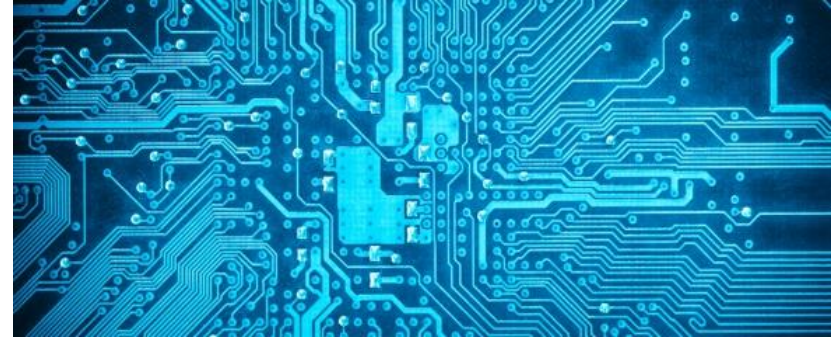
- **Artificial Intelligence and Technologies for Digitising European Industry and Economy**
- **European Data Infrastructures: HPC, Big data and Cloud technologies**
- **5G**
- **Next Generation Internet (NGI)**
- **Cross-cutting activities**

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

**Call - Cybersecurity**

# Technologies for Digitising European Industry 2020

349,5M€



- Cover wide range of ICT technologies including micro-electronics, cyberphysical systems, photonics and robotics. Systemic integration from smart integrated components to cyber-physical systems
- Complementary to the JTI Electronic Components and Systems (ECSEL)
- Organised in eight topics in 2020:
  - ICT-46-2020: Robotics in Application Areas and Coordination & Support
  - ICT-47-2020: Research and Innovation boosting promising robotics applications
  - ICT-48-2020: Towards a vibrant European network of AI excellence centres
  - ICT-49-2020: Artificial Intelligence on demand platform
  - ICT-38-2020: Artificial intelligence for manufacturing
  - ICT-36-2020: Disruptive photonics technologies
  - ICT-37-2020: Advancing photonics technologies and application driven photonics components and the innovation ecosystem
  - ICT-50-2020: Software Technologies

# European Data Infrastructures 2020

51,5M€



- Enable the creation of a world-class HPC/Big Data ecosystem
- Complementary to the work in the Excellent Science pillar under Research Infrastructures, FET and EuroHPC (on High Performance Computing)
- Develop competitive cloud solutions based on advanced platforms and services and cloud-based software and data application
- Organised in two topics in 2020:
  - ICT-51-2020: Big Data technologies and extreme-scale analytics
  - ICT-40-2020: Cloud Computing: towards a smart cloud computing continuum

**5G  
2020**

**183 M€**



- 5G cPPP targets validation of technologies and architectures in a system context and for multiple use cases
- 5G applied for Connected and Automated Mobility (CAM)
- 5G cPPP looking for Smart Connectivity beyond 5G
- Organised in four topics in 2020:
  - ICT-52-2020: 5G PPP – Smart Connectivity beyond 5G
  - ICT-41-2020: 5G PPP – 5G innovations for verticals with third party services
  - ICT-42-2020: 5G PPP – 5G core technologies innovation
  - ICT-53-2020: 5G PPP – 5G for Connected and Automated Mobility (CAM)



# Next Generation Internet (NGI) 2020

110 M€



- Next generation technologies for the internet in 10-15 years based on European values such as openness, neutrality, cooperation, inclusion, transparency and protection of data and privacy.
- Organised in five topics:
  - ICT-54-2020: Blockchain for the Next Generation Internet
  - ICT-55-2020: Interactive Technologies
  - ICT-56-2020: Next Generation Internet of Things
  - ICT-57-2020: An empowering, inclusive Next Generation Internet
  - ICT-44-2020: Next Generation Media

# Cross-cutting and international Cooperation activities 2020

15 M€

- Cross-cutting activities
  - ICT-45-2020: Reinforcing European presence in international ICT standardisation: Standardisation Observatory and Support Facility
- International Cooperation
  - ICT-58-2020: International partnership building between European and African innovation hubs

# Call - Digitising and transforming European industry and services: digital innovation hubs and platforms 2020

190,5 M€

- Focus area implemented mainly through:
  - Digital innovation hubs
  - Cross-sectorial and integrated digital platforms
- Organised in five topics in 2019:
  - DT-ICT-03-2020: I4MS (phase 4) - uptake of digital game changers
  - DT-ICT-04-2020: Photonics Innovation Hubs
  - DT-ICT-05-2020: Big Data Innovation Hubs
  - DT-ICT-09-2020: Boost rural economies through cross-sector digital service platforms
  - DT-ICT-12-2020: AI for the smart hospital of the future

# Call Cybersecurity 2020

47 M€



- Focus area
  - Combining contributions from **LEIT-ICT**, **SC1** and **SC7**
- Grouping the main R&D&I activities in Cybersecurity, from enabling technologies to specific use cases
- Organised in one topic in 2020:
  - SU-ICT-02-2020: Building blocks for resilience in evolving ICT systems



European  
Commission

19-20 SEPTEMBER - HELSINKI

# DIGITAL EXCELLENCE FORUM

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# ICT PROPOSERS' DAY 2019



Ministry of Economic Affairs  
and Employment of Finland

SITRA

BUSINESS  
FINLAND

VTT

Uusimaa  
Regional Council

@DSMeu | #ICTpropday

<http://bit.ly/ICTPropDay2019>

HORIZON 2020



European  
Commission

## Venue:

**Messukeskus Expo and Convention Centre, Helsinki**

<https://messukeskus.com/>

Website and registration:

<https://ec.europa.eu/digital-single-market/en/news/digital-excellence-forum-ict-proposers-day-2019>



# Thank you !

#DigitalEurope

<http://ec.europa.eu/digital-europe>