

HORIZON 2020



ICT-54-2020

Blockchain for the Next Generation Internet

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Blockchain for the Next Generation Internet

- i. Advancing research on Blockchain and Distributed Ledger Technologies
- ii. Fostering trust in internet information exchange and content with blockchain
- iii. Bringing forward the emergence of collective intelligence on the internet

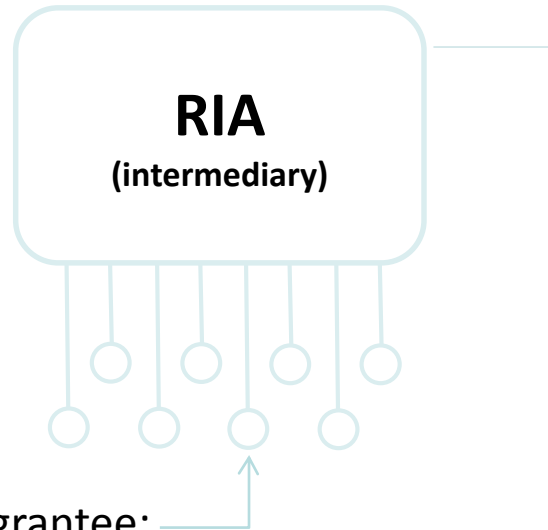
NOT wanted:

- Simplistic view on blockchain
- Projects that do not demonstrate thorough understanding of the overall programme logic (relation with other NGI and blockchain-related projects and actions)

Funding innovators through sub-granting

Project submitted to EC call:

- Run by organisations in the ecosystem
- Leadership in the research area
- Euro 7-8 million, 2-3 years
- **70% for sub-grantees, pan-European**
- Procedures adapted to stakeholders



Sub-grantee:

- Agile and focused specific project
- **Internet innovators: hi-tech startups and SMEs, researchers, developers, ...**
- Carry out the actual R&I work
- 50.000 – 200.000 Euro, 9 – 12 month

Activities include inter-alia:

- Provide programme logic and vision for third-party projects
- Definition of the calls for projects
- Attracting and selecting top Talents/teams
- Monitoring, Mentoring, Coaching, Sharing
- Provide the necessary technical support
- Managing the full life-cycle of the open calls transparently

Topic evolution

- Part of NGI - The Next Generation Internet initiative; also linking to other parts of the H2020 programme such as 5G, Cloud, Software and Artificial Intelligence.
- Follows-up “ICT-28-2018 Future Hyper-connected Sociality”
- Follows-up “ICT-24-2018 NGI – Open Internet Initiative”, Decentralized Data Governance sub-topic

Current portfolio

NGI:

- 4 RIA: LEDGER, NGI-Zero PET, NGI-Zero Discovery, NGI TRUST
- 5 CSA: NGI4ALL, NGI-Forward, TETRA, NGI Explorers, Think NEXUS

Social Media:

- 4 IA: EUNOMIA, PROVENANCE, WeVerify, SocialTruth
- 2 RIA: ARTICONF, HELIOS
- 1 CSA: SOMA

Key actors

Key group of actors (eg. cPPP or other) driving:

- NGI - Open Internet Initiative
- European Blockchain Observatory and Forum
- The European Blockchain Partnership
- Social Media platforms
- NEM technology platform

Background documents

- <https://www.ngi.eu/>
- <https://ec.europa.eu/digital-single-market/en/tackling-online-disinformation>
- www.eublockchainforum.eu
- <https://nem-initiative.org/>

Future outlook

Topics are present in Horizon Europe in

- Horizon Europe Cluster 2 - CULTURE, CREATIVITY AND INCLUSIVE SOCIETY
- Horizon Europe Cluster 4 - DIGITAL, INDUSTRY AND SPACE

Also linking to the Digital Europe programme.

Upcoming events / information days

- NGI info days (T.B.D)
- ICT Proposersday 19-20 September 2019, Helsinki
- NGI Forum 25 Sept. 2019, Helsinki
- Web Summit 4-7 Nov. 2019, Lisbon

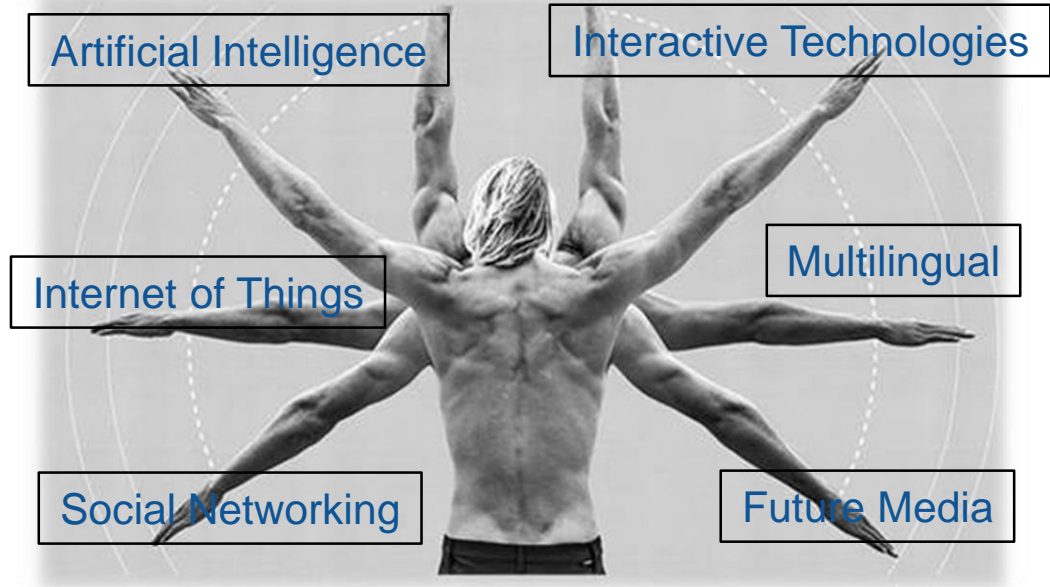
Drivers of Change

Areas of Impact

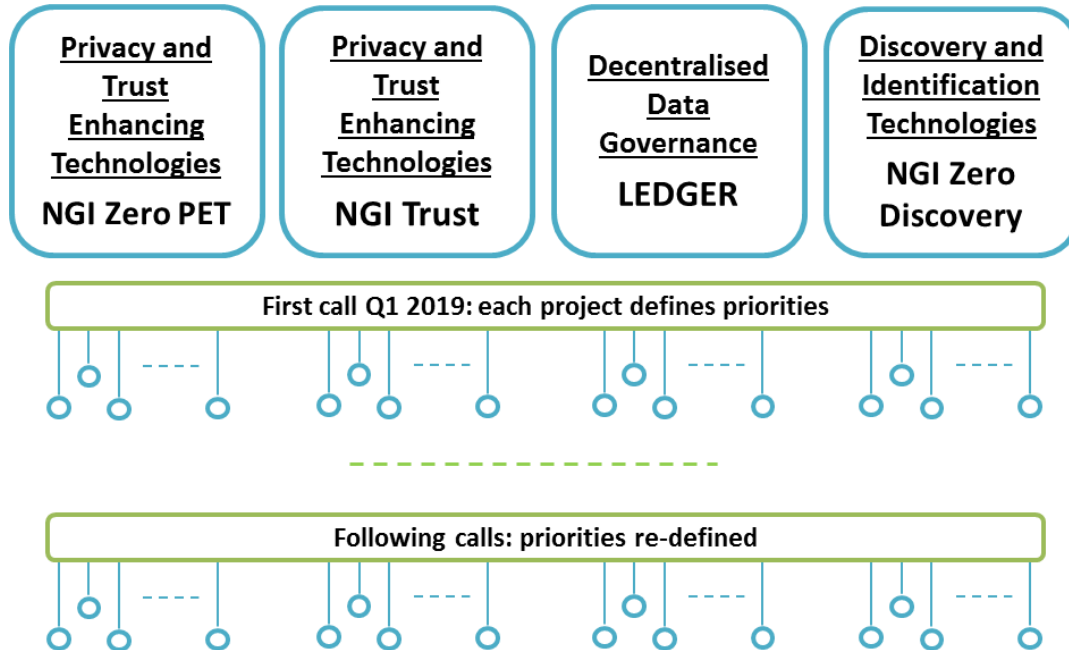


Next Generation Internet

The Next Generation Internet initiative aims at developing a more **human-centric Internet**, supporting values of openness, decentralisation, inclusiveness and protection of privacy and giving the control back to the end-users, in particular of their data.



NGI current portfolio



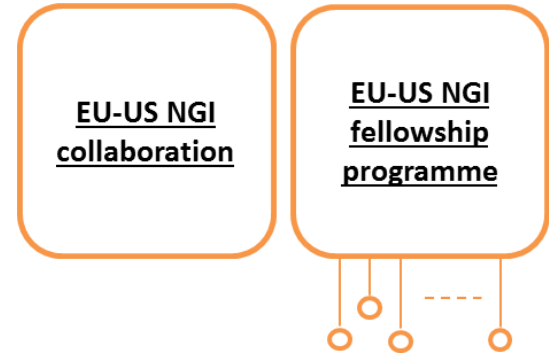
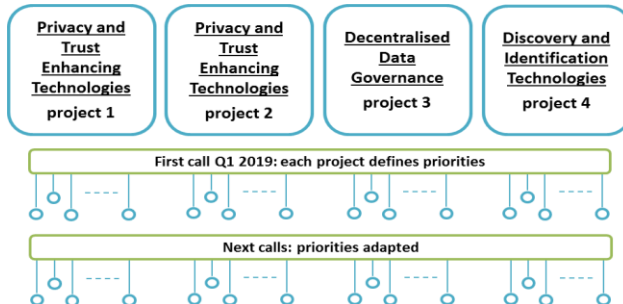
The Intermediaries:

- ✓ A process to **select most promising avenues** (funnel like focusing on impact)
- ✓ **Try & fail or succeed culture:** promising lines are expanded; failure feeds the ecosystem for learning and improving
- ✓ **Agile programming**, which can adapt to the technology / market

The Sub-Grantees:

- ✓ Selection based on **excellence & quality**
- ✓ **Research with market orientation** – not just apps
- ✓ **Co-creation model** – supporting novel ideas while contributing to the overall goals and objectives
- ✓ **Low administrative burdens**

Support Actions



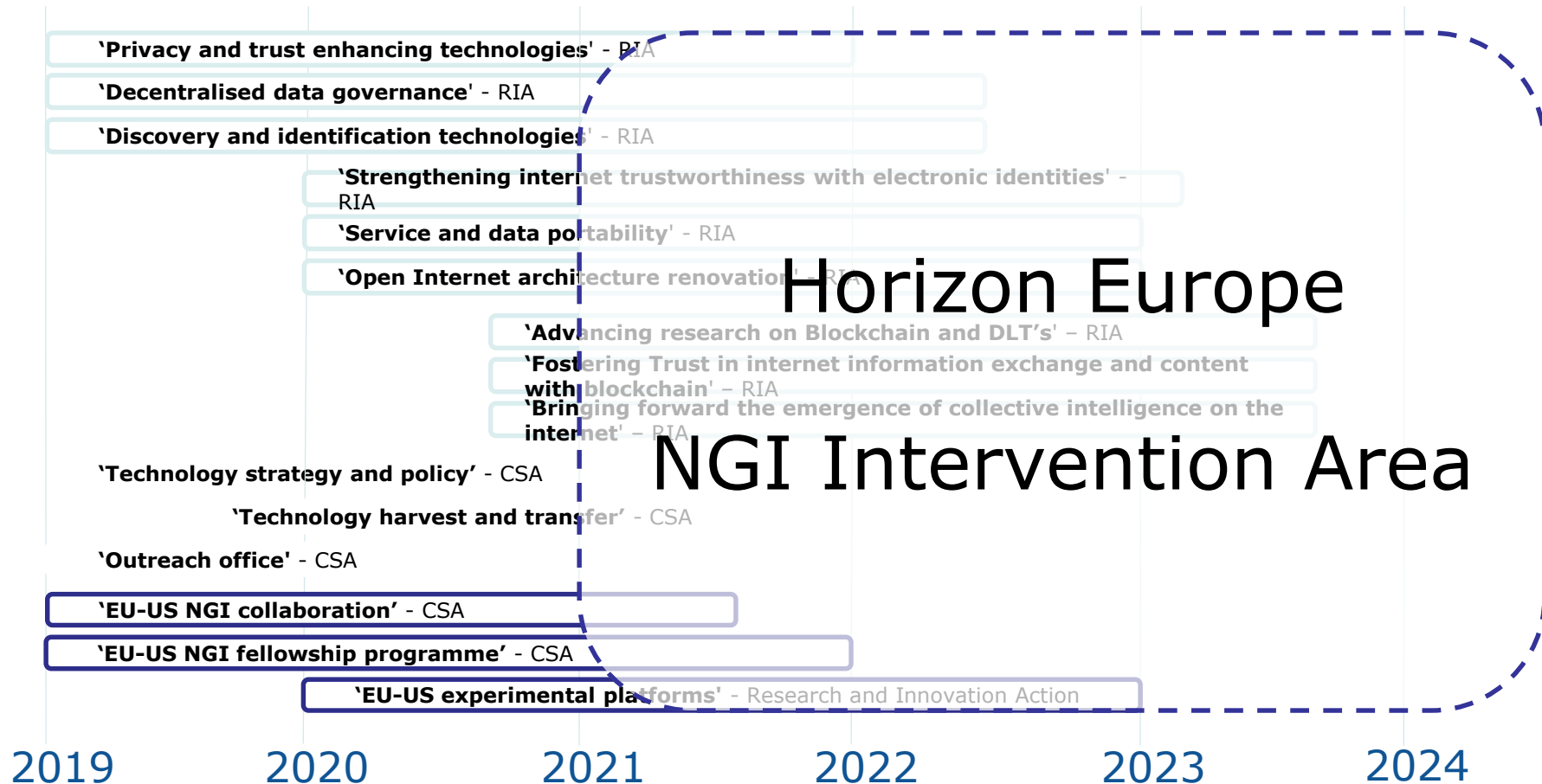
Mirror projects from NSF



Prize “blockchains for social good”

2 April 2019: deadline registration of interest

3 Sept 2019: deadline submit applications



Tackling online disinformation – DSM Policy

Action Plan on disinformation focusing on four key areas:

- improving detection, analysis and exposure of disinformation
- stronger cooperation and joint responses to threats
- enhancing collaboration with online platforms and industry to tackle disinformation
- raising awareness and improve societal resilience

Code of Practice on disinformation - actions to be taken in 5 areas:

- Disrupting advertising revenues of certain accounts and websites that spread disinformation;
- Making political advertising and issue based advertising more transparent;
- Addressing the issue of fake accounts and online bots;
- Empowering consumers to report disinformation and access different news sources, while improving the visibility and findability of authoritative content;
- Empowering the research community to monitor online disinformation through privacy-compliant access to the platforms' data.

Specific Challenge

- | **Blockchain and distributed ledger technologies (DLT)** have the potential to enable **more decentralised, trusted, user-centric digital services**, and stimulate new business models benefiting society and the economy.
- | These technologies create opportunities to enhance services and processes in public and private sectors, notably providing better control of data by citizens and organisations, reducing fraud, improving recordkeeping, access, transparency and auditability, within and across borders.
- | Contribution to the European Commission strategy on blockchain. The first milestones were the launch of the European Blockchain Observatory and Forum, and the European Blockchain Partnership, signed by 26 Member States and Norway, to cooperate for the establishment of a European Blockchain Services Infrastructure.

Scope and subtopics

- | Research and Innovation Actions (RIA) are called for in the following three sub-topics. Proposals should address only one of these sub-topics:
 - | **i. Advancing research on Blockchain and Distributed Ledger Technologies**
 - | **ii. Fostering trust in internet information exchange and content with blockchain**
 - | **iii. Bringing forward the emergence of collective intelligence on the internet**

Please refer to the published work programme when elaborating a proposal

Subtopic i. **Advancing research** on Blockchain and Distributed Ledger Technologies

- | Conducting research, proofs of concepts, piloting, testing and benchmarks to improve and further develop advanced blockchain technologies, for example regarding energy efficiency and sustainability, consensus protocols, a priori usage control, scalability and throughput, security, privacy, robustness, interoperability, cryptography, smart contracts, governance, compliance to regulatory frameworks. This action should contribute to standardisation activities.
- | The Research and Innovation Actions are complemented by a blockchain pre-commercial procurement action, which is presented under the “Other actions” part of the H2020 Work Programme.

Subtopic ii. **Fostering trust** in internet information exchange and content with blockchain

| Develop decentralised blockchain-based solutions that can be scaled in a sustainable manner, combined with the use of trustworthy electronic identification, authentication and verified pseudonyms, to preserve the integrity and reliability of information and content, including the underlying sources, on the internet.

| Two use cases:

- a) develop and implement new transparent and accountable reputation-based models to increase trustworthiness of the information exchange on the internet and social networks and,
- b) provide solutions for transparency, trustworthy transactional content handling, on the internet and social networks.

Subtopic iii. Bringing forward the emergence of **collective intelligence** on the internet

| Develop approaches for scientific understanding and technology-based stimulation of collective intelligence on social media and the internet to foster trustworthy knowledge and information sharing, and to enhance social inclusion.

| Two use cases:

- a) develop new community-based service models on social networks that exploit collective intelligence to provide enhanced community services, and increase the availability of trustworthy content and,
- b) in the context of collective intelligence develop and implement new concepts for connecting people and smart objects/agents/AI on social media. Approaches for both use cases must be rooted in scientific analysis of collective behaviour (taking into account gender difference, where relevant) and network mechanisms, harness decentralised technologies such as P2P or blockchain for governance and support a dependable collective memory.

Remarks for evaluation

- | Each RIA in the three sub-topics, through an agile and flexible process, will support third party projects from outstanding academic research groups, hi-tech startups, SMEs and other multidisciplinary actors, so that multiple third parties will be funded in parallel contributing to the research and innovation area.
- | The RIA will provide the programme logic and vision for the third-party projects, ensure the coherence and coordination of these projects, provide the necessary technical support, as well as coaching and mentoring, in order that the collection of third party projects contributes towards a significant advancement and impact in the research domain.
- | The focus is on applied research that is linked to relevant use cases and that can be further developed into viable solutions. Apps and services that innovate without a research component are not covered by this model.
- | RIAs should encourage open source software and open hardware design, open access to data, standardisation activities, access to testing and operational infrastructure as well as an IPR regime ensuring lasting impact and reusability of results.

Remarks for evaluation

| Full list of evaluation criteria at: http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-h-esacrit_en.pdf

| Specific remarks:

| **Focus will be on applied research that is linked to relevant use cases and that can be further developed into viable solutions**

| **Apps and services that innovate without a research component are not covered by this model**

Timing and budget

| Call opening: 09/07/2019 Call closing: 16/01/2020

| Budget: i. RIA: 8 MEUR, ii. RIA: 6 MEUR, iii. RIA: 6 MEUR

| Expected duration: 24 to 36 months

| As the primary purpose of the action is to support and mobilise internet innovators, a minimum of 70% of the total requested EU contribution should be allocated to financial support to the third parties.

| For ensuring focused effort, third parties will be funded through projects typically in the range of EUR 50 000 to 200 000 per project, with an indicative duration of 12 months.

| In line with Article 23 (7) of the Rules for Participation, the amounts referred to in Article 204-205 of the Financial Regulation may be exceeded in order to achieve the objective of the action up to a maximum funding per third party of EUR 500 000.

ICT-55-2020: Interactive Technologies

1. To increase the European innovation capacity through
 1. **The development of authoring tools** for automated interactive content creation
 2. Or **the development of solutions** in key sectors or in sector where the use of this technology is not mainstream
2. Proposals that focus on the development of **richer virtual environments, new user interfaces and improved immersion**
3. **Targeted industries** should have a leading role in the design of the solution

ICT-55-2020: Interactive Technologies

2. What do you NOT want?

1. Actions focused on research rather than innovation
2. Weak coordination or concept
3. Unclear idea of impact and sustainability
4. Incremental product development

ICT-55-2020 - topic evolution

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

- Follows and complements ICT-25-2018 (CSA and RIA) on interactive technologies
- Also part of the Next Generation Internet (NGI) initiative for a user centric internet

ICT-55-2020 - topic evolution

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

- Increase in the **use** of Interactive Technologies in the industrial and societal domains.
- Increase in the number of European SMEs and start-ups who benefit from **technology transfer**.
- Increase in **market opportunities** in the Interactive Technologies sector for European SMEs.

ICT-55-2020 : topic evolution

5. Current project portfolio

- **XR4ALL - Coordination and support action in interactive and immersive technologies**
 - *To forge a competitive and sustainable ecosystem of European actors in interactive technologies*
 - *Community building, research agenda, financial support to third party*
 - <http://xr4all.eu/>
- **Research and Innovation Action – 6 projects (GAP phase)**

TACTILITY (haptic sensors)

iv4XR (software)

ARTwin (digital twin, construction)

ARETE (education)

PRIME-VR2 (rehab)

PRESENT (virtual agent)

ICT-55-2020: Interactive Technologies – Key actors

6. Who are the leading players?

1. SMEs and start-ups
2. Targeted industries
3. Research institutions and universities
4. End-users

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

ICT-55-2020: Interactive Technologies

8. Are there any additional / background documents?

<https://ec.europa.eu/digital-single-market/en/next-generation-internet-interactive-technologies>

Future Outlook

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

Workshop on Interactive Technologies

12-13/03/2019

Report to be published soon

<https://ec.europa.eu/digital-single-market/en/next-generation-internet-interactive-technologies>

1. Digital Transformation of Industry
2. Societal Applications
3. Legal, Ethical and safety aspects

Upcoming events / information days

10. Please list upcoming information days and other events of relevance to this area

ICT PROPOSERS DAY

HELSINKI, FINLAND

19-20 September 2019

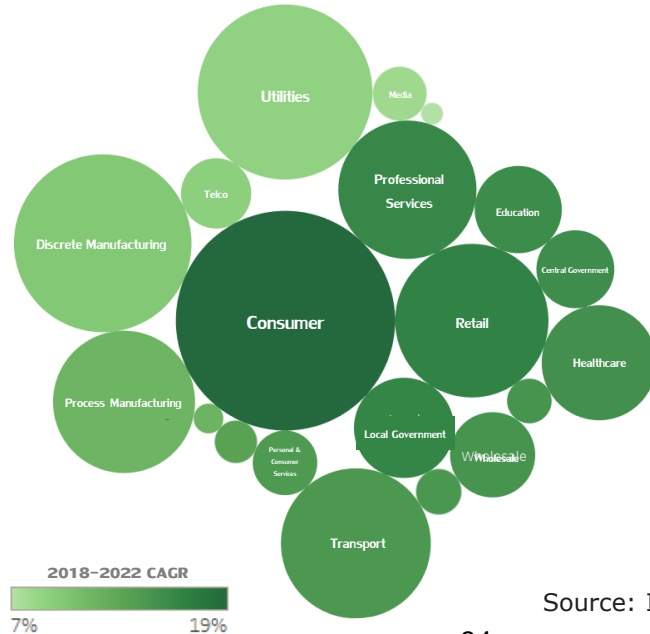


<https://ec.europa.eu/digital-single-market/en/news/digital-excellence-forum-ict-proposers-day-2019>

ICT-56-2020

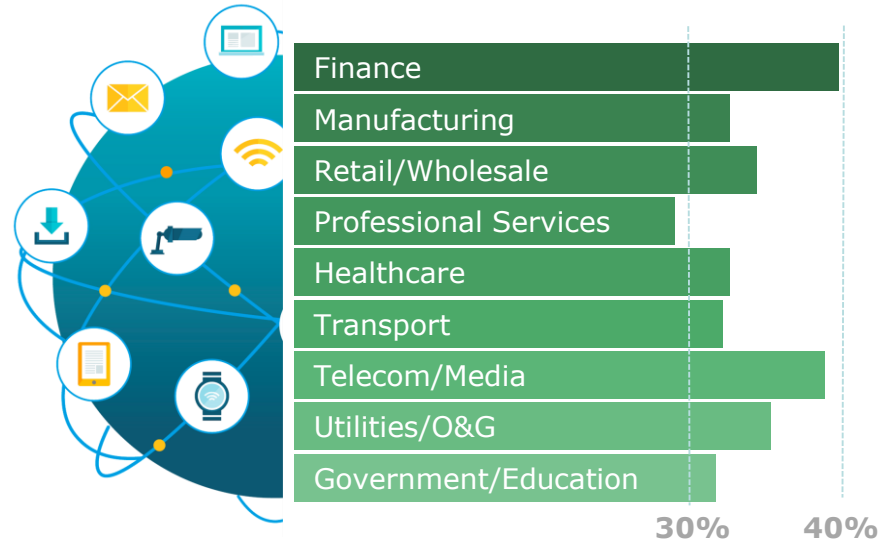
EUROPEAN IOT SPENDING BY INDUSTRY

(2018 Size and 2018-2022 CAGR)



IOT ADOPTION ACROSS EUROPEAN VERTICALS

(% of companies with more than 10 employees adopting at least one IoT solution in 2018)



Source: IDC Worldwide Semiannual Internet of Things Spending Guide, 2019



MONICA - Management Of Networked IoT Wearables – Very Large Scale Demonstration of Cultural Societal: Wearable devices containing sensors and actuators for massive scale applications. Europe (EU contr: 15M€, 28 partners in 9 countries)



IoF2020 - Internet of Food and Farm 2020: Strengthen competitiveness of farming and food chains in Europe. Europe (EU contr: 30M€, 70 partners in 16 countries)

european-iot-pilots.eu



ACTIVAGE - ACTivating InnoVative IoT smart living environments for AGEing well: Active and healthy ageing. Europe (EU contr: 20M€, 48 partners in 9 countries)



AUTOPILOT - AUTOMated driving Progressed by Internet Of Things: Automated driving and infrastructure. Europe (EU contr: 20M€, 43 partners in 14 countries)



SYNCHRONICITY - Delivering an IoT enabled Digital Single Market for Europe and Beyond: Single digital city market for Europe (EU contr: 15M€, 33 partners in 9 countries)



- **Focus Area Next Generation Internet (NGI)**
- ICT-54-2020: Blockchain for the Next Generation Internet 0
- 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
- ICT-24-2018-2019: Next Generation Internet - An Open Internet Initiative
- ICT-25-2018-2020: Interactive Technologies
- ICT-26-2018-2020: Artificial Intelligence
- ICT-27-2018-2020: Internet of Things
- ICT-28-2018: Future Hyper-connected Sociality
- ICT-29-2018: A multilingual Next Generation Internet
- ICT-30-2019-2020: An empowering, inclusive Next Generation Internet
- ICT-31-2018-2019: EU-US collaboration on NGI

Topic: H2020-ICT-56-2020

RIA

Timeline:

- Call opening: 9th July 2019
- Call deadline: 16th January 2020
- Budget: **46,5 Mio € ; proposals requesting an EU contribution between EUR 5 and 8 million would be appropriate**

Specific Challenges:

- **Next generation IoT architectures** with a focus on real-time capabilities, self-aware, semi-autonomous IoT systems, make use of distributed AI, decentralized topologies and governance.
- **Interoperability** for connecting vast number of devices, data sharing combined **with contractual arrangement** (e.g. DLT).
- **Next generation IoT devices** drawing on applicable results in micro-nano-bio integrating novel computing at the edge, new (mesh, 5G) topologies
- At the edge: **the Tactile Internet** will be enabled by IoT, AR/VR and contextual computing



Topic: H2020-ICT-56-2020

CSA

Timeline:

- Call opening: 9th July 2019
- Call deadline: 16th January 2020
- Budget: **2 Mio €**

Specific Challenges:

- To support measures for further development of IoT ecosystems, partnerships, stakeholders networking, contribution to pre-normative activities and to standardisation, development of business models, innovation activities and skills building.
- To liaise also with NGI and other initiatives of the work programme that are relevant to IoT related research and innovation activities.

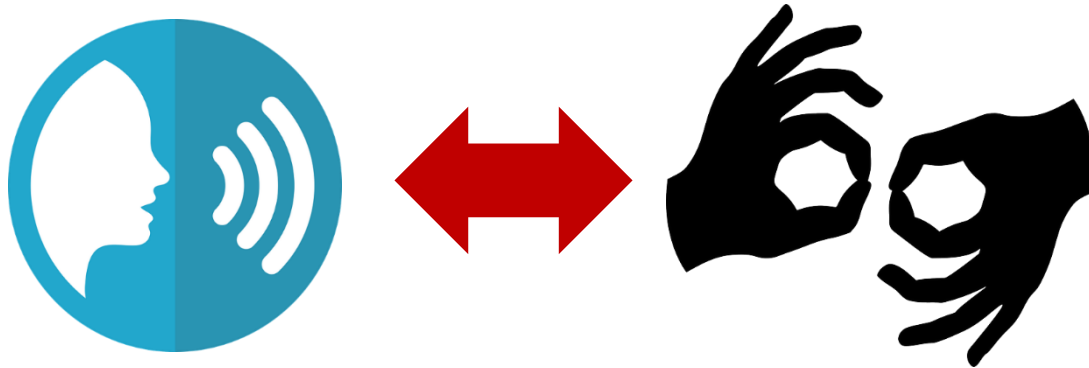
Expected impact:

- **User at the Center**
 - Improved privacy and security
 - Contribution to human-centered IoT evolution improving usability and user acceptance
- **Future and emerging standards** and pre-normative activities
- Evolution of **next generation of IoT infrastructure service platforms**
 - Scientific progress enabling future semi-autonomous and real-time IoT applications
 - Decentralised architectures and governance
 - Automating Processing at the edge
- **New disruptive business models**
 - Opportunities for SMEs, innovators and start-ups

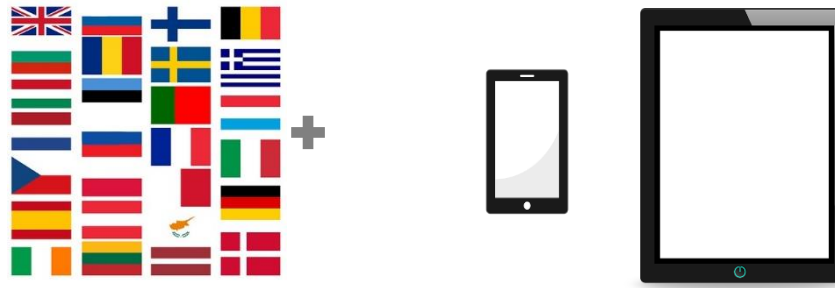
- Digitising European Industry Strategy (DEI):
<https://ec.europa.eu/digital-single-market/en/digitising-european-industry>
- EU Internet of Things in DAE:
<http://ec.europa.eu/digital-agenda/en/internet-things>
- The Alliance of Internet of Things Innovation
<http://www.AIOTI.eu>
- ENISA IoT work
<https://www.enisa.europa.eu/topics/iot-and-smart-infrastructures/iot?tab=publications>



- Develop **novel mobile applications translating between speech and sign languages** to assist people with hearing impairments



- The projects should leverage on current state-of-the-art in **translation** between **all official spoken and sign languages** of the EU and associated countries for efficient and effective use on **mobile devices**.



Research and Innovation Actions

pragmatic and useful solutions in **real life**

addressing challenges arising from:

automated recognition of

**speech, hand signs, facial expressions, movement of
the mouth, gestures, body positioning, etc.**

PROJECTS SHOULD EXPLORE

- how **end-users** can **best interact and cooperate** with the application
- how the system **adapts to users in real-life conditions** and **prevents unintended gender bias** in translation.
- The applications should be **open source**, robust, cost-effective and validated across a wide spectrum of users.
- Priority to projects addressing a **wide range of languages**, in particular under-resourced languages.



We are NOT looking for:

- Fundamental research
- Social study only

Topic evolution

ICT-23-2017: Interfaces for accessibility

ICT-29-2018: A multilingual Next Generation Internet

ICT-57-2020: An empowering, **inclusive** Next Generation Internet

Key actors

- Research entities and communities in:
 - assistive technologies
 - language technologies
 - artificial intelligence
- Associations of people with hearing impairments.
- Mobile software developers

Future Outlook

Inclusive Next Generation Internet, a priority in



Interactive Technologies, including immersive technologies and language technologies, will allow for a more inclusive, user-oriented/driven and innovative use of computers, machines and the Internet.

Upcoming events / information days

EVENT	WHEN	WHERE
AAATE 2019, Global Challenges in Assistive Technology: Research, Policy & Practice	27-30/09/2019	Bologna, Italy
30 th British Machine Vision Conference	9-12/09/2019	Cardiff, UK
ICIAP 2019: International Conference on Image Analysis and Processing	9-13/09/2019	Trento, Italy
Digital Excellence Forum @ ICT Proposers' Day 2019	19-20/09/2019	Helsinki, Finland
European Research and Innovation Days	24-26/09/2019	Brussels, Belgium
META-FORUM 2019, Introducing the European Language Grid	8-9/10/2019	Brussels, Belgium
4 th ELRC Conference, Share your language data, Shape Europe's multilingual future!	26-27/11/2019	Helsinki, Finland
ITU-EC Forum for Europe, Accessible Europe: ICTs for ALL	4-6/12/2019	Valletta, Malta
European Day of Persons with Disabilities 2019	12/2019	Brussels, Belgium
Funka Accessibility Days	1-2/04/2020	Stockholm, Sweden



HORIZON 2020

ICT-44-2020

Next Generation Media

NCP Training, 17 July 2019, Brussels
Rapolas LAKAVIČIUS, DG Connect, I4

Specific Challenge

- Traditional Media boundaries are blurring, end-user generated content offered by internet platforms has become an important part of the overall Media ecosystem.
- To meet quickly changing expectations of the audience, the European media sector needs to overcome traditional boundaries by rapidly embracing next generation technologies.
- Exploring the future of media should involve artists, influencers and other creatives.



Imagesource:Shutterstock/violetkaipa

Scope

Development of innovative solutions to support:

- 1) **Next Generation Media integrating the emerging technologies** such as 5G, Cloud, the Internet of Things, Virtual/Augmented Reality, smart objects, wearables, data analytics, artificial intelligence, etc. to overcome traditional boundaries and sectors.
- 2) **New adaptive and inclusive media ecosystem and new content**, e.g. new online strategies and business models or new forms of content creation/distribution/presentation.
- 3) **Synergies across media, operators, technologists and cultural/artistic actors**, in order to develop a network of stakeholders which, building on the existing STARTS (Science + Technology + ARTS) network, will explore innovative paths for the next generation of media.

Subtopics

a) Innovation Action (IA)

i. **Business Innovation Ecosystems**

ii. **New User Driven and Enriched Experiences in Future Media**

b) Coordination and Support Action (CSA)

STARTS – Technology and Arts Alliance as Driver for Next Generation Media

Please refer to the published work programme when elaborating a proposal

Subtopic a) i. Business Innovation Ecosystems

- Exploring novel approaches for technology-driven innovation in European media ecosystem
- At least two interlinked incubators hosted in existing operational environments providing access to relevant infrastructures and services as well as internal support.
- Technology-driven innovation for open and interoperable media with a particular focus on SMEs and start-ups.
- Exploring synergies with non-media sectors.
- Third party participants to be selected via two open calls (at least 70% of EU contribution).
- Each third-party project will last from 5 to 12 months with a size from EUR 50.000 to 350.000.
- Actions should mentor and coach the third party projects, connect them with high-performers to the venture capital market.

Subtopic a) ii. will cooperate and work closely with the subtopic a) i. and vice-versa versa through a specific task.

Subtopic a) ii. New User Driven and Enriched Experiences in Future Media

Large-scale demonstrators, pilots or close-to-market prototypes for the creation of a user driven, fair, sustainable and technologically advanced media ecosystem focused on one or more of the following themes:

- Enabling all-IP (distributed/accessed over internet) content value chain;
- New business opportunities on cross-media and cross-sectorial data analytics;
- Solutions that facilitate the availability of European content online;
- Tackling cross-border content restriction issues;
- User driven, immersive and accessible media services;
- Transmedia and cross media experiences and services;
- Immersive and interactive experiences in publishing;
- Agile media rights management and content identification solutions to improve online content distribution.

Subtopic a) ii. will cooperate and work closely with the subtopic a) i. and vice-versa versa through a specific task.

Subtopic b) STARTS – Technology and Arts Alliance as Driver for Next Generation Media

- The main activity: establishing a network of actors to foster synergies between art, media and technology with the following aims:
 - To create new uses and forms of media;
 - To employ media as a social catalyst.
- Target groups of actors: media industry, innovation hubs, technology and cultural/art institutions, civil society.
- In the spirit of digital innovation hubs to develop a strategy how to promote local art-technology centers and artist residencies that bring together these actors.
- Organize exhibitions, performances and awarding two prizes to stimulate new alliances between art, technology and media and help promoting novel role of media in societal context.



European
Commission

Expected Impact

Concrete development towards a user-driven and user-centric media value chain triggered by an alliance of media producers, media users, technology and cultural players.

- Validated new media services tested in real operational environments.
- Improved users' experiences and New solutions for access to media content.
- Open and interoperable solutions enabling a genuine Digital Single Market for media.
- Improvement of the technological transfer from European technological SMEs to the media value chain.
- An enhanced and enriched **media ecosystem**.



European
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Timing

- Call opening: 09/07/2019
- Call closing: 16/01/2020

Budget

- a) i. IA: 5,5 MEUR
- a) ii. IA: 2x 5 MEUR
- b) CSA: 2 MEUR

- Expected duration: 30 to 36 months
- At least one proposal for subtopics a) i. and b).
- Two proposals for subtopic a) ii.

Media Convergence, Social Media and STARTS

Research and Innovation for Future European Media 2019:

https://www.mediaroad.eu/wp-content/uploads/2019/02/Future_European_Media_2019_.pdf

Summary of a recent Concertation meeting:

https://www.mediaroad.eu/wp-content/uploads/2019/04/Report-Concertation-Meeting-6-February-2019_FINAL.pdf



Research and Innovation for
Future European Media 2019

MEDIA CONVERGENCE
SOCIAL MEDIA
STARTS



Stakeholders Initiatives



New European Media Initiative

European Technology Platform fostering Media convergence to develop a common innovation environment

nem-initiative.org

S + T + ARTS Science technology and Arts

Supports collaborations between artists, scientists, engineers and researchers. Enables artists to reflect on novel uses of technology.

www.starts.eu





Vision documents by SUPPORT ACTIONS (CSA)

MEDIAROAD

Vision Paper - The future of Media

Innovation: https://www.mediaroad.eu/wp-content/uploads/2018/09/Vision-Paper_Future-of-Media-Innovation.pdf

VITAL MEDIA

Final report on strategy development for convergence and social media

<https://nem-initiative.org/wp-content/uploads/2018/12/vital-media-d3-3-v2-0.pdf>

COMPACT

State of the art: research on convergence and social media

<http://compact-media.eu/state-of-the-art-research-on-convergence-and-social-media/>



Session of H2020 Calls ICT-44 and ICT-54 at the ICT Proposers' Day 2019

**Next Generation Media, Social Media &
Blockchain,
19/09/2019 (11:30-12:45)**

**S+T+ARTS: The Arts unleashing
creativity across H2020,
20/09/2019 (13:15 - 13:55)**

Programme: <https://ec.europa.eu/digital-single-market/events/cf/digital-excellence-forum-ict-proposers-day-2019/programme.cfm?id=458>





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Previous calls

- ICT-19-2017: Media and content convergence, the topic focused on personalised immersive experiences.
- ICT-28-2018: Future Hyper-connected Sociality, the topic focused on trustful and secure data ecosystem.
- ICT-32-2018: STARTS Lighthouse pilots, focus on the art-inspired human-centric environments and urban manufacturing.

What we do not want

- Addressing the same scope of work as ongoing projects.
- Addressing the same challenges as the previous topics ICT-19, ICT-28 and ICT-32.
- Well justified cases are exempt. For example, advancing the state of the art in emerging areas not covered by current portfolio, such as transparent and user-defined content customisation, trusted spatial and augmented reality, countering deep-fakes, etc.

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Media Convergence and Social Media (I4)

DG CONNECT

European Commission



ICT-45-2020

**Reinforcing European presence in international
ICT standardisation: Standardisation
Observatory and Support Facility**

Emilio Davila

European Commission DG CONNECT.F3

The Challenge



 **OBJECTIVES IN A NUTSHELL:** Support the participation of European experts in international ICT standardisation activities and ensuring promotion of European requirements and interests (based on European R&D results, support to PPP's, Rolling Plan for ICT Standardisation, bi-lateral agreements with 3rd countries...)

What are you looking for? *A CSA for*

1. Monitoring and gathering information regarding the ongoing work from the relevant international and global standards developing organisations (SDOs), fora and consortia, identifying where there is need of further EU involvement ("The Observatory")
2. Setting-up and managing a "facility" to support participation when needed of key European specialists (especially from SMES and Academia) in key SDOs to push for European requirements and promote broader European interest.

Work Programme topic ICT - 45

2. What do you NOT want?

- Direct contribution to standardisation activities

Work Programme topic – topic evolution

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



Continuation of ICT-40-2017

- *New:*

- *More focus on chairmanship and management functions in TCs*
- *Possibility of supporting organising international standardisation meetings in Europe*

- *Is it linked to other topics in the current WP?*

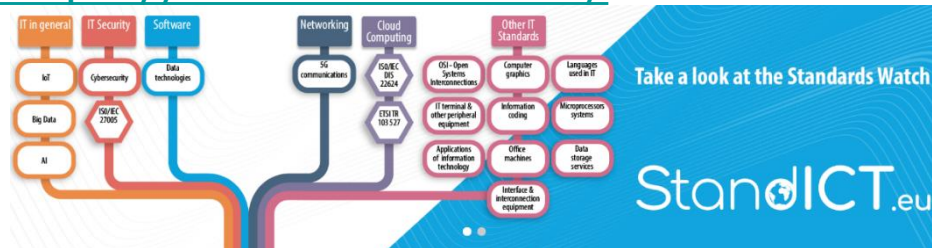
To any topic that may contribute to standardisation. It can support bringing results of any project/pilot to international Standards Development Organisations (SDOs)

Need to liaise with relevant CSAs and PPPs

Work Programme topic – topic evolution

4. Current project portfolio

<https://www.standict.eu/>



Work Programme topic – Key actors

5. Who are the leading players?

International SDOs active in ICT.

EU experts (SMEs, academia, industry, NSOs)

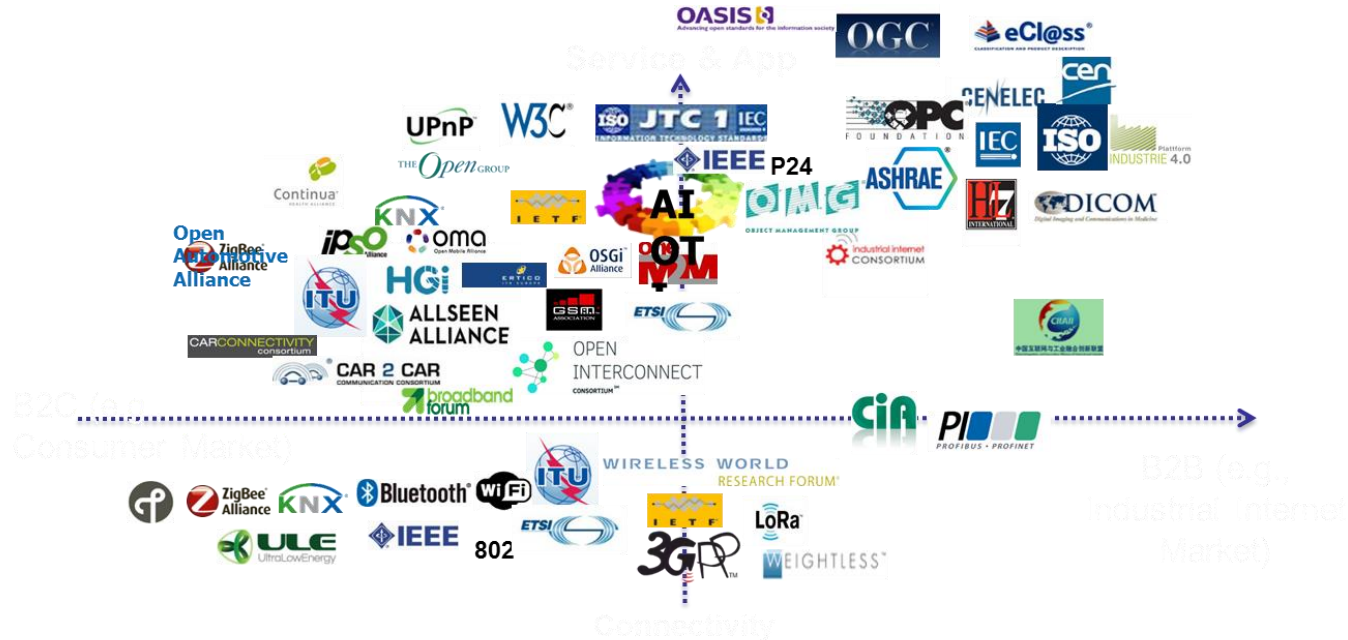
6. Is there a key group of actors (eg. cPPP or other) driving this?

PPPs: AIOTI, 5GPP, BDVA, ECSO, INATBA, FoF,...

European Multi-Stakeholder Platform on ICT standardisation

EU (and national) funded R&I projects and pilots

Example: World-wide Alliances related to IoT



Work Programme topic

7. Are there any additional / background documents?

- Communication "ICT standardisation priorities for the DSM"
COM(2016) 176 final. Pillar II.5
- ICT Standardisation Rolling Plan 2019
- Standardisation roadmaps from PPPs

Future Outlook

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

- Beyond 5G, New Generation Internet, BC/DLT, AI, ...

Upcoming events / information days

- **Networking Session**
"Standards for innovation, Standard Watch and funding of standardisation experts"
@ICT Proposers Day Helsinki.
- **20/09/2019 (15:40-16:15)**
- **[+ Stand of European Standardisation Organisations]**

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HORIZON 2020
Transversal topic



S+T+ARTS

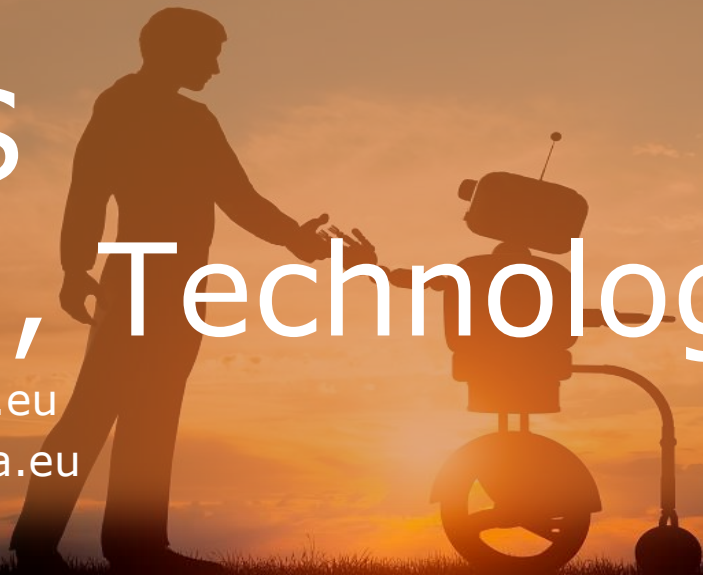
WP-2020

STARTS

Science, Technology, Arts

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What is STARTS

| 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 are invited to build on activities developed as part of the STARTS initiative in DG CONNECT (www.STARTS.eu)



STARTS in WP-2020

| ICT-44-2020 Next Generation Media

b) Coordination and Support Action (CSA)

Starts – Technology and Arts Alliance as Driver for Next Generation Media

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

a) Innovation Actions (IA) for Digital Innovation Hubs

Cognitive autonomous systems and human-robot interaction

| DT-ICT-05-2020 Big Data Innovation Hubs

Sub-topic 3: Innovation Actions (IA)

Experiments for data driven services and tools able to reshape the media value chain

ICT-44-2020 Next Generation

Media

Subtopic b) Synergies across media, operators, technologists and cultural/ artistic actors, in order to develop a network of stakeholders which, building on the existing STARTS (Science + Technology + ARTS) network, will explore innovative paths for the next generation of media.

Subtopic b):

- | Establish a network to foster synergies between art, media and technology with the following aims:
 - | To create new uses and forms of media;
 - | To employ media as a social catalyst.
- | Organize exhibitions and performances to stimulate new alliances between art, technology and media and help promoting a novel role of media in societal context; **significant amount of budget to be reserved for activities involving artists**
- | Support activities to organise the next two annual prizes (EUR 20.000 each) STARTS prizes:
 - | One on artistic exploration where appropriation by the Arts has altered use, deployment, or perception of technology
 - | One on ICT-Arts collaboration opening new pathways for innovation and/or society in particular in context of regional development

Timing and budget:

- | Call opening: 09/07/2019 / Call closing: 16/01/2020 / Expected duration: 30 to 36 months
- | Max. contribution 2 MEUR (CSA)

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

Scope: The topic calls for **Digital Innovation Hubs** that strengthen the digital transformation for European SMEs and mid-caps (<http://www.i4ms.eu>). Proposals should cover the manufacturing sector at large, including discrete manufacturing, continuous production, and construction. If appropriate, building ecosystems around digital industrial platforms driven by European actors should be supported.

Area:

Innovation Action in Cognitive autonomous systems and human-robot interaction:

- | Experimentation with cyber-physical systems in production environments.
- | Adoption of robots safely cooperating with humans to support their work, and taking into account gender issues.
- | Proposals should include partners that facilitate creation and experimentation with and by the arts to ensure human acceptance of digital technologies in manufacturing and to stimulate new products and services.

Timing and budget:

- | Call opening: 09/07/2019 / Call closing: 13/11/2019 / Expected duration: 30 to 36 months
- | Max. contribution 8 MEUR for the area (IA)
- | May involve financial support to third parties (typically in the order of EUR 20.000 to 100.000 per third party)

DT-ICT-05-2020 Big Data Innovation Hubs

Scope: Strengthen European SMEs and empower European citizens by supporting them to use and combine data sources from different sectors and communities (e.g. retail, tourism, manufacturing, finance and insurance, media, healthcare, consumer support, transport, energy, public administration...)

Sub-topic 3:

Select, launch and incubate innovation experiments for data driven services and tools able to reshape the media value chain, including social media. Experiments should involve one or both of the following aspects:

- to explore new ways in which citizens can exploit data to better target and extend the reach of user generated content so as to increase content diversity, transparency and accountability, in a way that enables bottom-up quality journalism, science education or digital democracy.
- to explore new ways in which artists and more generally the creative sectors could be integrated in the development of innovative data exploitation for content creation.

Timing and budget:

Call opening: 09/07/2019 / Call closing: 13/11/2019

Max. contribution 5 MEUR for sub-topic 3 (IA)

May involve support to third parties as a mini project following an open call, up to the amount of EUR 80.000 for each project