ICT-11-2017

Collective Awareness Platforms for Sustainability and Social Innovation

Challenge

- Capitalise on participatory innovation
- Develop models and blueprints to produce collective intelligence
  - leveraging on open data, knowledge networks, open hardware and Internet of things
- Demonstrate that innovative combinations of existing or emerging network technologies enable new Digital Social Innovation
  - to cope with emerging sustainability challenges better than with traditional solutions
ICT-11a: Scope

- **Pilots** of Collective Awareness Platforms (CAPS)
- **Demonstrating** new forms of bottom-up innovation and social collaboration
- Exploiting digital citizen engagement and **collaborative tools**
- Based on **open** data, **open** knowledge, **open** source software and **open** hardware
- Harnessing **crowd**sourcing or **crowd**funding models
- Leveraging on fresh grassroots ideas and civil society **participation** in the broad digital social innovation domain
ICT-11a: target areas

• New participatory innovation models for economy and society
  ➢ e.g. collaborative or circular economy, collaborative public services and collaborative making

• Solutions for sustainable lifestyles
  ➢ e.g. collaborative consumption and production, smart reuse, low carbon approaches

• Emerging ethics of digital innovation
  ➢ e.g. social entrepreneurship, direct democracy, privacy preservation, digital rights

At least 1 proposal per area will be selected
ICT-11a: methodological approach

- Include in consortia an existing and motivated community of citizens
  - driving platform development
- Base the platforms on an appropriate combination of existing or emerging network technologies
  - e.g. distributed social networks, wikis, sensors, blockchains
- Demonstrate a durable multidisciplinary collaboration
  - including in the consortia at least two entities whose main focus of interest is beyond the ICT domain
ICT-11a: methodological approach

- **Integrating different platforms**, addressing several sustainability challenges
- **Engaging civil society at large**, for instance through NGOs, local communities, social enterprises, non-profit organisations, students and hackers
ICT-11b: Coordination & Support Actions

• Coordinate and support the CAPS initiative and the underlying broader digital social innovation constituency
• Identify links and synergies among different projects
• Ensure visibility and contacts at European and international level
ICT-11: expected impact (1/2)

- Demonstrate increased effectiveness of new bottom-up, open and distributed approaches exploiting network effects and based on open data/open hardware, compared to existing solutions to societal/sustainability challenges.

- Capability to reach a critical mass of European citizens and to transpose the proposed approaches to other application areas related to sustainability.

- Achieve effective involvement of citizens and relevant new actors in decision making, collective governance, new democracy models, self-regulation, citizen science and citizens' observatories, new business and economic models.
ICT-11: expected impact (2/2)

- Achieve measurable improvement in cooperation among citizens, (including elderly), researchers, public authorities, private companies and civil society organisations in the development of new sustainable and collaborative consumption patterns, new lifestyles, and innovative product and service creation and information delivery.

- Demonstrate the applicability of concrete and measurable indicators to assess the social impact and the "social return of investment" of the proposed solutions.
CAPS: Evolution

Internet Science
Objective 5.1b (FIRE)
Budget: 4M EUR
2 projects funded

CAPS
Objective 5.5
Budget: 15M EUR
10 projects funded:
- 5 pilots
- 5 CSAs

CAPS ICT-10-2015
Budget: 37M EUR
→ 43M EUR
24 projects funded:
- 17 pilots
- 3 Internet Science
- 2 DSP
- 2 CSA

CAPS ICT-11-2017
Budget: 10M EUR

Distributed Architectures for Decentralised Data Governance
ICT-12b-2016
Budget: 5M EUR

CAPS I
WP 2012-13 (FP7)

CAPS II
WP 2014-15 (H2020)

CAPS III
WP 2016-17 (H2020)
CAPS and Internet Science

Internet Science
- Research

CAPS
- Innovation
- Development

- informs by theoretical development/theory
- proofs (or disproves) by measurable outcome
New Collaborative approaches (to inclusion, agriculture, health, disasters) will be added in January 2016.
CAPS: Examples

**Open Democracy:** enabling citizens' participation in democratic processes (voting, consultation)
   - **D-Cent:** Provide civil society with digital tools for democratic participation

**Open Policy Making:** better decision making based on open data
   - **WebCosi:** Increasing trust in collectively-generated statistics

**Collaborative Economy:** lending, exchange, swapping made to operate at scale

**Collaborative Making:** new ways of manufacturing

**Collaborative Consumption:** rethinking consumerism
   - **Wikirate:** enabling citizens to rate companies on corporate social responsibility

**Environmental action:** applying citizen science and IoT to environmental challenges
   - **DecarboNet:** foster behavioural change to reduce energy consumption

**New Collaborative approaches** to inclusion, agriculture, health, disaster management
   - **Cap4Access:** Collectively removing barriers to inclusion

**Internet Science,** Decentralised architectures, Open Data, Privacy, Social Entrepreneurship
   - **Catalyst:** Experimenting new collective forms of creativity and collaboration

**Accompanying Measures**
   - **CAPS2020:** Organisation and management of events
Why multidisciplinary?

To understand:

- simple **online reputation mechanisms**
- **new collective models for value creation** beyond monetisation
- **motivations and incentives** for online collaboration
- impacts of social networks on **sustainable collective behaviours**
EC Study on Digital Social Innovation in Europe
Crowdmapping actors and networks

http://digitalsocial.eu/
What do we NOT want?

- Proposals without a clear existing (and physical) community of motivated users
  - No "virtual" solution

- Proposals technology-driven, or aiming at purely commercial solutions
  - Rather integrating existing technologies

- Consortia without at least two partners which are focused on non-ICT disciplines
  - Be multidisciplinary!
ICT-11-2017: Good to know

✓ Opening: 8 December 2016
✓ Submission deadline: 25 April 2017
✓ Budget: 10 M€ (IA: 9M€, CSA: 1M€)

Work Programme:

CAPS Website:

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ICT-12-2016

Net Innovation Initiative
Challenge

• Turn RTD & I outcomes into business success
• Exploit the potential that open platforms offer for the development of new services and applications
• Develop alternatives to current centralised platforms for big and social data management
• Overcome the dominance of existing incumbent actors, stifling innovation and allowing less and less control over the data by citizens
• Give key players and ecosystems, startups and SMEs a sufficiently innovative technology to innovate on the net
• Outcomes of Future Internet RTD & I need to be transferred faster into real life.
ICT-12a: Multi-vendor Open Service Platform

✓ Increase competition
✓ Avoid vendor lock-in
✓ Royalty-free open specifications
✓ Open source reference implementations, offered by multiple vendors
✓ Deploy FIWARE platform (FP7)
ICT-12a: Innovation Actions (1/2)

i. FIWARE adoption
   • take-up of FIWARE in cities
   • evolution of the FIWARE platform with new context-aware services addressing the needs of cities

ii. Ecosystem creation
   • development of an engagement strategy
   • building and supporting an open community of FIWARE innovators and users (hackathons, challenges, community programmes for startups and SMEs, link to related national and regional programmes)
ICT-12a: Innovation Actions (2/2)

iii. FIWARE sustainability and evolution
   • further evolution of the FIWARE platform by an open community
   • execution of a roadmap (set of supported enablers, reference implementation in open source, maintained and made available to third parties, clear terms and conditions)
   • create public sandbox environment for experimentation of all supported enablers
   • build an open source community to manage the integrity and evolution of the FIWARE technology and to ensure a real multi-vendor approach

iv. Acceleration activities
   • support SMEs and startups taking research results of projects in the domain of Future Internet
   • financial support to third parties (typically EUR 25,000-75,000 EUR)
ICT-12a: Expected Impact

- Outcomes handed over to an open, multi-stakeholder community
- Ensure the evolution of FIWARE and its take-up among industry and small business
- Establishing FIWARE as the open service platform of choice for cities
- Increased take-up of Future Internet technologies by SMEs and web entrepreneurs
- Significant increase of the effectiveness of business processes and applications of high economic and/or societal value
ICT-12b: Distributed architectures for decentralized data governance (1/2)

• Demonstrating a distributed open hardware and software platform (for communications, cloud computing or Internet of Things)

• Supporting decentralised data and identity management and bottom-up participatory innovation

• Provide SMEs, social enterprises, industries, researchers, communities and individuals with a new development platform, which is intrinsically protective of the digital sovereignty of European citizens
ICT-12b: Distributed architectures for decentralized data governance (2/2)

- Fully distributed, e.g. using decentralised algorithms based on blockchains
- Resilient, intrinsically resistant to malware and hacking
- Preventing any possible centralisation of data storage or data management
- Able to provide federated identity management
ICT-12b: Goal

- Design, develop and demonstrate an architecture for such a platform
- Involving
  - **technological actors** (P2P and open source developers, open hardware manufacturers, experts in security, encryption, anonymity, blockchains and linked data)
  - **civil society** organisations (citizens' organisations, digital rights advocacies, artists, social scientists)
  - **developers** of the overlying social applications and systems (creative industries, SMEs, social entrepreneurs, software developers).
- To create robust **open standards** for distributed and decentralised architectures (in coordination with industry and academia)
ICT-12b: Expected Impact

- Demonstrate how a distributed architecture can enable **new data services** and disruptive (e.g. commons-based) economic models (as an alternative to the current centralised data management platforms)
- Demonstrate that citizens' generated data can be made available as part of a common distributed and decentralised architecture, open to all, so to **allow new entrants to aggregate data on demand**, bringing unanticipated features and innovative services
- Develop an architecture and open standards allowing European citizens to retain **full control over their digital identities**, and to move their personal profiles between different platforms (data portability)
- Create a **level playing field** for the development of new **collaborative applications and services** based on emerging participatory innovation models that are intrinsically respectful of privacy and ethics
ICT-12c: Coordination and Support Actions

- Support for collaboration and networking in the domain of Future Internet
- Organisation of the Net Futures conference
- Increased multi-disciplinary collaboration among Future Internet communities
ICT-12-2016: Good to know

- **Opening:** 20 October 2015
- **Submission deadline:** 12 April 2016
- **Types of action:** Innovation Action (IA, 12a), Research and Innovation Action (RIA, 12b), Coordination and Support Action (CSA, 12c)
- **Budget:** 15M € (12a), 5M € (12b), 200,000 € (12c)

**Work Programme:**

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Regulatory environment for platforms, online intermediaries, data and cloud computing and the collaborative economy

**Public Consultation:**
- This is a key action under the Digital Single Market
- Understand better the **key role of platforms** with the aim to create framework conditions for the digital world
- Addresses also **Open Service Platforms**
- For the first time policy makers sound out stakeholders to present their issues, concerns and advice.
- **Reply by 30 December 2015**

**Specific questions on Open Service Platform:**

"What are in your opinion the socio-economic and innovation advantages of open versus closed service platforms and what regulatory or other policy initiatives do you propose to accelerate the emergence and take-up of open service platforms?"
Looking for experts!

• are YOU an **expert** in the topic?
• are YOU **not submitting** a proposal?
• do YOU want to **work as evaluator** for these calls?

Please send an email and a short CV to **CNECT-SOCIAL-INNOVATION@ec.europa.eu**.