



# **WP2016-17**

## **H2020-LEIT-ICT-2017-1**

### **Big Data PPP**

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# Big Data PPP: The Challenge

- The main objective is to roll out an **industrial strategy** to develop Europe's data driven economy as outlined in the **EC Communication 'Towards a thriving data-driven economy'** COM(2014)442
- The Work Programme 2016-17 implements the Big Data PPP's **Strategic Research and Innovation Agenda** (<http://www.bdva.eu>)

# H2020-LEIT-ICT-2017

- ICT 14 Big Data PPP: cross-sectorial and cross-lingual data integration and experimentation (IA) - Budget 27 M€
- ICT 15 Big Data PPP: large scale pilot actions in sectors best benefitting from data-driven innovation (IA) - Budget 25 M€
- ICT 16 Big Data PPP: research addressing main technology challenges of the data economy- Budget 33 M€
- ICT 17 Big Data PPP: support, industrial skills, benchmarking and evaluation (1 RIA) - Budget 2 M€



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- Inducement Prize: Big Data technologies (Other Actions 7)
  - Budget 2 M€

# ICT 14 (aka Innovation Spaces) - IA

To foster the exchange, linking and reuse of data assets.  
To integrate data assets from multiple sectors across languages and formats in a safe environment for experimentations of innovative services and product ideas.

a) Innovation Actions addressing cross domain data integration challenges of EU industries arranged along data value chains. Wide range of technical issue to be tackled (i.e. data models, entity identifiers, standards, multi-lingual support, brokerage schemes, data quality, privacy, etc...)

# ICT 14 a) - Impact

Expected Impact: a. Data integration activities

- Data integration activities will simplify data analytics carried out over datasets independently produced by different companies and shorten time to market for new products and services;
- Substantial increase in the number and size of data sets processed and integrated by the data integration activities;
- Substantial increase in the number of competitive services provided for integrating data across sectors;
- Increase in revenue by 20% (by 2020) generated by European data companies through selling integrated data and data integration services offered.

## ICT 14 (continued)

b) Data experimentation incubators addressing big data industrial challenges in a cross-sectorial, cross-lingual and/or cross-border set-up.

Experimenters: SMEs and start-ups. At least 50% of experiments to be defined by data providers.

The incubator will offer access to cross-sectorial, cross language data pools, computing infrastructure and open software tools in addition to an organizational, legal, IPR support environment.

**Cascading Grants scheme to be implemented.**

# ICT 14 b) - Impact

## b. Data experimentation incubators

At least 100 SMEs and web entrepreneurs, including start-ups, participate in data experimentation incubators;

30% annual increase in the number of Big Data Value use cases supported by the data experimentation incubators;

Substantial increase in the total amount of data made available in the data experimentation incubators including closed data;

Emergence of innovative incubator concepts and business models that allow the incubator to continue operations past the end of the funded duration.



## ICT 14 DOs and DON'Ts

- DO NOT mix ICT-14 a) and b) in one single proposal: they are standalone
- DO NOT mix ICT-14 a) or b) with other ICT Topics in one single proposal, they are all standalone
- DO clearly explain at the BEGINNING of the proposal what is the industrial requirement motivating the whole proposal and who is the industrial partner in the proposal giving and responsible for that requirement
- DON'T: loosely coupled or vague 'use cases' will put your proposal at a competitive disadvantage
- DO make sure to have datasets ready for day 1 of the project

## ICT 14 DOs and DON'Ts (continued)

- Unless really important and relevant, do not build artificially new 'use cases'. One, robust, meaningful, substantiated – real\* – well developed industrial requirement

*\*real means that a company has a business need to be solved by Big Data technologies to improve its products and services, create new ones, or to improve its operations. Such company is interested in teaming up with partners in a EU project to solve such a problem and to transfer the project results into its commercial offer.*

# **ICT 15 (aka Lighthouse Projects) - IA**

Large Scale Pilot Actions in data intensive sectors involving key European industrial actors.

Their objective is to demonstrate how industrial sectors will be transformed by putting big data technologies at their core.

The Large Scale Pilot actions are meant to serve as best practice examples to be transferred to other sectors.

## ICT 15 (continued)

Possible industrial sectors for Large Scale Pilot actions include (but are not limited to) health, energy, environment, earth observation, geospatial, transport, manufacturing, finance and media.

Large Scale Pilot actions are expected to exhibit substantial visibility, mobilisation, and commercial and technological impact. Proposals must demonstrate that they have access to appropriately large, complex and realistic data sets.

## ICT 15 a) **DOs and DON'Ts**

- DO NOT mix ICT-15 with other ICT Topics in one single proposal, they are all standalone
- DO provide detailed information on the IT/Big Data platform on which the project will run on
- DO explain how the project will credibly reach the impact goals set in the Work Programme (i.e. it is not sufficient to state 'we will reach the impact goals set in the Work Programme')
- DO explain how the private investment of the Consortium partners (additional to the EU funding) is connected to the participation of company X in the project (i.e. generally providing information on company X's investment in R&D does not really address the Work Programme requirement of leveraging the EC investment)

# ICT 15 - Impact

- Demonstrated increase of productivity in main target sector of the Large Scale Pilot Action by at least 20%;
- Increase of market share of Big Data technology providers of at least 25% if implemented commercially within the main target sector of the Large Scale Pilot Action;
- Doubling the use of Big Data technology in the main target sector of the Large Scale Pilot Action;
- Leveraging additional target sector investments, equal to at least the EC investment;
- At least 100 organizations participating actively in Big Data demonstrations (not necessarily as partners of the projects).

## ICT 16 - RIA

The challenge is to fundamentally improve the technology, methods, standards and processes, building on a solid scientific basis, and responding to real industrial needs, to increase the efficiency and competitiveness of EU companies.

Cross-sector and cross-border challenges.

Examples (non-exhaustive): distributed data and process mining, predictive analytics, visualization, real time complex event processing, software stacks to take advantage of new architectures to optimize Big Data tasks...etc...etc..

## ICT 16 (continued)

Testing in real world scenarios (i.e. usability, robustness, performance, privacy aware) on real datasets, by professional/domain experts as opposed to researchers or software developers.

Proposals must demonstrate that they have access to appropriately large, complex and realistic data sets. From day 1 of the project!



# ICT 16 - Impact

- Powerful (Big) Data processing tools and methods that demonstrate their applicability in real-world settings, including the data experimentation/integration (ICT-14) and Large Scale Pilot (ICT-15) projects;
- Demonstrated, significant increase of speed of data throughput and access, , as measured against relevant, industry-validated benchmarks;
- Substantial increase in the definition and uptake of standards fostering data sharing, exchange and interoperability.

## **ICT 17 b) Benchmarking - RIA**

The benchmarking action will identify specific data management and analytics technologies of European significance, define benchmarks and organise evaluations that allow following their certifiable progress on performance parameters (including energy efficiency) of industrial significance.

## **ICT 17 b) (continued)**

To give European developers the means to continuously improve their performance (and thus their competitiveness)

With industrial actors that have expressed interest in the technology for very specific business reasons.

Make sustainability plans to continue to exist throughout the entire life-cycle of the relevant technology (i.e. after the project end).

## ICT 17 b) - Impact

- Availability of solid, relevant, consistent and comparable metrics for measuring progress in Big Data processing and analytics performance;
- Availability of metrics for measuring the quality, diversity and value of data assets;
- Sustainable and globally supported and recognized Big Data benchmarks of industrial significance



# Inducement Prize: Big Data Technologies

The problem: becoming very accurate and efficient in predicting the future based on past data.

- Extremely large amounts of past data about EU weather, energy production/consumption will be made available to train your algorithm(s)
- You submit your fully implemented prediction algorithm to a platform prepared by H2020 SEE.4C project (as many submissions as you want)
- The platforms automatically scores the performance of your submission on unseen data based on a public and verifiable success metric
- Several prizes available: best score in category (accuracy, energy consumption, others to be announced...) wins the prize
- **Eligibility criteria: The contest will be open to any legal entities (including single persons) or groups of legal entities, according to H2020 rules.**

# The Calls for proposals

- **H2020-LEIT-ICT-2017-1**

The Call opens on 8/12/2016

The Call closes on 25/04/2017 at 17:00 CET

- **Inducement Prize: Big Data Technologies**

Opening of the contest: Q2 2017

Deadline for application: Q4 2017

Award of the Prize: Q2 2018

## Next events

- DG CONNECT-G1 will organize an Info Day on Big Data PPP's WP2017 in Luxembourg, 17-18/01/2017

<https://ec.europa.eu/digital-single-market/en/news/information-and-networking-days-horizon-2020-big-data-public-private-partnership-topics-2017>

**REGISTRATIONS OPEN UNTIL 09/01/2017**

## Additional information

- Technical Background Notes will be available at:

<https://ec.europa.eu/digital-single-market/events/cf/ict-proposers-day-2016/item-display.cfm?id=18467>