

H2020 Work Programme 2014 – 2015

SC1- NCP Info Day

**Area: 8. Health, demographic change and wellbeing
(DG CNECT topics only)**

Monika Lanzenberger
European Commission - DG CNECT
Lisbon, 20 Nov. 2014

Agenda

- **Horizon 2020 Societal Challenge 1**
- CNECT topics H2020 WP-2015:
PHC 21, PHC 25, PHC 27, PHC 29, PHC 28, PHC 30
- Other topics of potential interests
- Evaluation process

Main Principles of the H2020 Work Programme

- **Challenge-based: Fewer but broader calls and topics to attract more multi-disciplinary and multi-sectoral proposals, encouraging innovative solutions.**
- **No grant negotiation phase nor budget cuts**
 - **The time from submission of a proposal, evaluation and signature of the grant has been reduced to a maximum of 8 months** (max. 5 months for evaluation + max. 3 months for signature)
- **Emphasis on innovation and impact**
 - Topic specific impact requirements
 - Explain how your work will achieve the required impacts

Eligibility Criteria & Funding Rates

- **Research & innovation action**

At least three independent legal entities from three different Member States or associated countries.

Funding rate: 100%

- **Pre-commercial procurement (PCP) Cofund & Public procurement of Innovative solutions (PPI) Cofund**

At least three independent legal entities from three different Member States or associated countries among them at least two public procurers.

PCP funding rate: max. 70% of eligible costs

PPI funding rate: max. 20% of eligible costs

Relevant Links

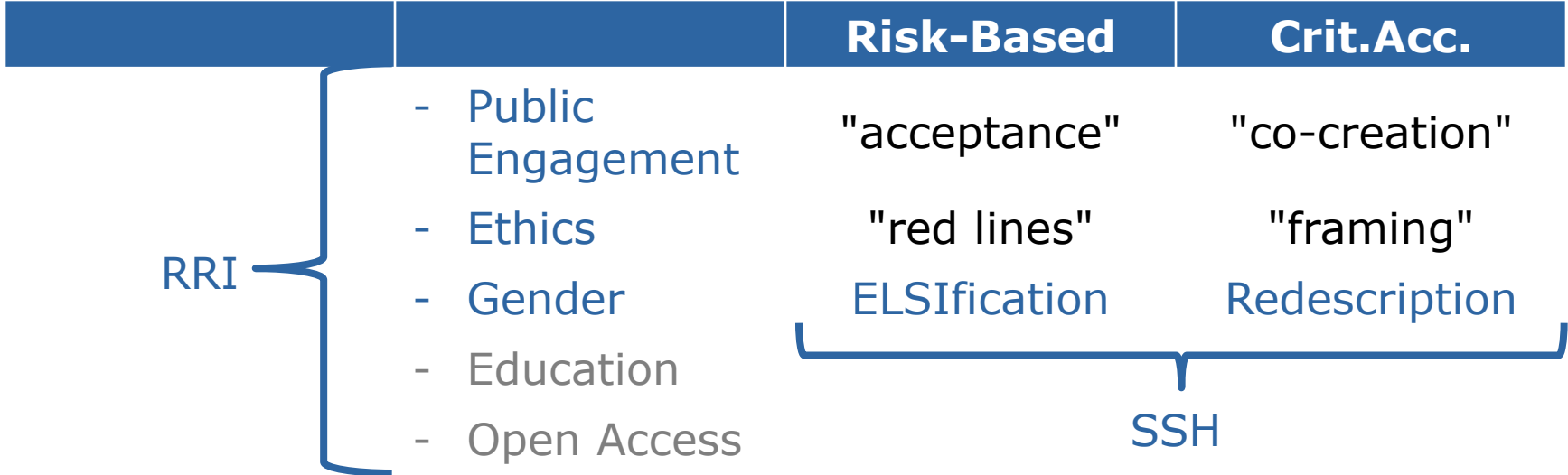
- **Work Programme 2014-15 / 8. Health, demographic change and wellbeing:**
http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-health_en.pdf
- **General Eligibility Rules:**
http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-ga_en.pdf
- **International cooperation "Open to the world" - beyond the Europe Union:**
http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/international-cooperation_en.htm

Cross-cutting issues

- **Cross-cutting issues integrated in the H2020 Work Programme:**
 - **Social Sciences and Humanities** (SSH) and **Responsible Research Initiative** (RRI) are integrated across all Horizon 2020 activities to successfully address European challenges
 - **Gender dimension in the content of R&I** - a question on the relevance of sex/gender analysis is included in proposal templates
 - **The new strategic approach to international cooperation**
 - **Other cross-cutting issues**

Cross-cutting issues taken into account if explicitly mentioned under the scope or expected impact of the call or topic

RRI and SSH closely related



<http://ec.europa.eu/digital-agenda/en/news/ssh-rri-organic-approach-ict-related-parts-wp14-15>

nicole.dewandre@ec.europa.eu

Putting Innovation at the Core of Your Proposal

Research & Innovation Actions	Innovation Actions
Basic & applied research	Limited R&D activities
Testing / validation on small-scale prototype (in lab or simulated environment)	Prototyping, testing, large-scale product validation & market replication
Limited demo or pilot activities (to show tech feasibility in a near to operational environment)	Demo or pilot activities (to show tech feasibility in operational environment)
Developing innovations meeting needs of markets	Developing innovations meeting needs of markets & <u>their delivery to market</u>
Exploitation activities	
Innovation management	

Putting Innovation at the Core of Your Proposal

'Excellence' criterion *(excerpt)*

- *Extent that proposed work is ambitious, **has innovation potential**, and is beyond the state of the art*

'Impact' criterion *(excerpt)*

- *Enhancing **innovation capacity** and integration of new knowledge;*
- *...developing **innovations meeting the needs of European and global markets**; and, where relevant, by **delivering such innovations to the markets***

'Quality & efficiency of the implementation' *(excerpt)*

- *Appropriateness of the management structures and procedures, including risk and **innovation management**.*

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PHC 21 – 2015:

Advancing active and healthy ageing with ICT: Early risk detection and intervention

Scope 1/2

- ICT based solutions to support active and healthy ageing by enabling early detection and minimisation of risks associated with ageing, including (but not limited to) cognitive impairment, frailty, depression and falls;
- Demonstrate the link between changes in behaviour and subsequent negative consequences of ageing by unobtrusive behavioural sensing, and large scale collection of data readily available in the daily living environment.

PHC 21 – 2015

Scope 2/2

- ICT based interventions, as well as innovative treatments and therapies based on early detection;
- Multi-disciplinary research involving ICT, behavioural, sociological, health and other relevant disciplines;
- Stakeholder engagement to identify relevant user needs and ensure end-user acceptance (including gender aspects);
- Ensure full compliance with relevant data protection rules.

PHC 21 – 2015

Expected Impact

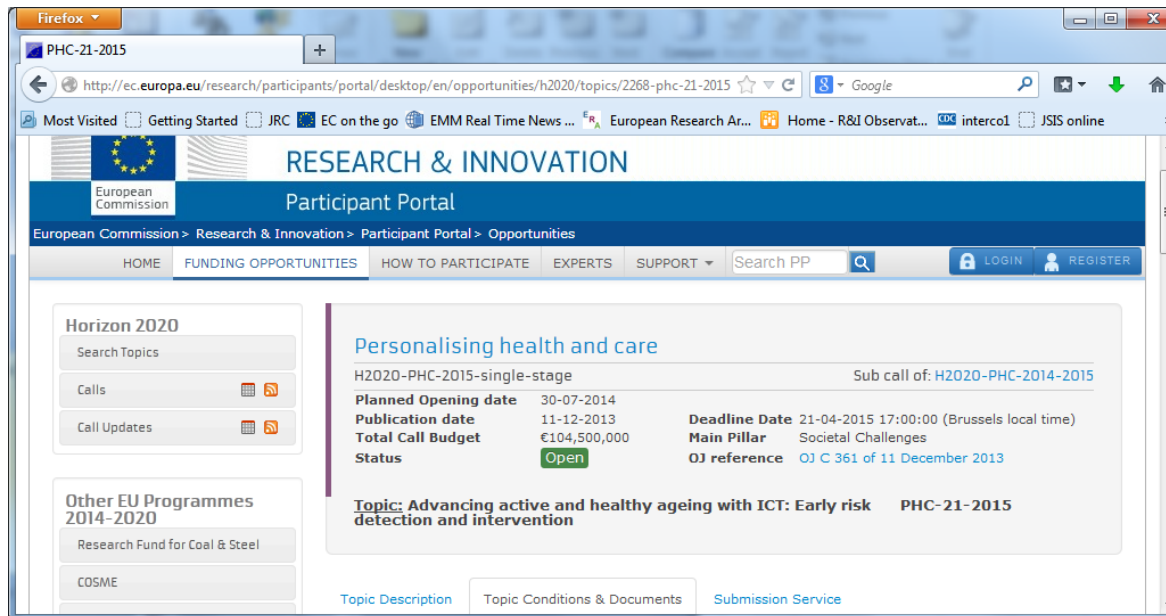
- Evidence for the benefits of risk detection and intervention, based on proof of concept and involvement of relevant stakeholders;
- Clear improvements for individuals, care systems and wider society from new therapies and interventions based on early risk detection;
- Global leadership in ICT based innovation for active and healthy ageing.

PHC 21 – 2015

Deadline, Budgets, Thresholds

- Submission Deadline: 21-04-2015 17:00:00 (Brussels local time)
- Single Stage
- Research and Innovation Actions, EU contribution 3-4 million €
- Total Call Budget: 20 million €
- Cumulative threshold: 12 (4/4/3)

PHC 21 – 2015 Participant Portal



The screenshot shows the Firefox browser window displaying the PHC 21 – 2015 Participant Portal. The URL in the address bar is <http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2268-phc-21-2015>. The page features the European Commission logo and the title "RESEARCH & INNOVATION Participant Portal". The navigation menu includes "HOME", "FUNDING OPPORTUNITIES", "HOW TO PARTICIPATE", "EXPERTS", and "SUPPORT". A search bar and "LOGIN" and "REGISTER" buttons are also present. The main content area displays details for the "Personalising health and care" topic, including the call "H2020-PHC-2015-single-stage" (Sub call of: H2020-PHC-2014-2015). Key information includes: Planned Opening date: 30-07-2014; Publication date: 11-12-2013; Total Call Budget: €104,500,000; Deadline Date: 21-04-2015 17:00:00 (Brussels local time); Main Pillar: Societal Challenges; OJ reference: OJ C 361 of 11 December 2013; and Status: Open. The topic description is "Advancing active and healthy ageing with ICT: Early risk detection and intervention".



<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2268-phc-21-2015.html>

PHC 25 – 2015: Advanced ICT systems and services for Integrated Care

Scope 1/2

Advance the state of art in telehealth and telecare systems, addressing technological, social and organisational issues. Focus on:

- services to support patient empowerment, self-care, adherence to care plans
- monitoring patient status, activity and compliance to therapy
- Fusion, analysis and interpretation of data (from patients and care providers) for improved decision making
- new patient pathways & personalisation of care programmes
- new knowledge for management of co-morbidities

PHC 25 – 2015

Scope 2/2

- Involve a wide range of stakeholders (doctors, nurses, social workers, patients, programmers, interaction designers, etc.)
- Proof-of-concept, with qualitative & quantitative success measures

**Integrated, sustainable,
citizen-centred care**



PHC 25 – 2015

Expected Impact

- Reduced admissions and stays in care institutions
- Improvements in daily activities and quality of life of older persons
- Stronger evidence on health outcomes, QoL and care efficiencies
- Improved cooperation among actors in care services & improved interaction between patients and carers
- Improved usability and adaptability of ICT systems for integrated care
- Strengthened European position in ICT products and services

PHC 25– 2015

Deadline, Budgets, Thresholds

- Submission Deadline: 21-04-2015, 17:00:00 (Brussels local time)
- Single Stage
- Total Budget: 20 million €
- Research and Innovation Actions, EU contribution 3-5 million EUR
- Cumulative threshold: 12 (4/4/3)

FAQ & Contact

FAQ on topics PHC21 and PHC25:

<http://ec.europa.eu/digital-agenda/en/news/questions-and-answers-open-calls-advancing-active-and-healthy-ageing-ict-ict-integrated>

Questions by email to Digital Social Platforms (H2):

CNECT-ICT4ageing@ec.europa.eu

PHC 28-30: Addressing Health and data modelling, but from 2 different approaches

- PHC 28 – 2015: Self-management of health and disease and decision support systems based on predictive computer modelling used by the patient him or herself
- PHC 30 - 2015: Digital representation of health data to improve disease diagnoses and treatment (used by the health professional)

PHC 28 – 2015: Self-management of health and disease and decision support systems based on predictive computer modelling used by the patient him or herself

Scope

- Development of predictive decision support systems (DSS) based on computer modelling to be used by the individual in health and wellbeing in decision and/or co-decision
- Collection of various data, examples including physical training and performance, environmental data etc.
- Existing predictive computer models
- Processing in real-time
- Indications on the uncertainties and limits

PHC 28 – 2015

Expected Impact

- Improving the participation of the patient in the care process
- Improving the management of a disease by reducing the number of severe episodes and complications
- Increasing the importance of the prevention sector in healthcare using predictive modelling
- Boosting the development of personal devices used for self-management of health
- Improving for individuals the self-control of health and the disease prevention

PHC 28 – 2015

Deadline, Budgets, Thresholds

- Submission Deadline: 21-04-2015, 17:00:00 (Brussels local time)
- Single Stage
- Total Budget: 19,5 million €
- Research and Innovation Actions, EU contribution 3-5 million EUR
- Cumulative threshold: 12 (4/4/3)

PHC 30 – 2015

Digital representation of health data to improve disease diagnosis and treatment

Scope 1/2

- Development of predictive decision support systems (DSS) based on a more complex integration of heterogeneous data sources and subject-specific computer models (Digital Patient)
- Personalised prediction and decision
- Prevention, diagnosis or treatment
- Highly visual data representation

PHC 30 – 2015

Scope 2/2

- Interactivity, friendly interfaces, usability
- Models: Existing multi-scale and multi-level, personalised computer models for diseases/physiology/functional disorders when relevant for the clinical context
- Data: patient specific, population specific and all other relevant data (e.g. history of patient, genomics, therapeutics, nutrition, molecular imaging data etc.). New technologies e.g. KET data.
- Emphasis on data standard formats
- Uncertainties and limits

PHC 30 – 2015

Expected Impact

- Better coherent use of health data and existing medical knowledge in clinical decision making
- Designing predictive and therapeutic interventions
- Better management of complex clinical situation
- Enabling use of the same information by the different medical services and relevant healthcare professionals
- Better control and inter-service coordination in the management of the patient health
- Providing a consistent view of a patient's care needs

PHC 28 – 2015

Deadline, Budgets, Thresholds

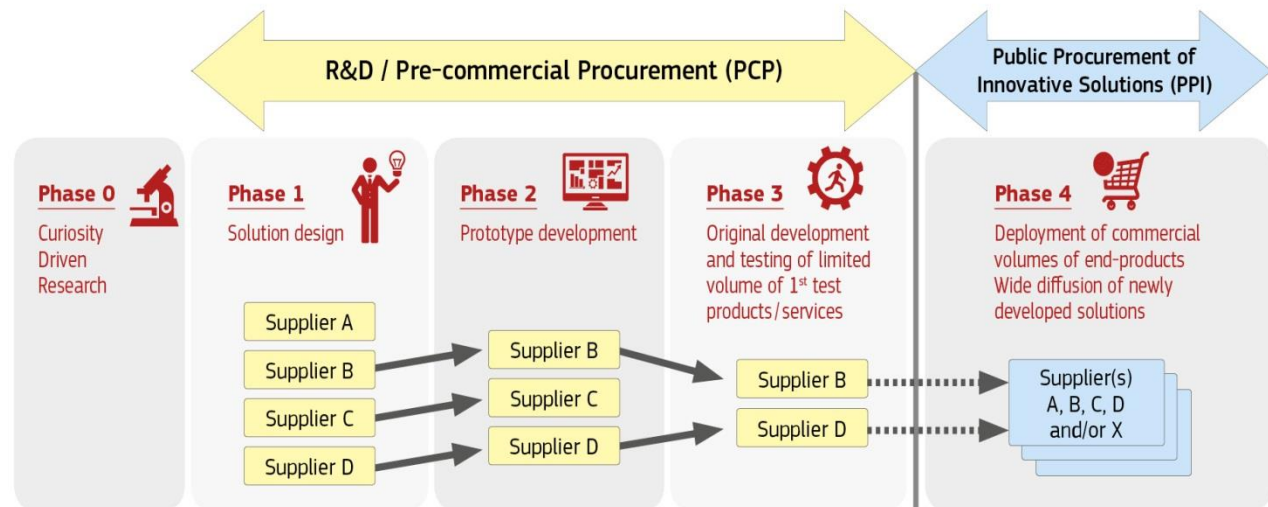
- Submission Deadline: 21-04-2015, 17:00:00 (Brussels local time)
- Single Stage
- Total Budget: 20 million €
- Research and Innovation Actions, EU contribution 3-5 million EUR
- Cumulative threshold: 12 (4/4/3)

PHC 27 - 2015, PHC 29 - 2015

Innovation Procurement = PCP + PPI

PCP to steer the development of solutions towards concrete public sector needs, whilst comparing/validating alternative solution approaches from various vendors

PPI to act as launching customer / early adopter / first buyer of innovative commercial end-solutions newly arriving on the market



PHC 27

2015 Self-management of health and disease and patient empowerment supported by ICT

Scope

- **Patient empowerment supported by ICT**
- Use of **pre-commercial procurement (PCP)** to maximise the engagement of innovation **in healthcare organisations**

PHC 27 – 2015

Expected Impact

- Improving the participation of the patient in the care process, management of a disease by reducing the number of severe episodes and complications, increasing the level of education, adherence and acceptance
- Improved interaction, evidence base on health outcomes
- Reinforced medical knowledge, confidence, commitment

Indicative project size 3 to 5 million EUR

PHC 29-2015

Public procurement of innovative eHealth services

Scope

- **Improve sustainable deployment** of new or improved **services** by healthcare service procurers in line with the eHealth Action Plan
- **Specify, purchase and deploy ICT based solutions** which can deliver sustainable, new or improved healthcare services
- **Improve the ecosystem** in which procurement approaches for innovative healthcare solutions are successfully applied
- Based on a **complete set of common specifications for technology and end-to-end services**
- Ambition to **reach a large scale implementation across multiple regions of Europe**

PHC 29 – 2015

Expected Impact

- *Contribution to regulatory and legal process*
- *awareness and successful use of public procurement to boost innovation in the application of ICT*
- *Support to interoperability and defragmentation of the market*
- *creation of economic conditions*
- *forward-looking, concerted, public sector approach to eHealth*
- **Reduced fragmentation** of public sector demand
- **wide market uptake** and economies of scale

Indicative project size 1 to 5 million EUR

PHC 27 and 29 – 2015

Deadline, Budgets, Thresholds

- Submission Deadline: 21-04-2015 17:00:00 (Brussels local time)
- Total Call Budgets:
 - PHC 27 Pre-Commercial Procurement (**PCP**) **Cofund actions**: 15 million € (EC contribution: maximum **70% of the total eligible costs**, compliance with Annex E)
 - PHC 29 Public Procurement of Innovative Solutions (**PPI**) **Cofund actions** : 10 million € (EC contribution: maximum **20% of the total eligible costs**, compliance with Annex E)
- Cumulative threshold: 10 (3/3/3)

Contact & More Info

Health and Well-being (H1): CNECT-EHEALTH@ec.europa.eu

Twitter: [@EU_eHealth](https://twitter.com/EU_eHealth) ; [@EU_eHealthweek](https://twitter.com/EU_eHealthweek)

Website: bit.ly/EUeHealth

Subscribe to our newsletter: bit.ly/eHealthinFocus

Work Programme 2014-2015, 8. Health, demographic change and wellbeing:

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-health_en.pdf

FAQ on topics PHC27, PHC28, PHC29 and PHC30:

<https://ec.europa.eu/digital-agenda/en/news/faqs-horizon-2020-topics-related-ehealth>

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- Evaluation process



HCO-O6: Global Alliance for Chronic Disease

Horizon 2020 - societal challenge 1

- **Specific challenge:** The Global Alliance for Chronic Diseases will focus its 2015 call for implementation science proposals on lung diseases.
- **Scope:** Proposals must focus on lung diseases and have an implementation science focus. They must address what works, for whom, under what contextual circumstances and are the intervention(s) adaptable and scalable in ways that are accessible and equitable.
- **Proposals should generate:** new knowledge on interventions and their implementation + demonstrate understanding of the local health system context & global cross-sectorial context.
- **Budget:** Contribution from the EU of between EUR **1 to 3 million** but does not preclude submission and selection of proposals requesting other amounts.

HOA7/e-Health inducement prize: The food scanner

- **Reward to whoever can first or best deliver breakthrough solution to a clearly defined challenge in order to:**
 - *identify new approaches or ideas and attract investment in specific areas*
 - *demonstrate the feasibility or potential of some technologies or promote their development and diffusion."*
- **Health and Well-being (H1):** CNECT-HEALTH-PRIZE@ec.europa.eu
- **Twitter:** [@EU_eHealth](https://twitter.com/EU_eHealth) ([#foodscanner](https://twitter.com/#foodscanner))

ICT28.a Innovation Actions**13 M€**

Horizon 2020 - societal challenge 1

- ICT KET integrated platforms for the healthcare and food sectors

Focus: Further development and validation in real settings of micro-nano-bio and bio-photonics systems, e.g. Reliable, Low cost, Driven by users

**Small projects (2-4 M€)
70% funding**

Focus is on:

- ✓ *Health sector:* Early or fast diagnosis and monitoring - Clinical Trials excluded
- ✓ *Food sector:* Quality, safety and process control

Impact

- ✓ **Measurable progress** in the effectiveness, cost-performance and speed of medical diagnosis, disease monitoring, the prevention and treatment of major diseases
- ✓ **Wide market introduction** of micro-nano-bio and bio-photonics systems for healthcare

- ICT28.c Coordination and Support actions

1 M€

Focus: Cooperation of scientists, technology developers and providers, and end-users for acceleration the deployment of bio-photonics and micro-nano-bio solutions in the health sector

Impact: **Reinforced value chains** and **accelerated deployment** of micro-nano-bio and bio-photonics solutions in the health sector through closer cooperation of the key stakeholders and users

Public-Private Partnership on Big Data

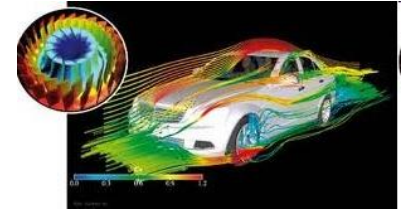
- **Big Data Value aisbl founded in October 2014** under Belgian law / President: Jan Sundelin (CEO TIE Kinetix)
- **Currently 24 members** (ATC, IT Innovation, IBM, SINTEF, University of Bologna (CINI), UPM, NOKIA Solutions & Networks, THALES, Univ. Duisburg Essen, Siemens, SAP, Engineering, TIE Kinetix, ANSWARE, Software AG, Orange, Atos, INDRA, ITI, VTT, FhG, Deri, TUB, supported by Platte Consult)
- **PPP was signed between NK and the private side 13/10/2014**
- **PPP Website:** <http://www.bigdatavalue.eu>

Specific Goals of the PPP on Big Data

- Translating priorities of industry into EC Work Programmes and Calls for Proposals
- Create new cross-sectorial, cross-lingual and cross-border big data ecosystems and markets
- Drive the take-up and integration of big data value services in private and public decision-making
- Optimise and validate data analytics' technologies (both from a technical and business perspective)
- E-space, lighthouse project, community building
- Supporting Community and networking dimensions within EU Data Community



HPC Centres of Excellence (HPC CoE)



Specific challenge:

- Establish a limited number of user-centred Centres of Excellence (CoE) in the application of HPC for addressing scientific, industrial or societal challenges (incl. health)
- CoEs may be: 'thematic', (medicine, life science, energy..)
 - 'transversal' on computational science (e.g. algorithms, analytics, numerical methods etc.) or 'challenge-driven', (e.g. ageing, climate change, clean transport etc.); or a combination of these types.



Proposals for CoEs

- 8-10 CoEs are expected to be funded
 - Follow up Call is expected in the future
- EU indicative contribution per proposal: 4 -5 M€
- Deadline for the submission of proposals:
14/01/2015
- Overall budget: 40M€

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The Evaluation Process 1/3

Rules on experts' recruitment and involvement

- Strict rules on the recruitment of experts: expertise, conflict of interest, etc. and also turnover.
 - Standard contract for involvement into the review process
 - Clear and strict rules concerning the Review process and consensus building : independence, impartiality, accuracy, etc.
-
- Proposals are scored between 0 and 5 during the Panel Review
 - All proposals above threshold are listed in descending order of overall score
 - Proposals are selected starting from the top of the list, until the available budget is exhausted: grading is absolutely crucial

The Evaluation Process 2/3

Crucial points of Horizon 2020

- Balanced approach to support research and innovation
 - Industry dimension: reinforcing the EU leading role
 - End-user dimension: proposals must be user friendly but also built-up in a very pragmatic perspective, eg proof-of-concept and piloting dimensions
- Major importance of the Work Programme's detailed specifications for each call
- Cross-cutting issues to be taken into account if mentioned under the scope of the call: gender dimension, Responsible Research and Innovation, and Social Sciences and Humanities (SSH)

The Evaluation Process 3/3

- **1. Excellence**
 - Clarity, soundness of the concept, credibility (including transdisciplinary considerations), but also demonstrating progress beyond the current state of the art:
- **2. Impact: [...] contribution to:**
 - The expected impacts listed in the work programme
 - Enhancing innovation capacity and integration of new knowledge;
 - Strengthening the competitiveness and growth of companies by developing innovations meeting the needs of European and global markets;
 - ...measures to, disseminate and exploit the project results,... communication.
- **3. Quality and efficiency of implementation**
 - Coherence and effectiveness of work plan (tasks, resources,) ; Competences and experience of people in charge of the project + the consortium as a whole
 - Appropriateness of the management structures and procedures....risk management.





Horizon 2020 - societal challenge 1

Thank you!

Questions?

Email Contact: CNECT-ICT4ageing@ec.europa.eu