**Horizon 2020
Health, Demographic Change and Well-being
Open Info day**
18 September 2015, Brussels, 15:00-17:30, room JENK

ICT for Health, demographic change and well-being – Work Programme 2016-17

Health and Well-being Unit (H1)

Digital Social Platforms Unit (H2)
DG Communications Networks, Content and Technology
European Commission

Presentation Outline

- **ICT Research and Innovation Strategy for Health Demographic Change and Well-Being**

- **Involving Social Sciences and Humanities**

- **Overview of the ICT topics for Societal Challenge 1 in the Horizon 2020 2016-17 draft Work Programme**
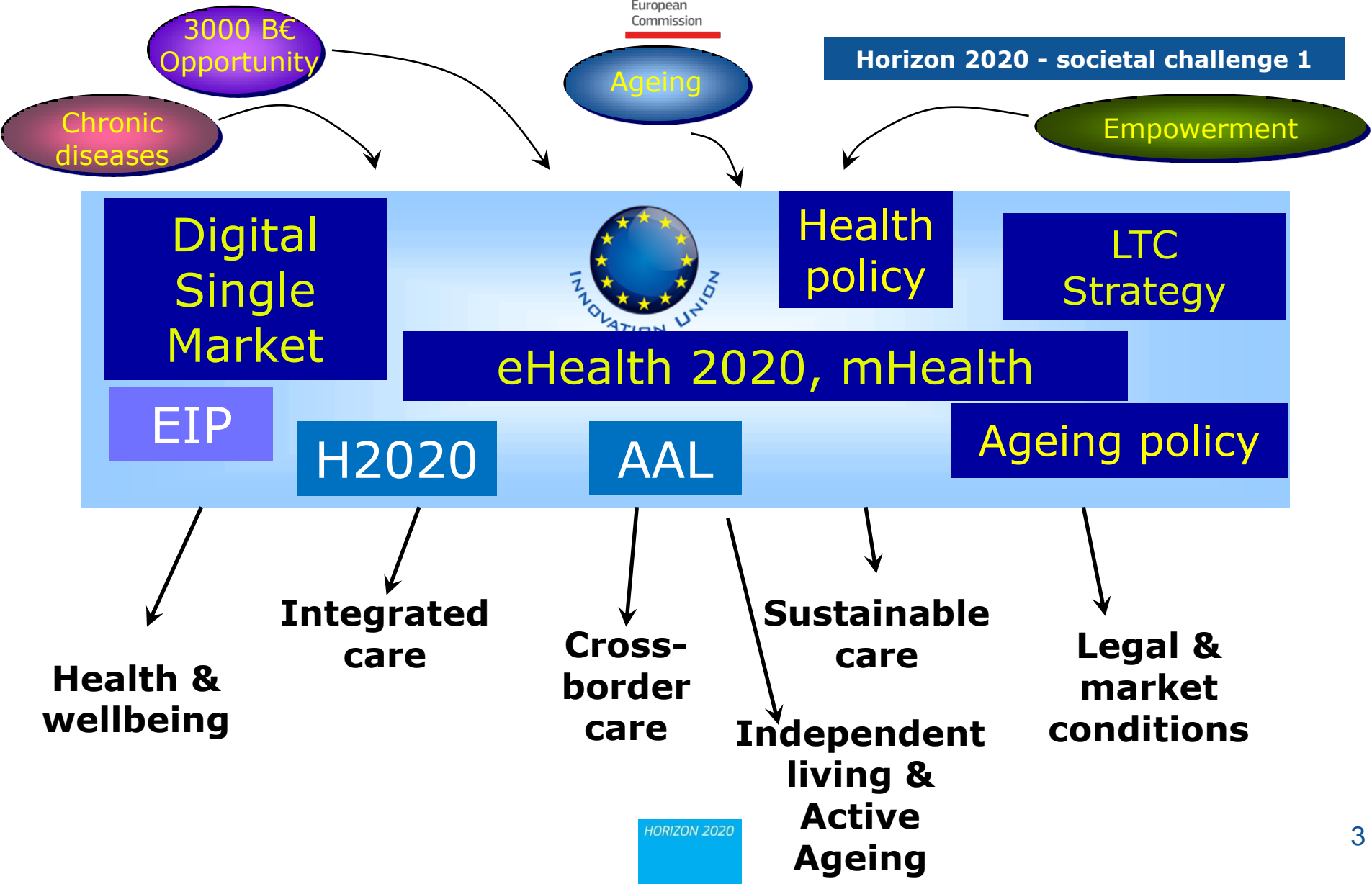
Web stream:
https://scic.ec.europa.eu/streaming/open-info-day-horizon-2020-health-demographic-change-and-wellbeing-jenk
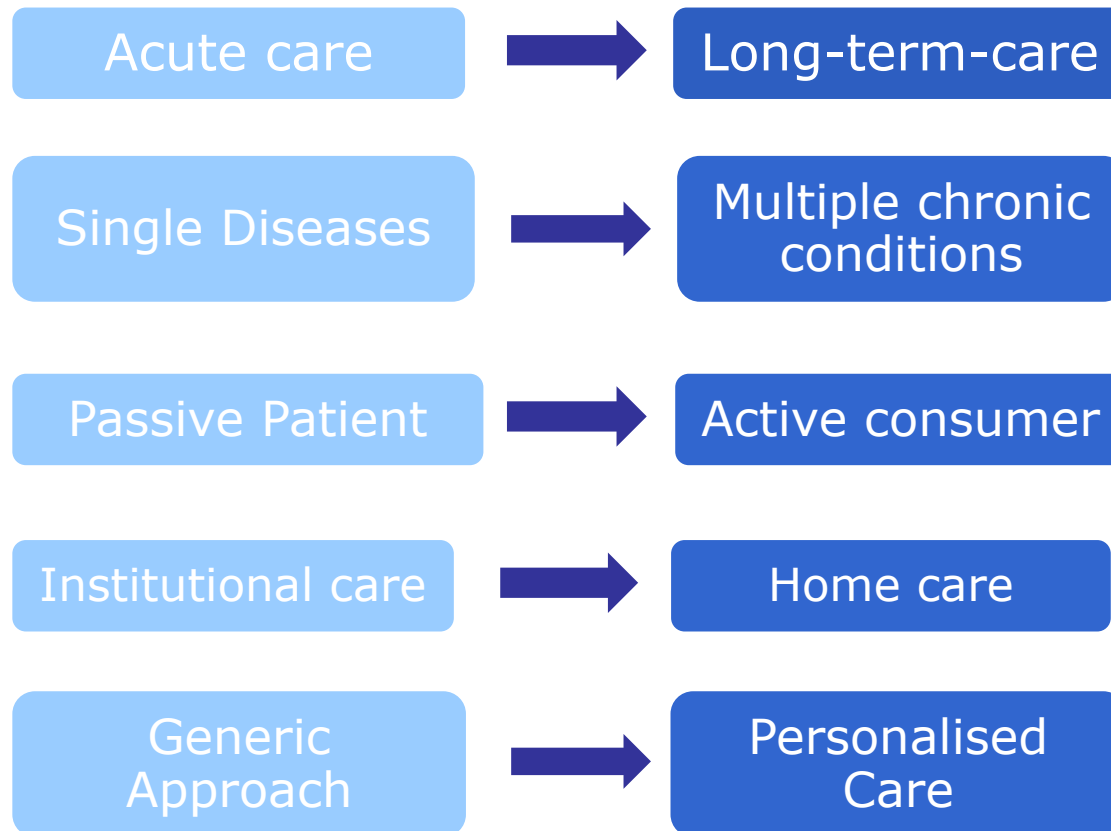
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EU Policy landscape in Health & Ageing

3000 B€ Opportunity

Chronic diseases

Ageing

Empowerment

Digital Single Market

Health policy

LTC Strategy

eHealth 2020, mHealth

EIP

H2020

AAL

Ageing policy

Health & wellbeing

Integrated care

Cross-border care

Sustainable care

Independent living & Active Ageing

Legal & market conditions

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3

Transforming Health and Care

Acute care	→	Long-term-care
Single Diseases	→	Multiple chronic conditions
Passive Patient	→	Active consumer
Institutional care	→	Home care
Generic Approach	→	Personalised Care

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How to get there

Digital Single Market

1.9 Billion € 2014-2020

Smarter, innovation friendly Policies

Creating scale, partnerships and return of investments

Investing in Research and Innovation (H2020)

European Innovation Partnership on Active and Healthy Ageing

eHealth Action plan 2012-2020

mHealth Green paper and follow-up

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Health and Ageing Well – the EU picture

European Commission

EIP on Active and Healthy Ageing

New Knowledge   **Proven Ideas**   **New solutions**   **Evidence and innovation guidelines**   **Deployment support**

Horizon 2020, SC1

JPIs

Alzheimer's   Lives   More Years Better

Health

eHealth

AAL JP2

SME Measures

ICT & Ageing

Public Health Programme

Structural Funds

EIB

ESF

EIT-KIC

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Research   **Innovation**   **Deployment**
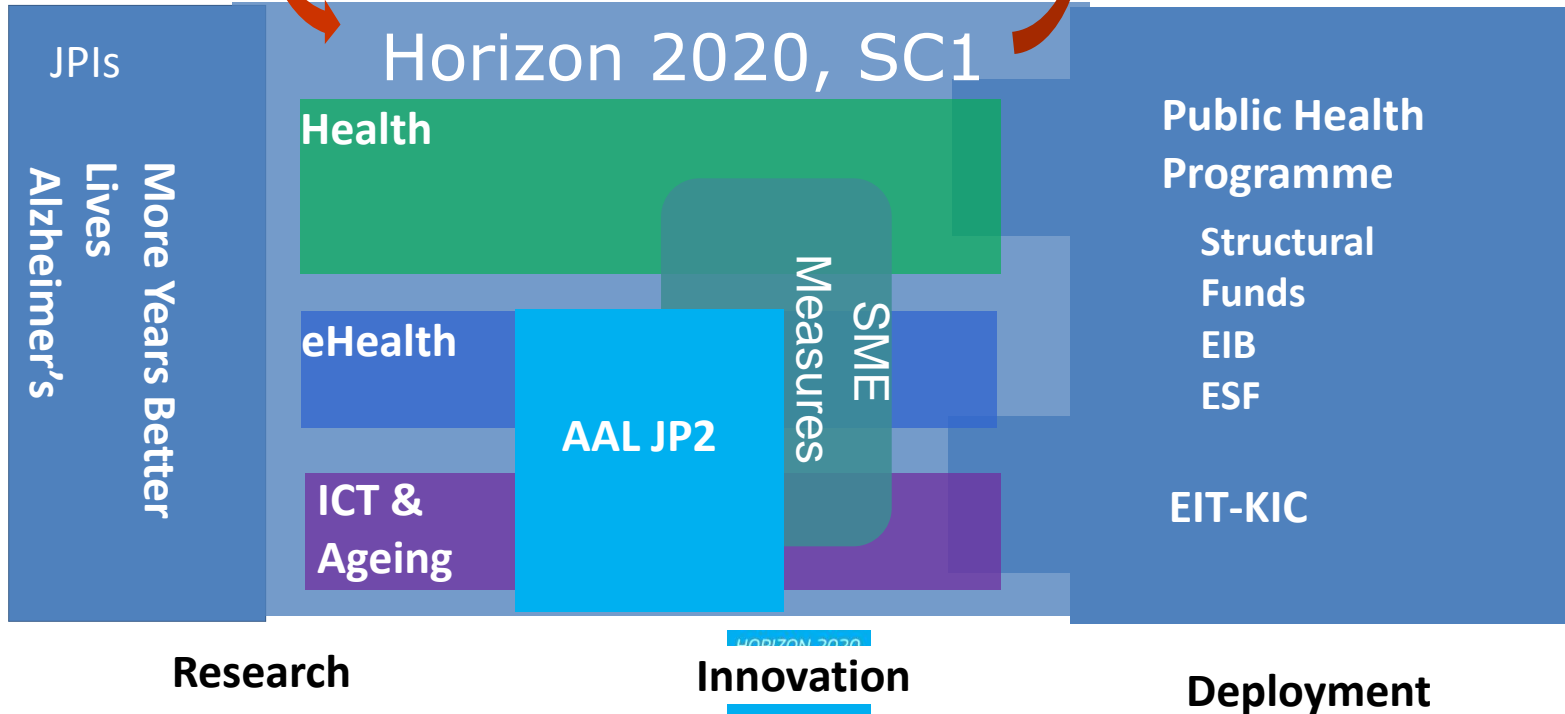
Longer Term Research Areas

- **Service robotics within smart living environments**

- **Early risk detection & intervention linked to ageing**

- **Advanced ICT for Integrated Care**

- **Self-management of health and disease based on predictive computer modelling used by the patient**

- **Digital representation of health data to improve disease diagnosis and treatment**

Applied Research

- **Open Service Platforms
(Open Source IoT middleware for service, device, data integration)**

- **Self-management of health and disease: citizen engagement and mHealth**

- **eHealth Interoperability**

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Market Oriented Action

- **Active and Assisted Living Joint Programme (co-financed with EU Member States)**

  - 140+ close to market projects funded until now

  - Transforming proven research ideas into new products and services across Europe

  - Close links with investors

  - Up to 350M€ EU+MS budget

  http://www.aal-europe.eu

Call 1: Chronic Conditions

Call 2: Social Interaction

Call 5: "Home Care"

Call 3: Self-Serve Society

Call 4: Mobility

Call 6 Occupation in Life

Call 7: Care of the Future

Call 8: Active and independent living

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Innovation Agenda

Large scale pilot projects

- **Piloting ICT solutions for independent living with cognitive impairments (4 pilots starting)**

- **Piloting Integrated Care solutions (3 pilots running)**

European cooperation in innovative public procurement

- **Pre-commercial Procurement of service robotics solutions (Silver project)**

- **Public Procurement of innovative combined health and care services (Stop and go project)**

- **Public procurement of innovative eHealth services**

European Commission

European Innovation Partnership on Active & Healthy Ageing

crosscutting, connecting & engaging stakeholders across sectors, from private & public sector

specific actions

+2 HLY by 2020
Triple win for Europe

health &
quality of life
of **European**
citizens

sustainable
& efficient
care
systems

growth &
expansion
of **EU**
industry

Pillar I
Prevention
screening
early
diagnosis

Pillar II
Care &
cure

Pillar III
Independent
living &
active ageing

Improving prescriptions and adherence to treatment
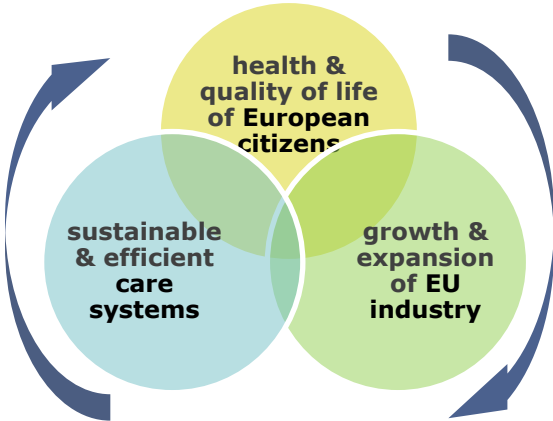
Better management of health: preventing falls

Preventing functional decline & frailty

Integrated care for chronic conditions, inc. telecare

ICT solutions for independent living & active ageing

Age-friendly cities and environments

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European Innovation Partnership on Active and Healthy Ageing

1,000 regions & municipalities

> 500 commitments

3,000 partners

32 Reference Sites

1 billion euro mobilised

30 mio citizens, >2 mio patients

Marketplace >100,000 visits
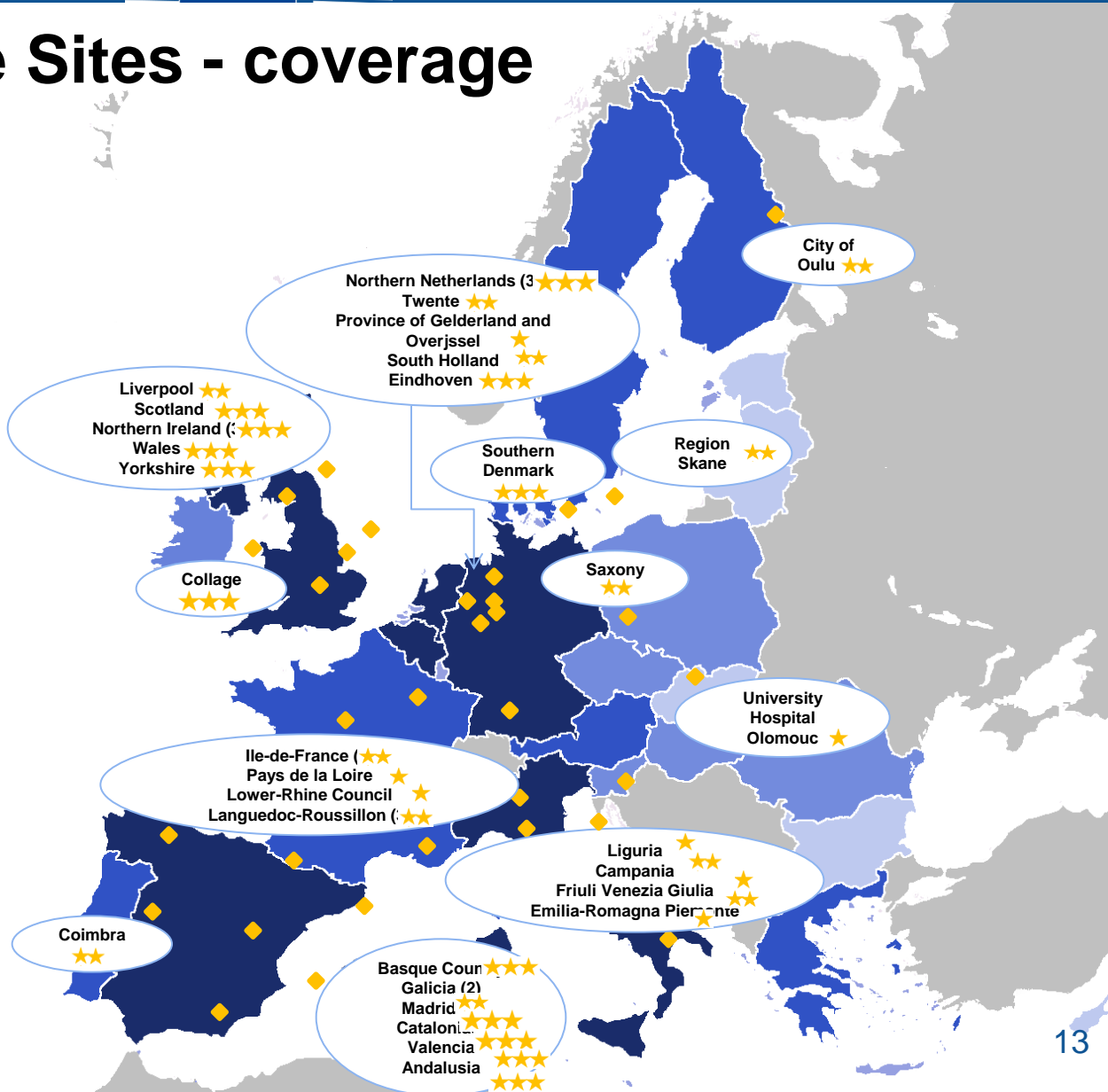
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Reference Sites - coverage

32 RSs =>12 MSs

selected for self-assessment and peer-review
(innovation, scalability, outcomes)

150+ good practices of care innovation-based impact on the ground

1 July 2013 – Star Ceremony
announcement of best RSs with stars, ready for replication and coaching

⭐⭐⭐ **13 Reference Sites**

⭐⭐ **12 Reference Sites**

⭐ **7 Reference Sites**

City of Oulu ⭐⭐

Northern Netherlands (3) ⭐⭐⭐
Twente ⭐⭐
Province of Gelderland and Overijssel ⭐
South Holland ⭐⭐
Eindhoven ⭐⭐⭐

Liverpool ⭐⭐
Scotland ⭐⭐⭐
Northern Ireland (3) ⭐⭐⭐
Wales ⭐⭐⭐
Yorkshire ⭐⭐⭐

Region Skane ⭐⭐

Southern Denmark

Saxony ⭐⭐

Collage ⭐⭐⭐

University Hospital Olomouc ⭐

Ile-de-France (2) ⭐⭐
Pays de la Loire
Lower-Rhine Council ⭐
Languedoc-Roussillon (3) ⭐⭐

Liguria ⭐
Campania ⭐⭐
Friuli Venezia Giulia
Emilia-Romagna Piemonte ⭐

Coimbra ⭐⭐

Basque Country ⭐⭐⭐
Galicia (2)
Madrid ⭐⭐
Catalonia
Valencia ⭐⭐⭐
Andalusia ⭐⭐⭐

13

A scalable EU Silver Economy

- 3000 B€ Wealth by people over 65

- 85 Million Consumers over 65 and growing

- <15% ICT use

The Consumer Market

- Care costs ~1000 B€ /year in Europe (8 % GDP)

- 10% for innovation

  ~100 B€ /year

The Public Market

HORIZON 2020

EU Silver Economy Strategy

2015–2016 Action Areas

Summary Of Conclusions

European Summit On Innovation For Active & Healthy Ageing, 9–10 March 2015

HOW?

Innovating...

Technology

Systems

Society

SCALING UP INNOVATION ACROSS EU	ADVANCING THE SILVER ECONOMY STRATEGY	BOOSTING INVESTMENT & ACCESS TO CAPITAL
• EC Co-Financing Of Public Procurement Of Innovation (PPI) • Rapid Transfer Of Innovation Across Regions • Mobilising New Public Investments	• EC to Launch Joint Initiatives on Age-Friendly Homes, Integrated/Connected Care at Home and Silver Tourism • New EC Action on Accelerating Adoption of Standards & Promote Interoperability • New EC Study on Potential of the Silver Economy	• Ease Access to "Growth Capital" by Innovative Start-Ups • Develop Joint Public-Private Investment Strategies For Innovative Projects (H2020, AAL Programme) • Optimize EC Support Tools (PPI)

BUILDING ON STAKEHOLDER PLATFORMS

• European Innovation Partnership on Active & Healthy Ageing (EIP-AHA)

• Active and Assisted Living Programme (AAL Programme)

• European Institute Of Innovation & Technology – Knowledge And Innovation Community (KIC) –Health & Ageing

• Public-Private Partnerships (Internet of Things, Robotics, 5G, Big Data, IMI, others)

WHO?

Partnerships Between...

EU

Member States

Public Authorities

Businesses

Financial Institutions & Investors

Civil Society

Organisations

See EU silver economy strategy

HORIZON 2020

Involving Social Sciences and Humanities

SSH and H2020 SC1 calls

- **H2020 calls are challenge based**

- **Making technology work is required but not enough**

- **Expected impact in work programme are about demonstrating outcomes**

- **In SC1 responsible research and innovation is relevant, eg ethics, privacy, consent**

- **This requires involvement of SSH**

SSH and H2020 SC1 calls

- **Example impact statements**

  - Clear improvements of outcomes for individuals, care systems from new therapies and interventions based on early risk detection in comparison with current practices

  - Improved therapeutic management of older patients affected by mental conditions and disorders

- **Need for new SSH expertise and skills in consortium as well as user involvement**

- **Understanding how to create a realistic environment for project validation**

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EIP-AHA Outcome Indicators

Headline Target

+2 HLYs

Triple Win

Quality of Life

Sustainability

Innovation & Growth

Outcome Indicators on intervention / commitment level

HRQoL	Mortality
Risk factors	Physical Activity
Adherence	Frailty
Functional status	Falls
Nutrition	Mental health
Cognitive decline	
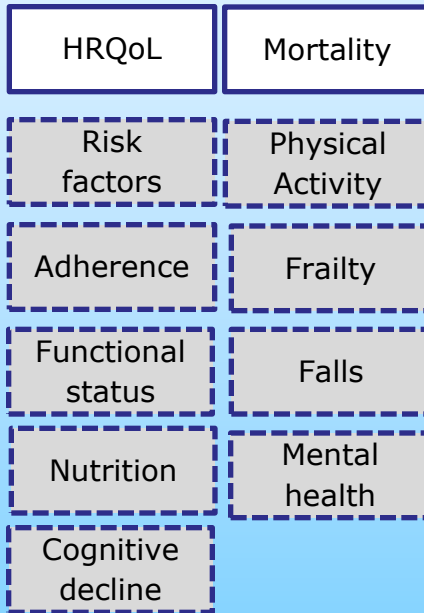
Incremental change in resources used

$$X$$

(Local) unit cost for resources

Some frequent resource categories:
- Hospital (re-) admissions
- Length of hospital stay
- Emergency visits
- Primary care visits
- Specialist visits
- Institutionalisation

Nr. of implemented technologies	Nr. of users of new technologies
Nr. of created jobs	Nr. of new SMEs

Horizon 2020
SC1 Work Programme 2016
Overview

European Commission

Draft – Pending Committee Opinion and Commission Decision

Horizon 2020 - societal challenge 1

- Exploring new opportunities

- Catalyse Silver Economy

- IoT for Smart Living Environments (with ICT-LEIT)

- Scale up Innovative Care Services

- Complementing previous calls

Smart Living Environments Large-scale pilot (2016)

Ground-breaking R&D in Personalised Coaching (2017)

EU – Japan Cooperation (2016)

PPI for deployment and scaling up (2016)
CSAs Standards & Silver Economy take-up (2016)

Stimulate research and growth in SMEs (2016-17)

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Draft – Pending Committee Opinion and Commission Decision

European Commission
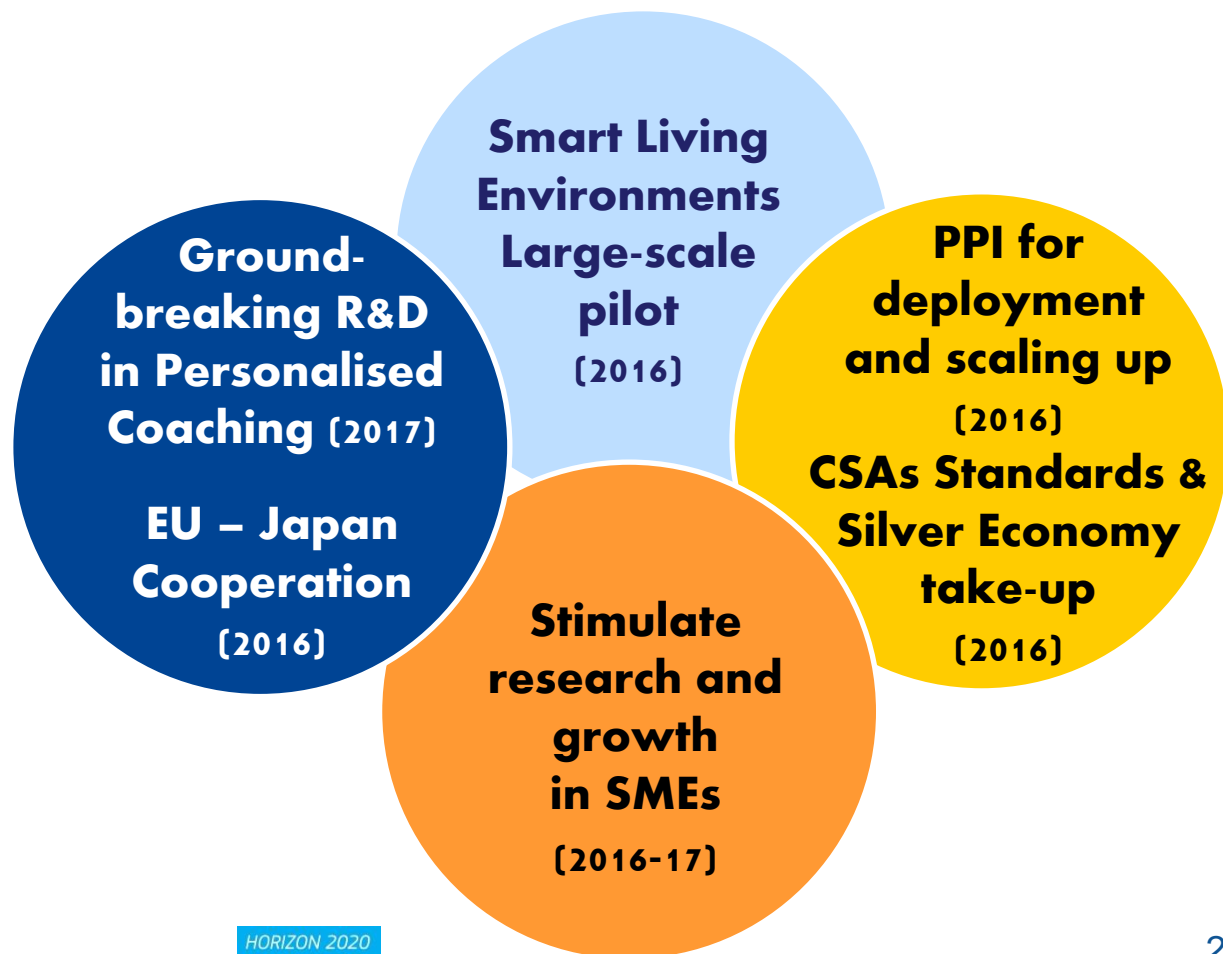
Draft H2020 WP 2016/2017 - ICT for Health - Principles, areas and strategy

- More strategic patient-centred approach and health promotion

- Creating a body of evidence for IT technologies, support for SME's growth, IT skills for healthcare workforce

- New approaches in managing health, from well-being to personalisation

- Data and sharing data challenges

- Decrease of time to market, better adaptation to innovation and support to policy

- Contribution to WHO activities and US cooperation

The entire chain of innovation is needed, from research to support actions and specific instruments.

Self-management of health and mobile health

Digital Health literacy

Evidence on IT technologies, Opportunities for SME's, Optimal use of healthcare workforce

Well-being

Prevention, Personalisation, SSH

Data security and privacy

Interoperability and standards

In-silico clinical trials

Big data

HORIZON 2020

Draft H2020 WP 2016/2017 SC1- ICT for Health and Well-bein g - Overview

CSAs: EU mHealth Hub; Support for Health ICT SMEs; Digital Health literacy; Healthcare Workforce IT skills; EU/US Interoperability roadmap; EU eHealth Interoperability conformity;

PCP: Empowering the patient

SME Instrument: Accelerating market introduction of ICT solutions for SC1

RIA: Big Data; Digital Security; Simulation /modelling on wellbeing; In silico trials

Horizon Prize: Food scanner *)

*) Horizon Prize instrument (not under SC1)

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Horizon 2020 - societal challenge 1

DS-03-2016
Increasing digital security of health related data on a systemic level

Challenge:

- Approach to security of storing and exchange of health related data on a systemic level.

Scope:

- Holistic solution addressing security of storage and transfer of medical data.

- Secure access and storage of data on mobile devices.

Expected Impact:

- Better acceptance of eHealth solutions among patients.

- Encouraging Member States to widen the use of eHealth.

- Supporting the development of European legal and operational standards for cross-border data exchange and patient privacy protection.

- Better protection against unauthorised use of personal data, breach of confidentiality and cybercrime.

DS-03-2016
Increasing digital security of health related data on a systemic level

Deadline, Budgets

- Submission Deadline: 16/02/2016 (17.00.00 Brussels local time)

- Research and Innovation Action

- Total Call Budget: 11 million €

Innovation Procurement = PCP + PPI / Complementarity

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
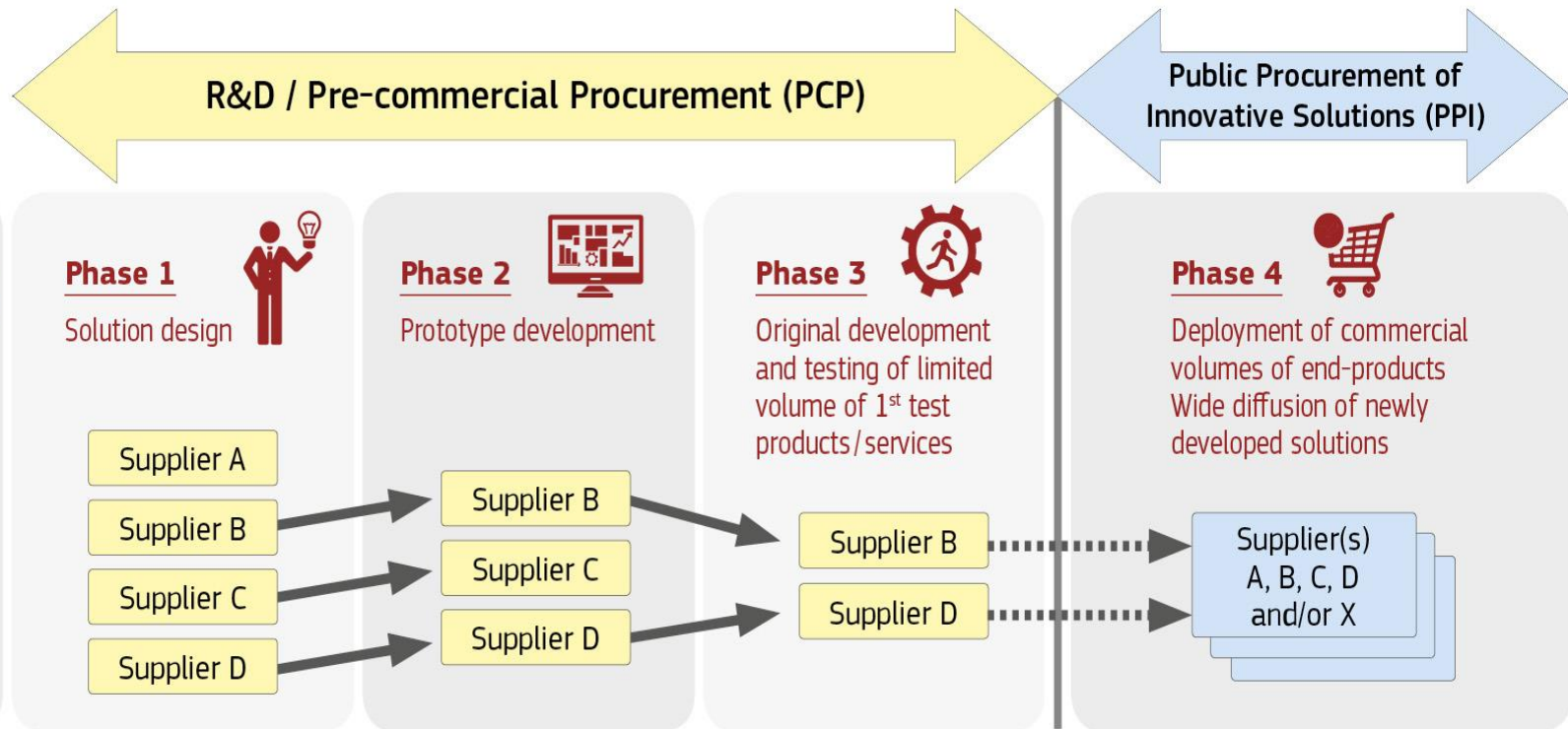
Draft – Pending Committee Opinion and Commission Decision

- ❑ PCP Cofund actions support groups of procurers to execute **one joint PCP** procurement
- ❑ Minimum of 3 independent participants from 3 different MS or AC, of which minimum 2 public procurers (buyers group) from 2 different MS or AC
  - ▪ Public procurers are contracting authorities/entities as defined in EU public procurement directives

- ❑ In addition, there can be other beneficiaries
  - ▪ Other type of procurers that are providing services of public interest and share the same procurement need (e.g. private procurers, NGOs)
  - ▪ Other entities that add clear value to the action (e.g. end-users, certification bodies that assist the procurers in the preparation, implementation and follow-up of the procurement or in additional coordination/networking activities)
  - ▪ But that are not potential suppliers or solutions sought for by the PCP and have no other type of conflict of interest with the PCP undertaken during the action

- ❑ In addition, there can be third parties linked to beneficiaries
  - ▪ E.g. Third parties (e.g. end-users such as fire brigade) putting resources (e.g. test sites, testers) at the disposal of the beneficiaries/procurers to carry out the action

- ❑ Subcontractors
  - ▪ Successful tenderers, selected by the buyers group & lead procurer as result of the call for tender: They do 'NOT' become beneficiaries in the grant agreement with the EC, they are subcontractors from the point of view of the EC grant agreement.

EU contribution

- Reimbursement rate 'direct costs': 90% for PCP co-fund actions

- Eligible direct costs to carry out eligible activities defined in WP include:

  - Price of the R&D services procured
  - VAT is eligible cost except for beneficiaries that can deduct it
  - Eligible coordination and networking activities (e.g. to prepare, manage and follow-up the procurement)
  - In-kind contributions (e.g. third parties/end-users putting resources – e.g. test facilities - at disposal of procurers)

  Requested reimbursement for coordination and networking activities can comprise max 30% of the total requested contribution

- Reimbursement 'indirect costs': flat rate of 25% of eligible direct costs

SC1-PM-12–2016: PCP - eHealth innovation in empowering the patient

Challenge

- Empowering the hospitalised patients, outpatients and their families/carers to support a continuum of care across a range of services supported by ICT

- The eHealth action plan 2012-2020 and the outcome of the mHealth Green paper pave the way towards empowerment of the patient with the assistance of ICT.*)

- use of **pre-commercial procurement (PCP)** to maximise the engagement of innovation **in healthcare organisations**

*) details, see the Work Programme

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Draft – Pending Committee Opinion and Commission Decision

SC1-PM-12–2016: PCP - eHealth innovation in empowering the patient

Scope

- Actions that focus on enabling the transition to new services or better integration of existing services through appropriate ICT

- relevant elements e.g.:

  - proof of concept
  - user acceptance
  - use of the service
  - training of the professionals including online courses/forums that bring professionals and patients together
  - trust and security
  - consent of the patient

Draft – Pending Committee Opinion and Commission Decision

SC1-PM-12–2016: PCP - eHealth innovation in empowering the patient

Expected Impact

- Improve the quality and cost-effectiveness of healthcare systems by challenging industry from the demand side to develop innovative solutions

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SC1-PM-12–2016: PCP - eHealth innovation in empowering the patient

Expected Impact (cont...)

- reduced fragmentation of demand for innovative solutions

- encouraging synergies with Structural Funds

- increase the opportunities for solution uptake across wider international procurement markets by aiming at interoperable solutions that are validated through field testing by participating procurers in multiple countries across Europe

- contribution to standardisation where relevant

- equal access rights to the results generated by the PCP for all procurers jointly undertaken a PCP aiming for a fair and transparent level playing field for modernizing public services

Draft – Pending Committee Opinion and Commission Decision

SC1-PM-12–2016: PCP - eHealth innovation in empowering the patient

Deadline, Budgets, Thresholds

- Submission Deadline: 16/2/2016 at 17:00:00 (Brussels local time)

- Total Call Budgets:

    - SC1 PM-12 Pre-Commercial Procurement **(PCP) Cofund actions:** 18 million € (EC contribution: maximum **90% of the total eligible costs**, compliance with Annex E)

- Cumulative threshold: 10 (3/3/3)

Draft – Pending Committee Opinion and Commission Decision

About Public Procurement of Innovation (PPI)
The PPI instrument can stimulate innovation by bringing innovative commercial end-solutions earlier to the market.

Public Procurement of Innovative solutions (PPI) is used when challenges can be addressed by innovative solutions that are nearly on the market (or already in small quantity in the market) and don't need new Research & Development (R&D). PPI acts as launching customer / early adopter / first buyer of innovative commercial end-solutions newly arriving on the market

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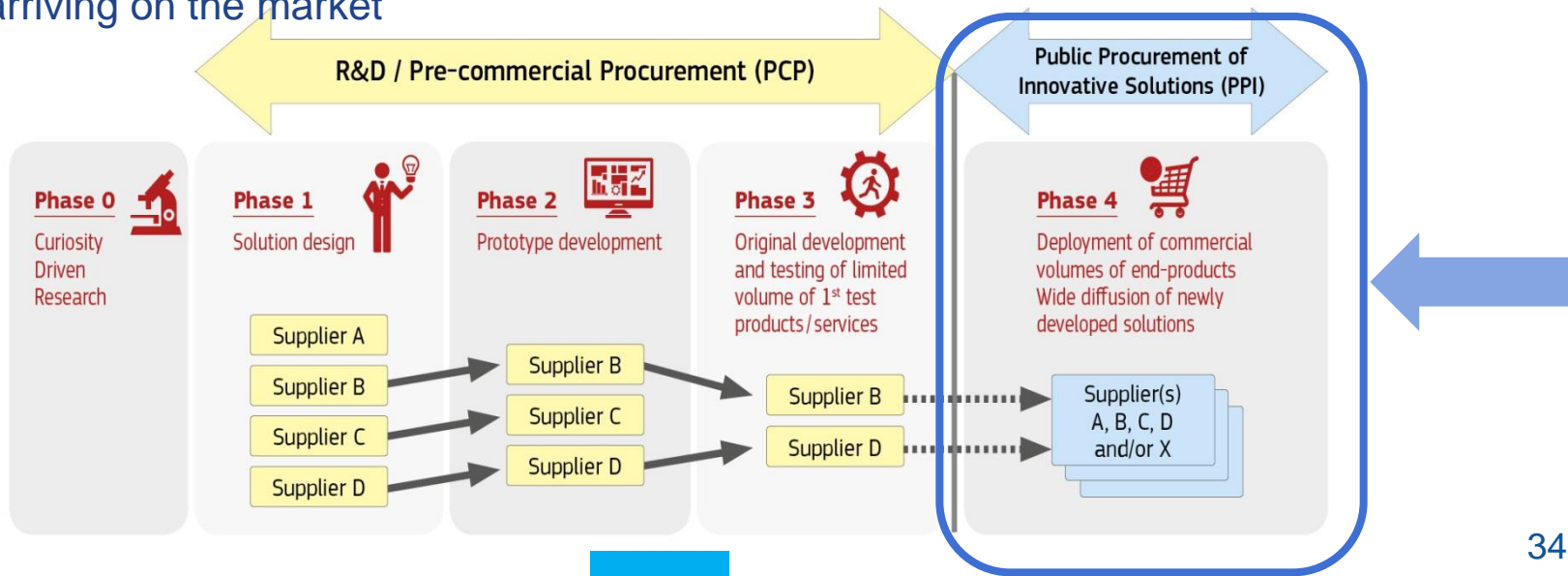
SC1-PM-13–2016
PPI for deployment and scaling up of ICT solutions for active and healthy ageing

Scope

- Target deployment of active and healthy ageing solutions at large scale across different regions in Europe

- Specify, purchase and deploy ICT based solutions for active and healthy ageing

- Must contribute to:
  - Scaling Up Strategy of the **European Innovation Partnership on Active and Healthy Ageing**
  - Boosting the **Silver Economy** and **Digital Single Market** in Europe

- Proposals requesting a contribution from the EU of between EUR 2 and 5 million would allow this specific challenge to be addressed appropriately through PPI

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SC1-PM-13 Expected Impact

- Growing awareness and successful use of public procurement to boost ICT innovation applied to active and healthy ageing,

- Contribution with data and experiences to regulatory and legislative process development

- Contribution of open and comprehensive socio-economic evidence base for ICT investments in the field that can support the development of sustainable business models

- Support initiatives on interoperability and standardisation that can contribute to defragmentation of the market

- Creation of economic boundary conditions that can support long-term sustainability of health and care systems and emergence of new business models

- Support forward looking, concerted public-sector investment strategies that benefit from joint approaches across different regions;

European Commission

Draft – Pending Committee Opinion and Commission Decision

SC1-PM-13 Deadline, Budgets, Thresholds

- Submission Deadline: 16 February 2016, 17:00:00 (Brussels local time)

- Budget: EUR 10.5 million funded by SC1

- Funding rate: up to 35%

- Cumulative threshold: 10 (3/3/3)

- expected Work Programme Publication Date: 14 October 2015

SC1-PM-14-2016: EU-Japan Cooperation on novel ICT robotics based solutions for active and healthy ageing at home or in care facilities

<u>Scope</u>

- Advanced ICT robotics based solutions as basis for services demonstrating extended active and healthy ageing in daily living, driven by user needs

- Involving multi-disciplinary research combining health, social, technology, behavioural disciplines

- Building on advances in open service platforms, IoT, intelligent living environments, personalised and self-adaptable interaction

- Novel service models for extended independent living, prevention, efficient care provision, improvements in social situation, keeping active

- Realistic test environments in EU <u>and</u> Japan with sufficient users involved to validate the expected impact including ethical and safety aspects

SC1-PM-14 **Expected Impact**

- Extended independence and autonomy of older adults in need of care

- Improved quality of life of older adults and their carers

- Improved efficiency in care provision

- Reduced burden on caregivers

- Global leadership in advanced solutions supporting active and healthy ageing

SC1-PM-14 Deadline, Budgets, Thresholds

- Submission Deadline: 19/1/2016, 17:00:00 (Brussels local time)

- Indicative Budget: 5M€ for EU participants

- Threshold: 12 (4/4/3)

- Special conditions:

  - Need for submission of EU proposal with EU partner activities and corresponding proposal for Japanese partner activities (to MIC or NICT)

  - Need to prepare and agree a coordination agreement before submission of EU proposal

  - EU proposal can only be funded if corresponding Japanese proposal is also selected

  - Special evaluation criteria

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SC1-PM-18–2016: Big Data supporting Public Health policies

Challenge:

- How to use Big Data for supporting healthy life and preventing diseases.

- Insight for understanding human systems to develop personalized medicine.

Scope:

- Develop integrating solutions for acquiring, managing, sharing, modelling, processing and exploiting Big Data to support public health authorities in long-term policy making and increase the ability to provide actionable insights at the point of care.

Expected Impact:

- Creation of network of knowledge by linking data sources for public health strategy.

- Turning large amounts of data into actionable information to authorities for planning public health activities and implementation of an approach "health in all policies".

SC1-PM-18–2016: Big Data supporting Public Health policies

Deadline, Budgets

- Submission Deadline: 16/02/2016 (17.00.00 Brussels local time)

- Research and Innovation Action

- Cumulative threshold: 10 (3/3/3)

- Total Budget: 10 million €

Horizon 2020 - societal challenge 1

Cross-Cutting Activities jointly with ICT-LEIT Large Scale IoT Pilots – Innovation Action

Scope

- Targeted, goal driven initiatives that will propose IoT approaches to specific real-life industrial/societal challenges

- Involve stakeholders from supply side to demand side

- Large scale validation (large in terms of … multiple sites, heterogeneous devices and systems, real users)

- Balanced effort devoted to supply and demand for each pilot

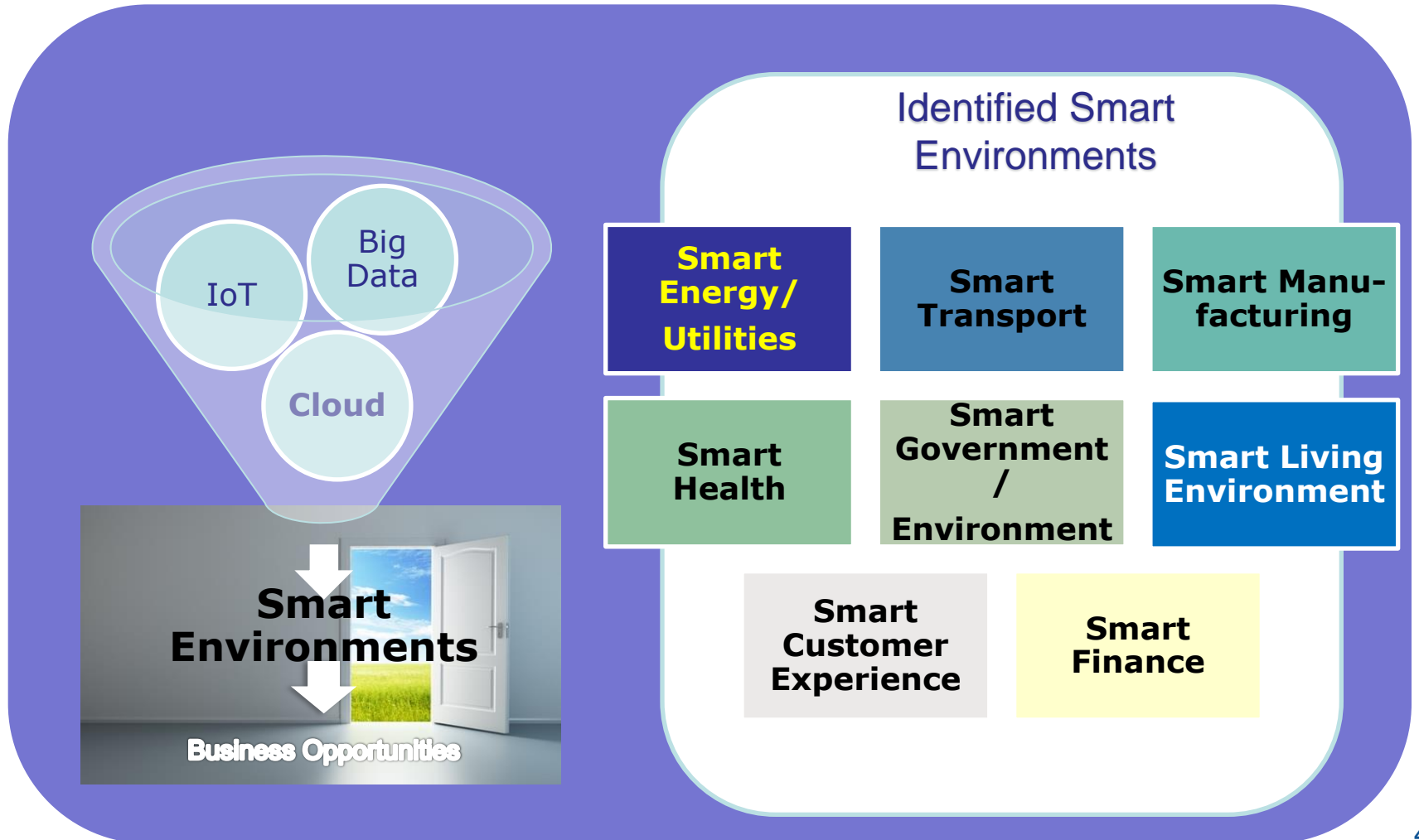HORIZON 2020

Internet of Things as a Focus Area

Opportunity to design IoT as a programme combining research, innovation/experimentation and horizontal actions, including policy issues

Building bridges between SCs and LEIT

Reinforcing community-building across vertical silos and building scalable markets for industry

IoT-01-2016: Large Scale Pilots

IoT · **Big Data** · **Cloud**

Smart Environments

Business Opportunities

Identified Smart Environments

Smart Energy/ Utilities	Smart Transport	Smart Manu-facturing
Smart Health	Smart Government / Environment	Smart Living Environment
Smart Customer Experience	Smart Finance	

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Pilot 1: Smart living environments for ageing well

safety & security

Prevention Wellbeing

Social Inclusion

Health/care monitoring

safety & security

Daily living

Pilot 1: Smart living environments for ageing well
Scope & Expected Impact

- User-led pilot projects capable of supporting and extending independent living at home for older adults using advanced IoT technologies, tools and services

- User-friendly configuration and management of connected technologies for homes and outside

- Active user engagement and a multi-disciplinary approach

- To validate IoT solutions and prove their socio-economic potential and to foster their deployment in Europe through integration of advanced IoT technologies across the value chain and with other relevant application domains

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Pilot 1: Smart living environments for ageing well
Scope & Expected Impact 2/2

- Minimum of 4 pilot sites in 4 countries
  Demonstration to operate the system across multiple sites, scalability to large amount of heterogeneous devices and systems, as well as with large amount of real users

  ➢ Clear methodology for socio-economic impact assessment
  ➢ Clear evidence of the benefits of the proposed solutions for active and independent living and quality of life of older persons

Draft – Pending Committee Opinion and Commission Decision

Implementation

- Submission Deadline: 12 April 2016, 17:00:00 (Brussels local time)

- Budget: EUR 20 million jointly funded by ICT-LEIT and SC1

- Innovation Action: funding rate: 70%

- Cumulative threshold: 10 (3/3/3)

- Evaluation by external experts representing supply and demand

- 1-2 large scale pilots expected

Expected Work Programme Publication Date: 14 October 2015

Draft version:
https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/17.%20CROSS%20CUTTING_2016-2017_pre-publication.pdf

Horizon 2020 SME instrument

- **Inspired by the US Small Business Innovation Research (SBIR) program**

- **Piloted by the Health Directorate in 2012/13**

- **<u>Single company support possible</u>**

- **Target group: Innovative SMEs**

- **Only EU SMEs allowed to apply for funding**

- **Competitive, market-oriented, EU dimension**

- **Several cut-off dates i.e. submission deadlines per year**

H2020:~€3 billion
SC1 Health: ~€500m

HORIZON 2020

SME instrument

Horizon 2020 - societal challenge 1

Idea

Phase 1	Phase 2	Phase 3	Market
Concept & Feasibility Assessment	Innovation R&D activities	Commercialisation	

- Feasibility of concept
- Risk assessment
- IP regime
- Partner search
- Design study

- Development, prototype, testing
- Miniaturisation/design
- Clinical trials
- Etc.

- Facilitate access to private finance
- Support via networking, training, coaching, knowledge sharing, dissemination

Lump sum:
~ 50.000 €
~ 6 months

Output-based payments:
1 to 5 M€
12 to 36 months

No direct funding

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Draft – Pending Committee Opinion and Commission Decision

SMEInst-06-2016-2017: Accelerating market introduction of ICT solutions for Health, Well-Being and Ageing Well

Challenge

- overcome the current gaps in exploitation of promising research results in ICT for Health, Well-being and Ageing well

- stimulate increased availability and market uptake of relevant ICT products and services.

- This concerns:

  - interoperable and secure eHealth solutions for consumers and institutional healthcare delivery building on standards

  - new ICT solutions and innovation ecosystems for ageing well building on open software platforms, in order to deliver new and more efficient care to European citizens and respond to new market opportunities for SMEs.

SMEInst-06-2016-2017: Accelerating market introduction of ICT solutions for Health, Well-Being and Ageing Well

Challenge (cont...)

- particular attention to potential for disruptive innovation and fast market up-take

- opportunity for SMEs and young companies that are looking for swift support to their innovative ideas

Draft – Pending Committee Opinion and Commission Decision

SMEInst-06-2016-2017: Accelerating market introduction of ICT solutions for Health, Well-Being and Ageing Well

Scope

- The SME instrument consists of three phases, including a coaching and mentoring service for beneficiaries. Participants can apply to phase 1 or directly to phase 2.

- Phase 1

  - a feasibility study shall be developed in order to verify the technological/practical as well as economic viability of an innovation idea/concept with considerable novelty to the industry sector in which it is presented

  - Funding will be provided in the form of a lump sum of EUR 50.000. Duration around 6 months

SMEInst-06-2016-2017: Accelerating market introduction of ICT solutions for Health, Well-Being and Ageing Well

Scope

- Phase 2

    - address the specific challenges identified and that demonstrate high potential in terms of company competitiveness and growth underpinned by a strategic business plan

    - based on an elaborate business plan

    - contain a specification for the outcome of the project and criteria for success

    - indicative EC contribution between EUR 0.5 and 2.5 million

    - duration between 12 and 24 months

SMEInst-06-2016-2017: Accelerating market introduction of ICT solutions for Health, Well-Being and Ageing Well

Scope

- Phase 3

  - aims to increase the economic impact of the funding provided by the SME Instrument phase 1 and 2 grants and by the business coaching

  - not subsequent to phase 1 and/or 2, but provides specific support to SME instrument beneficiaries during and after phase 1 or 2

  - all support under phase 3 of the SME instrument accessible through a single, dedicated entry point, which will serve as an information portal and a networking space

SMEInst-06-2016-2017: Accelerating market introduction of ICT solutions for Health, Well-Being and Ageing Well

Scope

- Phase 3

  - This platform will offer access to two main strands of services:

    - Access to markets

    - Access to finance

  - In addition, phase 3 will create opportunities for partnering, networking and training, which are set out in the Dedicated Support Actions at the end of this call (e.g. HCO-10)

  - SME instrument beneficiaries are also offered dedicated business innovation coaching and mentoring support.

Draft – Pending Committee Opinion and Commission Decision

SMEInst-06-2016-2017: Accelerating market introduction of ICT solutions for Health, Well-Being and Ageing Well

Expected Impact

- Enhancing profitability and growth performance of SMEs

- Market uptake and distribution of innovations in a sustainable way.

- Increase of private investment

- Expected impacts clearly described in qualitative and quantitative terms

Draft – Pending Committee Opinion and Commission Decision

Conditions for the Call - Horizon 2020 dedicated SME Instrument 2016-2017

SMEInst-06-2016-2017 Opening dates & deadlines

Phase	Deadlines
Opening: 26 Nov 2015	
SME-2	03 Feb 2016 14 Apr 2016 15 Jun 2016 13 Oct 2016 18 Jan 2017 06 Apr 2017 01 Jun 2017 18 Oct 2017
SME-1	24 Feb 2016 03 May 2016 07 Sep 2016 09 Nov 2016 15 Feb 2017 03 May 2017 06 Sep 2017 08 Nov 2017

Conditions for the Call - Horizon 2020 dedicated SME Instrument 2016-2017

Indicative budget

- **SMEinst 6-2016-2017**

- Indicative budget **from 'Health, demographic change and well-being'**

- **18 million € (2016)**

- **12,5 million € (2017)**

- EC contribution: **maximum 70 % of the total eligible costs**

Conditions for the Call - Horizon 2020 dedicated SME Instrument 2016-2017

- Eligibility and admissibility conditions apply

- Evaluation criteria, scoring and threshold: criteria, scoring and threshold are described in part H of the General Annexes to the work programme with the following exceptions:

  - The criterion Impact will be evaluated first, then Excellence and Implementation.

  - Evaluation stops if one criterion fails – The thresholds are:

    - Phase 1: for individual criteria (4/4/4) and overall 13

    - Phase 2: for the criterion Impact is 4 and overall threshold 12

=> For complete information see Annex 10 Horizon 2020 Work Programme 2016 – 2017: 7. Innovation in SMEs

SC1-HCO-10–2016: Support for Europe's leading Health ICT SMEs

Scope

- co-ordinate post R&D and offering support for developing business models

- improve the maturity of the new products emerging from Europe's leading Health ICT SMEs

- build up and maintain professional support structures e.g., by

  - facilitating **networked opportunities with high calibre third parties**,

  - organising **eHealth specific networking events**,

  - **training** of the staff,

  - **improving the maturity of the business** for further investment,

  - **addressing legal conditions**, and

  - addressing issues related to **registration and certification**.

Draft – Pending Committee Opinion and Commission Decision

SC1-HCO-10–2016: Support for Europe's leading Health ICT SMEs

Expected Impact

- **Evidence of positive business outcome** based on e.g., networking activities and ecosystems including various types of business opportunities (e.g., venture and crowd funding, European Investment Fund).

- **Demonstration of success with the investors**

- **Reduction of market failures**

- Successful business models including **sustainable co-operation with the demand side** in the value chain

- Increased **useful options for patients and citizens to manage their health**

- Optimisation of the **efficiency and effectiveness of healthcare provision, personalised medicine/personalised health** and **consumer health** across Europe

- **Successful legal outcome** fostering the innovation in eHealth sector

- **Self-sustaining support structures** for eHealth SMEs

SC1-HCO-10–2016: Support for Europe's leading Health ICT SMEs

Deadline, Budgets, Thresholds

- Submission Deadline: 16/2/2016 at 17:00:00 (Brussels local time)

- Total Call Budgets:

    - CSA

    - 3 million € (EC contribution: maximum **100% of the total eligible costs**)

- Cumulative threshold: 10 (3/3/3)

SC1-HCO-11–2016: Support to the recognition of Silver Economy opportunities arising from demographic change

Scope

- Establishing a widely recognised European annual Silver Economy recognition award scheme for successful innovative ICT solutions

- Develop and implement an integrated communications and innovation concept which can reach and influence key stakeholders

    - Identify most relevant award categories

    - Establish a high-level selection jury ensuring widespread recognition and visibility

    - Identifying additional award sponsors and securing commitment

    - Mobilise relevant stakeholders and similar initiatives in Member States to promote a positive narrative on demographic change

    - Tracking outreach and impact to assess results

SC1-HCO-11 <u>Expected Impact</u>

- Ensure recognition and sustainability of the Silver Economy award scheme

- Encouraging further innovation and entrepreneurship

- Engaging further stakeholders such as social entrepreneurs, investors, retailers, major brands, designers and public authorities

- Increased public awareness across Europe about opportunities and potential of demographic change and innovation

Draft – Pending Committee Opinion
and Commission Decision

SC1-HCO-11 Deadline, Budgets, Thresholds

- Submission Deadline: **16 Feb 2016, 17:00** (Brussels local time)

- Indicative Budget: EUR 1 M

- Threshold: 10 (3/3/3)

SC1-HCO-16-2016: Standardisation needs in the field of ICT for Active and Healthy Ageing

Challenge

- Standardisation plays a key role in the area of ICT for active and healthy ageing (AHA). However, efforts tend to be taken by the different domains' actors individually, often lacking a coordinated and targeted approach.

- Emerging fragmentation in different national/regional initiatives, labels and standards could potentially make interoperability difficult and impede or reduce scalable growth opportunities.

- Linking together the standardisation needs from the different domains and addresses them in a coordinated way.

- Support progress within the Silver Economy overall, contributing to its different sectors such as age-friendly environments, smart houses and integrated care.

SC1-HCO-16 <u>Scope</u>

- Foster user-centred ICT innovation on AHA and Silver Economy by engaging, supporting and coaching stakeholders in their standardisation activities.

- Covering domains such as: infrastructures for independent living in age-friendly buildings, scaling-up of innovative care services and interoperability profiles for independent living.

- Specific activities envisaged:

    - Mapping of relevant harmonisation activities in the area;

    - Fostering cooperation between standard development organisations;

    - Creating a platform for discussion and decision-making for stakeholders;

    - Identifying harmonisation and standardisation needs and best ways to address them;

    - Best practice guidance: co-developing standards, certificates, procurement;

    - Coordinating contributions to AHA standardisation from EU funded projects.

SC1-HCO-16 Expected Impact

- Engagement of required stakeholders to ensure lasting impact;

- Identification of standardisation and other types of harmonisation needs and creation of a clear roadmap with actions needed to address them;

- Accelerated progress in the establishment of favourable framework conditions for introducing user-friendly ICT solutions for AHA into the European market and a metrics for measuring the progress;

- Elaboration of a first draft for smart / age friendly home guidelines and roadmap for the development of a certification or label;

- Networking and match-making among stakeholders, including R&I projects and relevant standardisation bodies.

Draft – Pending Committee Opinion and Commission Decision

SC1-HCO-16 Deadline, Budgets, Thresholds

- Submission Deadline: **16 Feb 2016, 17:00** (Brussels local time)

- Indicative Budget: EUR 1 M

- Threshold: 10 (3/3/3)

SC1-HCO-12–2016: Digital health literacy

Challenge:

- Further empowerment of patient by improving digital health literacy skills.

Scope:

- Design of open access courses that support interactive learning environment.

Expected Impact:

- Increased awareness of the opportunities of eHealth tools.

- A better understanding for citizens of online information on health-related topics and improving implementation of this knowledge into health management.

SC1-HCO-12–2016: Digital health literacy

Deadline, Budgets

- Submission Deadline: 16/02/2016 (17.00.00 Brussels local time)

- Coordination and support action

- Threshold: 10 (3/3/3)

- Total Budget: 2 million €

SC1-HCO-13-2016: Healthcare workforce IT skills

Challenge:

- shortage in the EU of eHealth workers across the full spectrum of job roles I healthcare sector

Scope:

- mapping, quantifying and projecting the need, supply and demand of workforce skills and competencies to develop IT skills and training programmes for the healthcare workforce taking into account the EU-US collaboration.

Expected Impact:

- Improved access to training programmes, including continuous professional development, and upgrading of skills for all types of actors in healthcare workforces.

- Strengthened international collaboration in the area of healthcare professionals IT skills including contributions to the actions of the EU-US MoU eHealth Roadmap and better informed policy decisions.

SC1-HCO-13-2016: Healthcare workforce IT skills

Deadline, Budgets

- Submission Deadline: 16/02/2016 (17.00.00 Brussels local time)

- Coordination and support action

- Threshold: 10 (3/3/3)

- Total Budget: 0,5 million €

Draft – Pending Committee Opinion and Commission Decision

SC1-HCO-14–2016: EU-US interoperability roadmap

Challenge

- Implement the EU-US interoperability roadmap activities including inter-alia piloting and standardisation activities.

Scope

- The main objective remains to achieve one single international standard for the patient summary and the possibility to establish pilots that will validate the principles established within the EU-US MoU eHealth Roadmap

SC1-HCO-14–2016: EU-US interoperability roadmap

Expected Impact

- Improved international interoperability of eHealth Systems in the US and in Europe.

- Accelerated establishment of interoperability standards in eHealth and of secure, seamless communication of health related data.

SC1-HCO-14–2016: EU-US interoperability roadmap

Deadline, Budgets, Thresholds

- Submission Deadline: 16/2/2015 17:00:00 (Brussels local time)

- Total Call Budgets:

    - CSA

    - 1 million € (EC contribution: maximum **100% of the total eligible costs**)

- Cumulative threshold: 10 (3/3/3)

SC1-HCO-15–2016: EU eHealth Interoperability conformity assessment

Challenge

- Maintaining and developing the adoption and take-up of testing of eHealth standards and specifications as defined in the eHealth European Interoperability Framework (eEIF).

SC1-HCO-15–2016: EU eHealth Interoperability conformity assessment

Scope

- Establishment of a sustainable European Conformance Assessment Scheme associated with the maintenance of the eEIF

- Fostering a wider eHealth interoperability uptake for the entire European market

- This conformity scheme should ensure consistent testing results across testing laboratories and a suitable corresponding trusted label/certificate should be considered

SC1-HCO-15–2016: EU eHealth Interoperability conformity assessment

Expected Impact

- Develop a core eHealth interoperability conformity scheme for the European market based on the eHealth EIF

- Enable healthcare systems suppliers to assess their conformance to the eHealth EIF and advertise such compliance to procurers

- Help procurers in their solution specifications and evaluation

- Facilitate the development and testing of cross-border, national, and regional eHealth projects

- Setting common criteria for effective benchmarking of different European eHealth implementations

SC1-HCO-15–2016: EU eHealth Interoperability conformity assessment

Deadline, Budgets, Thresholds

- Submission Deadline: 16/2/2016 17:00:00 (Brussels local time)

- Total Call Budgets:

    - CSA

    - 1 million € (EC contribution: maximum **100% of the total eligible costs**)

- Cumulative threshold: 10 (3/3/3)

Recent DG CNECT innovation policy documents closely related to SC1

Health and Wellbeing Unit (H1):

- eHealth, Better Healthcare for Europe (summary of eHealth activities in H1, references and links): paper version only

- Green Paper on mobile health (2014): **bit.ly/ECmHealth**

- Summary report to the Public consultation on the Green Paper on Mobile Health (2015): **bit.ly/ECmHealth**

- Staff Working Document, Existing EU legal framework applicable to lifestyle & wellbeing apps (2014): **bit.ly/ECmHealth**

- eHealth Projects (updated regularly): **europa.eu/!hp88pk**

- eHealth Action plan 2012-2020: **europa.eu/!KD73MY**

Recent DG CNECT innovation policy documents closely related to SC1

Digital Social Platforms Unit (H2):

- EU Silver Economy Strategy http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=silvereconomy
- European Scaling-up Strategy in Active and Healthy Ageing https://ec.europa.eu/research/innovation-union/pdf/active-healthy-ageing/scaling_up_strategy.pdf
- European Innovation Summit on Active and Healthy Ageing http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=2015-summit
- ICT for Active and Healthy Ageing http://ec.europa.eu/digital-agenda/en/policies-ageing-well-ict
- European Innovation Partnership on Active and Healthy Ageing http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing
- Active and Assisted Living Joint Programme http://www.aal-europe.eu/
- EIT KIC on Healthy Living and Active Ageing https://eithealth.eu/
- Joint Programming Initiative More Years – Better Lives http://www.jp-demographic.eu/

Contact and more info

Draft Horizon 2020 Work Programme 2016-2017:
https://ec.europa.eu/programmes/horizon2020/sites/
horizon2020/files/08.%20SC1-Health%202016-2017_pre-pub.pdf

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Questions?

EC Participant Portal

http://ec.europa.eu/research/participants/portal/desktop/en/home.html

For updated information about Work Programme 2016-2017, you may also consult your National Contact Point:

http://ec.europa.eu/research/participants/portal/desktop/en/support/ national_contact_points.html

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