

# Regional Strategies of collaboration in PPPs in Europe



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REGIONE DEL VENETO

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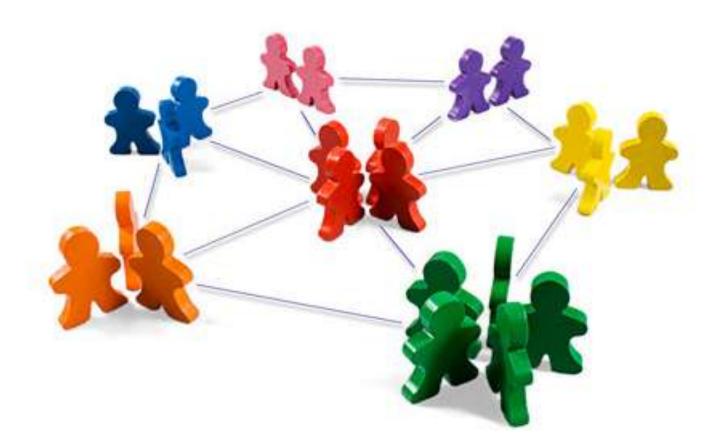
**EU funding opportunities** 

**Regions and synergies** 

**EU funding landscape for health** 



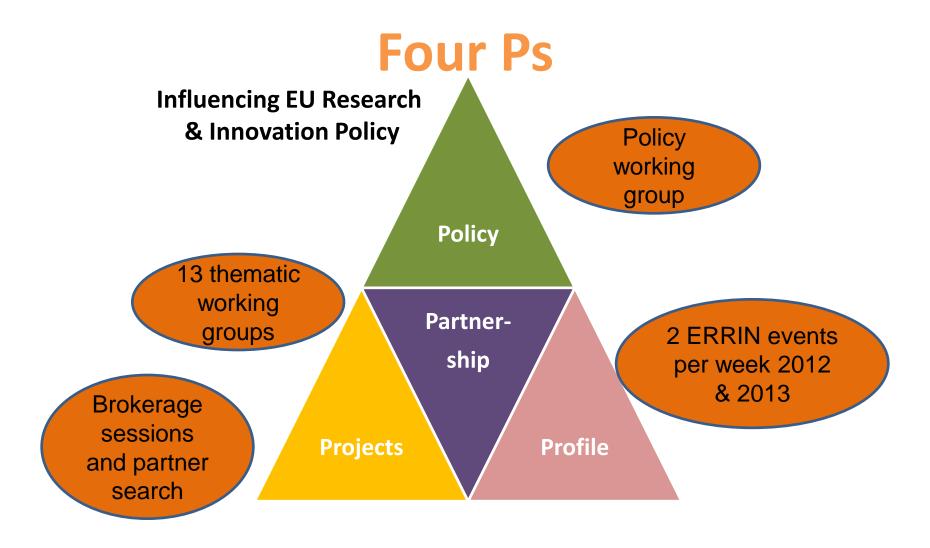
ERRIN is a Brussels-based platform of regions strengthening regional research and innovation capacities by exchanging information, sharing best practice, supporting project development, policy shaping and profile raising.



**ERRIN** helps regions get their voice heard in Brussels and supports the implementation of the Europe2020 Strategy, the **Innovation Union flagship** initiative and Smart Specialisation.







Supporting project development and engaging ERRIN regions in EU projects

Raising the profile of ERRIN and member regions in Brussels

#### **ERRIN** working with...









Raising the productivity and competitiveness of European businesses through technology. Boosting national economies on the international market, and strengthening the basis for sustainable prosperity and employment.



**On Mirror Group** 

#### **Working Groups**

Strategic	Cross-cutting	Societal Challenges	Industrial Competitive- ness	Innovation
Policy	Smart Specialisation	Health	ICT	Innovation Tools and Funding
Projects	Smart Cities and Regions	Inclusive Societies and Security	Advanced materials and nano	Tourism
	New!!!	Energy and Climate Change	Bio- economy, food and agriculture	Design and Creativity
		Transport		
		Water		

#### **Working Groups and Leaders 2013**

Excellence

- Policy Emilia Romagna, Scotland Europa, East and North Finland, South Tyrol...
- Projects South Denmark, West Midlands and Eindhoven

Societal

- Energy Scotland Europa and Stuttgart
- Health South Denmark and Flanders
- Inclusive societies and security Bremen and Scotland Europa
- Transport and Logistics Aragon and Ile de France
- Water Aragon, Fryslan, Skane and Puglia

Industry

- Advanced /raw materials and nano Twente University and Rhone-Alpes
- Bio economy and food and agriculture Navarra, Lombardy and Northern Ireland
- Design and creativity Paris CCI, Flanders, Central Denmark, Lombardy and Stuttgart
- ICT North Denmark, Amsterdam and Wallonia
- Innovation Wales Higher Education, Cantabria, Eindhoven...
- Tourism Tampere and Valencia

X-cutting

- Smart Cities and Regions Eindhoven....
- Smart Specialisation Scotland Europa, Northern Ireland, Murcia, Skane



#### **Events**

Jan-Dec 2012 2 activities per week

+ 100
activities in
2012
+ 2 per
week 2013

#### **Future programmes**





#### Horizon 2020

- Inside region
- Funding predictable
- Smart specialisation
- Operational programme
- Priorities
- Capacity building

- Working outside region
- Unpredictable funding
- Understanding of
  - Work programmes
  - Calls
  - Partnerships
  - Projects



## Combining structural funds and Horizon 2020

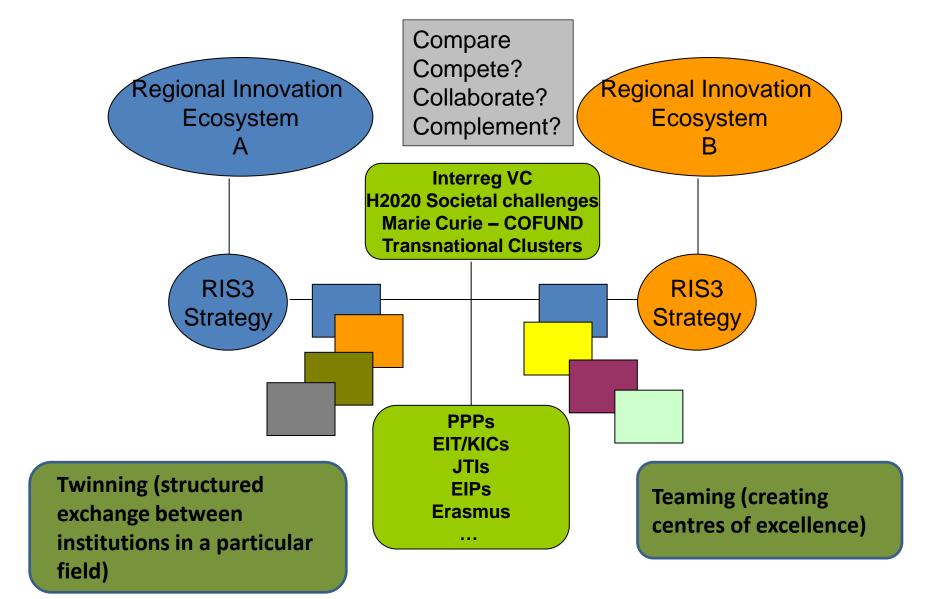




## Widening opportunities under Horizon 2020

- PPPs Future Internet, Green Vehicles, Factories of the Future, Energy Efficient Buildings, SPIRE, Photonics and Bio-based industries
  - JTIs Fuel Cells and Hydrogen, Innovative Medicines...
  - Article 185 Ambient Assisted Living, Eurostars...
- EIPs Healthy Ageing, Water, Smart Cities, Raw materials, Agriculture
- EIT /KICS Climate, ICT, Energy, Food, Raw Mats and Healthy Ageing
- KETs ICT, nano, bio, advanced materials...
- **JPIs** Urban, Climate, Alzheimer's...

#### **Regional Partnerships**



#### Key messages

- Key focus of EU policy (Europe 2020 Strategy)
  - Competitiveness, Jobs and Growth
- Competitiveness driven by research and innovation
- More emphasis in R+I policy and therefore more funding
- Two major sources of future funding for R+I
  - Structural funds
  - Horizon 2020
  - Plus other related funding opportunities
- Key role for regions synergies
  - Strategy Smart specialisation and strategic thinking
  - Implementation combining EU/MS/regional funding
  - Collaborating outside the region (critical mass/enhanced value chains/'benchlearning' – Markku Markkula)

#### Health landscape

	Programme	Funding	Source	
	Horizon 2020	Yes 70%	EU	
	PPPs			
	JTIs e.g. IMI	Yes	EU/Industry	
	AAL	Yes	EU/MS	
7	EIP on Healthy Ageing	No /policy driver		
\ \	EIT/KICs	Yes	EU/ partners	
	JPIs	Yes	MS (if MS partner)	

#### **Horizon 2020 R&D&I Health programmes** tinantino Pillar 1 instrument Pillar 2 Pillar 3 Future EIP AHAA/ AAL Health \* Coantage of the state of the **KIC Joint Programming** Elbon AHA 44 Health Societal

Commercial deployment

**CRL 8-9** 

**CRL 5-7** Financing, clinical trial, manufacturing

planning

**CRL 3-4 Business model** 

and initial financing

**CRL 1-2** Market

research and patent protection

> **TRL 1-2** Basic technology research

**ERC** 

JPIS

**TRL 3-4** Proof of concept

KET

Biotech Nano

**TRL 5-7 Technology** demonstration

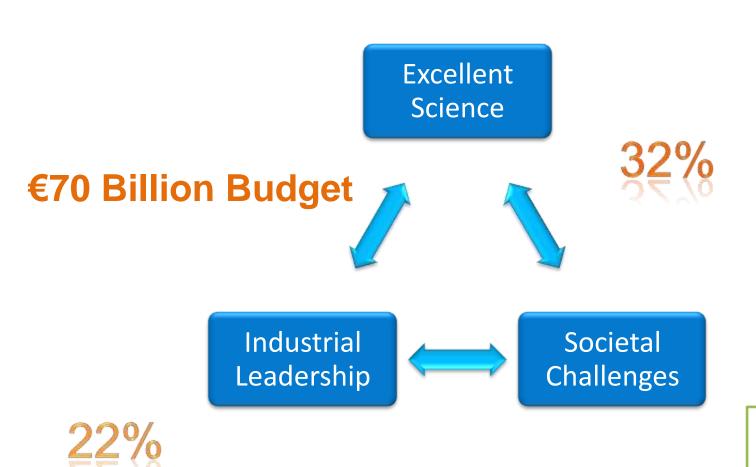
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**TRL 8-9** 

System test, launch and operations

**Technology Readiness Level** 

#### Horizon 2020 – three pillars



39%

#### Societal challenges: focus areas

- Build scale and critical mass
- Exploit existing research and innovation
- Cross-cutting
- Involve both societal challenges and KETs
- Support the innovation chain
  - research> development> proof of concept> piloting> demonstration projects...
- Make use of a variety of funding schemes
- Integrate different perspectives
  - Social science and humanities, gender...

### Societal challenges: supporting innovation

- Support for activities close to end user and markets
- Support for pre-commercial and first commercial public procurement and standard setting
- Inducement prizes (possible Capital of Innovation)
- Piloting new forms and sources of innovation focusing on public sector and social innovation

#### Horizon 2020: Societal challenges

- 1. HEALTH, DEMOGRAPHIC CHANGE AND WELLBEING
- 2. EUROPEAN BIOECONOMY CHALLENGES: FOOD SECURITY, SUSTAINABLE AGRICULTURE AND FORESTRY, MARINE AND MARITIME AND INLAND WATER RESEARCH
- 3. SECURE, CLEAN AND EFFICIENT ENERGY
- 4. SMART, GREEN AND INTEGRATED TRANSPORT
- CLIMATE ACTION, RESOURCE EFFICIENCY AND RAW MATERIALS
- 6. EUROPE IN A CHANGING WORLD INCLUSIVE, INNOVATIVE AND REFLECTIVE SOCIETIES

### Societal Challenge 1: Health, Demographic Change and Wellbeing

- 1. Understanding Health, Wellbeing and Disease
- 2. Preventing Disease
- 3. Treating and Managing Disease
- 4. Active Ageing & Self Management of health
- 5. Methods and Data
- 6. Health Care Provision and Integrated Care
- 7. Specific Implementation Issues

The Commission Strategic Programme

#### Personalising health and care

This focus area will support research and innovation throughout the health and care chain

**Focus areas** 

- by promoting the development of personalised diagnostics, drugs and other interventions
- by improving health and care delivery through measures including evidence based integrated and self-care
- by promoting population health interventions.

through the

#### Innovative Medicines Initiative

bringing together

- > academia,
- > small businesses and the
- > research based pharmaceutical industry

through the

#### Ambient Assisted Living Joint Programme

bringing together

- > academia,
- > small businesses and the
- > research based pharmaceutical industry

through

direct support to small businesses

or

other forms of co-operative research

#### **PPPs**

- Public Private Partnerships
- Contractual PPPs = Energy efficient buildings; Green Vehicles; Factories of the Future and Future and sustainable process industries (SPIRE); Robotics, Photonics and Future Internet
- **Joint Undertakings** established in FP7 under Article 187 of the Treaty, for which further support may be provided under the above conditions are:
- The Innovative Medicines Initiative (IMI), Clean Sky, Single European Sky ATM Research (SESAR), Fuel Cells and Hydrogen (FCH), and Embedded computing systems (ARTEMIS) and Nanoelectronics (ENIAC).
- The latter two may be combined into a single initiative.

Contribution so far: €575 + 581 million

## IMI: Joining forces with the pharma industry



- Largest PPP in Europe
- Duration: 2007-2013
- Fosters open collaboration
- Modernises drug development
- Supports pre-competitive pharmaceutical research and development





- Proposal for a renewed PPP with increased budget
- Enlarged to other industries: imaging, vaccines, ICT
- Starting date: early 2014

#### Article 185

- Four initiatives identified in the FP7 Specific Programmes
- AAL a joint research programme on 'Ambient Assisted Living';
- Bonus a joint research programme in the field of Baltic Sea research;
- EMRP a joint research programme in the field of Metrology (the science of measurement)
- Eurostars a joint research programme for research-performing SMEs and their partners.



The AAL JP is a funding activity that aims to create better condition of life for the older adults and to strengthen the industrial opportunities in Europe through the use of ICT.

- 6 years (2008 2013)
- €700 million (50% Public funding Commission and Partner States 50 % Private Funding from participating organisations
- Awaiting confirmation for additional funding in the beginning of 2014

#### **AAL**

- 6 previous calls
- Last call: Call 6 (supporting occupation in life for older adults) deadline 30<sup>th</sup> April 2013
- Most likely new funding for an additional 7 years (waiting approval beginning of 2014)
- Next Call (potentially) April 2014

#### **AAL Forum 2013**

- AAL Forum in Norrköping, Sweden
- Around a 1000 participants
- Brings together current AAL project participants as well as new ones
- Policy makers, care providers, industry and entrepreneurs
- September 24<sup>th</sup> to 26<sup>th</sup> 2013

#### **European Innovation Partnerships**

- Healthy Ageing, Water, Smart Cities, and Raw materials, Agricultural sustainability and productivity
- http://ec.europa.eu/research/innovationunion/index en.cfm?pg=eip

#### Healthy Ageing: what are we looking at?

- 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



### EIP on Active and Healthy Ageing: the overall vision







http://ec.europa.eu/research/innovation-union/pdf/active-healthy-ageing/steering-group/operational\_plan.pdf#view=fit&pagemode=none

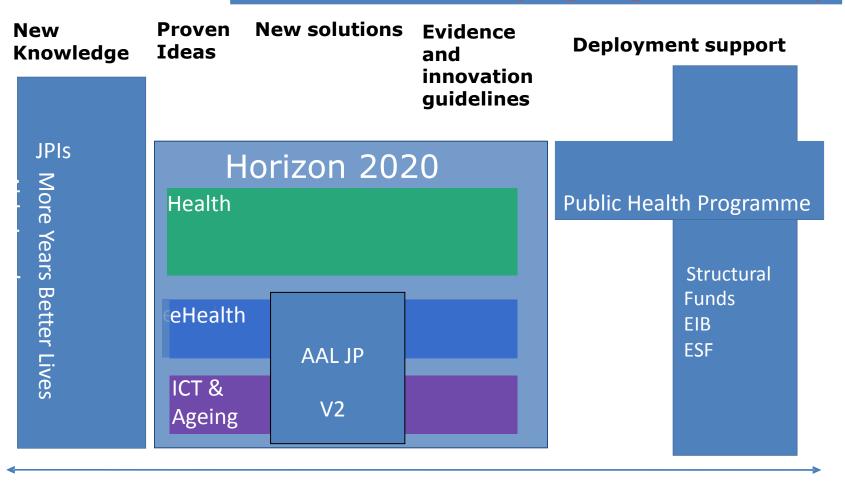
#### How to get there?

Smarter, innovation friendly Policies Creating scale, partnerships and return of investments

Investing in Research and Innovation Horizon 2020, AAL JP European Innovation Partnership on Active and Healthy Ageing



#### Active and Healthy Ageing Partnership



Research

**Innovation** 

**Deployment** 

## European Innovation Partnership on Active & Healthy Ageing

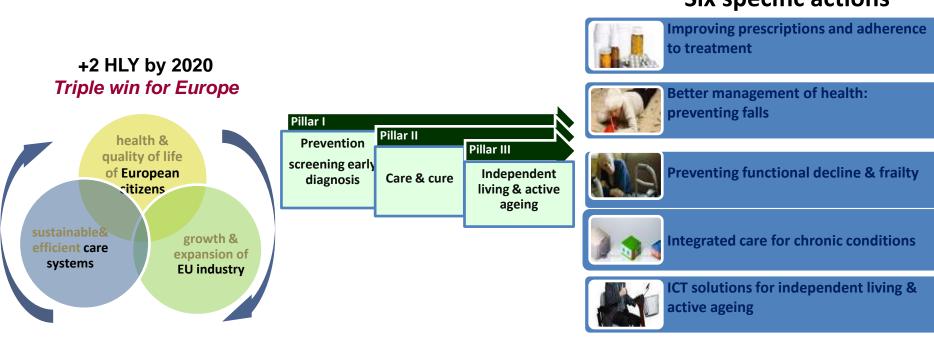
innovative collaboration



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

#### Six specific actions

**Age-friendly cities and environments** 



## Everybody can engage



- Action Group

Active partners submitted a commitment to work together towards the Specific Actions of the Partnership





- (Candidate) Reference Sites

Regions or other geographical areas where the actions covered by EIP are in place and could coach and show best practices to others



Marketplace for innovative ideas

Online Platform- open for everybody <a href="https://webgate.ec.europa.eu/eipaha/initiative">https://webgate.ec.europa.eu/eipaha/initiative</a>

## **Current state of play of the EIP on AHA**

- >500 commitments
- >300 leading organisations
- >300 regions & municipalities
- >30 million citizens & 2 million of patients involved
- Marketplace more than 30000 visits and more than 650 registered users
- More than 1 billion euro mobilised
- 32 innovative good practices (reference sites)

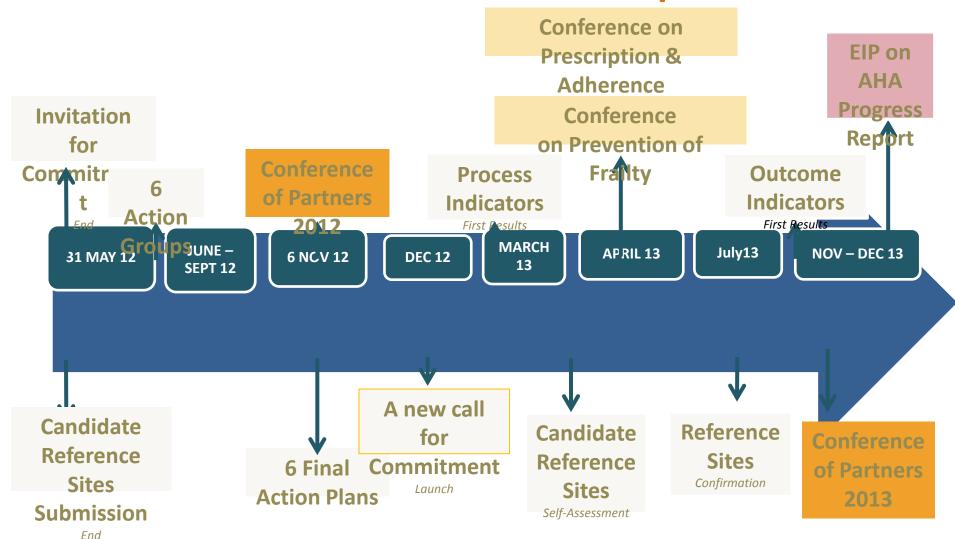
## Reference sites

- 32 cities and regions across Europe have been rewarded for new ways of helping older people
- Star winners came from the Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Portugal, Spain, Sweden, The Netherlands and the UK. 13 Reference Sites have received three stars, 12 two stars and 7 one star
- Italy reference sites
- Regione Liguria
- Campania Health Care Authority
- Regione Emilia Romagna: Agenzia Sanitaria e Sociale Regionale dell'Emilia-Romagna (ASSR)
- Regione Friuli Venezia Giulia: Istituto Regionale Rittmeyer per i Ciechi
- Regione Piemonte: Assessorato Regionale alla Tutela della Salute, Sanità, Edilizia Sanitaria, Politiche Sociali e per la Famiglia, Coordinamento Interassessorile per il Volontariato(AReSS)

## **Good practice...**

- **Scotland** has rolled out a risk prediction tool for anticipatory care to help achieve its goal of everyone living longer, healthier lives at home, or in a homely setting by 2020. The result has been fewer hospital admissions, shorter hospital stays, and a net saving of £190 per patient.
- The **Basque region** in Spain is using 14 ICT projects to implement its strategy for chronic conditions. So far this has seen a 38% reduction in hospitalisation for highly complex cases and a 26% fall in emergency room visits.
- The University of Coimbra, Portugal, supports a holistic ecosystem of stakeholders to implement innovative practices. The area of cognitive ageing, dementia and vision impairment has shown positive results with 1350 patients per year being evaluated by specialists, and the creation of over 100 jobs.
- Andalusia, Spain has electronically integrated the health information of all its 8,5 million inhabitants, optimised the coordination of their health and social carers and improved social welfare for their nearly 1.3 million citizens aged 65+.
- http://ec.europa.eu/health/ageing/docs/eipaha reference sites en.pdf

#### Milestones & next steps



## Joint programming

- Alzheimer and other Neurodegenerative Diseases (JPND)
- Agriculture, Food Security and Climate Change (FACCE)
- A Healthy Diet for a Healthy Life
- Cultural Heritage and Global Change: A New Challenge for Europe
- Urban Europe Global Urban Challenges, Joint European Solutions
- Connecting Climate Knowledge for Europe (CliK'EU)
- More Years, Better Lives The Potential and Challenges of Demographic Change
- Antimicrobial Resistance- The Microbial Challenge An Emerging Threat to Human Health
- Water Challenges for a Changing World
- Healthy and Productive Seas and Oceans

## Joint programming

- Alzheimer and other Neurodegenerative Diseases (JPND)
   http://www.neurodegenerationresearch.eu/about/joint-programming/
- A Healthy Diet for a Healthy Life http://www.healthydietforhealthylife.eu/
- More Years, Better Lives The Potential and Challenges of Demographic Change <a href="http://www.jp-demographic.eu/">http://www.jp-demographic.eu/</a>
- Antimicrobial Resistance- The Microbial Challenge An Emerging Threat to Human Health <a href="http://www.jpiamr.eu/">http://www.jpiamr.eu/</a>

### **EIT- new KICs > 2014**

- Food4future sustainable supply chain from resources to consumers
- Innovation for healthy living and active ageing
- Raw materials sustainable exploration, extraction, processing, recycling and substitution
- Added-value manufacturing
- Urban mobility
- Smart secure societies ???



## Innovation for healthy living and active ageing

- Contribute to societal challenge under Horizon 2020
- Socio-economic dimension
  - Pharmaceutical sector
  - Developed health and social care systems
  - Hi-tech manufacturing
  - Old-age tourism accessible services
  - World class research and education in EU

## **Challenges**

- Intense cooperation between multidisciplinary/multi-sector teams and knowledge triangle (research, business, education)
- Emphasis on higher education curricula, new skills, entrepreneurial approach to new services and products, strengthening exiting value chains and social innovation
- Address the European paradox 'adding value to EU research through innovative products and services

## **Synergies**

- Cooperation with the <u>EIP on Active and Healthy Ageing</u> and help to deliver the EIP Strategic Implementation Plan
- Contribute to '<u>Lead Market initiative on e-health</u>'

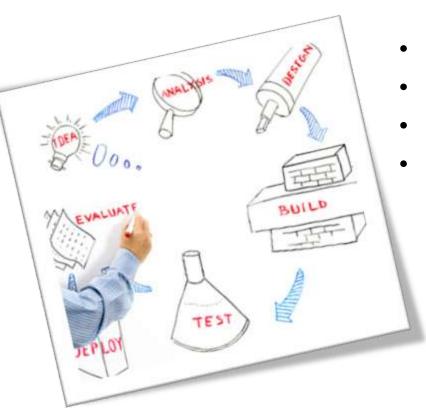
   <u>http://ec.europa.eu/enterprise/policies/innovation/policy/lead-market-initiative/ehealth/index en.htm</u>
- Coordinate with the JPIs <u>Alzheimer's and More Years and</u>
   Better Lives
- Capitalise on the major research results of the <u>JTI IMI</u>
- Coordinate with the <u>Ambient Assisted Living Joint Programme</u>

# Financing instruments (EC support through EIF)

- Equity instrument for innovative SMEs:
  - Seed, start-up, early stage, expansion & growth phase
  - Target: indirect support to 1,000 SMEs
  - Debt instrument for innovative SMEs:
    - Loan guarantees for small and mid caps
    - Target: indirect support to 3,000 SMEs

Budget: €3,5 billion

## Special support for SMEs



- Inspired by the US model "SBIR"
- Challenge driven, bottom up
- A single company can be funded
- 3 phases / 3 entry points:
  - Concept and feasibility assessment
  - R&D, demonstration, market replication
  - Commercialisation

#### **SME** instrument

Idea



Concept & Feasibility

**Assessment** 

Phase 1

Phase 2

Demonstration
Market replication
R&D

Phase 3

**Commercialisation** 

Market



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

- Development, prototype, test
- Miniaturisation/ design
- Clinical trial,
- Market replication

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

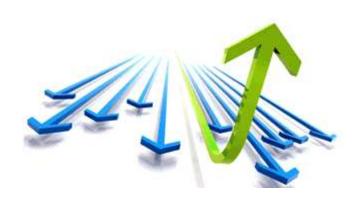
ut-based payments:

No direct funding

Lump sum: €50.000 € ~ 6 months Output-based payments: 1 to 3 M€ EC funding 12 to 24 months

## Fast track to innovation

- To be launched in 2015
- Open calls
  - With 3 cut-off dates
  - Maximum 5 participants
  - Maximum €3 million/project
  - Calls will cover all fields across KETs/ Leadership in enabling and industrial technologies (LEITs) and Societal Challenges
  - Opportunity for non-SME industrial partners



## Closing the innovation divide

- Initial emphasis will be to support Member States and regions in the effective implementation of the new R&I
- Policy support to MS and regions on R&I policy design and innovation
- ERA Chairs
- Teaming
  - creating centres of excellence
- Twinning
  - Structured exchange between institutions and upgrading knowledge in a particular field

## Conclusion

EIT/KIC EIP Healthy Ageing JPIs Marie PPPs Sklowdowska-Curie Interreg 5C IMI/AAL Smart Structural Funds Horizon 2020 Specialisation

## **Thanks**

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for listening