

FP7 ICT Programme Challenge 5

Obj.5.4: ICT for Ageing and Wellbeing

***European Commission,
DG Information Society and Media
ICT for Inclusion Unit (H3)***



European Commission
Information Society and Media

Call 7

Objective ICT-2011.5.4: ICT for Ageing and Wellbeing

Target Outcomes

Key Area

**Service and social
robotics systems for
ageing well**

More efficient care, prolonged
independent living and better
quality of life of elderly and carers

Strengthened global position of
European industry in Service
robotics

Key Area

**Smart and self-adaptive
environments prolonging
independent living**

Proven ICT concepts for early
detection of ageing-related risks

Global industrial and academic
leadership in ICT and Ageing Well

Coordination Frameworks

**RTD roadmaps and
Stakeholder coordination**

Common strategic vision / RTD
roadmap for ICT for ageing well
in Europe and beyond

Comprehensive specific vision on
ICT for Ageing at Work

Key Area

**Pre-Commercial Procurement
on elderly care robotics**

Proven impact from demand
driven R&D to accelerate
innovation in elderly care robotics

Expected Impacts

Target outcome a):

Service Robotics for Ageing Well

- Care solutions integrating R&D advances in robotics research and intelligent environments
 - Excluded: R&D on robotics components
- Providing improved quality of life and efficiency of care for elderly people and their carers



- Support for daily living and care activities
- Interacting with people (context detection)
- Integrated with other smart artefacts, intelligent home space + services
- Usability, ethics
- Improving state of the art

Service Robotics for Ageing Well

- **Key Issues**

- Concrete application targets, multi-disciplinary team
- Seamless integration within smart environments
- Autonomous operation
- Building on open platforms
- Affective and empathic user interaction
- Adaptability to user requirements and behavior
- Addressing user acceptance, safety and trust
- Clear Service models and measurable impact

- **Essential Elements**

- **One IP + STREPs**
- User oriented research approach for operational verification of benefits in realistic environments
- **No basic robotics component development -> Challenge 2**

Target outcome b):

Smart and Adaptive Environments prolonging Independent Living

- Flexible care solutions able to provide early detection of individual care needs and support related to ageing
 - E.g. increased risks of falls, depression, sleep deprivation, cognitive decline
- Building on long term monitoring of unobtrusive daily behavioural and physiological sensing and analysis



- Unobtrusive sensing available in future homes
- Better prediction/prevention & support
- Advanced reasoning and trend analysis with medical correlation
- Integrated solutions with adaptive support
- Validation of results

Smart and Adaptive Environments prolonging Independent Living

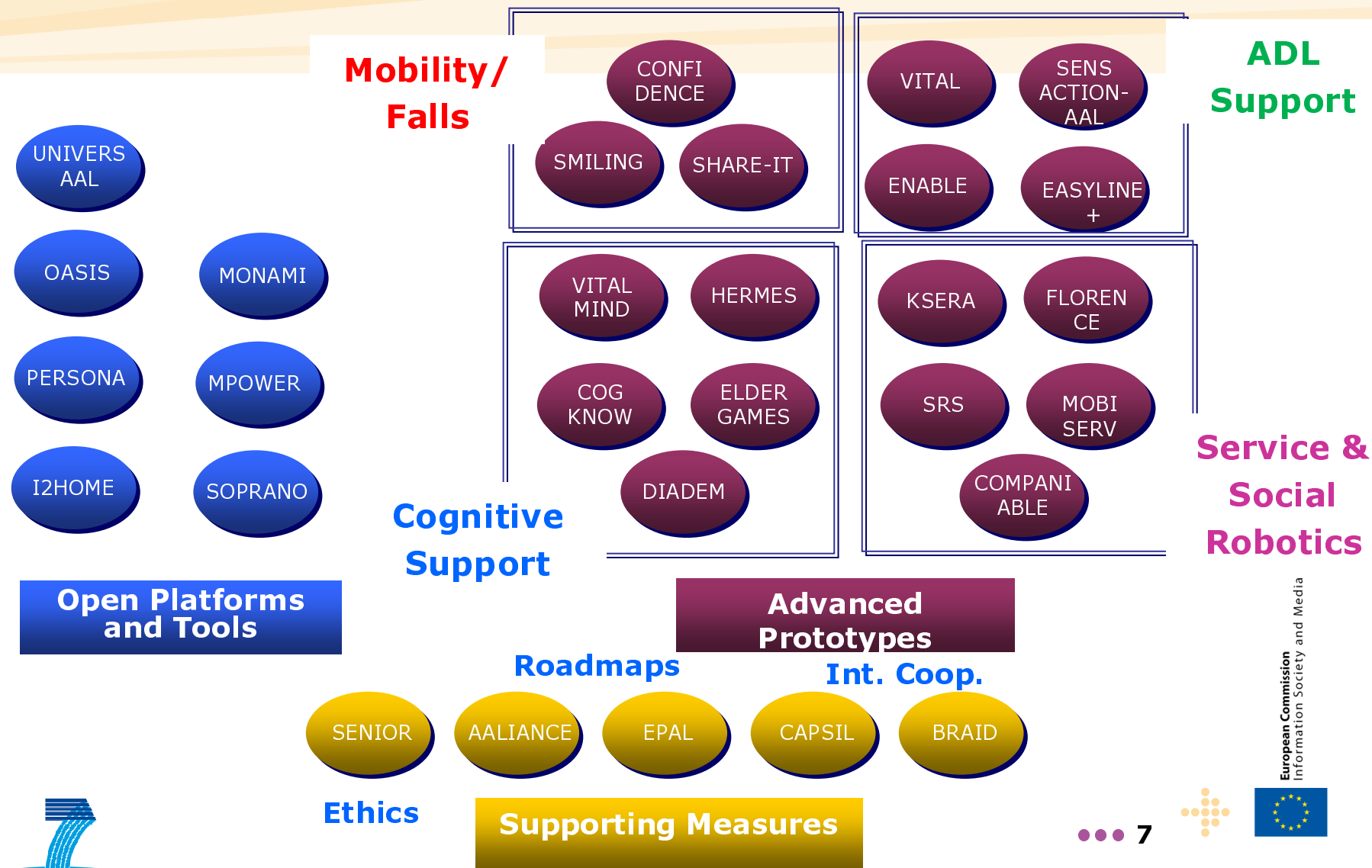
- **Key Issues**

- Concrete application targets, multi-disciplinary team
- Validation methodology to demonstrate potential impact
- Building on open platforms
- Adequate user interaction, acceptance and trust
- Adaptability to user requirements and behavior
- Addressing ethics of user and carer involvement

- **Essential Elements**

- **STREPs**
- User oriented research approach for operational verification of benefits in realistic environments

Existing EU Portfolio ICT & Ageing R&D Projects



Coordination Frameworks

ICT and Ageing Well

- Objectives
 - Further development of RTD Roadmaps in ICT for Ageing Well
 - Continue and widen stakeholder coordination
 - Boosting open standards development
 - International cooperation with North America and Asia
- Essential elements
 - One CSA only: Coordination Action OR Support Action
 - Credible industrial and other relevant stakeholder involvement essential

ICT and Active Ageing at Work

- Objectives
 - Further development of RTD Roadmaps in ICT for Ageing at Work
 - ICT R&D analysis
 - Stakeholder cooperation
- Essential elements
 - One CSA only: Coordination Action OR Support Action
 - Credible industrial and other relevant stakeholder involvement essential

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Objective ICT-2011.5.4: ICT for Ageing and Wellbeing

Target Outcomes

Key Area

**Services for elderly people
through Pre-Commercial
Procurement (PCP)**

New

Effective cooperation and linkage between longer-term research and innovative real-life implementation of robotics based solutions for ageing well

New public-private partnerships for sustainable improvements in care provision

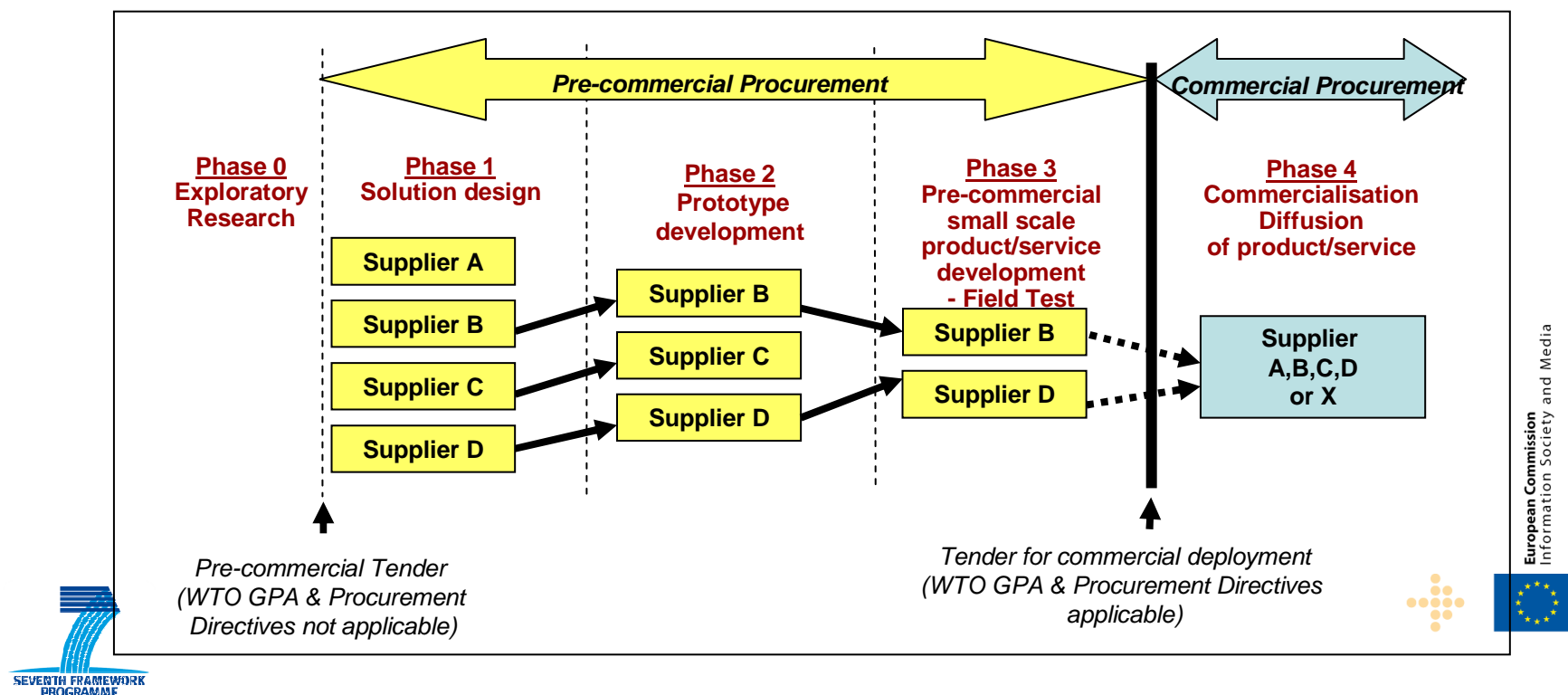
Strengthened global position of European industry in Service and Social robotics

Expected Impacts

Pre-commercial procurement

Bridging the innovation gap through public demand pull
(COM/2007/799 & SEC/2007/1668)

- Specific approach for public sector to procure R&D services, ensuring
 - Benefit and risk sharing between procurers and suppliers
 - Competition and transparency in the procurement process
 - Compliance with legal framework without entailing State Aid



What do the PCP actions aim for?

Help Member States to...

- Bring **radical improvements** to the **quality and efficiency of public services** with breakthrough solutions.
- Encourage public bodies around Europe **to work together** on new ICT based solutions that can respond to concrete public sector needs.
- Especially where interoperability and coherence of solutions across borders is required, **cross-border cooperation** can help better address **issues of common European interest**.
 - To achieve the above targets, the PCP actions will support (1) networking and cooperation between public bodies to define together the mid-to-long term solution requirements and (2) to explore, through PCP, various alternative solution paths that respond to their needs.

New support for PCP

What's new?

- Support for public authorities planning joint implementation of pre-commercial procurements on topics of common European interest
- EU contribution: combination of
 - Reimbursement of eligible costs for preparation and coordination of the joint PCP call for tender (100% funded)
 - Reimbursement of 50% of the cost of the joint PCP call for tender (for financing of the R&D to be performed by selected tenderers participating in the PCP)

Services for elderly people through Pre-commercial Public Procurement (PCP)

ICT and Ageing Well

- Objectives
 - Extended independent living and increased efficiency of care of elderly people building on **robotics solutions**
 - Public-private partnership through pre-commercial procurement based on public sector needs, driven by public procurers
 - Example services include support to daily tasks, mediated social interaction, mobility
- Key issues
 - Adequate involvement of public sector, users and other key stakeholders
 - Use of open platforms and contributions to standards
 - Measurement of impacts and documentation of results
 - Appropriate consideration of safety and ethical issues

Services for elderly people through Pre-commercial Public Procurement (PCP) (2)

- Essential elements
 - One CP-CSA only:
 - Realistic objectives versus expected impact (e.g. compared to target outcome a)
 - Minimum number of participants
 - 3 independent public purchasers from 3 different MS/AS
 - Eligible public authorities
 - Public purchasers, planning to integrating PCP into their activities
 - Public authorities (e.g. managing R&D&I programs) planning to provide incentives to public purchasers to undertake PCP
 - In addition: other stakeholders, if well justified

Funding Schemes and Budgets

Target	Indicative Budget	Funding Scheme
<ul style="list-style-type: none"> a) Service Robotics for Ageing Well 	18 M€	CP: <u>one</u> IP + STREPs
<ul style="list-style-type: none"> b) Smart and self-adaptive environments prolonging independent living 	14.5 M€	CP: STREP only
<ul style="list-style-type: none"> c) Coordination frameworks <ul style="list-style-type: none"> i) Ageing Well ii) Ageing at Work 	1 M€ 0.5 M€	CSA: <u>one</u> CA or SA only for i) and ii)
<ul style="list-style-type: none"> d) Services for elderly people developed through joint Pre-commercial Public Procurement 	3 M€	<u>one</u> CP-CSA

Further Information

- Web Resources

- http://cordis.europa.eu/fp7/ict/programme/challenge5_en.html
- <http://ec.europa.eu/einclusion>

Examples of open platforms

- <http://aaloa.org/>
- <http://openurc.org>

- Key Contacts

- ICT & Ageing: [peter.wintlev-jensen \[at\] ec.europa.eu](mailto:peter.wintlev-jensen[at]ec.europa.eu)

- General Contacts

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