Information day ICT-PSP 2011

THEME 3: ICT FOR AGEING WELL AND INCLUSION

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Unit H3: ICT for Inclusion

DG Information Society and Media

ICTPSP
ICT POLICY SUPPORT PROGRAMME

ICT for eInclusion
A Comprehensive EU Approach

Technology Risk

FP7

- Longer-term R&D
- Advanced, e.g. BCI, Robotics, Open Accessible platforms
- 400 M€

AAL JP

- Market-oriented R&D
- Local adaptation
- Business models
- >600 M€

- Large scale validation
- Existing technology
- Service innovation
- Business models
- 60 M€

CIP ICT PSP

Time to Market

5-10 years   **2-3 years**   **deployment**

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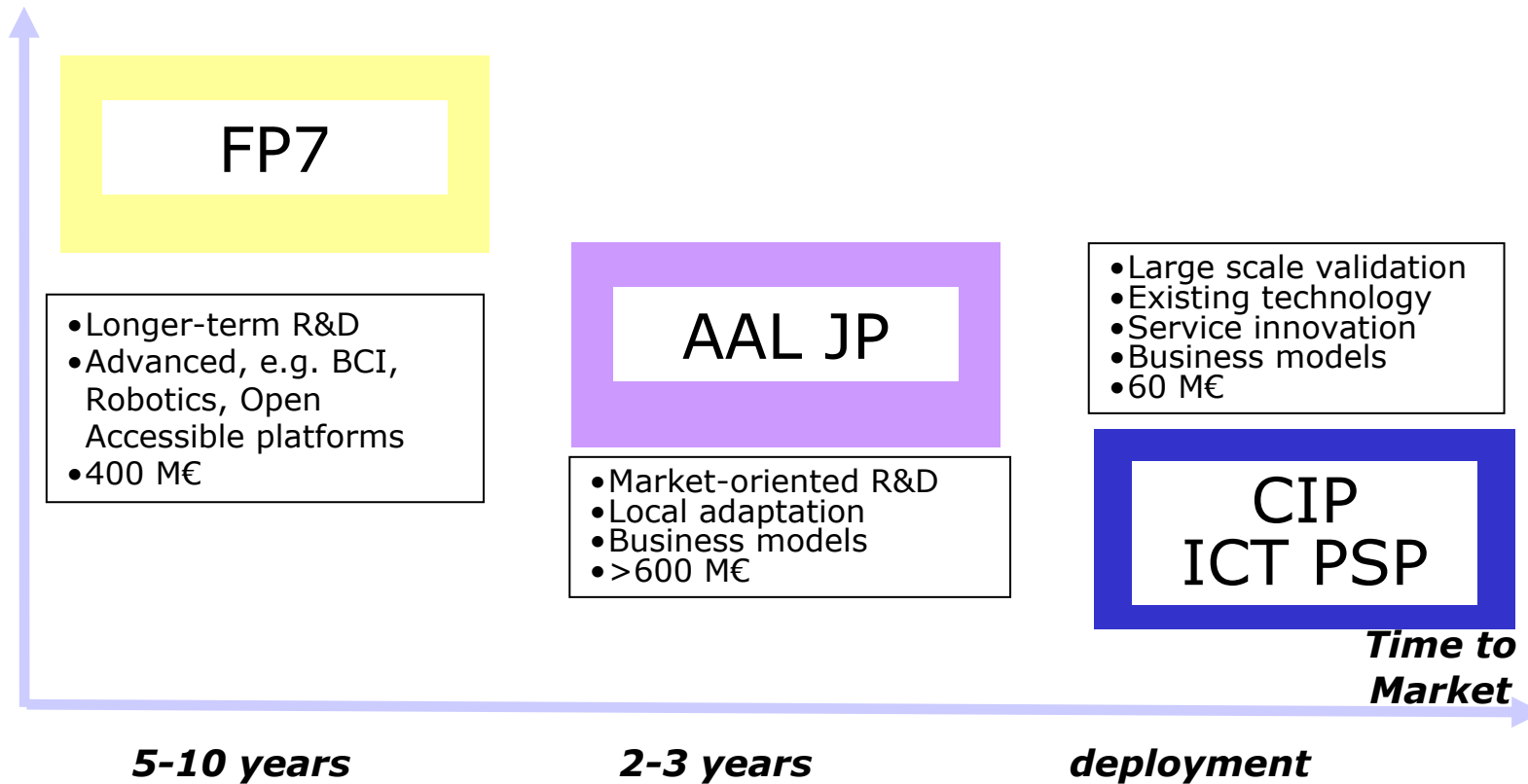
e-Inclusion in ICT PSP 2007-2010

- **Ageing and ICT**
  - 11 Pilots B
  - Thematic network on innovative ICT for ageing well

- **E-accessibility**
  - Accessible digital TV
  - Accessible "total conversation"/ emergency services
  - e-Accessibility of Public Digital Terminals
  - Assistive technologies (AT) and solutions for accessibility
  - Thematic network on e-accessibility

- **Wider e-Inclusion**
  - Migrants and ICT thematic network
  - Innovative solutions for inclusive and efficient eGovernment
  - Thematic network on capacity building for inclusive public services
  - Multi-channel service delivery for the socially disadvantaged

ec.europa.eu/information_society/activities/einclusion/docs/rtd_docs/projects.doc

Demographic Ageing- why?

Societal challenge – ageing of the EU population

- Population 65+: 2008 – 81 mio ➜ 2060 – 151 mio
- Old-aged dependency ratio : 2008 – 4 to 1 ➜ 2030 – 3 to 1

Socio-economic implications

- Budget constraints and unsustainable health and social systems – average total spending on health care in the EU 27 ↑ by 1.5-2 p.ps of GDP by 2060
- Total aged-related expenditure (inc. health, pensions, long-term etc.) ↑ by 4.75 p.ps. by 2060 in the EU average
- Shrinking workforce in the care sector and insufficient number of health specialists

Innovation and active & healthy ageing

- Great market potential and promise of **active and healthy ageing solutions** - **9% of GDP in innovation capacity**, but...
- Innovation (in all forms) needed to address changing needs
- A number of **bottlenecks and weaknesses**, on demand and supply side, such as citizens' inability to use innovations, absence of incentives for innovation, lack of clear business models for integrated care, public procurement barriers, inadequate regulatory frameworks etc.
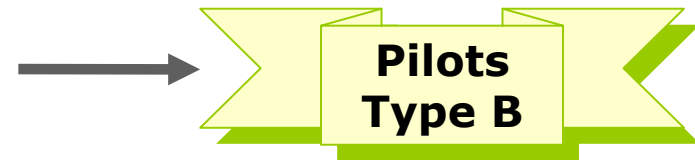
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DRAFT ICT PSP Call 2011 e-Inclusion Objectives

Objective 3.1
a) **ICT solutions for Fall prevention and detection**

/several pilots €8.5M/

→ **Pilots Type B**

WHAT   Significantly improve QoL & care efficiency for the ageing population

HOW   Through independent living solutions (focus: falls & safety of elderly people)

IMPACT   Substantial **increase** in QoL

                Increased efficiency of care

            Supporting   **large scale take-up** across Europe

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Conditions and characteristics :

- **Prevention of falls**
  - e.g. through intelligent lighting and environments, smart walkers, smart shoes and carpets, safety, cognitive or balance training etc.

- **Fall detection**
  - e.g. reliable detection (combining sensing data for reliable decisions)
  - design of solution for compliance and user acceptance (e.g. how to ensure that users wear sensors, that solutions can be used in the bathroom or bedroom (privacy)
  - fast response (ensuring rapid support when needed)

- **Wider support -** safety and independent living (integrated solutions)
  - prolong independent living of people at risk of falling
  - life-course perspective to fall

- **Home settings** (institutional settings may be additional)
- Solutions as part of **comprehensive (beyond ICT) approaches**

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Conditions and characteristics – ctd.:

- **ICT based solutions building on**

  - wide validation of **integrated** (not individual) components

  - address **full needs** (organisational re-engineering, business models, financial planning); **various contexts** EU wide

  - **demand driven**; **PPPs**; **set of regional actions and actors**: health & social care, housing corporations, insurance organisations, end users, their representatives, families & carers for end-user acceptance **–>** uptake

- **Real life settings**

  - real-life **testing**; **consolidated requirements** set; **validated functional specs**

  - credible **methodology** & pilot **population** (e.g. people who had falls – but safety) **–>** for significant results (socio-econ impact)

  - **public authorities** involvement (responsibilities and budget control)

  - specific & realistic quantified **indicators –>** monitor pilot stages progress

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Conditions and characteristics – ctd.:

- **Dissemination, visibility, enabling replication**

  - **socio-economic evidence base** for ICT investments in the field (cost-benefit analysis and user satisfaction) **–>** sustainable business models

  - **sustainable uptake and replication –>** Complete set of common specifications for technology and services agreed along value chain

  - **networking and coordination** between the pilots **–>** visibility and impact

  - **dissemination** - guidelines, manuals, educational materials; various audiences & levels (experts, authorities, public)

  - **interoperability**, compliance with relevant **standards**, taking into account best practices and relevant standardisation efforts; **ethics** & **privacy** issues

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'ICT for Ageing Well and Independent Living'

**Objective 3.1
b) ICT and Ageing Network**

/1ThN €0.5M/

Thematic Network
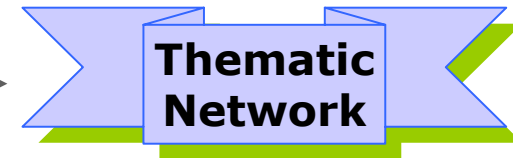
WHAT Develop guidelines for deployment of innovation in ICT & Ageing Well and share good practices across Europe

HOW Network representatives of key national or regional innovation initiatives in the field of ICT for Ageing Well

IMPACT Substantial **increase** in QoL and **efficiency** of care

Accelerating **large scale take-up** across Europe

Strengthening partnerships across innovators, industry players, public authorities and investors

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Why is a network needed?

- Many existing & emerging initiatives on Innovation in ICT and Ageing

    - National level, Regional level

- Difficult to identify and contact
- Little cooperation exist between them

$\Rightarrow$ Lacking sharing of information and good practice
$\Rightarrow$ Lacking critical mass
$\Rightarrow$ Reduced impact

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Conditions and characteristics :

- Build on the key national or regional stakeholder platforms associated with ICT & Ageing

- Outreach to a wider set of national and international stakeholders from across Europe,
  - industry, users organisations, public authorities, investors, housing and insurance companies and service providers

- Coordination with related EU level activities, notably
  - ageing well pilots under the ICT-PSP programme
  - relevant national pilots

- Contribute to key events and activities

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Conditions and characteristics – ctd.:

- Regular workshops should be organised, e.g. on
  - Indicators and measurement methodologies for impact assessment
  - Emerging care standards and guidelines

- Exchange of current results and experiences to a wider set of stakeholders:
  - consolidation of common specifications for successful solutions
  - Wider dissemination

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Expected impact:

- **Evidence of substantial prolongation of time** elderly people can live independently at home

- **Evidence of improvement of**

  - **Quality of Life** of older people & their families

  - **health and social care systems and services**

- **Wide take-up** of ICT-based fall prevention solutions across Europe

- **World leading position** by European industry *in innovative markets for ICT based solutions supporting independent living and the ageing population.*

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Impacts of a coherent investment

- **Proven functional specifications** for ICT & Ageing solutions – validated across Europe, translatable into public procurement,

- **Substantial socio-economic evidence of impact** from ICT solutions for key Ageing related problems

  - Cost-benefit

  - Quality of Life

- **Europe-wide replication** using public procurement and Structural Funds – intermediate step to large scale deployment in European Innovation Partnership

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EC ICT & Ageing Deployment Projects

Independent Living with Fall prevention and detection

Independent Living with Cognitive Impairments

Draft

2011 Call

IN-CASA
INDEPEN DENT
HOME SWEET HOME

SOCIABLE
ISISEMD
LONG LASTING MEMORIES

DREAMING
CLEAR
COMMON WELL
NEXES
T-SENIORITY

Integrated Care and Delivery for Independent Living

Independent Living with Multiple Chronic Conditions

Deployment Initiatives

ICT PSP Ageing & eAccessibility Pilots
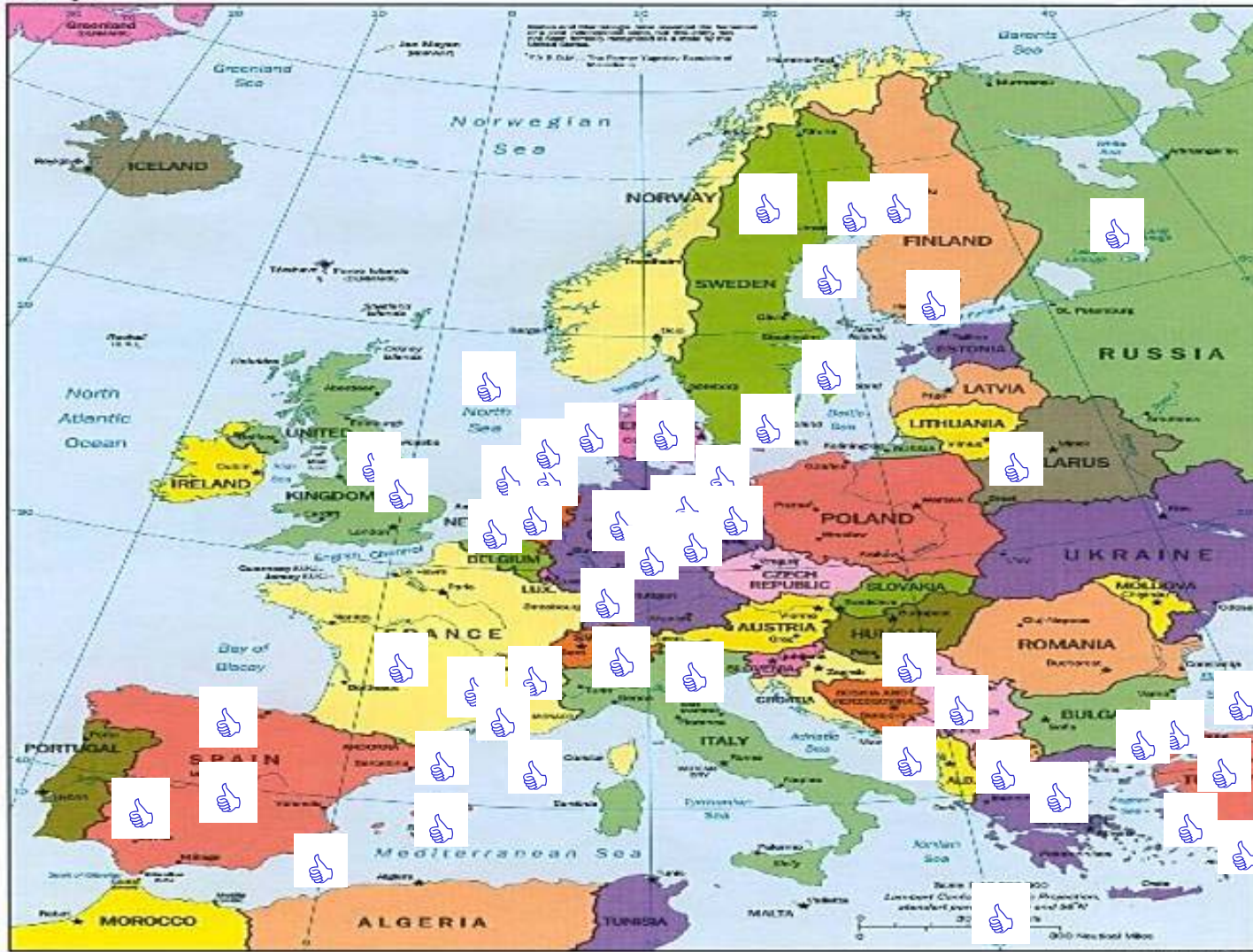
> 40 Regional sites

> 15 large Pilot projects

> 10.000 users

Digital Competence and social Inclusion

Objective 3.2
Digital competences and social inclusion

/1 Pilot up to €2 mln/

Pilots Type B

- **WHAT** help develop **digital competences** and **digitally-supported professional skills** for social inclusion actors - **special focus on domiciliary care workers**

  /formal and informal/

- **HOW** piloting operational support through online tools and services, targeted distance training, acquisition and certification of competences.

  /learning ICT and through ICT/

- **IMPACT**

  - structure "social inclusion" professions and market

  - improve the efficiency of health and social care systems and services

Digital Competence and social Inclusion

Conditions and characteristics – ctd.:

- **Actors**: "social inclusion actors" - carers of dependent people (formal / informal) incl. family relatives, social assistants, "telecentres" staff, relevant associations and authorities

- **Digital competence** = relevant tools BUT not only 'care' related tools

- **Real life setting**:
  - either include those constituencies or establish close links with, demonstrate the capacity to mobilise relevant actors during the pilot duration
  - varied geographical setting (to reflect reality of care work across Europe)
  - build on realistic scenarios - "normal" operations (service provision)
  - specific & realistic quantified **indicators –>** monitor pilot stages progress

- Credible methods for **measuring impact** ("upgrade of digital skills of carers"), e.g.
  - QoL of both carers and cared
  - more attractive job (less strain more options)
  - wider inclusion
  - reference scenario / control group
  - IMPACT on people – not care outcomes

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Digital Competence and social Inclusion

Conditions and characteristics – ctd.:

- **Single entry point**
  - Probably not Europe-wide – rather location specific (because of different contexts) BUT set of initiatives learning from each other
  - information, services, platforms, tools on acquisition, recognition of competences; practical support, various sources (public authorities, professional bodies, citizens associations…), good practices, evidence

- Provision of additional tools and materials

- **Online learning & training**; tailored packages – on digital competences or other relevant competences that can be acquired online

- **Assessment and certification schemes** for digital competences and skills needed for Social inclusion actors

- **Channels for communication, collaboration and support**

- **Design** - e-Accessibility, usability; multilingual where relevant

- **Dissemination** - various audiences & levels (experts, authorities, public

Digital Competence and social Inclusion

- **Outcomes**

  - **best practice toolkits** – how to teach and train people

  - which are the **skills / competences**

  - **business models** – who and how should invest in training

  - qualitative and quantitative evidence on **benefits from investment** in carers digital competences and skills

Expected impact:

- Strengthening the **use of ICT solutions** for delivering social support and care

- **Increasing digital competences** and engagement of persons involved in this area

- **Raising the profile** of social inclusion work

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e-Accessibility – Background

e-Accessibility: ensuring that people with disabilities and the elderly access and use ICTs on an equal basis with others; that the design, production and installation of ICTs take account of their specific needs.

Setting up Policies and Actions

- **European i2010 initiative on e-Inclusion**: "to be part of the information society"

- Commission's Communication **"Towards an accessible information society"**, 2008 (suggestions for improving Web accessibility)

- **Digital Agenda for Europe**: Promote take-up of digital technologies by potentially disadvantaged groups, such as elderly, less-literate, low-income persons; Improving access for people with a disabilities

- **ICT Policy Support Programme -** stimulate competitiveness and innovation while encouraging greater uptake of ICT across society

- **Framework Programmes** for supporting R&D on e-Accessibility, including Assistive Technology and Design for All since > 15 years

- Monitoring progress via **Studies, Consultations, Surveys**

UN Convention and EU disability strategy 2020

- **UN Convention on the Rights of People with Disabilities –** new momentum for acting on e-accessibility: *"to ensure access, on an equal basis with others, to ICT and systems, and to services provided to the public, including electronic services and emergency services"*
  - International treaty on human rights
  - Many references to technology
- **Implementation UNC**:
  - Implementation thematic level
  - Implementation at formal level: Coordination, focal point, independent mechanism
  - Monitoring; Statistics: Indicators and targets with dates, UNC report
- **Thematic Actions**
  - 10 areas (including accessibility), various actors
  - European Commission actions
  - Possible common actions at National level
  - EU institutions
  - Civil society

UNITED NATIONS

enable

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Objective 3.3 – e-Accessibility

/up to one pilot €3M/

Pilots Type B
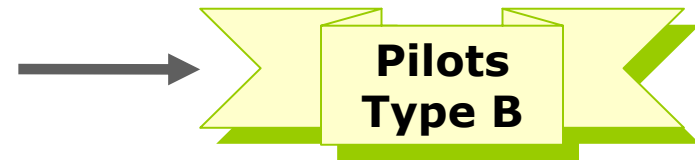
Focus and outcomes

- to reinforce the e-accessibility implementation across Europe,

- notably in the area of <u>public services</u>,

- through the provision of <u>common approaches</u>

- leading to the <u>creation and the delivery of accessible services</u> for people with disabilities

- and the <u>monitoring of accessibility</u> through <u>multiple platforms</u>.

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Conditions and characteristics : Elements to deliver (1)

- **Technology guidance** for generating, testing and validating accessible presentation and content on multiple platforms (**web**, digital TV, mobile, public digital terminals). In particular:

  - **Tools, templates and specifications for accessible web page creation and design, content creation and management.**

  - **Automatic and manual testing**

  - **Quality control certification and conformance aspects.**

<u>**To build as appropriate on past and ongoing EU-funded projects**</u> **(e.g. FP6 WAB cluster, FP7 ACCESSIBLE project, FP7 VUMS cluster, CIP Pilots DTV4ALL, REACH112, CIP Thematic-Network eAccess+, and a coming CIP Pilot on public digital terminal)**

<u>**To take into account existing specifications**</u> **(widely acknowledged internationally) for web content, authoring tools, user agents, rich internet applications and other aspects relevant to e-accessibility.**

Conditions and characteristics : Elements to deliver (2)

- **Accessible online public services/ services of general interest**, paying special attention to services with high social impact and to cross-border services. In relation to:

  - "European Interoperability Framework" for **e-government** (IDABC)

  - **Inclusive e-government** aspects beyond accessibility (e.g. usability, user centricity).

  - Accessibility requirements for **public procurement of web-based services, on the basis of appropriate guidance and toolkits**.

  - **Multi-platform delivery** (mobile, TV, public digital terminals,…)

  - "dynamic web"/ **web 2.0 applications**

  - **Interaction with users**:
    - use of the service itself (access to information, forms, transactions, etc)
    - and user feedback & online assistance regarding e- accessibility issues.

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Conditions and characteristics : Elements to deliver (3)

- **Support packages and training for creators and managers of web sites and other on-line information**, including:

  - reference curricula,

  - competence assessment and certification,

  - tutorials and good practices repository.

- **Public awareness**

- **Monitoring and assessment schemes for e-accessibility status and impact**, notably in terms of quality of service, costs and benefits.

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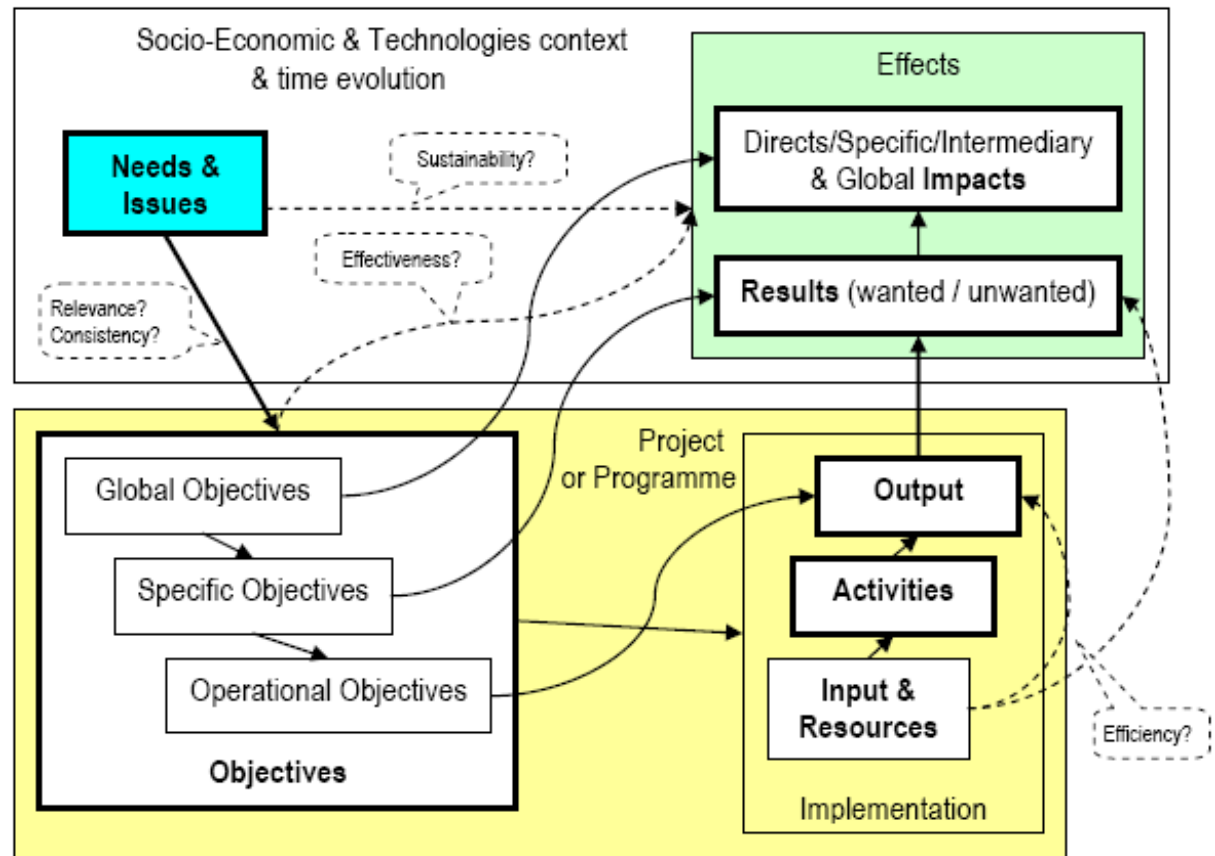**Conditions and characteristics :** Elements to consider (4)

- Coverage of a **wide range of user profiles** and user functionalities (using as appropriate the ICF from WHO)

- **International standards and specifications related to web- and e-accessibility**. In particular, to build upon and liaise with activities undertaken under the European standardisation mandate 376.

- Specific and realistic quantified **indicators** to monitor progress at all stages during the pilot.

- Integrated **dissemination and communication**, addressing

  - not only experts,

  - but also public authorities and relevant stakeholders who could play a role for the future deployment or replication of the envisaged solution/service,

  - as well as the public at large.

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Expected impact :

- <u>Facilitating</u> the **alignment of efforts** on web- and e-Accessibility implementation across the EU

- <u>Developing and validating</u> **common European approaches and associated methodologies**, preparing smooth implementation of future European standards.

Socio-Economic & Technologies context & time evolution

Effects

Needs & Issues

Sustainability?

Directs/Specific/Intermediary & Global **Impacts**

Effectiveness?

Relevance? Consistency?

Results (wanted / unwanted)

Global Objectives

Specific Objectives

Operational Objectives

Objectives

Project or Programme

Output

Activities

Input & Resources

Efficiency?

Implementation

<u>Intervention</u>: **Concept & Definition** (SMART Objectives = *Specific, Measurable, Attainable, Relevant, Time-bound*), **Risks, Milestones & Work-Plan, necessary Resources, Monitoring and Evaluation** (RACER Indicators = *Relevant, Accepted, Credible, Easy to monitor, Robust against manipulation*)

Relevant on-going Standardisation

- Mandate 376 to ESOs on European **Accessibility requirements for the *public procurement* of ICT goods and services**
  - *Phase I:* Inventory of existing functional requirements and stds/technical specs, Analysis on testing & conformity assessment
  - ***Phase II:* Standardisation Activities: European standard, Technical report and support guidelines, On-line freely accessible toolkit**

- NEW Mandate 473 to ESOs **to include Design for all in relevant standardization initiatives**
  - *Acceptance of the mandate expected by 8 March*
  - **Set up of a new CEN CENELEC Technical Board working group (SAGA)**
    - **will monitor the revision of ISO/IEC Guide 71**
    - **relevance of standardization deliverables for people with disabilities & olders**
    - **main areas for standardization**
    - **report on progress of work programme**
  - **Progress report by Autumn 2011**

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Writing an e-Inclusion Pilot proposal

- Clearly link approach, implementation and impacts (including means to achieve them) sections

- Demonstrate a logical path from approch, challenges /risks, specific objectives, milestones and key deliverables

- Explain the rationale of each pilot site (complementarity, etc)

- Demonstrate the coverage of the full value chain of stakeholders

- Include not only technical validation, but also validation of operational, legal, policy aspects

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Further Information

- CIP ICT PSP Info Day – February 28th 2011
- CIP Programme details

  http://ec.europa.eu/information_society/activities/ict_psp
- e-Inclusion specific Info Day – February 11th

  http://ec.europa.eu/information_society/activities/einclusion/events/cip_call5/index_en.htm
- e-Inclusion

  http://ec.europa.eu/einclusion
- Ambient Assisted Living Joint Programme
  http://www.aal-europe.eu/
- EIP
  http://ec.europa.eu/active-healthy-ageing
- Best Practice Portal
  http://www.epractice.eu
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