Information and Communication Technologies

FP7 - ICT

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About the FP7 ICT Work Programme

- Published every 2 years (2007 – 2013), last 1 year

  !!! Updated version

- Budget: > 2 B EUR each, increases through FP7

- Defines calls for proposals, content

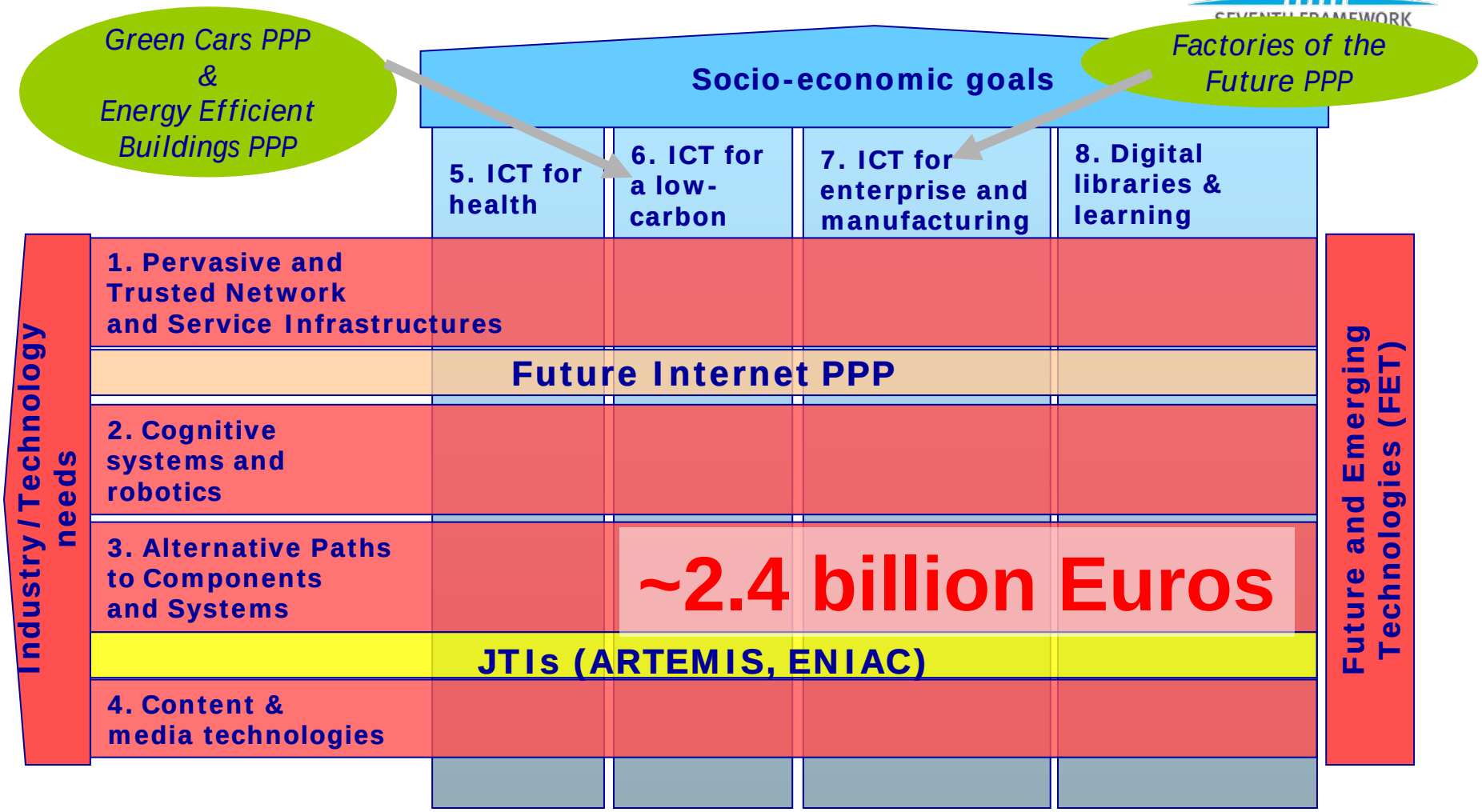
- Usually 2 large, 1 small call
  + several targeted calls

COOPERATION

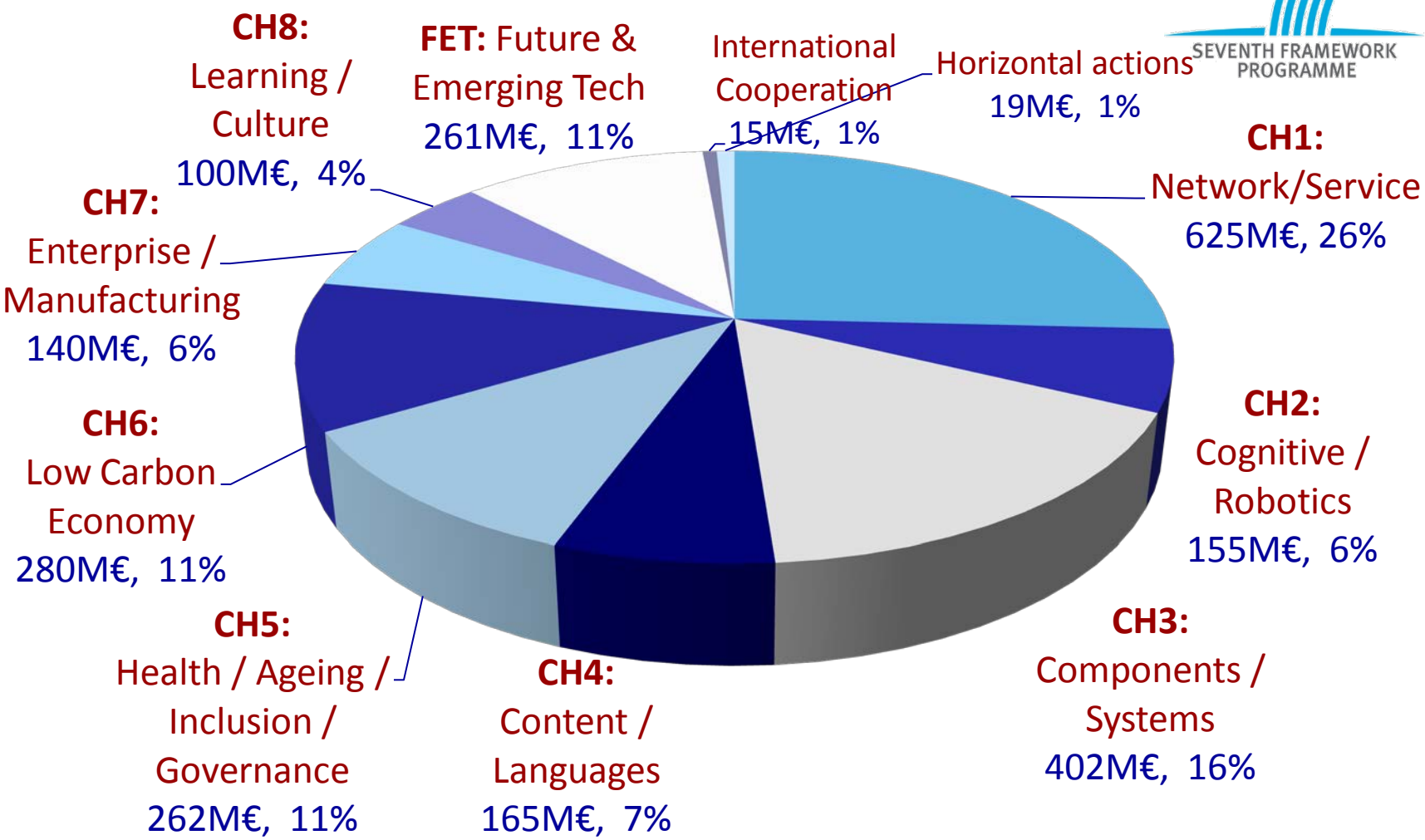
THEME 3

ICT – INFORMATION AND COMMUNICATIONS TECHNOLOGIES

2011-2012 ICT Work Programme ***Challenges***



2011-2012 ICT Work Programme ***Challenges***



FP7 ICT Work Programme

2011-12 - *4 major technological challenges*

Challenge 1: pervasive and trusted network and service infrastructures - covers tools and platforms for novel Internet application development and deployment through the launch of a Public-Private Partnership on Future Internet. At the same time, key technological developments in networking, digital media and service infrastructures of the future are addressed. *625 M€ -- Call 8: 335 M€ -- PPP2012: 80 M€*

Challenge 2: cognitive systems and robotics - Challenge 2 aims to enhance the performance and manageability of artificial cognitive systems and to expand and improve the functionalities of robotic systems operating under circumstances that were not fully planned for explicitly at design time. It supports both research on endowing artificial systems with cognitive capabilities as well as research more specifically related to the design and engineering of robotic systems. *155 M€ -- Call 9: 82 M€*

Challenge 3: alternative paths to components and systems - focuses on further miniaturisation and increased performance in electronic and photonic components, in micro/nanosystems integrating functionalities like sensing, actuating, communicating, in alternative routes to new components and systems such as organic electronics and in multicore computing systems, embedded systems, monitoring and control, and cooperating complex systems. *402 M€ -- Call 8: 191 M€*

Challenge 4: technologies for digital content and languages - aims to enable individuals and small organisations to create quality content and innovative services and at allowing people to access and use online content and services across language barriers; it also aims at ensuring reliability of retrieval and use of digital resources across applications and platforms and at scaling up data analysis to keep pace with extremely large data volumes. *165 M€ -- Call 8: 50 M€ -- Call 9: 30 M€*

FP7 ICT Work Programme

2011-12 - *4 challenges driven by socio-economic goals*

SEVENTH FRAMEWORK PROGRAMME

Challenge 5: ICT for health, ageing well, inclusion and governance - has a focus on ICT for disease prediction, early diagnosis, prevention, minimally invasive treatment, and overall disease management and support to healthy lifestyles. Another focus is on ICT solutions for prolonging independent living and for extending active working life, as well as ICT solutions enabling accessibility of emerging mainstream ICT solutions, and assistive technologies for people with disabilities. A final focus is on ICT tools for governance and policy modelling. *261.5 M€ -- Call 8: 1.5 M€ -- Call 9: 66.5 M€*

Challenge 6: ICT for a lower carbon economy - concentrates on the development of ICT to achieve substantial efficiency gains in the distribution and use of key resources such as energy and water, as well as the application of ICT to decarbonise transport and make it safer. This incorporates the ICT contributions to the Public-Private Partnerships on Energy Efficient Buildings and on Green Cars: ICT for the fully electric vehicle. *280 M€ -- Call 8: 85 M€ -- PPP2012: 60 M€*

Challenge 7: ICT for manufacturing & factories of the future - incorporates the ICT contributions to the Public-Private Partnership on Factories of the Future. It aims to improve the technological base of manufacturing across a broad range of sectors by improving, not only their efficiency and adaptability, but also the sustainability of manufacturing systems as well as their better integration within business processes. *140 M€ -- PPP2012: 60 M€*

Challenge 8: ICT for learning and access to cultural resources - has the objective is to develop technologies and methodologies that make people learn more effectively and support the acquisition of new skills. It also aims to ensure the effective use and exploitation of the cultural resources by developing technologies to make them available, usable and re-usable regardless of their form, location, time sphere etc. *140 M€ -- Call 8: 60 M€ -- Call 9: 40 M€*

Structure of FP7 ICT Work Programme

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- **8 Challenges** (technology + application areas) + Other
  - Research Objectives
    - Target outcomes
    - Expected impact
    - Funding scheme, budget, call information

Expected Impact

- Strengthened positioning of European industry in the fields technologies, mobile and wireless broadband systems, optical net management technologies.
- Developing the technology for the future generations of the E broadband and mobile network infrastructure.

ergy efficiency of access/transport infrastru

and regulation as well as the related IPRs, zation bodies and fora.

ated all optical networks and of spectral rnet architectures and technologies

difficult

Funding schemes

a), b), c): IP, STRE

Indicative budget d

- IP/STREP: EUR 68.5 milli
- CSA: EUR 1.5

Calls

FP7-ICT-2011-8

Indicative budget distribution[10]

a): EUR 79 million of which a minim

b): EUR 20 million;

c): EUR 10 million (Any remaining will be transferre

d): EUR 3 million;

e): EUR 5 million

Calls

b), e): FP7-ICT-2011-7

a), c), d): FP7-ICT-2011-8

FP7/ICT Calls: open/upcoming in 2011/2012

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FET Open

Continuous open throughout 2011-2012

PPP call 2012: Factories of the Future, Energy-efficient Buildings, Green Cars

Open 20 July 2011* - Close 1 December 2011*

ICT Call 8

Open 20 July 2011* - Close 17 January 2012

ICT Call 9

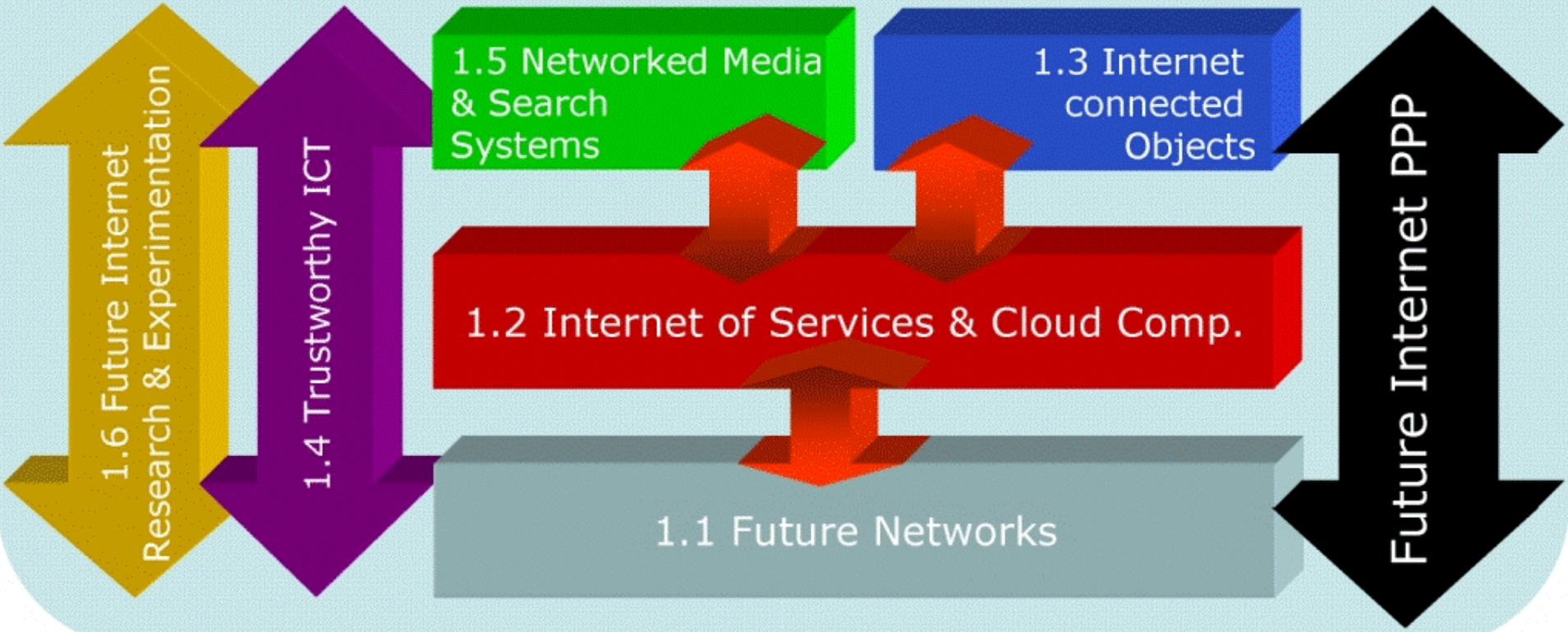
Open 18 January 2012 - Close 17 April 2012

PPP call 2012: Future Internet

Open 18 May 2012 - Close 24 October 2012*

Brussels local time 17:00

Challenge 1 - "Pervasive and Trusted Network and Service Infrastructures"



ICT – Challenge 1
Pervasive and Trusted Network and Service Infrastructures

Research Objectives

ICT-2011.1.1: Future Networks

ICT-2011.1.2: Cloud Computing, Internet of Services and Advanced Software Engineering

ICT-2011-1.3: Internet-connected Objects

ICT-2011.1.4: Trustworthy ICT

ICT-2011.1.5: Networked Media & Search Systems

ICT-2011.1.6: Future Internet Research and Experimentation (FIRE)

Red = call open Green = upcoming call

ICT – Challenge 1
Pervasive and Trusted Network and Service Infrastructures

Research Objectives

ICT-2011.1.7: PPP FI: Technology foundation - Future Internet Core Platform

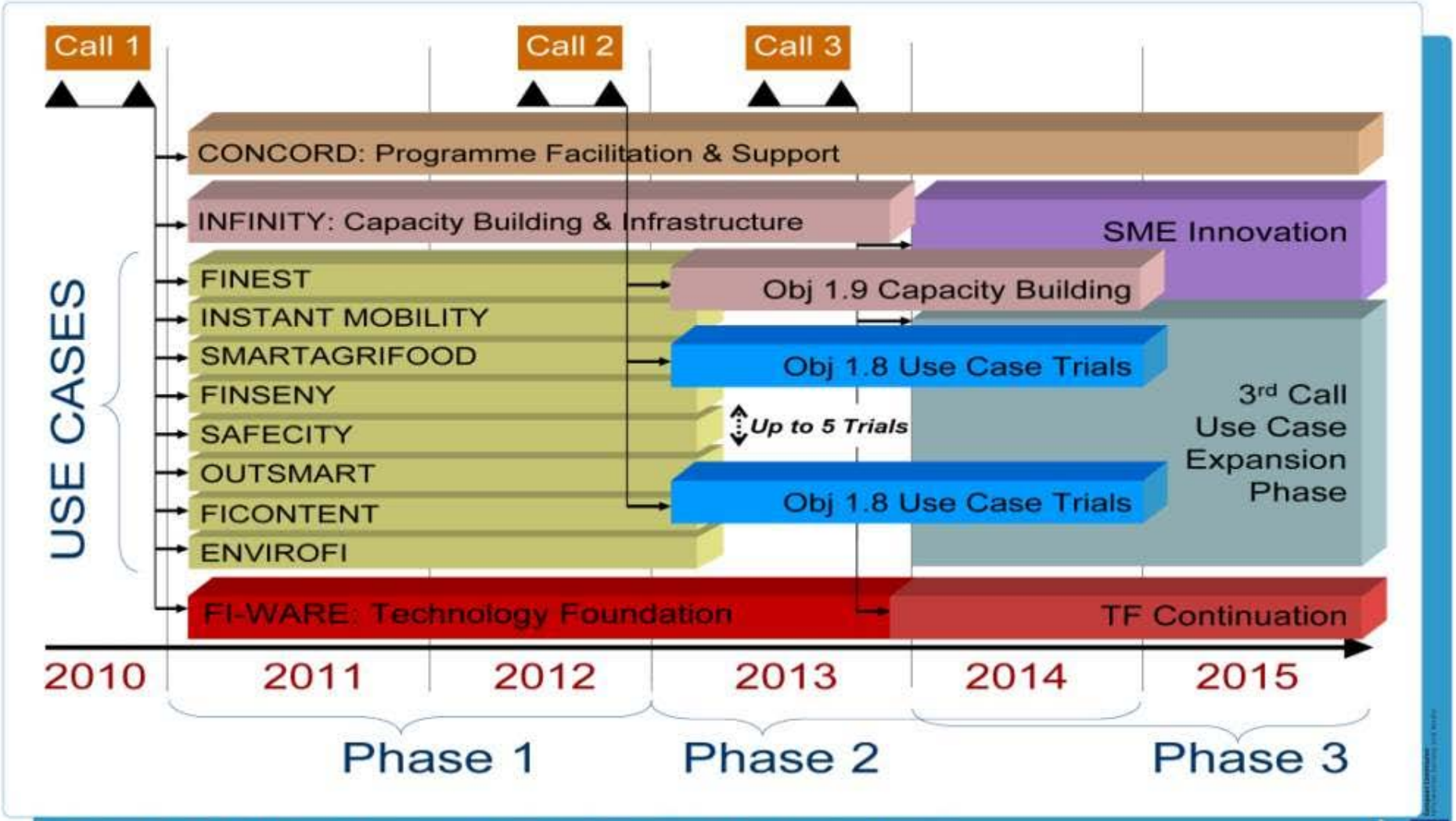
ICT-2011.1.8: PPP FI: Use Case scenarios and early trials

ICT-2011.1.9: PPP FI: Capacity Building and Infrastructure Support

ICT-2011.1.10: PPP FI: Programme Facilitation and Support

Red = call open Green = upcoming call

FP7 Future Internet Public-Private Partnership — Programme Architecture



The detailed FI-PPP work programme is available at http://ec.europa.eu/foi

ICT – Challenge 2
Cognitive Systems, Robotics

Research Objectives

ICT-2011.2.1: Cognitive Systems and Robotics

Red = call open Green = upcoming call

ICT – Challenge 3
Alternative Paths to Components and Systems

Research Objectives

ICT-2011.3.1: Very advanced nanoelectronic components: design, engineering, technology and manufacturability

ICT-2011.3.2: Smart components and smart systems integration

ICT-2011.3.3: New paradigms for embedded systems, monitoring and control towards complex systems engineering

ICT-2011.3.4: Computing Systems

ICT-2011.3.5: Core and disruptive photonic technologies

ICT-2011.3.6: Flexible, Organic and Large Area Electronics and Photonics

ICT – Challenge 4
Technologies for Digital Content and Languages

Research Objectives

ICT-2011.4.1: SME initiative on Digital Content and Languages

ICT-2011.4.2: Language technologies

ICT-2011.4.3: Digital Preservation

ICT-2011.4.4: Intelligent Information Management

Red = call open Green = upcoming call

ICT – Challenge 5
ICT for Health, Ageing Well, Inclusion and Governance

Research Objectives

ICT-2011.5.1: Personal Health Systems

ICT-2011.5.2: Virtual Physiological Human

ICT-2011.5.3: Patient Guidance Services (PGS), safety and healthcare record information reuse

ICT-2011.5.4: ICT for Ageing and Wellbeing

ICT-2011.5.5: ICT for smart and personalised inclusion

ICT-2011.5.6: ICT Solutions for governance and policy modelling

ICT-2011.5.7: Support to JPI 'More Years – Better Lives'

Red = call open Green = upcoming call

ICT - Challenge 6
ICT for a Low Carbon Economy

Research Objectives:

ICT-2011.6.1: Smart energy grids

ICT-2011.6.2: ICT systems for Energy Efficiency

ICT-2011.6.3: ICT for efficient water resources management

ICT-2011.6.4: PPP EEB: ICT for energy-efficient buildings and spaces of public use

ICT-2011.6.5: PPP EEB: ICT for energy-positive neighbourhoods

ICT-2011.6.6: Low-carbon multi-modal mobility and freight transport

ICT-2011.6.7: Cooperative systems for energy efficient and sustainable mobility

ICT-2011.6.8: PPP GC: ICT for fully electric vehicles

Red = call open Green = upcoming call

ICT - Challenge 7
ICT for the Enterprise and Manufacturing

Research Objectives:

ICT-2011.7.1: PPP FoF: Smart factories: energy-aware, agile manufacturing and customisation

ICT-2011.7.2: PPP FoF: Manufacturing Solutions for new ICT products

ICT-2011.7.3: PPP FoF: Virtual factories and enterprises

ICT-2011.7.4: PPP FoF: Digital factories: Manufacturing design and product lifecycle management

Red = call open Green = upcoming call

ICT - Challenge 8
ICT for Learning and Access to Cultural Resources

Research Objectives:

ICT-2011.8.1: Technology-Enhanced Learning

ICT-2011.8.2: ICT for access to cultural resources

Red = call open Green = upcoming call

Future and Emerging Technologies

FET Open

ICT-2011.9.1 Challenging current Thinking

ICT-2011.9.2 High-Tech Research Intensive SMEs in FET research

ICT-2011.9.3 FET Young Explorers

ICT-2011.9.4 International cooperation on FET research

Red = call open Green = upcoming call

Future and Emerging Technologies

SEVENTH FRAMEWORK PROGRAMME

FET Proactive

ICT-2011.9.5: FET Flagship Initiative Preparatory Actions

ICT-2011.9.6: FET Proactive: Unconventional Computation (UCOMP)

ICT-2011.9.7: FET Proactive: Dynamics of Multi-Level Complex Systems

ICT-2011.9.8: FET Proactive: Minimising Energy Consumption of Computing to the Limit (MINECC)

ICT-2011.9.9: FET Proactive: Quantum ICT (QICT) including ERA-NETPlus

ICT-2011.9.10: FET Proactive: Fundamentals of Collective Adaptive Systems (FOCAS)

ICT-2011.9.11: FET Proactive: Neuro-Bio-Inspired Systems (NBIS)

ICT-2011.9.12: Coordinating Communities, Identifying new research topics for FET Proactive initiatives and Fostering Networking of National and Regional Research Programmes

Special Initiatives

ICT-2011.9.13: Exa-scale computing, software and simulation

ICT-2011.9.14: Science of Global Systems

Red = call open Green = upcoming call

International Cooperation

ICT-2011.10.1	EU-Brazil Research and Development Cooperation
ICT-2011.10.2	EU-Russia Research and Development Cooperation
ICT-2011.10.3	International Partnership building and support to dialogues

Red = call open Green = upcoming call

Horizontal Support Actions

ICT-2011.11.1: Pre-Commercial Procurement Actions

ICT-2011.11.2: National Contact Points

ICT-2011.11.3: Strengthening Cooperation in ICT R&D in an Enlarged Europe

Red = call open Green = upcoming call

More info?

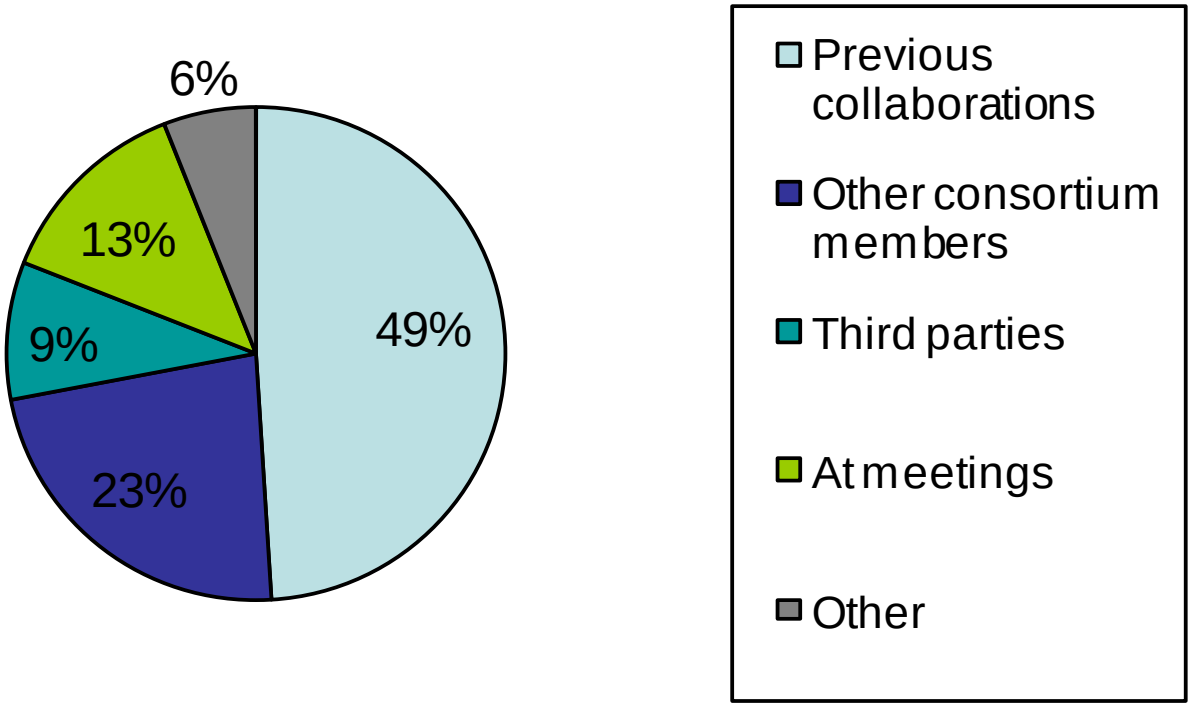
SEVENTH FRAMEWORK PROGRAMME

- Detailed presentation of each Research objective on ICT NCP website: www.ist.hu
  - ✓ Background information (policies, history, expectations)
  - ✓ Research objective – target outcomes
  - ✓ Expected impact
  - ✓ Current project portfolios
  - ✓ Information days & other relevant events

Preparation for Participation

- Information + Visibility
- Start early – get involved in the development of the ICT Work Programme, contribute to public consultations - http://cordis.europa.eu/fp7/ict/
- Follow Policy debates, documents
- Get involved in ETPs – follow Strategic Research Agenda
- „Roadmapping" project results
- Understand project portfolio
- Register as an evaluator, reviewer
- Get to Know EC Project Officers

Partnering


6%
13%
9%
49%
23%
Previous collaborations
Other consortium members
Third parties
At meetings
Other

Partnering

- Visibility
- ETPs & other networks
  - internal partner searches, dedicated working groups
- Partner search tools
  - Idealist – dedicated to ICT
  - Cordis – social networking
- EU events
  - ICT Proposers Day – networking facilities still open!
  - Research Objective infodays

European Technology Platforms Joint Programmes (JTI, art. 185)

SEVENTH FRAMEWORK PROGRAMME

- AAL http://www.aal-europe.eu/

- NEM http://www.nem-initiative.org/
- EUROP http://www.robotics-platform.eu/
- ISI http://www.isi-initiative.eu.org
- ARTEMIS https://www.artemis-ju.eu/
  http://www.artemisia-association.org
- Net!works http://www.networks-etp.eu/
- ENIAC http://www.eniac.eu/
- Nessi http://www.nessi-europe.com
- Photonics21 http://www.photonics21.org/
- EPoSS http://www.smart-systems-integration.org

Useful Information, Services

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- FP7 http://cordis.europa.eu/fp7/
- ICT program http://cordis.europa.eu/fp7/ict
- EU ICT Pro Nemzeti kapcsolattartó http://www.ist.hu
- Partner search http://www.ideal-ist.net http://cordis.europa.eu/partners/ http://ec.europa.eu/information_society/events/ictproposersday/2011/
- Finance Helpdesk http://www.finance-helpdesk.org
- IPR Helpdesk http://www.ipr-helpdesk.org

SEVENTH FRAMEWORK PROGRAMME

Thank you for your attention