

ICT FP7 coming opportunities

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Outline

- ICT in FP7
- ICT Call 6
- ICT Specific Support
- ICT in other parts of FP7

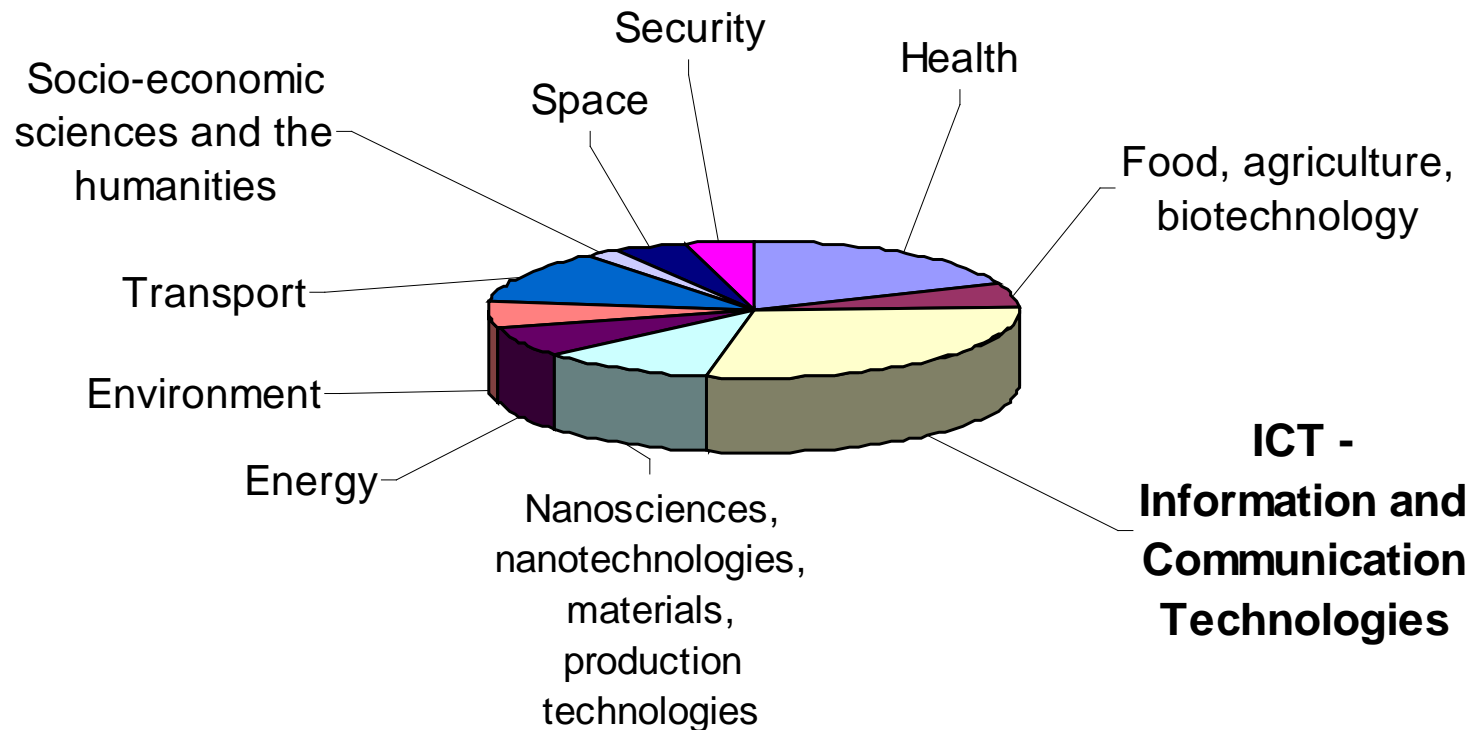
COOPERATION

4 Specific FP7 programmes

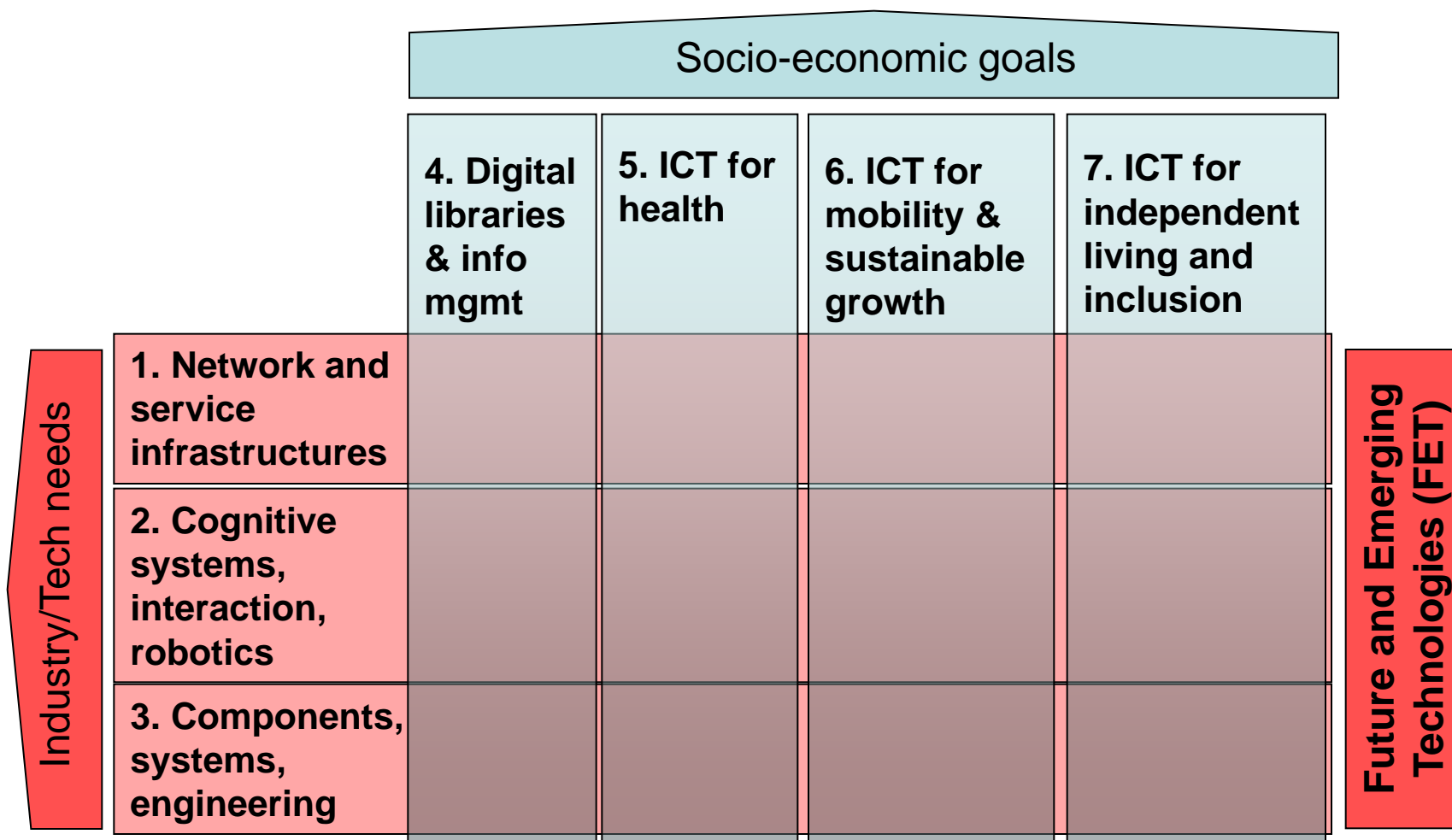
		Billion €
Cooperation	10 themes	€ 32.4
Ideas	Basic research (ERC)	€ 7.5
People	Mobility (Marie Curie actions)	€ 4.7
Capacities	7 horizontal axes	€ 4.1



Cooperation – 10 themes

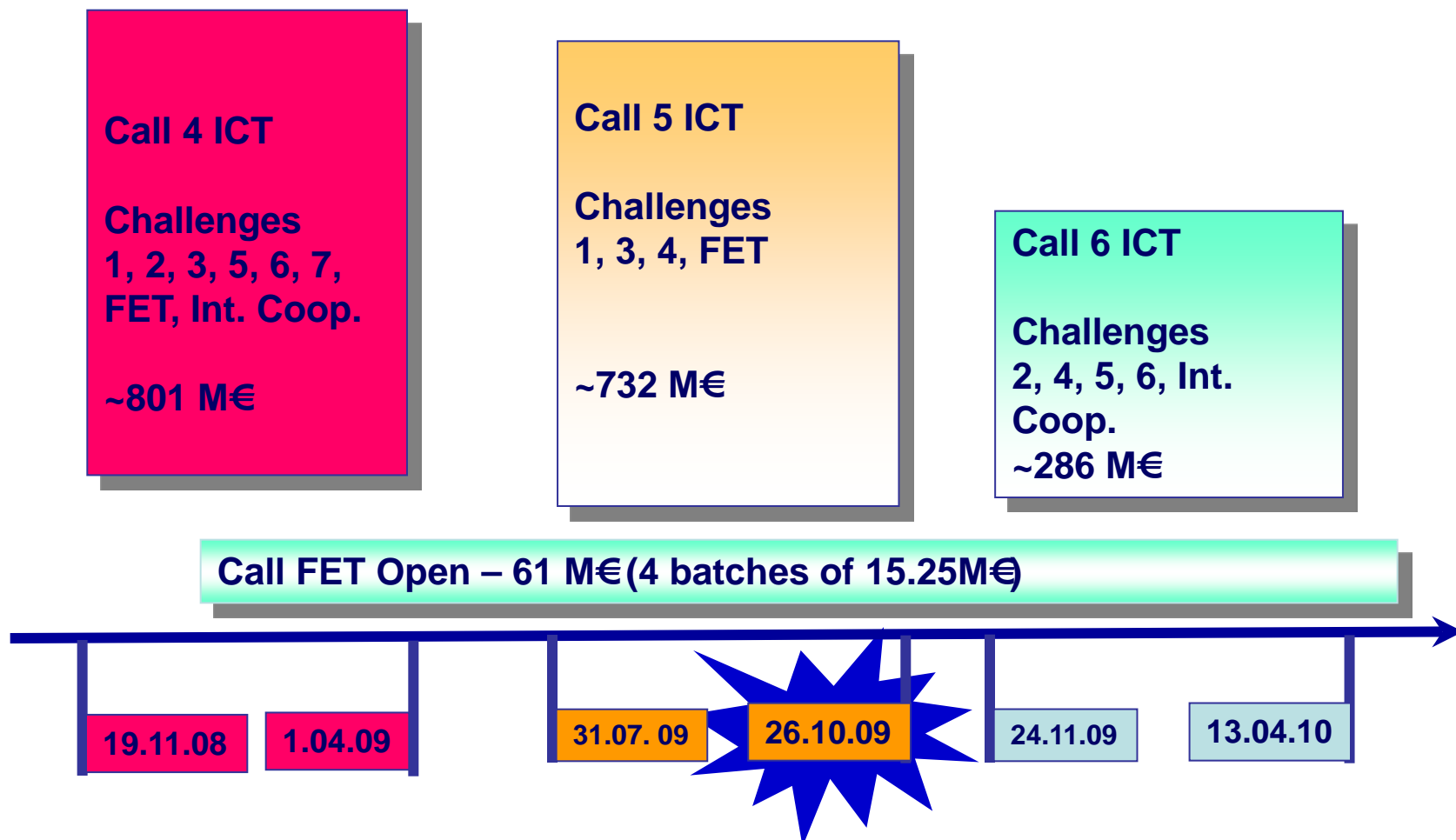


ICT Challenges



Calls roadmap

4 calls covered by the WP 2009-2010



ICT Types of projects (indicative)

Research funding

- **STREP: Specific Targeted Research Project**
 - ♦ Look for smart new idea
 - ♦ 3-6 partner, 2-4 years
 - ♦ 2-4 M€ EC funding
- **IP: Integrated Project**
 - ♦ Look for high impact (global visibility, flagship EU projects)
 - ♦ 5-10 partners, 3-5 years
 - ♦ 4-10 M€ funding

ERA strengthening funding

- **NoE: Network of Excellence**
 - ♦ Coordination of Joint Programmes of Activities across EU
 - ♦ All stakeholders involved
 - ♦ 5-7 M€ funding (for coordination work mostly)
- **CSA: Coordination and Support Action**
 - ♦ Not for research, but for roadmapping, prospective studies, assessments, supporting implementation of the ICT programme
 - ♦ Up to 1-2 M€ funding
- **ERA- Nets, I3, etc : please ask Euresearch**

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- 2.1 Cognitive Systems & Robotics – 80 M€
- 4.1 Digital Libraries & digital preservation – 69 M€
- 5.3 Virtual Physiological Human – 63 M€
- 6.2 ICT for Mobility of the Future – 37 M€
- 8.7 Molecular Scale Devices and Systems – 15 M€
- 8.8 Brain inspired ICT – 15 M€

- 8.9 Coordinating Communities – 1.5 M€
- 8.10 Identifying new research topics, Assessing emerging global S&T trends in ICT – 0.5 M€
- 9.1 International Cooperation – 5 M€
- 9.2 Supplements to Support Int'l Cooperation – 0.4 M€



2.1 Who is involved

Relevant disciplines:

- Robotics, AI, computer vision, natural language
- ICT
- Cognitive science, psychology, natural and life sciences, neurosciences



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Relevant networks:

- [EURON](#) links some 200 robotics research centres in 28 countries
- [euCognition](#) links over 230 institutes researching different aspects of artificial cognitive systems, including (cognitive) robotics...
- [PASCAL](#) combines nearly 60 institutes researching into machine learning ...
- [European Technology Platform on Robotics](#)

[Cognition at the European Commission](#)

2.1 Call Content

- **a) STREPS: 24-39 M€ (about 10 STREP)**
New approaches in artificial cognitive systems, *more robust, more adaptive, more effective, more natural*
- **c & e) IPs: 39-55 M€ (about 5-6 IP)**
 - **New ways of building complete robotic systems**
 - **A framework for cross- fertilization between academic and industry**
- **h) CAs: 2M€**
Cooperation in cognitive systems



2.1 Further Info

- Challenge 2 [by Euresearch Web](#)
- Challenge 2 [on CORDIS](#)
- SO 2.1 website [on CORDIS](#), including
 - ◆ [past and upcoming events](#)
 - ◆ [project portfolio](#)
- ECHORD IP - European Clearing House for Open Robotics Development: Calls for Experiment Proposal: www.echord.info

4.1 Call Content

- a) Scalable systems and services for preserving digital content, large scale testbeds - *IP only***
- b) Advanced preservation scenarios:**
 - b1/ preserving complex objects - *STREP only*
 - b2/ Intelligent digital curation and preservation - *IP only*
- c) Innovative solutions for assembling multimedia digital libraries - *IP only***
- d) Adaptive cultural experiences - *STREP only***
- e) Interdisciplinary research networks - *NoE***
- f) Pan- European network of “living memory centres” - *CSA***

IP/STREP >50%/>30% rule
a)-d) 56 M€ - e)-f) 13M€

4.1 Further Info Sources

- i2010 Digital Libraries Initiative:
http://ec.europa.eu/information_society/activities/digital_libraries/index_en.htm
- DG INFSO Unit Website for 4.1:
http://cordis.europa.eu/fp7/ict/telearn-digicult/digicult_en.html
- Short Factsheets on running projects:
http://cordis.europa.eu/fp7/ict/telearn-digicult/publications_en.html
- Brokerage&Info Event: Oct. 9th, 2009
- Mailbox Digital Preservation:
info-digicult@ec.europa.eu

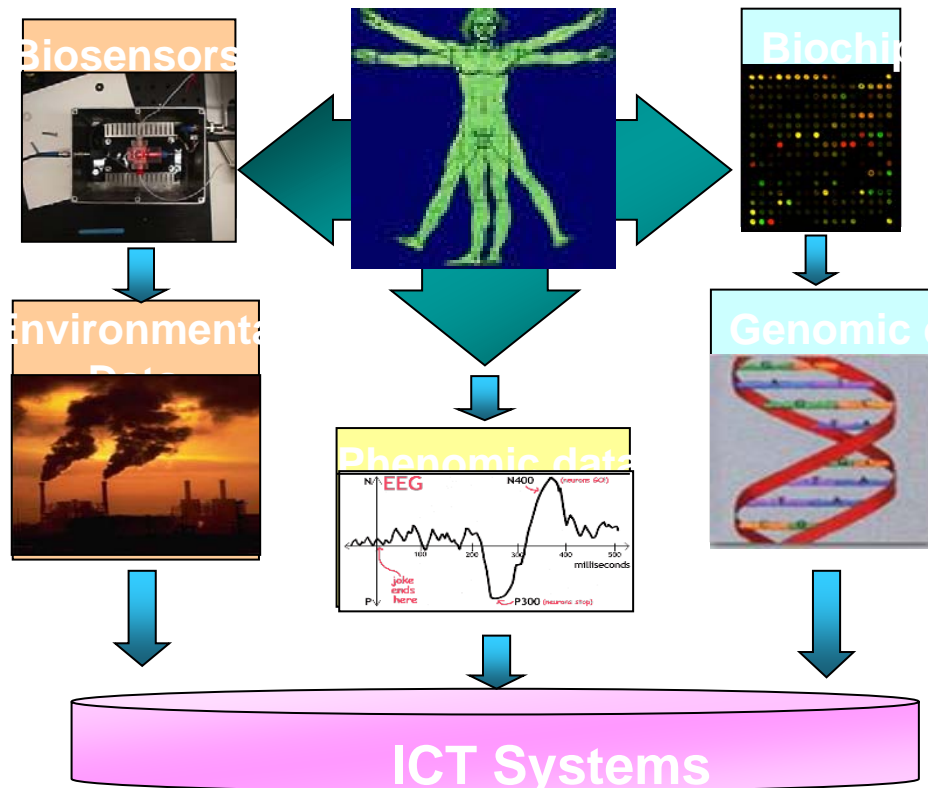


5.3 The VPH concept

Basis: International physiome project www.europphysiome.org:

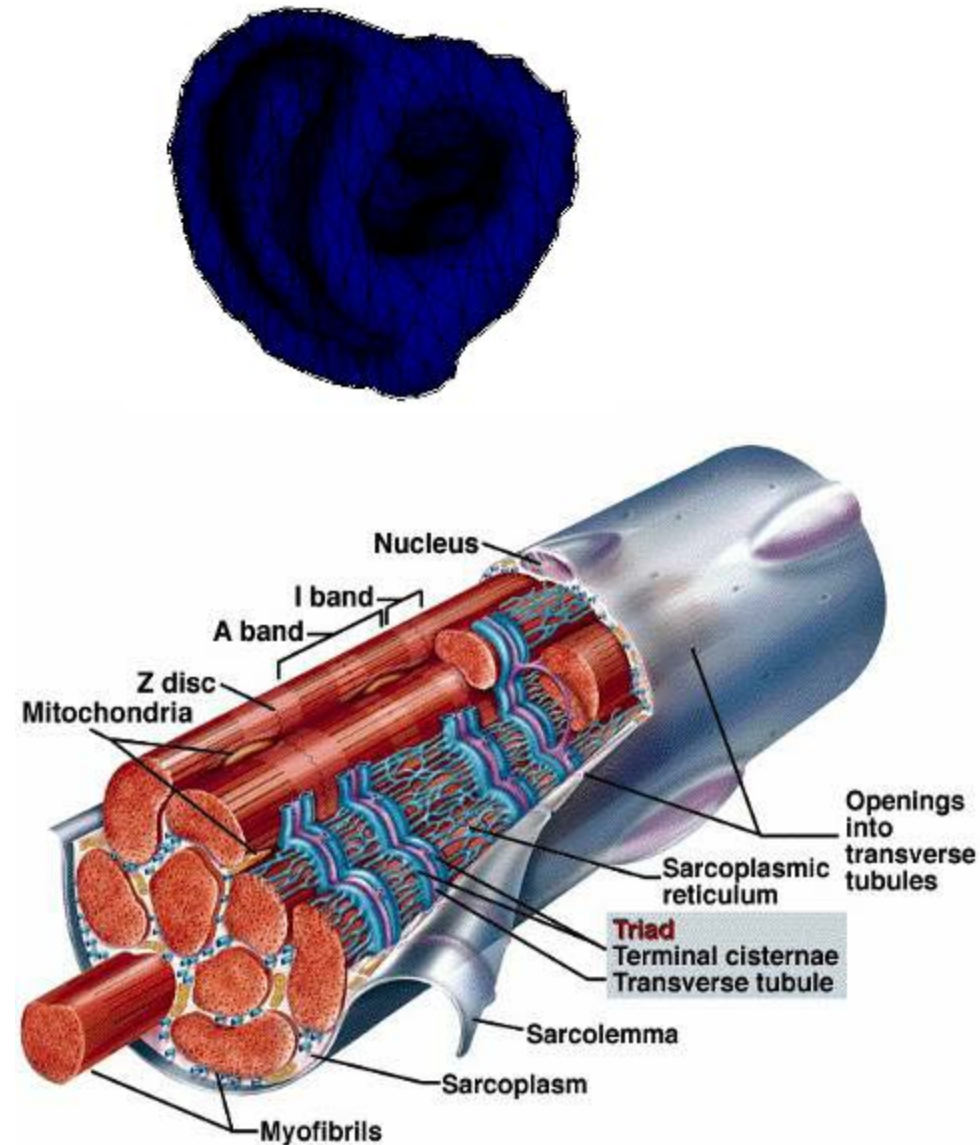
- Personalised (Patient- specific) solution
- Early diagnostics & predictive medicine

Computer models of the human physiology, including interactions across temporal and spatial scales from molecules to cells, tissues, organs, up to the whole human body

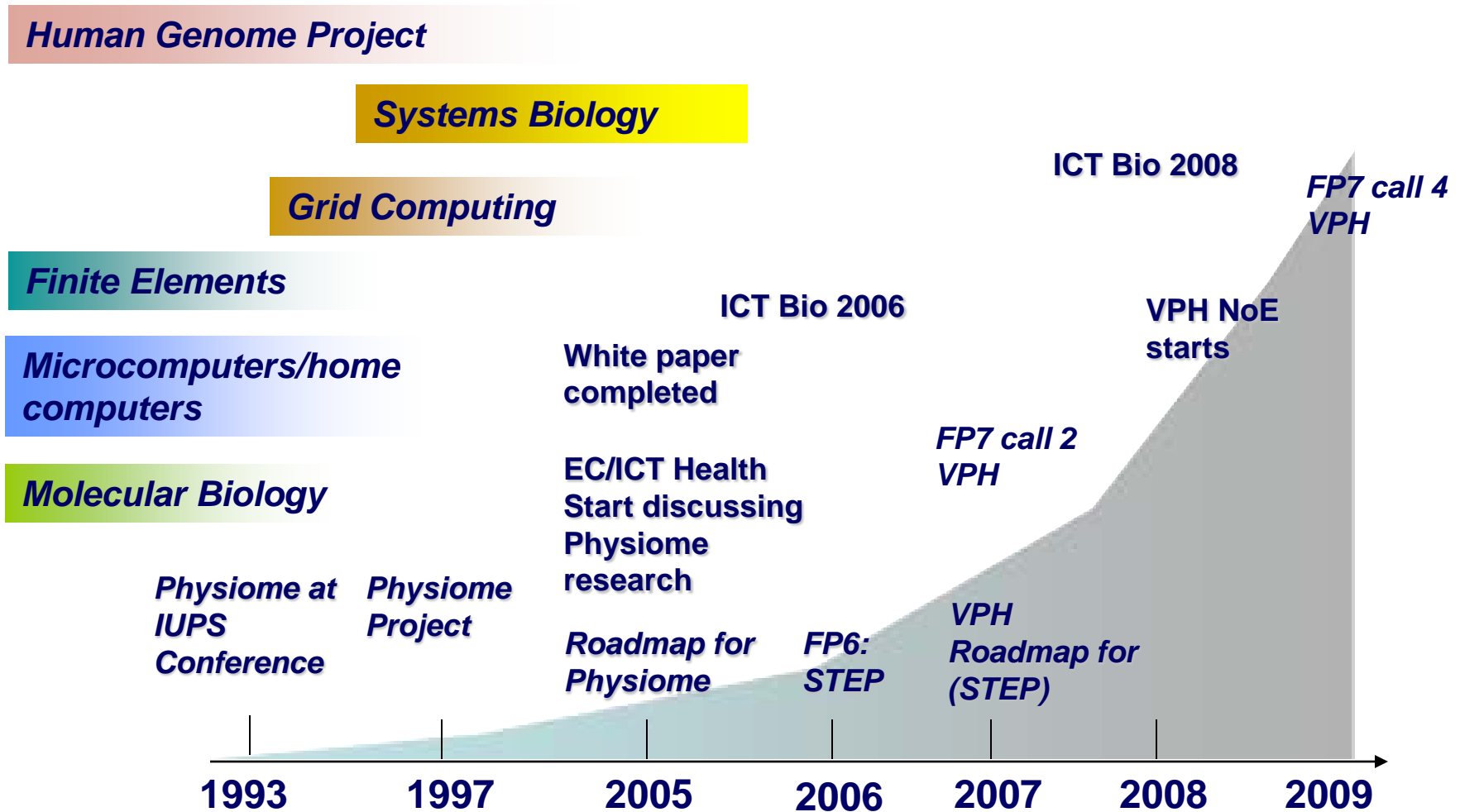


5.3 VPH technologies

- Data mining
- Knowledge discovery tool
- Semantic integration
- Biomedical imaging
- Modelling
- Simulation
- Visualisation
- HealthGrid Tools & infrastructure



5.3 VPH history

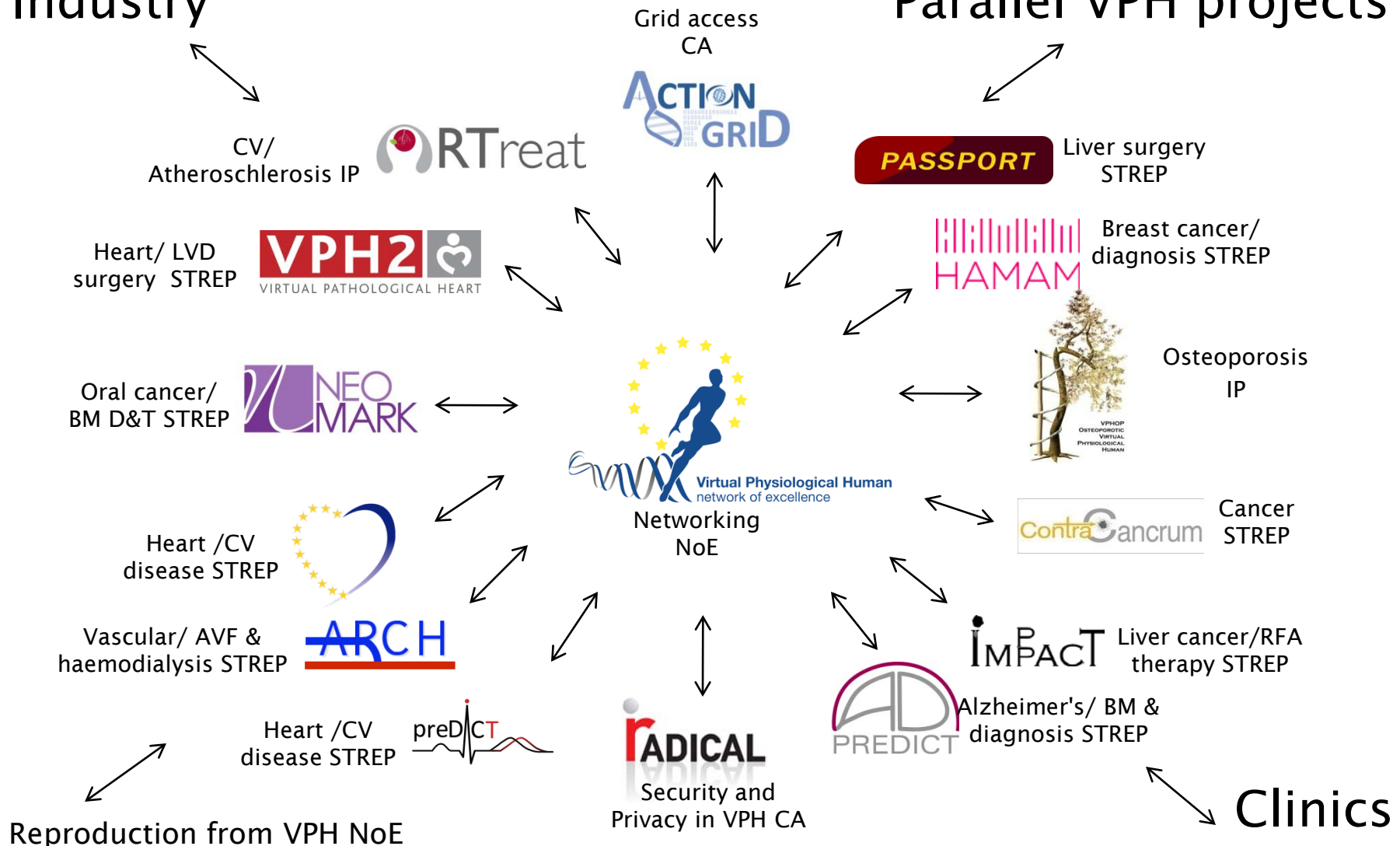




VPH 1st call: 15 FP7 projects

Industry

Parallel VPH projects





5.3 Call Content

- a) Patient- specific computer based models and simulation:**
multiscale modelling, integration of existing models, for clinical need in prediction of disease or treatment outcome and/or early diagnosis – IP/STREP 50/30 – approx 30.5 M€, 1IP at least
- b) ICT tools, services and specialised infrastructure for the biomedical research community** - IP/STREP 50/30 – approx 30.5M€, 1 IP at least
- c) Evaluation and assessment of VPH projects** – SA (1M€)
- d) Observatory on Biomedical Informatics** – CSA (1M€)

Cooperation with the VPH NoE and InCo partners essential

5.3 VPH Focus a)

Emphasis on:

- Integration of existing models
- Clinical benefits demonstrated
- Data acquisition, medical, clinical, bio research (if needed) < 25%
- Access to external computing facilities supported
- targeting clinical applications other than cancer and cardiovascular diseases will be given preference

Not in scope:

- proposals which cover only one biological scale.
- improvement of current medical image processing techniques (image based models)
- Modelisation of clinical processes
- Full development of simulator based on medical images only
- Geometrical model of the anatomy

5.3 VPH Focus b)

to support at least 2 of the 3 activities:

1. Share data and knowledge
2. Jointly develop and share models/simulators
3. Create collaborative environments

- Interface to access to resources like Grid/HPC infrastructures
- Ability to interface with existing medical research infrastructure
- Complement/compatible with existing methods/standards to be suggested by VPH-NoE

5.3 VPH Generic Pointers

eHealth Research and Policy site

http://ec.europa.eu/information_society/ehealth

Health Monthly Research Newsletter

http://ec.europa.eu/information_society/activities/health/research/newsletter/index_en.htm

White paper on BMI: “Symbiomatics”, 2006,

www.symbiomatics.org

Conference 2006 on “ICT for BIO-medical sciences”

http://europa.eu.int/information_society/events/ict_bio_2006/index_en.htm

HealthGrid Knowledge Base (e.g. white paper 2004)

<http://www.healthgrid.org/>

<http://whitepaper.healthgrid.org>

5.3 VPH Specific Pointers

2005 [1st workshop & white paper](#)

2006 2nd white paper for the VPH roadmap
<http://www.europhysiome.org>

2006 [2nd STEP conference on the VPH](#)

2007 [HealthGrid Conference Geneva](#)

2008 [ICT BIO 2008](#)

DG INFSO Unit “ICT for Health”

http://ec.europa.eu/information_society/ehealth

Contact: joel.bacquet@ec.europa.eu



6.2 Call Content

- a) Field Operational Tests for Integrated Safety Systems and Co-operative Systems** large-scale test assessment of the efficiency, quality, robustness and user-friendliness of close-to market systems, before their full-scale deployment in Europe
 - *at least 2IP, STREP, CSA*
- b) ICT- based systems and services for Smart Urban Mobility and new Mobility Concepts**, demand management, logistics for urban environments; virtual mobility, tele-presence; multi-modal urban mobility
 - *STREP only*
- c) Intelligent Car Initiative** – *CSA only*
- d) International Cooperation** – *Japan & US – CSA only*

IP/STREP 32M€ - CSA 5M€

6.2 Further Info Sources

DG INFSO Unit Website

http://cordis.europa.eu/fp7/ict/mobility-future/home_en.html

Mail Box: Infso-g4@ec.europa.eu

Stakeholders: ERTRAC, ERRAC, ACMARE, eSafety Forum, EUCAR, ECTRI, CLEPA, FERHL, CEDR

Background Documents (eSafety Initiative website):

- http://ec.europa.eu/information_society/activities/esafety/
- [Strategic Research Agenda](#)
- [The EC Architecture for Co-operative Systems](#)
- [Projects portfolio](#)

8.7 Molecular Scale Devices and Systems

- a) physical implementations** - molecular computation, single molecular memories, molecule-based sensors
- b) supporting technologies**, as measurement and control systems, simulation and modelling tools
- c) Exploration and demonstration of radically new characteristics and functionality**

IP/STREP 15M€ - 50/30 rule
IP should cover 2 subtopics

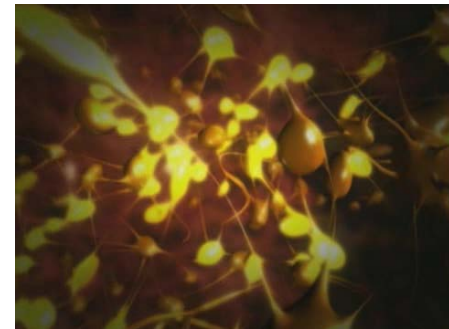
Further Info:

- [Background document](#)
- FET call 6 proposers' info day: 2nd half of January 2010
- Web: http://cordis.europa.eu/fp7/ict/fet-proactive/amolit_en.html
- Contact: david.guedj@ec.europa.eu;

8.8 Brain inspired ICT

- a) Development of Multi- scale models of information processing and communication in the brain and/or PNS – systemic, multidisciplinary**
- b) Synthetic Hardware Implementations of Neural Circuits - to mimic the brain or PNS**

IP/STREP 15M€ - 50/30 rule
IP should cover the 2 subtopics



Background documents:

- [Neuro-Information Science workshop, Jan 08](#)
- [EUro-IT.net roadmap, 2006](#)

Contact: julian.ellis@ec.europa.eu

Web: http://cordis.europa.eu/fp7/ict/fet-proactive/brainict_en.html

8.9 Coordinating Communities and Actions in FET PI (1.5M€, CSA only)

- Increase visibility of FET initiatives, coordinate them, promote new curricula
- Examples: [PEACH](#), [PERADA](#) [NanoICT](#) [QUROPE](#)
- Prepare ERA-Net+, e.g. in QIFT
- Preproposals check: wide.hogenhout@ec.europa.eu

8.10 Identifying new research topics, Assessing emerging global S&T trends (0.5M€, CSA only)

- a) Organize formulation of novel FET topics
 - b) in-depth analyses of emerging global trends
- Complements what ISTAG has proposed
- Preproposal check: Jose.Fernandez-Villacanas@ec.europa.eu

Horizontal Actions

9.1 International Cooperation

b) uptake of European ICT research results in developing economies

- ♦ Main focus AFRICA

STREP/SICA actions (2+2, total 5M€)

9.2 Supplements to Support International Cooperation between Ongoing Projects

- ♦ For Nanoelectronics (call 5) and ICT for Safety and Energy Efficiency in Mobility (call 4)

CSA 0.4M€

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Info Sources



■ **European Research**

<http://cordis.europa.eu>

<http://cordis.europa.eu/fp7>

■ **ICT Research**

http://ec.europa.eu/information_society

<http://cordis.europa.eu/fp7/ict>

<http://www.euresearch.ch/ict>

ICT Results: <http://cordis.europa.eu/ictresults/>

ICT Projects: http://cordis.europa.eu/fp7/ict/projects/home_en.html

ICT Partnersearch: <http://www.ideal-ist.net>

9 European Technology Platforms in ICT

- **European Nanoelectronics Initiative Advisory Council (ENIAC)**
<http://www.eniac.eu>
- **Advanced R&D on Embedded Intelligent Systems (ARTEMIS)**
<http://www.artemis.eu>
- **Mobile and wireless communications technology (eMobility)**
<http://www.emobility.eu.org/>
- **Networked and electronic media platform (NEM)**
<http://www.nem-initiative.org/>
- **The Photonics Technology Platform (Photonics 21)**
<http://www.photonics21.org/>
- **The Integral Satellite communication Initiative (ISI)**
<http://www.isi-initiative.eu.org/>
- **The Smart Systems Integration**
<http://www.smart-systems-integration.org/>
- **Networked European Software and Services Initiative (NESSI)**
<http://www.nessi-europe.com/index.htm>
- **European Robotics Platform (EUROP)**
<http://www.roboticsplatform.com/>



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IDEAS

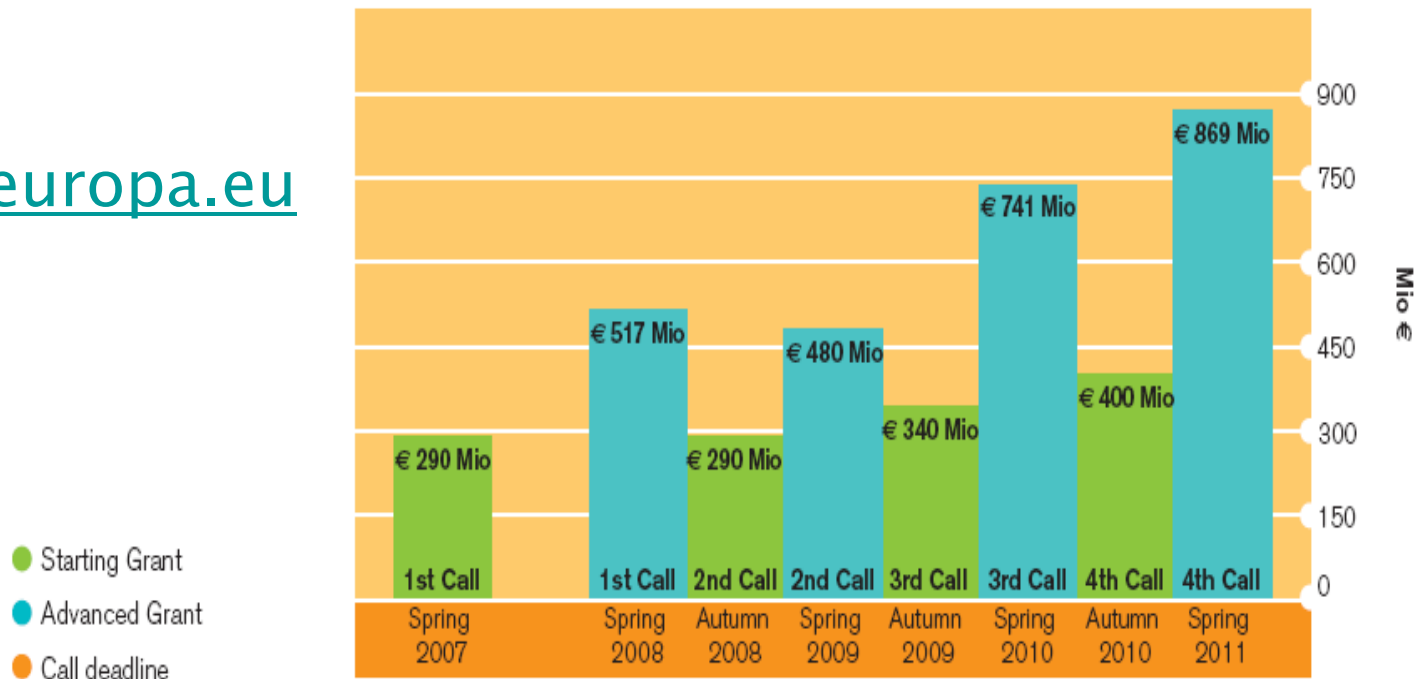
4 Specific FP7 programmes

Billion €		
Cooperation	10 themes	€ 32.4
Ideas	Basic research (ERC)	€ 7.5
People	Mobility (Marie Curie actions)	€ 4.7
Capacities	7 horizontal axes	€ 4.1



Starting Grants & Advanced Grants for Principal Investigators (individual teams) 100% reimbursement (20% overheads)

<http://erc.europa.eu>



Contact: katja.wirth@euresearch.ch

PEOPLE

4 Specific FP7 programmes

		Billion €
Cooperation	10 themes	€ 32.4
Ideas	Basic research (ERC)	€ 7.5
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PEOPLE

- aiming at supporting **individuals**
- **any topic**
- trans-nationality = **go abroad!**
(or come back)
- **no age limit** for researchers
(but research experience)
- actions open to **researchers worldwide**
- **individual fellowships**
↔
host-driven actions



Find out more: Juliane.sauer@euresearch.ch
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Get ready for ICT

- Past events:
 - ◆ [Swiss ICT Summit 2008](#) 10.10.2008 in Lugano
focus on Challenge 1
 - ◆ [ICT 2008 Conference](#) 25-27.11.2008 in Lyon
 - ◆ [Proposers Day](#) 22.1.2009 in Budapest
 - ◆ [Ideal-IST International Face2Face](#) 25.06.2009 in Basel
focus on Challenge 3
- [Surf on FP5-FP7 projects DB](#)
- [Register to be an evaluator](#)
- [Profile yourself on Euresearch online](#)
- [Participate to Euresearch events & trainings](#)
- Bookmark the ICT-FP7 webpage
www.euresearch.ch/ict

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