Perspectives for EU-LAC cooperation in e-Infrastructures in Horizon 2020

Conferencia AMERICAS "EU-LAC ICT&e-infrastructures for R&D Cooperation"

Leonardo Flores Añover
e-Infrastructures – Excellence in Science
DG CONNECT
European Commission

H2020 overview

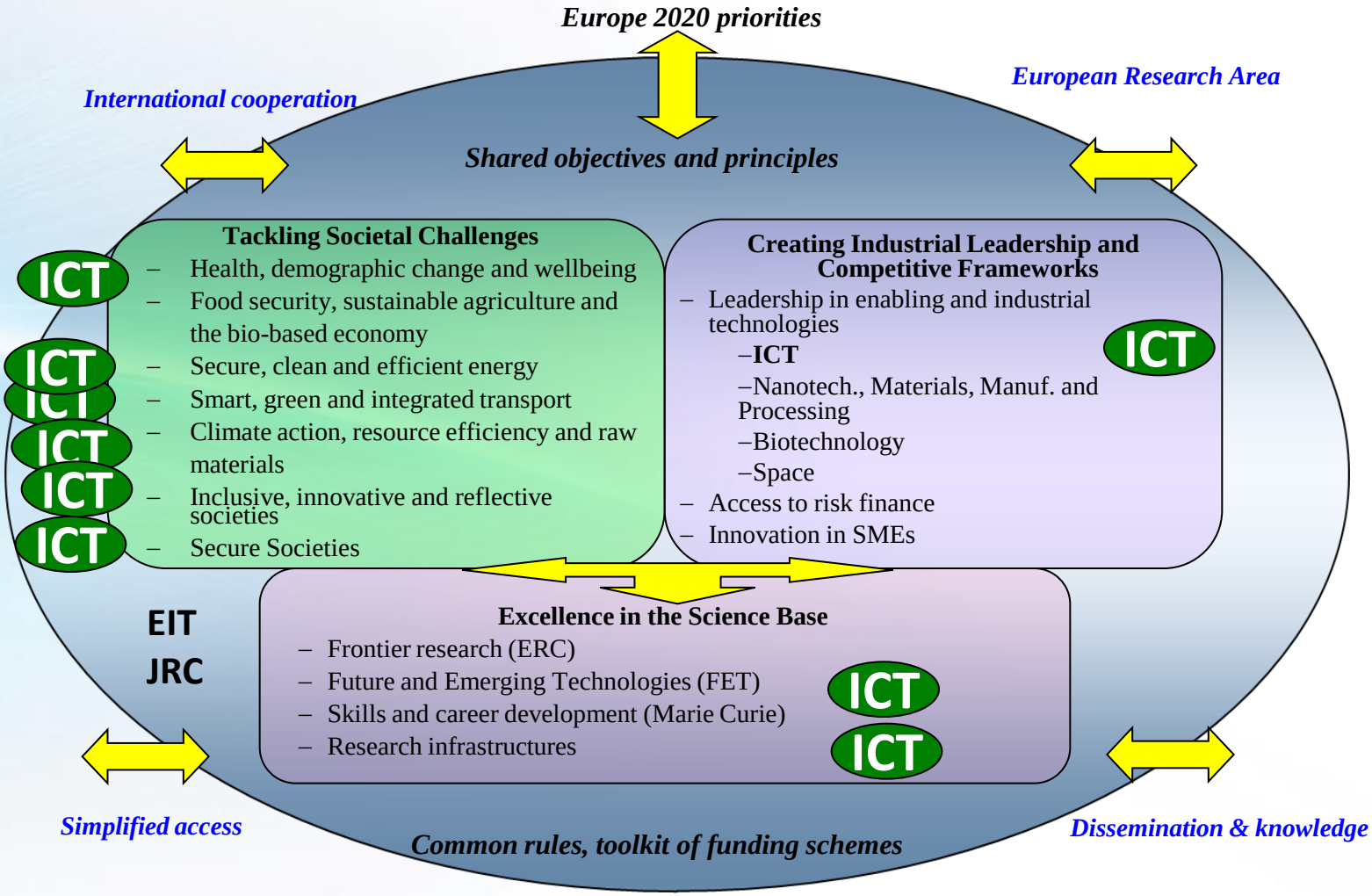
Horizon 2020

- A European Research & Innovation funding programme (2014-20) (~77 billion Euro)
- Part of proposals for next EU budget, complementing Structural Funds, education, etc.
- A core part of Europe 2020, Innovation Union & European Research Area:
  - **Responding to the economic crisis** to invest in future jobs and growth
  - **Addressing peoples' concerns** about their livelihoods, safety and environment
  - **Strengthening the EU's global position** in research, innovation and technology

International Cooperation under Horizon 2020

- **International cooperation will be a cross-cutting issue in H2020 with a similar approach to the practice under FP7**
  - **General opening of the programme** (all 3rd countries can participate)
  - **Targeted openings,** partners from identified countries/regions are welcome to participate (but this is not an eligibility criterion)
  - **Horizontal actions on international cooperation** (eligibility criteria may apply)
  - **Coordinated calls** (agreed with third countries)
- **Actions with specific third countries will be implemented on the basis of common interest and mutual benefit**
- **Reciprocal access to third country programmes encouraged**
- **Certain middle income countries (Brazil, Russia, China, India and Mexico) no longer eligible for automatic EC funding.**

A stronger, clearer focus


Europe 2020 priorities
International cooperation
European Research Area
Shared objectives and principles
Tackling Societal Challenges
– Health, demographic change and wellbeing
– Food security, sustainable agriculture and the bio-based economy
– Secure, clean and efficient energy
– Smart, green and integrated transport
– Climate action, resource efficiency and raw materials
– Inclusive, innovative and reflective societies
– Secure Societies
ICT
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Creating Industrial Leadership and Competitive Frameworks
– Leadership in enabling and industrial technologies
–ICT
–Nanotech., Materials, Manuf. and Processing
–Biotechnology
–Space
– Access to risk finance
– Innovation in SMEs
ICT
EIT
JRC
Excellence in the Science Base
– Frontier research (ERC)
– Future and Emerging Technologies (FET)
– Skills and career development (Marie Curie)
– Research infrastructures
ICT
ICT
Simplified access
Common rules, toolkit of funding schemes
Dissemination & knowledge tranfer

Societal challenges

- EU policy objectives (health and well-being, ageing, climate, environment, energy, transport…) cannot be achieved without innovation
- Breakthrough solutions come from multi-disciplinary collaborations, including social sciences & humanities
- Promising solutions need to be tested, demonstrated and scaled up

Industrial leadership

- Strategic investments in key technologies (e.g. advanced manufacturing, micro-electronics) underpin innovation across existing and emerging sectors
- Europe needs to attract more private investment in research and innovation
- Europe needs more innovative SMEs to create growth and jobs

Excellent science

- *World class science is the foundation of tomorrow's technologies, jobs and well-being*
- *Europe needs to develop, attract and retain research talent*
- *Researchers need access to the best infrastructures*

  - *ERC– European Research Council (Frontier research by the best individual teams)*
  - *FET - Future and Emerging Technologies (Collaborative research to open new fields of innovation)*
  - *Marie Curie (Training and career development)*
  - *Research infrastructures ,including e-infrastructures (Ensuring access to world-class facilities)*

Leadership in Enabling and Industrial Technologies LEIT
Draft Work-programme 2014-15

ICT in Industrial Leadership

1. Components and systems
2. Advanced Computing
3. Future Internet
4. Content technologies and information management
5. Robotics
6. Key Enabling Technologies: Micro-nano-electronics and photonics

+ Factory of the Future cPPP

+ International Cooperation actions (EU-Brazil, EU-Japan)

<u>ICT Cross cutting activities:</u>

- Internet of Things
- Human-centric Digital Age
- Cybersecurity
- Support to NCPs

<u>ICT Innovation actions</u>

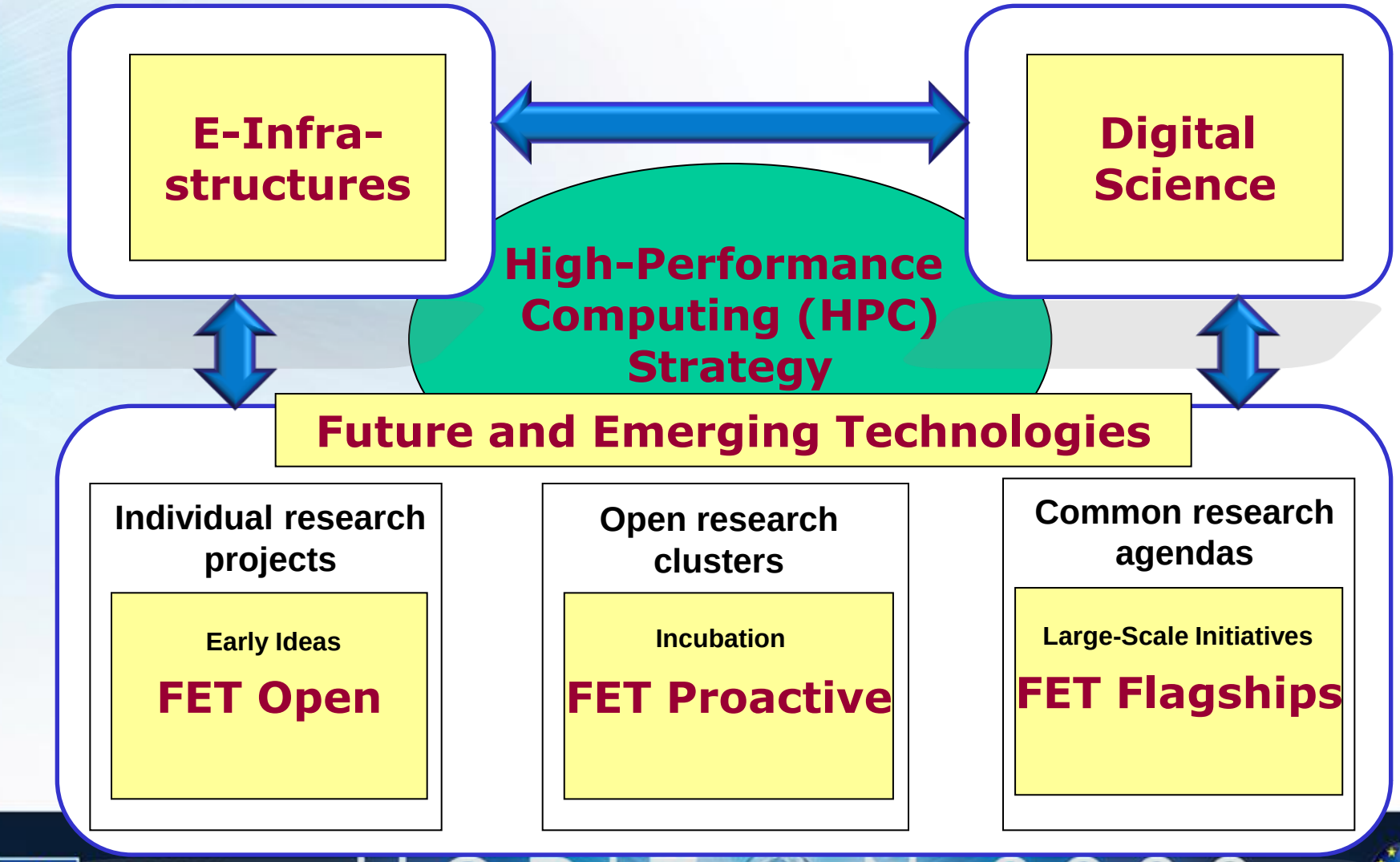
- Access to finance
- Innovation policy support
- Open disruptive innovation scheme (SME instrument)

International Cooperation actions

- Two coordinated calls
  - EUB: Brazil (advanced cyber infrastructure) (~7M)
    - Cloud Computing, including security
    - High Performance Computing (HPC) applications
    - Experimental Platforms
  - EUJ: Japan (Network Futures) (~6M)
- ICT36: International partnership building and support to dialogues with high income countries (USA, Canada and East Asia) (~3M)
- ICT37: International partnership building in low and middle income countries (~11M)
- Targeted opening on Future Internet Research and Experimentation (FIRE), Micro- and nano electronics with US, Japan, Brazil and South Korea

Draft Excellent Science Work-programme 2014-15

ICT in Excellent Science



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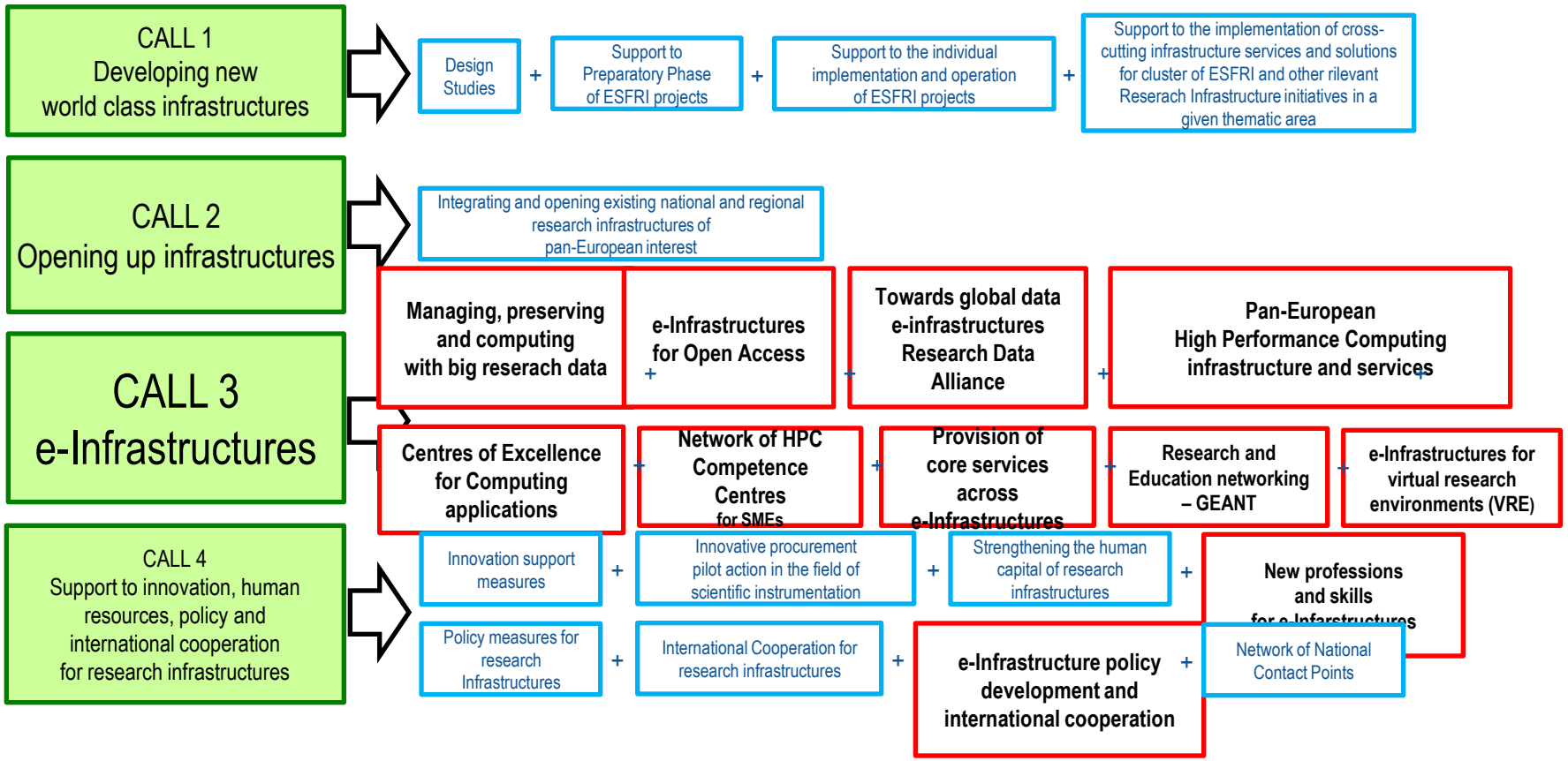
RESEARCH INFRASTRUCTURE
Work Programme 2014-2015 (DRAFT)



International Cooperation actions in e-infrastructures (DRAFT)

INFRASUPP 7-2014 – e-Infrastructure policy development and international cooperation (~ 5 m€)

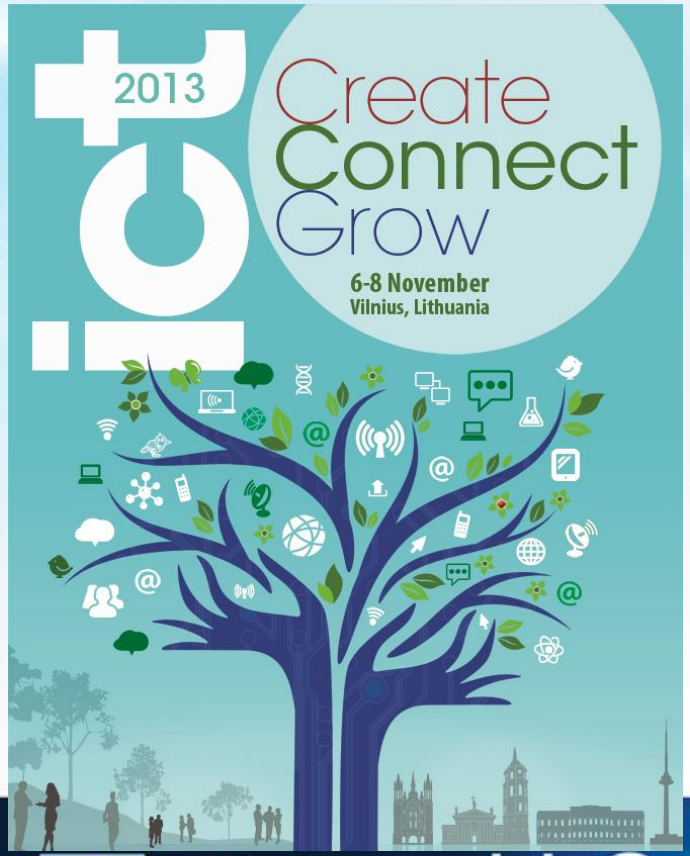
1. Dissemination of information on the e-infrastructure programme and of project results, including coordination among projects;
2. Stakeholder initiatives, including a user forum to provide orientations for e-infrastructure service interoperability and integration;
3. Policy coordination with the major national and European policy makers, including the collection of information needed for policy making e.g. through consultation actions and surveys as well as the wider use of e-infrastructures for public services and society;
4. Support to monitoring results and assessing impact of the Horizon 2020 e-infrastructure activities, including through metrics and indicators;
5. Monitor and analyse the take-up of digital science and e-infrastructures by researchers and possible other users, such as citizens and the education sector, per country, region and research domain or community;
6. Support to technology transfer from the e-infrastructures projects to the market;
7. Support to cooperation with developing countries and regions to promote connectivity, global e-infrastructure services, identification of use cases and promising applications of particular interest for developing regions.

http://ec.europa.eu/ictevent

European Commission

ICT 2013: Create, Connect, Grow

6-8 November 2013, Vilnius



Aim of the event:

ICT in Horizon 2020 - the EU's Framework Programme for Research and Innovation for 2014-2020.

Structure of the event :

- conference,
- exhibition,
- networking.

Registration: Open from the end of April 2013

Thank you for your attention!

Find out more:

www.ec.europa.eu/research/horizon2020

Research and Innovation