1 – Introduction to HORIZON 2020

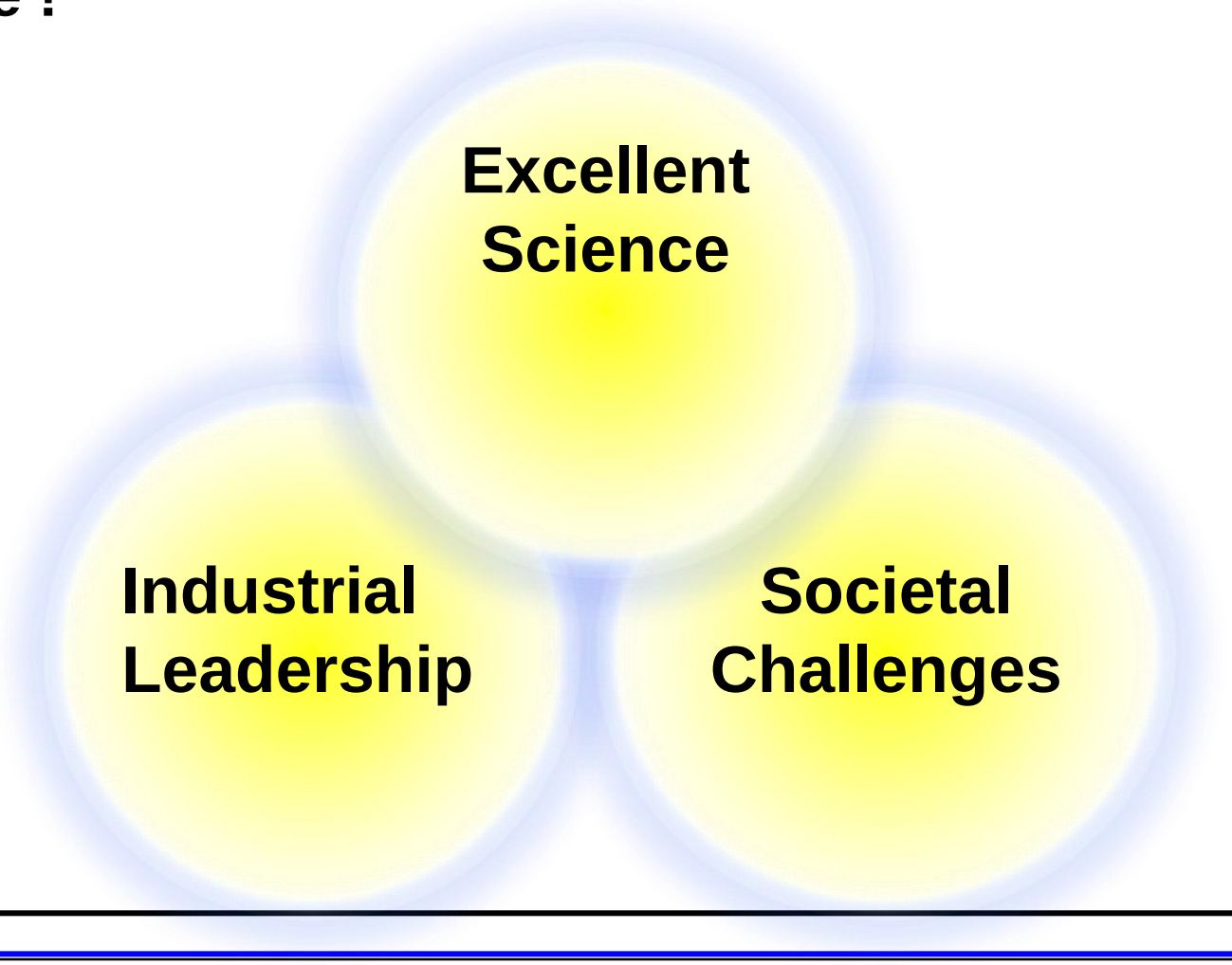
The EAST-HORIZON project (611063) is co-funded by the European Community's ICT Programme under FP7

Characteristics of EU R&D Activities

- Transnational collaboration (min. 3 partners/3 countries)
- Open to all: Industry, SMEs, Universities,…)
- Consortia selected via Calls for Proposals and evaluation procedures involving a set of multiple criteria and independent experts
- Strategic objectives - programme oriented
- Innovative, based on science & technology excellence
- Competitive - competition of the best teams in EU
- RTD results are the property of the participants

The H2020 Structure

Important: the clear boundary between the sub-programmes has gone !



Part I Excellent Science

1. EUROPEAN RESEARCH COUNCIL
2. FUTURE AND EMERGING TECHNOLOGIES
3. MARIE CURIE ACTIONS
4. RESEARCH INFRASTRUCTURES

The H2020 Structure

Part II Industrial Leadership

1. LEADERSHIP IN ENABLING AND INDUSTRIAL TECHNOLOGIES – LEIT
   - Information and Communication Technologies (ICT)
   - Nanotechnologies
   - Advanced materials
   - Biotechnology
   - Advanced Manufacturing and Processing
   - Space

The H2020 Structure

Part III Societal Challenges

1. Health, Demographic Change and Wellbeing
2. Food Security, Sustainable Agriculture, Marine and Maritime Research and The Bio-Economy
3. Secure, Clean and Efficient Energy
4. Smart, Green and Integrated Transport
5. Climate Action, Resource Efficiency and Raw Materials
6. Inclusive Societies
7. Secure societies

FP7 was called the

Framework Programme for Research and Development

H2020 is called the

Framework Programme for Research and **Innovation**

What is Innovation ?

- Innovation is the process and outcome of creating something new, which is also of value.
- Innovation involves the whole process from opportunity identification, research or invention to development, prototyping, production marketing and sales, while entrepreneurship only needs to involve commercialization (Schumpeter)

How easy will it be to get H2020 funding ?

The competition will be as high as in FP7, with an average success rate of 15%.

But also, as before, excellent proposals that are fully in line with the objectives of a call stand a realistic chance to win.

The promises are that procedures will be simplified and processes faster.

Types of actions supported by grants

- **Research and Innovation Actions**
- **Innovation Actions**
- **Coordination and Support Actions**

Research and innovation actions

- Actions primarily consisting of activities aiming to establish new knowledge and/or to explore the feasibility of a new or improved technology, product, process, service or solution.
- For this purpose they may include basic and applied research, technology development and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment.

Innovation actions

- Actions primarily consisting of activities directly aiming at producing plans and arrangements or designs for new, altered or improved products, processes or services.
- For this purpose they may include prototyping, testing, demonstrating, piloting, large-scale product validation and market replication.

Coordination and support actions

Actions consisting primarily of **accompanying measures** such as standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogues and mutual learning exercises and studies, including design studies for new infrastructure and may also include complementary activities of networking and coordination between programmes in different countries.

Evaluation of proposals

Award criteria

- Excellence
- Impact
  - *Higher weighting for innovation actions*
- Quality and efficiency in the implementation
- Details, weightings and thresholds be laid down in WP

- Evaluation carried out by independent experts
- Possibility of a 2 stage submission procedure

Eligible costs

Main cost categories:

- Personnel costs
- Costs of subcontracting
- Other direct costs
  - Travel costs and subsistence allowances
  - Depreciation costs of equipment
  - Costs of other goods and services (including non-deductible VAT)

Rules to allow costs for large infrastructure are under discussion

ICT in Horizon 2020

The EAST-HORIZON project (611063) is co-funded by the European Community's ICT Programme under FP7

ICT in Horizon 2020

The calls presented in this presentation derive from the Commission's draft Workprogramme 2016-2017 and are subject to change.

draft work programmes are working documents. As such, calls indicated in the documents may not appear in the final versions of the Work Programme 2016-2017, and likewise, new calls may be introduced.

Official Workprogramme 2016-2017 is to be announced by the Commission

ICT in H2020

This part covers the following ICT technological areas:

1. A new generation of components and system,
2. Advanced Computing and Cloud Computing,
3. Future Internet,
4. Content,
5. Robotics and autonomous systems,
6. Key Enable Technologies
7. Internet of Things
8. Security
9. Innovation and Entrepreneurship support
10. Responsibility and Creativity
11. International Cooperation Activities

ICT Calls 2016-2017 (1)

A new generation of components and systems
ICT1.1 – 2016: Smart Cyber-Physical Systems ICT1.2 – 2016: Thin, Organic and Large Area Electronics (TOLAE)
ICT1.3 – 2016: SSI – Smart System Integration
ICT1.4 – 2016: Smart Anything Everywhere Initiative
Advanced Computing and Cloud Computing
ICT2.1 - 2016: Customized and low energy computing
ICT2.2 – 2016: Cloud Computing
Future Internet
ICT3.1 – 2016: 5G PPP Research and validation of critical technologies and systems
ICT3.2 – 2016: 5G PPP Convergent Technologies
ICT3.3 – 2016: Networking research beyond 5G
ICT3.4 – 2016: Software technologies
ICT3.5 – 2017: Collective Awareness Platforms for Sustainability and Social Innovation
ICT3.6 – 2016: Net Innovation Factory
ICT3.7 – 2016: Future Internet Experimentation – Building a European Experimental Infrastructure

ICT Calls 2016-2017 (2)

ICT4.1 – 2016: Big Data PPP: innovation hubs for cross-sectorial and cross-lingual data integration ICT4.2 – 2016: Big Data PPP: innovation Hubs for cross-sectorial and cross-lingual data experimentation
ICT4.3 – 2016: Big Data PPP: Large Scale Pilot projects in sectors best benefitting from data driven innovation
ICT4.4 – 2017: Big data PPP: research addressing main technology challenges of the data economy ICT4.5 – 2016-17: Big data PPP: Support, Benchmarking and evaluation
ICT4.6 – 2016: Big data PPP: privacy-preserving big data technologies
ICT4.7 – 2017: Big data PPP: skills
ICT4.8 – 2016: Media and content convergence ICT4.9 – 2017: Tools for smart digital content in the Creative Industries
ICT4.10 – 2016: Support technology transfer to the Creative Industries
ICT4.11 – 2016: Learning and skills
ICT4.12 – 2017: Interfaces for accessibility
ICT4.16 – 2016: Gaming and gamification

ICT Calls 2016-2017 (3)

Robotics and autonomous systems
ICT 5.1 - 2016: Advanced robot capabilities and system abilities
ICT 5.2 – 2016: Market driven research and innovation in robotics
ICT 5.3 - 2017: Advanced robot capabilities and system abilities
ICT 5.4 – 2017: Market-driven research and innovation in robotics
ICT 5.5 – 2017: Coordination and Support Actions
ICT 5.6 – 2017: Joint Actions
Key Enabling Technologies
ICT6.1 – 2016: Photonics KET
ICT6.2 – 2017: Photonics KET
ICT6.3 – 2017: Micro- and nanoelectronics technologies
ICT6.4 – 2017: Cross-KET for Health
Internet of Things
ICT7.1 – 2016: Large Scale Pilots
ICT7.2 – 2016: IoT Horizontal
ICT7.3 – 2016: R&I on IoT integration and platforms

ICT Calls 2016-2017 (4)

Security

ICT8.1 – 2016: Assurance and Certification for Trustworthy and Secure ICT systems, services and components

ICT8.2 – 2016: A Digital Security and Privacy Cluster for LEIT-ICT

ICT8.3 – 2017: Cryptography

Innovation and Entrepreneurship support

ICT9.1 – 2017: Startup Europe for Growth

ICT9.2 – 2016: Innovation procurement network

ICT9.3 – 2017: Innovation procurement open

Responsibility and Creativity

ICT10.1 – 2016: Enabling responsible ICT-related research and innovation

ICT10.2 – 2016: Establishing a structured dialogue between creative people and technologists

ICT10.3 – 2016: STARTS– Innovation at the nexus of S&T, Design and the Arts

ICT10.4 – 2017: STARTS – S&T&ARTS prize

ICT Calls 2016-2017 (5)

International Cooperation Activities
ICT11.1 – 2016: CHINA Collaboration on Future Internet
ICT11.2 – 2016: MEXICO Collaboration on Future Internet
ICT11.3 – 2017: International partnership building in low and middle income countries

LEIT & Societal Challenges

Industrial Leadership

Information and Communication Technologies **[1,257 KB]**

Nanotechnologies, advanced materials and advanced manufacturing and processing **[3,168 KB]**

Societal Challenges

Personalised Medicine [Health]

Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy

Secure, clean and efficient energy

Smart, green and integrated transport

Climate action, environment, resource efficiency and raw materials

Europe in a changing world – inclusive, innovative and reflective societies Secure societies

Protecting freedom and security of Europe and its citizens

Work Programmes will be available at:

- http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/index.html

H2020 reference documents are available at:

- http://ec.europa.eu/research/participants/portal/desktop/en/funding/reference_docs.html

Thank you !