

# **Horizon 2020 – The New Framework Programme for Research and innovation**

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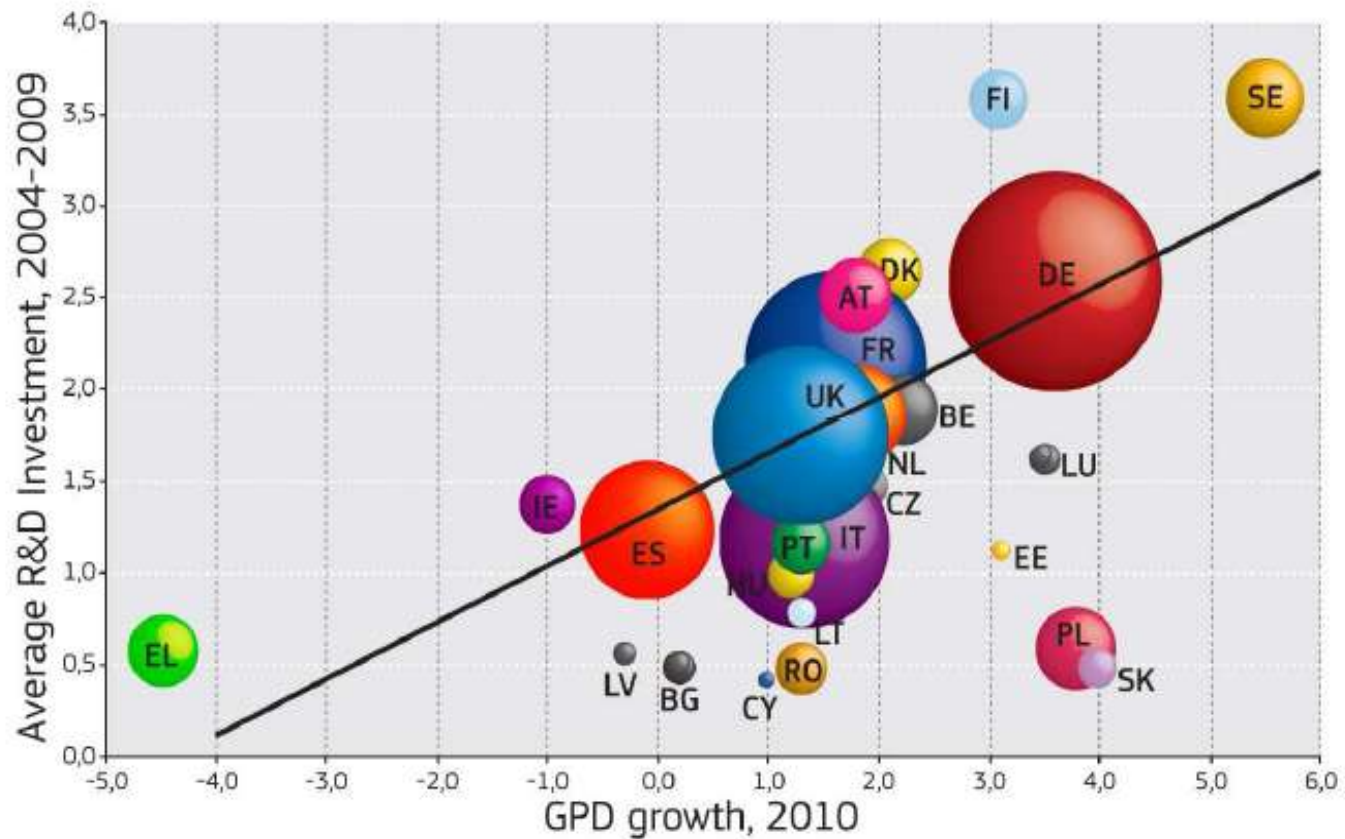
- *How does the European Union work?*
- *What is Horizon 2020?*
- *What is new in Horizon 2020 compared to FP7?*
- *Priorities and Structure in Horizon 2020*
- *International Cooperation Strategy in Horizon 2020*
- *Useful Links*

# The Multiannual Financial Framework 2014-2020: Commission's proposals of 29 June 2011

- **Smart & inclusive growth (€491bn)**
  - Education, Youth, Sport
  - Connecting Europe
  - Cohesion
  - Competitive Business SMEs
  - Horizon 2020 (€80.2bn)
- **Sustainable growth, natural resources (€383bn)**
- **Security and citizenship (€18.5bn)**
- **Global Europe (€70bn)**
- **Administration (€62.6bn)**

**TOTAL : € 1.025bn**

# Impact of R&D on economic recovery



## What is Horizon 2020?

- *Commission proposal for a multi-billion € research and innovation funding programme (2014-20)*
- *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*

## What's new ?

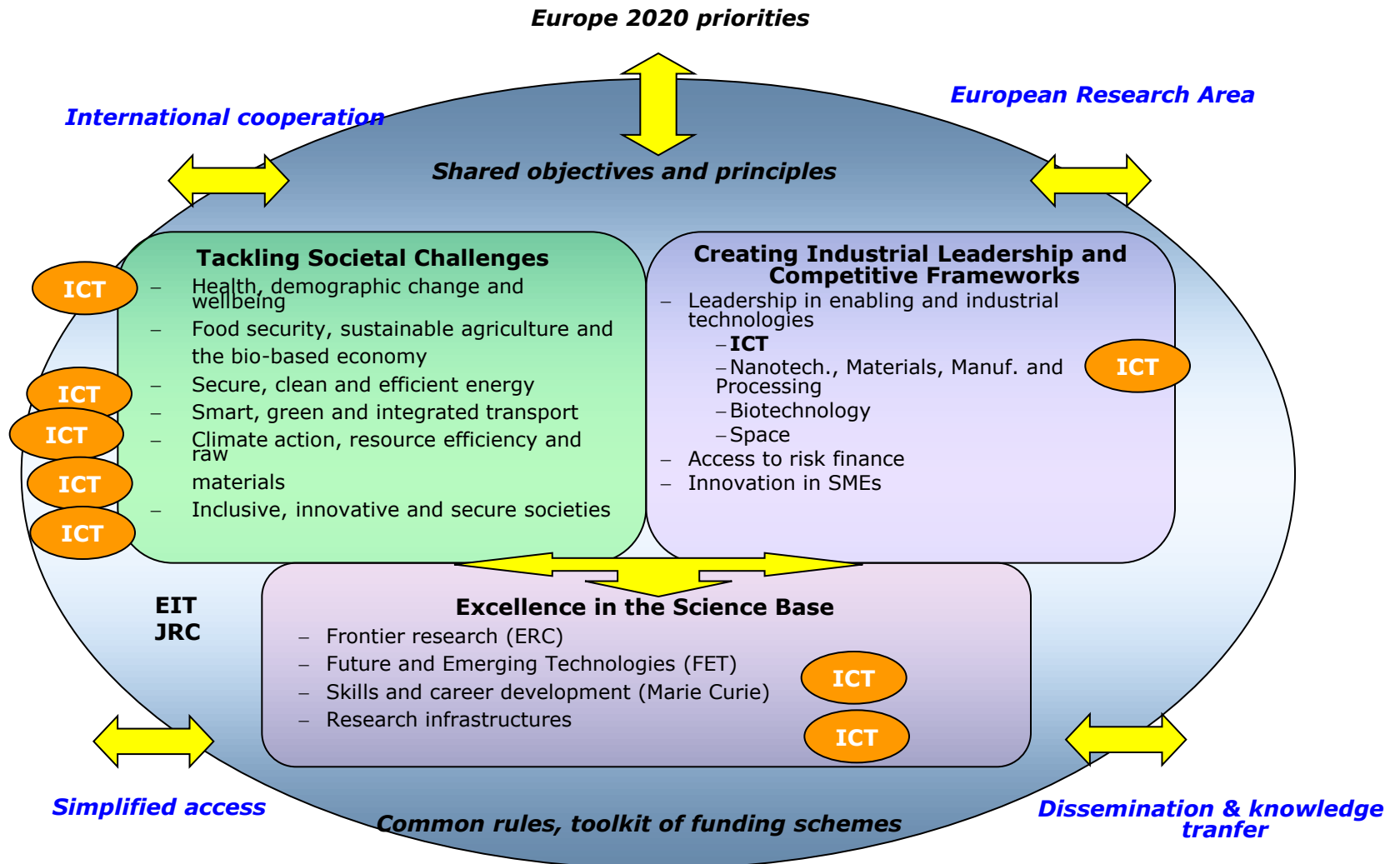
- ***A single programme*** bringing together three separate programmes/initiatives\*
- ***More innovation***, from research to retail, all forms of innovation
- ***Focus on societal challenges*** facing EU society, e.g. health, clean energy and transport
- ***Simplified access***, for all companies, universities, institutes in all EU countries and beyond.

*\*The 7th research Framework Programme (FP7), innovation aspects of Competitiveness and Innovation Framework Programme (CIP), EU contribution to the European Institute of Innovation and Technology (EIT)*

# **Priorities and Structure in Horizon 2020**

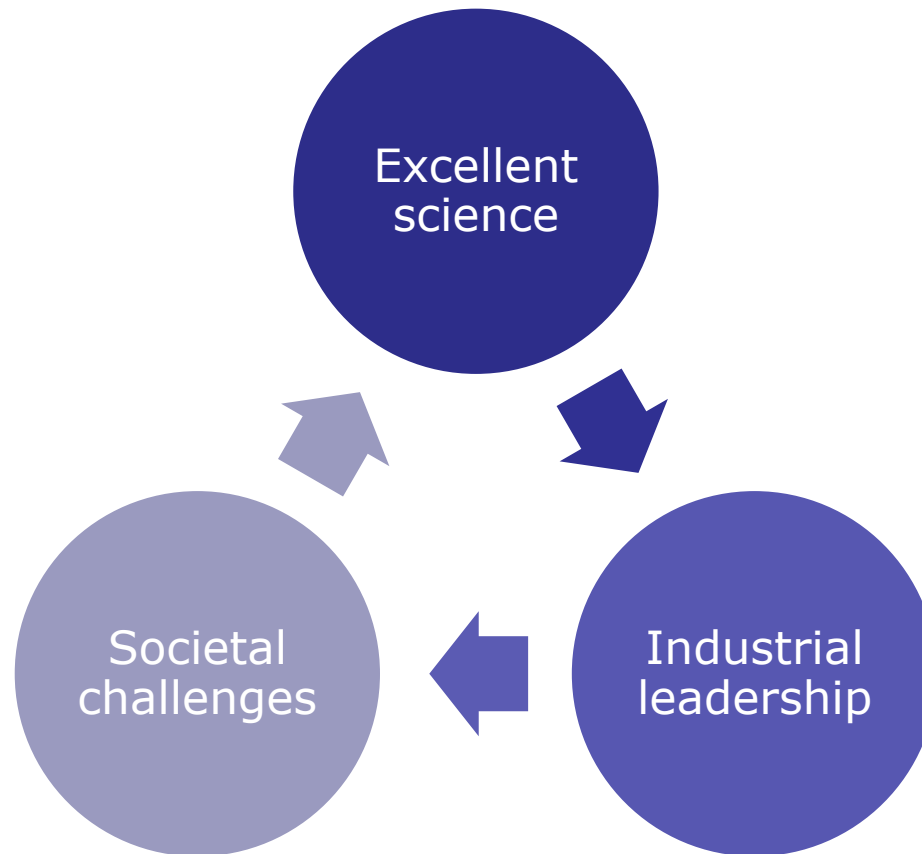


# Objectives and structure





## Three priorities:



# Priority 1. Excellent science

## Why

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

## Proposed funding (mil euro, 2014-2020)

<b>European Research Council</b> Frontier research by the best individual teams	13 268
<b>Future and Emerging Technologies</b> Collaborative research to open new fields of innovation	3 100
<b>Marie Curie actions*</b> Opportunities for training and career development	5 752
<b>Research infrastructures (including e-infrastructure)</b> Ensuring access to world-class facilities	2 478

## Priority 2. Industrial Leadership

### Why

- Europe needs more innovative SMEs to create growth and jobs
- 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

### Proposed funding (mil euro, 2014-2020)

<b>Leadership in enabling and industrial technologies</b> (ICT, nanotechnologies, materials, biotechnology, manufacturing, space)	13 781
<b>Access to risk finance</b> Leveraging private finance and venture capital for research and innovation	3 538
<b>Innovation in SMEs</b> Fostering all forms of innovation in all types of SMEs	619

## Priority 3. Societal Challenges

### Why

- EU policy objectives (climate, environment, energy, transport etc) 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

### Proposed funding (mil euro, 2014-2020)

<i>Health, demographic change and wellbeing</i>	8 029
<i>Food security, sustainable agriculture, marine and maritime research &amp; the bio-economy</i>	4 152
<i>Secure, clean and efficient energy*</i>	5 782
<i>Smart, green and integrated transport</i>	6 802
<i>Climate action, resource efficiency and raw materials</i>	3 160
<i>Inclusive, innovative and secure societies</i>	3 819

\*Additional € 1 050m for nuclear safety and security from the Euratom Treaty activities (2014-18). Does not include ITER.

# Three priorities to be supported by: EIT and JRC in Horizon 2020

## *Proposed funding (mil euro, 2014-2020)*

<i>European Institute of Innovation and Technology (EIT)</i>	<i>1 360</i>
<i>Combining research, innovation &amp; training in Knowledge and Innovation Communities</i>	<i>1 440*</i>
<i>Joint Research Centre (JRC)**</i>	<i>1 962</i>
Providing a robust, evidence base for EU policies	

*\* Second tranche pro rata from LEIT and Societal challenges (subject to review)*

*\*\*Additional €724 m for the JRC to be funded from the Euratom Treaty activities*

# Euratom Programme 2014-2018

- **Budget:** Total € 1665 million, including Fission € 336; Fusion € 673 m; JRC € 656m
- **Programme for 5 years, in line with the Euratom Treaty (Art. 7)**
- **What is new?**
  - *Stronger focus on nuclear safety and nuclear training*
  - *A single Euratom programme bringing together three separate decisions*
  - *The same rules for participation as in the Horizon 2020 – simplified access*
  - *Programme contributes to the implementation of priorities of the Horizon 2020*
  - *Fusion research programme will be restructured*
- **Funding for ITER outside MFF in a separate supplementary programme:**  
€ 2573 million for 2014-2018

## Other Feature: Widening participation

- **Principle of excellence:** continue to allocate funding on the basis of competitive calls, selecting only the best projects
- **Clear division of labour between cohesion policy and Horizon 2020**
  - *Cohesion policy: support for regions in building up their research and innovation capacity*
  - *Horizon 2020: widen participation, better coordination between the two Union funding programmes, support policy learning reforms*
- **Accompanying measures in Horizon 2020 to ensure that excellence prevails wherever it exists, including:** twinning, ERA chairs, support for access to international networks, development of smart specialisation strategies

## Other Feature: Broader access

- ***For SMEs*** - dedicated SME projects to address societal challenges and enabling technologies
- ***For all regions*** – tailored support to policy learning, twinning, networking, complementing Structural Funds
- ***For international partners*** – broad access to Horizon 2020 (“mainstreaming”), strategic initiatives where there is mutual benefit
- ***For all forms of innovation*** - social innovation, services, pilots, stimulating demand through public procurement, standard setting



## Rules for Participation: Summary – Simplification

- *Single set of simpler and more coherent participation rules*
- *New balance between trust and control*
- *Moving from several funding rates for different beneficiaries and activities to just two*
- *Replacing the four methods to calculate overhead or <indirect costs> with a single flat rate*
- *Major simplification under the forthcoming financial regulation*
- *Successful applicants to get working more quickly: reduction of average time to grant by 100 days (current average of around 350 days under FP7)*

# Rules for Participation: Simplification (1)

- ***A Single of Rules***

- *Adapted for the whole research and innovation cycle*
- *Covering all research programmes and funding bodies*
- *Aligned to the Financial Regulation, coherent with other new EU Programmes*

- ***ONE PROJECT - ONE FUNDING RATE***

- *Maximum of 100% of direct costs (except for actions close to market, where a 70% maximum will apply)*
- *Indirect eligible costs: a flat rate of 20% of direct eligible costs*

- ***SIMPLE EVALUATION CRITERIA***

- *Excellence – Impact - Implementation (Excellence only, for the ERC)*

- ***NEW FORMS OF FUNDING aimed at innovation: pre-commercial procurement, inducement prizes, dedicated loan and equity instruments.***

- ***INTERNATIONAL PARTICIPATION: facilitated but better protecting EU interests.***

# Simplification: Rules for Participation: *what's new?* (2)

## Rules for Participation: Simplification (2)

- **SIMPLER RULES FOR GRANTS:** *broader acceptance of participants accounting practices for direct costs, flat rate for indirect costs, no time-sheets for personnel working full time on a project, possibility of output-based grants*
- **FEWER, BETTER TARGETED CONTROLS AND AUDITS**
  - *Lowest possible level of requirements for submission of audit certificates without undermining sound financial management;*
  - *Audit strategy focused on risk and fraud prevention*
- **IMPROVED RULES ON INTELLECTUAL PROPERTY**
  - *Balance between legal security and flexibility;*
  - *Tailor-made IPR provisions for new forms of funding;*
  - *A new emphasis on open access to research publications.*

*\*\* Beyond the Rules: further simplified provisions in the Grant Agreement and implementing procedures to facilitate access to Horizon 2020 (e.g., common IT platform)*

# Rules for participation (still under negotiation)

***Single set of Rules*** for Participation and Dissemination

*„Horizon 2020“ combines the following funding programmes for research and innovation:*

- **Seventh Framework Programme for Research**
- **European Institute for Innovation and Technology (EIT)**
- **Competitiveness and Innovation Framework Programme (CIP)**

***Central IT platform*** for proposal submission and project implementation

***Simplified cost reimbursement***

# Rules for participation

- **General principles** according to **EU Financial Regulation** as in FP7:
  - **Transparency**
  - **Co-financing**
  - **no-profit principle**
  - **no double funding of the same costs**
- *Reimbursement on the basis of **actual costs** as in FP7*
- **Single Certificate on the Financial Statement** when the amount claimed is equal or superior to EUR 325 000 at the end of the project
- **Financial Viability Check** only for **coordinators** with funding equal or superior to EUR 500 000  
**Exception** in cases of doubt: financial viability check also for funding under EUR 500 000 as well as for other participants

## Funding Rates

Cost Category	Proposal Commission	Proposal Council (PGA)
<b>Direct costs</b>	<p>Research &amp; Development: max. 100%</p> <p>Close-to-market actions: max. 70%</p>	<p>Research &amp; Development: max. 100%</p> <p>Close-to-market actions: max. 70%</p> <p><b>Exception:</b> Close-to-market actions for non-profit legal entities: max. 100%</p>
<b>Indirect costs</b> <b>Flat rate</b>	Flat rate: <b>20%</b> of total direct costs	Flat rate: <b>25%</b> of total direct costs
<b>Indirect costs</b>  <b>Actual indirect cost</b>	No option for actual indirect costs	<p>No actual indirect costs</p> <p>Commission will issue guidelines for large infrastructures how parts of the indirect costs can be moved to direct costs</p>

## Funding Rates

Cost model	Proposal Parliament (ITRE)
<b>Flat rate for indirect costs</b>	<b>RTOS / SME / other:</b> max. 100% of total direct costs + 20% flat rate for indirect costs  <b>Industry:</b> max. 70% of total direct costs + 20% flat rate for indirect costs
<b>Option for actual indirect costs with Certificate on the Methodology</b>	<b>RTOS / SME / other:</b> max. 70% of total direct costs + actual indirect costs  <b>Industry:</b> max. 50 % direct total costs + actual indirect costs

# CIP 2007 - 2013

# MFF 2014-2020

IEE

Intelligent Energy

Secure, clean and efficient energy societal challenge

ICT  
-  
PSP

ICT Support

Leadership in enabling and industrial technologies: ICT

HORIZON 2020

Climate action, resource efficiency and raw materials challenge

Eco-Innovation

Access to risk finance + Innovation in SMEs

Innovation

EIP

Competitiveness

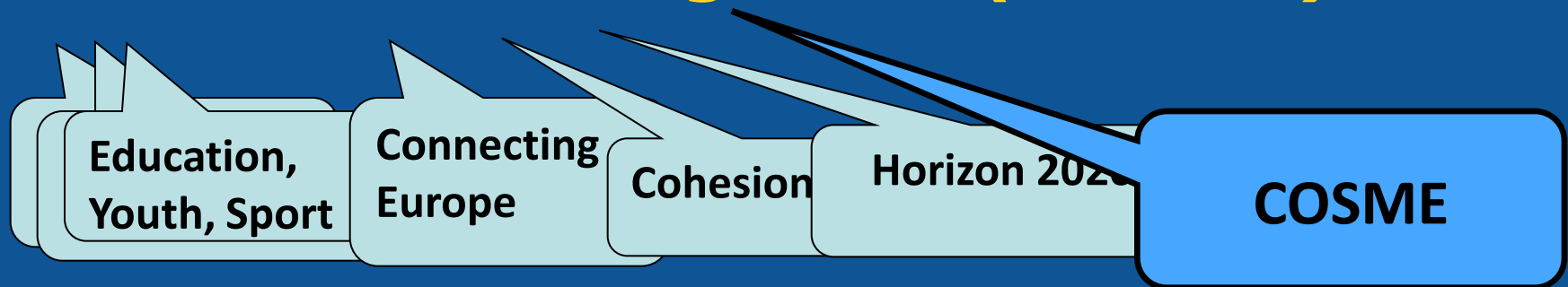
- Access to Finance
- Access to Markets
- Internationalisation
- Entrepreneurship
- Framework conditions





## The Multiannual Financial Framework 2014-2020: Commission's proposal of 29 June 2011

### • *Smart & inclusive growth (€491bn)*



**Sustainable growth, natural resources (€383bn)**

**Security and citizenship (€18.5bn)**

**Global Europe (€70bn)**

**Administration (€62.6bn)**

**Total:  
€ 1,025bn**

## **COSME: What is the Programme about?**

**Strengthening the competitiveness and sustainability of European enterprises**

**Encouraging entrepreneurship and promoting SMEs**

**Main target audience: SMEs, Entrepreneurs, Business Support Organisations, regional and national Administrations**

**Foreseen budget: € 2.5 billion from 2014 to 2020**

# COSME : Objectives & Activities

To improve the framework conditions for the competitiveness and sustainability of EU enterprises	Activities to improve European competitiveness
	Activities to develop SME policy and promote SMEs competitiveness
	Tourism
	New business concepts for consumer goods
To promote entrepreneurship	Erasmus for Entrepreneurs
	Entrepreneurship education
To improve access to finance	Financial instruments
To improve access to markets	Enterprise Europe Network
	Support to SMEs abroad
	Support to international industrial cooperation

## **EU added value of the Programme**

**Overcoming market fragmentation in the Single Market  
(Enterprise Europe Network)**

**Facilitating the adoption of the best practices across all  
Member States (time to start a new business)**

**Economies of scale and demonstration effects  
(Financial Instruments)**

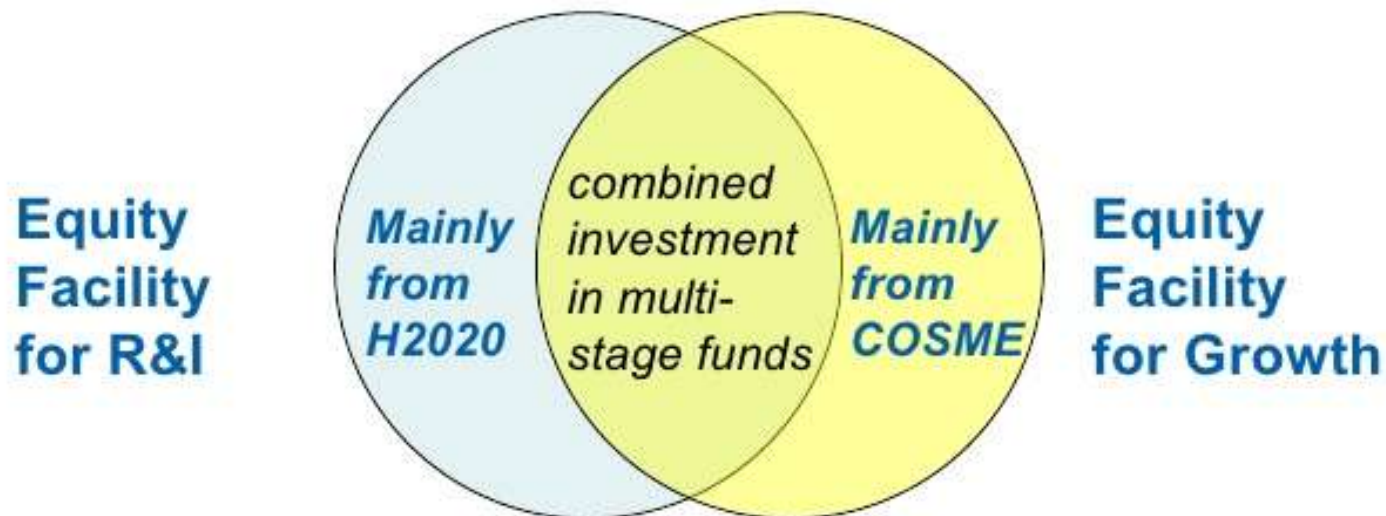
**Mobilising EU expertise and resources:**

- 
-



## Equity instrument for SMEs' growth and R&I

Two complementary facilities working together to support access to risk capital and stimulate the development of the VC industry in the EU



from start-up/early stage  
stage



to expansion/growth stage

*may make growth investments*

*may make early-stage investments* 12

*up to 20% of total EU investment*



## Budget proposed

- **COSME – “Actions to improve SME access to finance”**
  - **€ 1 436 million in current prices**
    - **Equity Facility for Growth: € 690 million**
    - **Loan Guarantee Facility: € 746 million**
- **H2020 (Industrial Leadership) – “Access to risk finance”**
  - **€ 3 768 million in current prices (net of adm. Costs) for financial facilities supporting all sizes of companies and types of entity**
  - **At least 1/3 (ca. € 1.25 bn) likely to be absorbed by SMEs and small midcaps (no breakdown between equity and debt)**

} indicative

# **International Cooperation Strategy in Horizon 2020**



# New strategy for international cooperation in research and innovation: Dual approach

- **Openness:**

- *Horizon 2020 open to participation from across the world*

- 

- **Targeted actions:**

- *Thematic: identifying areas for international cooperation*




# International Cooperation in Horizon 2020

- Targeted activities in ***societal challenges and industrial leadership***
- ***Excellent science***
  - *Marie Skłodowska-Curie Fellowships : strong international dimension*
  - *Development of global research infrastructures*
  - *ERC open to researchers from all over the world - research to be carried out mostly in Member States or Associated Countries*
- ***Dedicated cross-cutting actions*** – Inclusive, Innovative and Secure Societies challenge
  - *Support for policy dialogue*
  - *Networking and twinning activities*
  - *Coordination of EU and EU countries international cooperation policies*
  - *Strengthening of European presence in partner countries programmes*

# H2020 Novelties

- Integration of the innovation dimension
  - Additional emphasis on Public-Private-Partnerships and Public-Public-Partnerships
  - New approaches to SME support
  - Massive increase in financial instruments (loan guarantees for Mid-Caps)
  - Even greater variety of governance modes (Knowledge and Innovation Communities for the European Institute for Technology and Innovation)
- 

# Simplification

- Simpler and more coherent participation **rules**
  - New **balance between trust and control**
  - Moving from several **funding rates** for different beneficiaries and activities to just two
  - **Single flat rate to calculate overhead or 'indirect costs'**
  - Simplification under the **new Financial Regulation**
  - Reduction of average **time to grant**
- 

# 100/20

19 March 2013, Commissioner Geoghegan-Quinn before ITRE and informed the assembled MEPs that :

- “the 100/20 system has been used throughout FP7 by the ERC ...”.
- “has been widely acclaimed by stakeholders, notably universities and public research organizations, as one of the most successful methodologies. This proposal is also strongly endorsed by industry ...”.
- ??????

# Partnering in H2020

## Public private partnerships:

- Joint Technology Initiatives or other formal structures (Art. 187)
- **Contractual agreements, inputs for work programmes**
- Clear criteria, e.g. clear commitments from private partners

## Public public partnerships:

- "ERA-Nets" for topping up individual calls/actions
- Participation in joint programmes between MS (Art. 185)
- Supporting agendas of Joint Programming Initiatives
- Clear criteria, e.g. commitments of participating countries

## European Innovation Partnerships:

- Not funding instruments, but for coordination with broader policies and programmes

# Small and Medium Enterprises (SMEs)

- Integrated approach - around 15% of the budget for societal challenges and LEITs to go to SMEs.
- Simplification of particular benefit to SMEs (e.g. single entry point).
- New SME instrument, building on the SBIR model, will be used across all societal challenges as well as for the LEITs
- A dedicated activity for research-intensive SMEs in 'Innovation in SMEs'.
- 'Access to risk finance' will have a strong SME focus (debt and equity facility)

# COSME

- Horizon 2020 and COSME are complementary programmes to generate growth and jobs
  - Horizon 2020 = innovation driven growth
  - COSME = support to create favourable business environment and competitiveness
- Closely coordinated, for instance:
  - Integrated financial instruments with facilities in both programmes serving complementary objectives
  - Enterprise Europe Network set up under COSME, but support to SMEs for EU funding

# Current debate in Council

- Partial General Agreement on H2020 Regulation  
(DK Presidency)
- Partial General Agreement on Rules of participation  
(CY Presidency)
- Partial General Agreement on H2020 Decision  
("Specific P.") (CY Presidency)
- IRL Presidency: Trilogue with EP and COM





# Current debate - Budget

- FP7 55 bln €
- Horizon 2020 (= FP+EIT+CIP)
  - Commission proposal 80 bln €
  - MFF Summit conclusions 8 February 70 bln €
  - Parliament position (ITRE Committee) (100 bln €)
- Next milestone
  - Parliament vote on MFF June (tbc)

# Current debate -Trilogue

- 'Trilogue' process underway (Commission, Council, EP)
- "Technical" meetings underway
- Political debates to follow
- Final legislative acts expected at end of the year
- First calls: expected mid December

# Horizon 2020 negotiations around the multiannual financial framework

- 8 February 2013 EC reached agreement on the next multiannual financial framework (MFF), which defines the budgetary priorities of the EU for the years 2014-2020.  
In line with the consolidation efforts in the Member States, EU leaders agreed to cut, compared to the current MFF 2007-2013, the financial resources which the EU may mobilise.
- 13 March: The Parliament adopted its position on the negotiations in a Resolution at its plenary, and set out clearly the issues of importance to it:
  - Revision of the budget,
  - Flexibility
  - Own Resources
  - Unity of the EU Budget.
- In addition, the Parliament stated clearly that it would not open negotiations on the MFF until the commission proposed an Amending Budget for 2013, thus linking the two issues explicitly.

# Horizon 2020 negotiations around the multiannual financial framework

- 27 March 2013, the Commission made its formal amending budget proposal.
- 24th April 2013 - European Parliament's decision to postpone the start of the negotiations with the Council and the Commission on the next financial period (2014-2020),
  - EU Commissioner for Financial Programming and Budget, Janusz Lewandowski: "I am concerned as time is running out to provide Europe with a stable, secure financial framework for the next seven years. Our businesses, scientists, NGOs, and towns and regions badly need EU funding as Member States are reducing national investment to a trickle and banks reduce their lending. Therefore, the European Commission will keep sparing no effort to bring all parties to the negotiating table in the shortest possible time. We will do our utmost to break the current inter-institutional deadlock; we owe it to half a billion Europeans".

# Horizon 2020 negotiations around the multiannual financial framework

- 25th April, Irish Presidency of the Council, Eamon Gilmore, Tánaiste (Deputy Prime Minister) and Minister for Foreign Affairs and Trade, and Chair of General Affairs Council delivers mid-term assessment of the Irish Presidency to the Centre for European Policy Studies (CEPS) in Brussels

“As Chairman of the General Affairs Council I have a responsibility to the Council to advance work on this in accordance with the Treaty provisions.

The European Council has already given us a general mandate to work on the MFF. This was reconfirmed by the General Affairs Council on Monday. And the way to make progress and reach agreement is to engage in detailed negotiations with the Parliament on the specifics.”

# Social Funds

- *80 – 100 billion EUR for R&D*
- *80 % of the funding should be used for:*
  - **R&D**
  - **SME competitiveness**
  - **Energy Efficiency & renewables**

## Useful links

- ***CORDIS:*** <http://cordis.europa.eu/>
- ***Horizon 2020:*** <http://ec.europa.eu/research/Horizon2020>
- ***COSME:*** <http://ec.europa.eu/cip/COSME>
  
- ***Participants Portal:***  
[http://ec.europa.eu/research/participants/portal/page/people;efp7\\_SESSION\\_ID=1T6jRJPXCm5pFXYFTLfs27fhTC2LW01Ff1X3VFGPyX6hWVJS9cx3!1683559056#wlp\\_call\\_FP7](http://ec.europa.eu/research/participants/portal/page/people;efp7_SESSION_ID=1T6jRJPXCm5pFXYFTLfs27fhTC2LW01Ff1X3VFGPyX6hWVJS9cx3!1683559056#wlp_call_FP7)
  
- ***Euraxess:*** <http://ec.europa.eu/euraxess/index.cfm>



***Thank you for your attention!***

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