



HORIZON 2020

**Workshop on
Research challenges and opportunities
in smart grids and new energy markets
28 January 2013 - Pisa**

Chiara Pocaterra

**APRE - Agency for the Promotion of the European Research
National Contact Point and Expert in the Programme Committee
Theme 5 "Energy" FP7**

What is Horizon 2020?

- Commission proposal for an 80 billion euro R&I 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)*



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A stronger, clearer focus



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 (million euro, 2014-20)

European Research Council <i>Frontier research by the best individual teams</i>	15 008
Future and Emerging Technologies <i>Collaborative research to open new fields of innovation</i>	3 505
Marie Curie actions* <i>Opportunities for training and career development</i>	6 503
Research infrastructures (including e-infrastructure) <i>Ensuring access to world-class facilities</i>	2 802
Spreading excellence (EP's Proposal) <i>support to policy learning, networking and training opportunities</i>	

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 (million euro, 2014-20)

Leadership in enabling and industrial technologies (<i>ICT, nanotechnologies, materials, biotechnology, manufacturing, space</i>)	15 580
Access to risk finance <i>Leveraging private finance and venture capital for research and innovation</i>	4 000
Innovation in SMEs <i>Fostering all forms of innovation in all types of SMEs</i>	700

Priority 3 Societal challenges

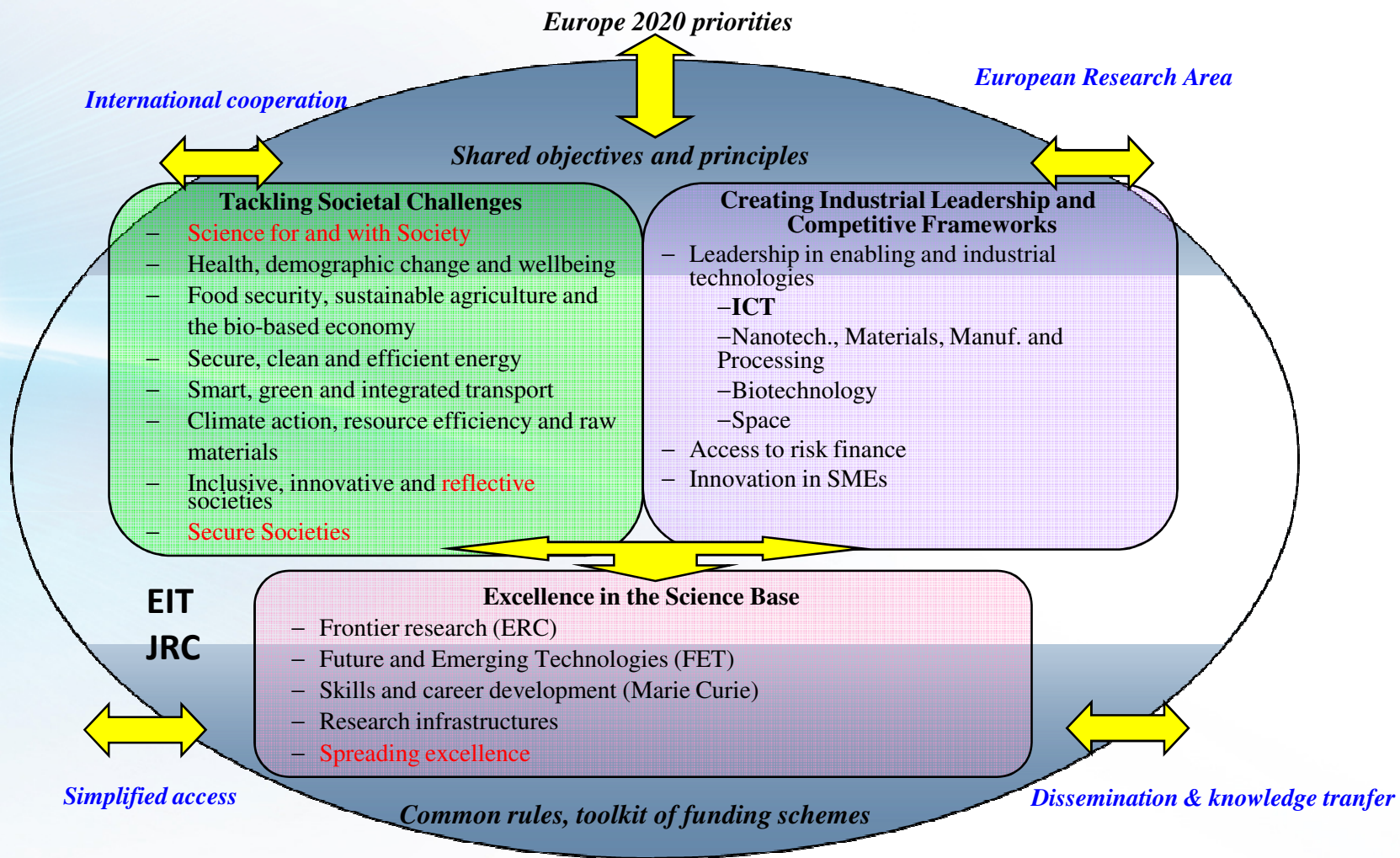
Why:

- 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 (million euro, 2014-20)

Health, demographic change and wellbeing	9 077
Food security, sustainable agriculture, marine and maritime research & the bioeconomy	4 694
Secure, clean and efficient energy*	6 537
Smart, green and integrated transport	7 690
Climate action, resource efficiency and raw materials	3 573
Inclusive, innovative and secure reflective societies	4 317
Secure societies (EP's Proposal)	

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



Proposed funding of the EP (million euro, 2014-20)

Budget H2020	COMMISSION	COMMISSION	EP
	million €	%	%
I. Excellent science, of which:	27.818	31,71	32,60
1. The European Research Council	15.008	17,11	16,30
2. Future and Emerging Science and Technologies	3.505	3,99	3,50
3. Marie Curie Actions	6.503	7,41	8,30
4. European research infrastructures	2.802	3,19	3,60
<i>5. Spreading Excellence and Widening Participation</i>		0,00	0,90
II. Industrial leadership, of which:	19.780	22,54	24,30
1. Leadership in enabling and industrial technologies	15.080	17,19	15,80
2. Access to risk finance	4.000	4,56	4,00
3. Innovation in SMEs	700	0,80	4,50
III. Societal challenges, of which:	34.736	39,59	37,40
<i>Science for and with society</i>		0,00	0,40
1. Health, demographic change and wellbeing	8.785	10,01	9,00
2. Food, agriculture, marine research and the bio	4.544	5,18	4,90
3. Secure, clean and efficient energy	6.327	7,21	8,40
4. Smart, green and integrated transport	7.443	8,48	6,90
5. Climate action, resource efficiency and raw	3.458	3,94	4,00
6. Inclusive, innovative and secure societies	4.179	4,76	1,70
<i>7. Protecting freedom and security in Europe</i>		0,00	2,10
European Institute of Innovation and Technology	3.194	3,64	3,30
Non-nuclear direct actions of the JRC	2.212	2,52	2,40
TOTAL	87.740	100,00	100,00

Part II

H2020 Rules for participation



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Rules for Participation: *what's new?* (1)

1. A SINGLE SET OF RULES

- Covering all research programmes and funding bodies
- Aligned to the Financial Regulation, coherent with other new EU Programmes.

2. 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

3. SIMPLE EVALUATION CRITERIA

Excellence – Impact - Implementation

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

5. INTERNATIONAL PARTICIPATION: better protecting EU interests.

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

6. 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.

7. 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.

8. IMPROVED RULES ON INTELLECTUAL PROPERTY

- 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 (eg. common IT platform).**



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Rules for Participation and Dissemination

Main differences between the Council's Partial General Approach and the Commission's Proposal



Horizon 2020 state of play: European Parliament

- **Very detailed discussions in EP:**
- E.g.: Ms Riera Madurell's report on the Framework Programme - 1824 amendments tabled in total.
- Mr Ehler's report on the RfP: 766 amendments tabled in total.
- Ms Carvalho's report on the Specific Programme: 988 amendments tabled in total.
- ITRE voted on H2020 package: 28 November 2012.
- EP Conference of Presidents decided that all EP reports under MFF (e.g. Horizon 2020) will not be adopted in Plenary until agreement is reached on MFF.



Horizon 2020 state of play: Council

- Framework Programme Regulation: Partial General Approach reached on 31 May 2012
- Rules for Participation and Dissemination: Partial General Approach reached on 10 October 2012
- Specific Programme: Partial General Approach expected at the Competitiveness Council of 11 December 2012.

Councils' Partial General Approach: A positive step forward

Main elements of the Commission's proposal are maintained, in particular:

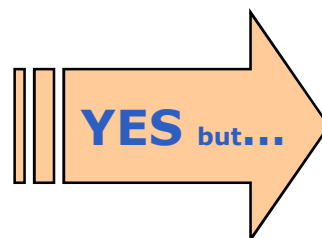
- One project, one rate (although with exceptions)
- Single flat rate for indirect costs
- Open Access
- IPR orientations

A SINGLE FUNDING RATE (Art. 23)

Commission

One project = One rate

- ↪ Same rate for all beneficiaries and all activities in the grant.
- ↪ The rate is fixed ex-ante in the WP (not negotiated per project).
- ↪ Up to 100 % of the total eligible cost
- ↪ Limited to maximum 70 % for actions close to market



**Council
PGA**

"For close-to-market actions, as an exception to paragraph 3 of this Article, the Horizon 2020 grant may reach a maximum of 100% of the total eligible costs for non-profit legal entities, without prejudice to the co-financing principle."

Council PGA

➔ New definition on "close-to-market":

"close-to-market action' means an action 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;

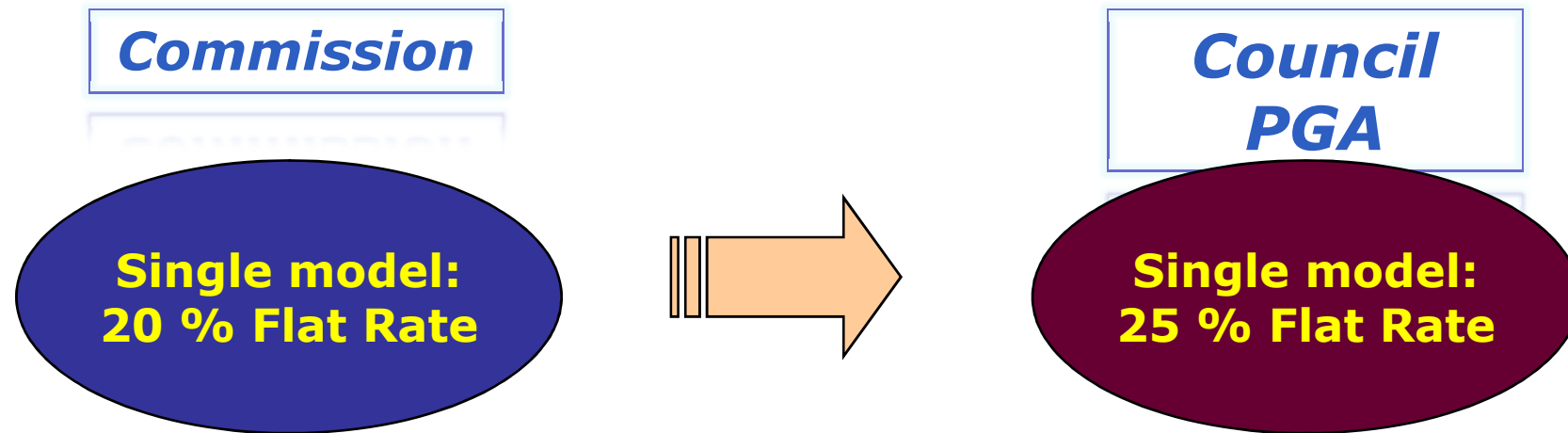
A SINGLE FUNDING RATE (Art. 23)

**Council
PGA**

To be added to recitals:

"[Whereas]: The reimbursement rates mentioned in Article 23 are referred to as maximum in order to comply with the non-profit requirement and the co-financing principle, and to allow participants to ask for a lower rate. By principle, the reimbursement rates should however be 100 or 70%."

INDIRECT COSTS (Art. 24)



Art. 24 PGA:

" 1. Indirect eligible costs shall be determined by applying a flat rate of 25% of the total direct eligible costs, excluding direct eligible costs for subcontracting and the costs of resources made available by third parties which are not used on the premises of the beneficiary, as well as financial support to third parties.

2. By way of derogation from paragraph 1, indirect costs may be declared in the form of a lump sum or scale of unit costs when provided for in the work programme or work plan."

Council PGA

Interim evaluation on the funding levels:

"The interim evaluation of Horizon 2020 shall include an evaluation of the impact of the various features introduced with the new funding levels laid down in Articles 22a, 23 and 24, with the aim to evaluate whether the new approach has led to undesired situations adversely affecting the attractiveness of the Framework programme."

Direct Eligible PERSONNEL COSTS (Art. 22a)

Council PGA

Definition of what is eligible as direct personnel costs:

"1. Without prejudice to the conditions laid down in Article 22, direct eligible personnel costs shall be limited to salaries plus social security charges and other costs included in the remuneration of personnel assigned to the action, arising from the national law or the employment contract."

Direct Eligible PERSONNEL COSTS (Art. 22a)

**Council
PGA**

Additional payments:

"2. Without prejudice to the conditions laid down in Article 22, **additional remuneration** to personnel assigned to the action, including payments on the basis of supplementary contracts regardless of their nature, **may also be considered as direct eligible personnel costs**, up to the amount set out in paragraph 3, if they fulfil the following additional conditions:

(a) It is part of the usual remuneration practices of the participant and is paid in a consistent manner whenever the same kind of work or expertise is required;

(b) The criteria used to calculate the supplementary payments are objective and of general application by the participant, independently from the source of funding used."

3. Additional remuneration may be eligible **up to EUR 8 000 per year and per person**. For a person not working exclusively for the action, a limit per hour shall apply. The limit per hour shall be calculated by dividing EUR 8 000 by the number of annual productive hours calculated in accordance with Article 25.

ANNUAL PRODUCTIVE HOURS (Art. 25)

Commission

The grant agreement shall contain the minimum requirement for the time recording system as well as the number of annual productive hours to be used for the calculation of the hourly personnel rates.

Council PGA

"3. The grant agreement shall contain:

- (a) the minimum requirements for the time recording system;*
- (b) the option to choose between the fixed number of annual productive hours and the method for establishing the number of annual productive hours to be used for the calculation of the hourly personnel rates taking account of the participant's usual accounting practices."*

AWARD CRITERIA (Art. 14)

Commission

Only three criteria

EXCELLENCE

IMPACT

IMPLEMENTATION

**Sole criterion for ERC
frontier research**

**Council
PGA**

2a. The criterion of impact may be given a higher weighting for proposals for close-to-market actions.

**Council
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⇒ **Open access (Art.40):**

The grant agreement may lay down conditions under which open access to result shall be provided...

"taking into account the legitimate interests of the participants and any restrictions due to the protection of intellectual property and security rules. In such case, the work programme or work plan shall indicate if dissemination of research data through open access is required."

Council PGA

- ➔ New definition on "fair and reasonable conditions" (Art.2):

"fair and reasonable conditions' means appropriate conditions including possible financial terms or royalty-free conditions, taking into account the specific circumstances of the request for access, which may be determined by the actual or potential value of the results or background to which access is requested and/or the scope, duration or other characteristics of the exploitation envisaged;"

OTHER RELEVANT CHANGES

✓ **Financial capacity** (Art.14)

"Financial capacity can be guaranteed by any other legal entity, whose financial capacity shall then be verified according to Article 14.5."

✓ **Model Grant Agreement** (Art. 16)

"The Commission shall, in close cooperation with Member States, draw up model grant agreements [...]."

✓ **CoM and systematic errors** (Art. 29)

"Once the Commission has accepted a certificate on the methodology, it shall not attribute any systemic or recurrent error to the accepted methodology."

✓ **Responsibility of the third parties**

Art.19: [The third party] "accepts joint and several liability with the participant for the Union contributions corresponding to the amount declared by the third party."

Art. 32: [...] "the Commission or the relevant Union funding body shall recover directly from participants or third parties any amount owed."



H2020 decision making calendar

- **COM proposal on MFF 2014-2020** **6 July 2011**
- **COM proposals on H2020** **30 November 2011**
- **Council PGA on FP** **31 May 2012**
- **Council PGA on Rules +EIT** **10 October 2012**
- **EP/ITRE vote on H2020 package** **28 November 2012**
- **Council PGA on SP** **11 December 2012**
- **European Council on MFF** **? early 2013**
- **EP/plenary vote on H2020 package** **? early 2013**
- **Council common position** **? 1st quarter 2013**
- **EP+Council 2nd readings/conciliation** **? 2nd/3rd quarter 2013**
- **EP and Council adopt H2020 package** **? before end 2013**
- **H2020 starts, first calls** **1 January 2014**



Thank you for your attention!

Per ulteriori informazioni:

Chiara Pocaterra

APRE

pocaterra@apre.it

Via Cavour 71, Roma

06 48939993