

Sommaire

- > H2020 General presentation, objectives
- > H2020 Architecture
- > Main Funding instruments and funding rules
- > Focus on key thematic/non thematic call proposals
- > Where to find the information
- >Other relevant EU funding opportunities for this audience



HORIZON 2020

General presentation

H2020 – General Presentation

Horizon 2020 – Main R&I funding instrument

H2020 Main features:

- €79 billion Research and Innovation funding programme (2014-2020);
- A core part of Europe 2020, Innovation Union & European Research Area:
 - -Responding to the economic crisis to invest in future jobs and growth
 - -Addressing people's concerns about their livelihoods, safety and environment
 - -Strengthening the EU's global position in research, innovation and technology
- A single programme bringing together three separate programmes/initiatives



- -Coupling research to 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
- 20% of the budget towards SMEs

http://ec.europa.eu/research/participants/portal/desktop/en/home.html



HORIZON 2020

Architecture

3 pillars – 3 objectives

- Pillar 1 « Scientific Excellence » : 24 Md €
 Promote EU scientific excellence, researchers careers and mobility
- Pillar 2 « Industrial Leadership»: 17 Md €
 Investing on key enabling industrial technologies, to strenghthen EU competitiveness, stimulate economic growt of EU companies, in particular SMEs
- Pillar 3 « Societal Challenges » : 30 Md €
 Tackle main societal challenges/ trends faced by EU societies

Thematic calls

Infrastructures (Pillar1)
KET (Pillar 2)
Societal Challenges(Pillar 3)

Open / non thematic calls

FET, ERC Marie-Sklodowska-Curie (Pillar1) Fast track to innovation

Pilar I: Scientific Excellence

- ERC European Research Council: open scientific programme dedicated to exploratory research, excellent research
- FET Future Emerging Technologies: promoting research on emerging scientific and technological fields, high risk and long term opportunities (FET Open, FET Proactive, FET Flagship)
- **European Research Infrastructure:** developp and promote access to EU wide top level research infrastructure
- •MSCA Marie-Sklodowska Curie Actions: promoting researchers careers and mobility (open)

Pillar II: Industrial leadership

• **Key Enabling Technologies (KET):** microelectronics, photonics, nanotechnologies, advanced materials, production systems, biotechnologies

Upstream R&D projects, pilot lines, demonstration/prototyping...

- ICT
- Space
- Access to private financing
- Innovation in SMEs: SME instrument, collaborative project, Eurostars...

Pillar III: Societal Challenges

- 1. Health, demographic change and well being
- 2. Food security, sustainable agriculture, marine and maritime research, and the Bioeconomy
- 3. Secure, clean and efficient energy
- 4. Smart, green and integrated transport
- 5. Climate action, resource efficiency and raw materials
- 6. Inclusive and reflective societies
- 7. Secure societies

Pillar III : Societal Challenges

Key words

- strong involvement of ICT and SSH
- Transversality / Interdisciplinarity
- Even when it is not compulsory, participation of SMEs is a « plus »

SME= for profit private entity, nb of employees below or equal to 250, annual turnover below or equal to 50M ", annual balance below or equal to 43M"

H2020 – Main characterisitcs (projects)

- Multidisciplinary « societal challenges »
- Work Programmes every 2 years (still yearly calls..)
- « Wider » topic description
- « Impact » criteria more important plus important
- Unique funding rate per project (100%/70%)
- Shorten « Time-to-grant » = 8 months (no more negotiation..)

H2020 – Main participation rules

Simplified and unified funding rules

Funding rate HORIZON 2020	Academic		Non Academic		
	Research and Innovation projects	Innovation projects	Research and Innovation projects	Innovation projects	
Direct costs	Funded 100%		Funded 100%	Funded 70%	
Indirect costs	25% of direct costs funded 100%		25% of direct costs funded 100%	25% of direct costs funded 100%	



HORIZON 2020

Main funding instruments

Research and Innovation actions

- Collaborative research project
- « Top-down »
- Min 3 Partner from 3 different countries
- 10 partners in average BUT NO RULE
- 2 to 10 M" grants in average (information given in the WP)
- Duration: 3 to 5 years in general
- Funding rate: 100% of direct costs + 25% of direct costs as a flat rate for indirect costs

Innovation Actions

- Collaborative research project
- « Top-down »
- Strong involvement of industrial sector E leadership
- Applied research, close to market, high TRL level
- Min 3 Partner from 3 different countries
- 10 partners in average BUT NO RULE
- 2 to 10 M" grants in average (information given in the WP)
- Duration: 3 to 5 years in general
- Funding rate: **100**% of direct costs for academics/ **70**% for non-academics + 25% of direct costs as a flat rate for indirect costs

Technology Readiness Level

- TRL 1: basic principles observed
- TRL 2: technology concept formulated
- TRL 3: experimental proof of concept
- TRL 4: technology validated in lab
- TRL 5: technology validated in relevant environment
- TRL 6: technology demonstrated in relevant environment
- TRL 7: system prototype demonstration in operational environment
- TRL 8: system complete and qualified
- TRL 9: actual system proven in operational environment

Coordination and support actions (CSA - CA)

- No research activities . support the coordinations of research activities laready funded (networking, dissemination, coordination, exchange of best practicesõ)
- « Top-down »
- 1 partner minimum
- 0,5 à 1,5 M" grant in average (information in the WP)
- Durée : 1 to 3 years
- Funding rate: 100% of direct costs + 25% of direct costs as a flat rate for indirect costs

Fast track to innovation - FTI

- Transfer of technology, applied research, close to market and commercialisation phase
- Collaborative projects
- « Bottom-up » (normally at or above TRL 6)
- 3 to 5 partners max. from 3 different countries INCLUDING industrial partners (leadership encouraged)
- 3 M" grant max.
- Duration: 2 to 3 years
- ■First call in 2015! Not « tested » yetõ
- Funding rate: **100%** of direct costs for academics/ **70%** for non-academics + 25% of direct costs as a flat rate for indirect costs

Individual projects and fellowships

- Individual fellowships Marie Curie
- Individual projects ERC
- « Bottom-up »
- 1 single organisation in principle
- 0,2 à 3 M" grant
- Durée : 1 to 5 years
- Funding 100% or lump sums.



HORIZON 2020

Non thematic call for proposals Focus on MSCA

H2020 – Non thematic

Summary

- European Research Council (ERC / Pillar 1)
- •Marie-Sklodowska-Curie Actions (Pillar 1)
- Future Emerging Technologies (Pillar 1)
- Fast track to innovation (new instrument, pillar 3)

Les différents types de projets/bourses MSCA

Innovative Training Networks	ITN	Doctoral and initial training
Individual Fellowships	IF	Support for experienced researchers undertaking international and inter-sector mobility
Research and Innovation Staff Exchange	RISE	International and inter-sector cooperation through the exchange of staff
Co-funding of programmes	COFUND	Co-funding of regional, national and international programmes: - doctoral programmes - fellowship programmes

ITN – Innovative Training Networks

- ➤ European Training Networks (ETN): Training network for research and through research associating public and private partners
- ➤ European Industrial Doctorates (EID): Research and training programme associating one industrial partner and one academic partner, from 2 different countries (2 to 5 PhD students recruited).
- ➤ European Joint Doctorates (EJD): Joint Doctoral degree (ex Erasmus Mundus)

ITN — ETN

- > Min 3 partners from 3 different countries
- >6-10 in average
- > Participation of industrials is essential!
- > All partners recruit PhD students (ESRs) for 3 to 36 months
- >ESRs are seconded to other partners'
- ➤ ESRs must not have resided more than 1 year during the last 3 years in the country of the host institution.
- ➤ESRs salary covered 100% + consumables (1800/research-month + overheads and management: 1200€/researchermonth)

ITN - EID

- ➤ **Minimum 2 partners**, 1 academic and 1 industrial from 2 different countries.
- > PhD students recruited for 36 months (between 2 and 5). Each must spent at least 50% of time at the industrial's.
- > ESRs must be registered as PhD students
- ➤ ESRs salary covered 100% + consumables (1800/researchmonth + overheads and management: 1200€/researchermonth)

RISE — Research and Innovation Staff Exchange

- > International and/or intersectorial staff exchange
- > Research, technical and administrative staff eligible
- Reinforce international/intersectorial cooperation, based on a common research programme
- > 3 partners from 3 different countries (plus condition of internationality/intersectoriality)
- > Staff seconded to partners': 1 to 12 months per person (breakable)
- > Organisation of workshops, seminars, conferences, training activities
- >Lump sums: 2000€ (per month salary top up to cover mobility) + 2500€ (for the institution)
- Duration: 4 years

IF – Individual Fellowships

- > Develop research careers and individual competences, through mobility (international and intersectoral)
- ➤ Individual projects, between one researcher (identified) and one organisation (can be a private organisation!)
- > Researcher of all status and nationalities
- > Incoming and outgoing mobility
- ➤ Having stayed less than 12 months within the last 3 years in the country of the Host institution
- Lump sums for allowances and fixed-rate salary



HORIZON 2020

Thematic calls for proposals

Pillar 2 – LEIT – NMP – 22-2015 (2 stage)

Specific challenge: New approaches to improve the functionality of materials are important for the sustainable development of Europe's competitiveness. Fibre-based materials for technical, high -value, high -performance products at reasonable prices, with improved safety and functionality, represent a challenge for materials science and engineering.

Scope: Proposals should aim to develop engineered fibre-based materials for novel, smart, high-value and high-performance non-clothing parts and products for technical and industrial use. New approaches and production technologies will enable a broader spectrum of industrial applications, taking into account, as appropriate, issues of sustainability, recycling, safety, energy, and self-cleaning or other functionalities. Portable final products may also be considered. In order to ensure the industrial relevance of the research, the cost effectiveness and commercial potential of the innovative technologies compared to state-of-the-art solutions currently available on the market should be quantitatively monitored during the project. A market estimate should be outlined in proposals and developed in projects, with recommendations for future industrial uptake.

Proof of concept in terms of product and/or process must be delivered within the project, excluding commercially usable prototypes, but convincingly demonstrating scalability towards industrial needs. Dedicated multiscale modelling and characterisation, and standardisation or the production of (certified) reference materials may also be addressed.

Activities expected to focus on Technology Readiness Level 5-6. The Commission considers that proposals requesting a contribution from the EU between EUR 6 and 8 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact:

- · Increase in competitiveness and sustainability of European multiple sectors industry through innovative high value products and manufacturing processes;
- · Employment and training through engagement in cutting edge technologies in various sectors, e.g. transport, construction, sport and leisure etc.

Type of action: Innovation Actions

Pillar 2 – LEIT – NMP – 22-2015 (2 stage)

- > Stage 1: 26-03-2015
- > Stage 2: 08-09- 2015

 \triangleright Project start = s(2) + 8 months = May 2015

Pillar 3 – SC6 – INT – 12 - 2015 (1 stage)

Specific challenge: A shared history, as well as cultural, political and economic ties, closely connect Europe and Latin America and the Caribbean (LAC). Individual countries enjoy close bilateral relations, and cooperation at regional and sub-regional level is gaining momentum. At bi-regional level, the Strategic Partnership between the EU and LAC was launched in Rio de Janeiro in 1999 and has gradually been upgraded into the current EU-CELAC[1] Partnership Today, the European Union is the leading investor in the region, the second largest trading partner after the U.S.A. and a major provider of development cooperation assistance. However, beyond the economic relationship, the EU-CELAC cooperation needs to reinforce the cultural, scientific and social ties and common vision between the two world regions.

Scope: Research under this topic should critically examine past and present cultural, scientific, intellectual and social exchanges between individuals, countries and regions within the wide EU-CELAC area, with a view to determining synergies and cross-fertilization, as well as identifying asymmetries in bi-lateral and bi-regional relations. The cultural exchanges between EU and LAC should be studied, as for instance those brought about through long-standing migration movements between the two regions, as well as those taking place in fields such as arts, literature, sports and beyond. Scientific exchanges between EU and LAC should also be examined in an historical and forward-looking perspective and research should look at how mobility of researchers and cooperation between research institutions and laboratories can contribute to an increased understanding and cooperation between the two sides. Research could also shed light on how LAC representative groups of citizens perceive the role of Europe in their own continent and the process of European integration, more generally. The social dimension of the EU-CELAC relation should also be taken into consideration. Research could look at the impact of the EU-CELAC relation on the promotion of social cohesion in the two regions and at how different approaches to fight social exclusion and regional disparities can be successfully shared and applied to different contexts. Research should be focused on those areas that are deemed crucial to explain the current state of play of relations between EU and LAC, and those that are considered strategic for future interaction and cooperation between the two regions. Proposals shall include at least three legal entities established in three different LAC countries. However, an even broader participation of international partners from the LAC countries in proposals submitted to this call is encouraged. The Commission considers that proposals requesting a contribution from the EU of between EUR 1.5 and 2.5 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact: Research under this topic will provide a better understanding of the cultural, scientific and social dimension of the relationship between the EU and LAC, Research will contribute to the understanding of the role of social actors in both societies and to encourage mutual knowledge between the two regions, thus feeding into the work of the EU-LAC Foundation[2]. Research is also expected to inform the on-going bi-regional networking activities of the JIRI and the work of the Trans-Atlantic Platform for the Social Sciences and Humanities (T-AP).

Type of action: Research and innovation actions

Pillar 3 — SC6 — INT — 12 - 2015 (1 stage)

> Deadline: 07-01-2015

> Project start = + 8 months = September 2015

Pillar 2/3 – SME Instrument

SME instrument: main features

- Targeted at all types of innovative SMEs showing a strong ambition to develop, grow and internationalise
- Bottom-up approach within the frame of the societal challenges and enabling technologies
 → each SC & LEIT defines a broad topic
- Only SMEs will be allowed to apply for funding and support
- Single company support possible
- No obligation for applicants to sequentially cover all three phases; each phase open to all SMEs
- 70% funding (exceptions possible)
- Continuously open call with cut-off dates:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-smeinst-1-2014.html

Pilier	Programme	Topic	Budget 2014	Budget 2015
Societal challenges5	Climate Action, Environment, Resource Efficiency and Raw materials	SC5_20 Boosting the potential of small businesses for eco-innovation and a sustainable supply of raw materials		19M€
Societal challenge 2	Food security, sustainable agriculture and forestry, marine and maritime and inland water research, the bioeconomy	BG 12 Supporting SMEs efforts for the development - deployment and market replication of innovative solutions for blue growth	9M€	17 M€
Societal challenge 2	Food security, sustainable agriculture and forestry, marine and maritime and inland water research, the bioeconomy	SFS 8 Resource-efficient eco-innovative food production and processing		
Societal challenge 1	Health, demographic change and wellbeing	PHC 12 Clinical validation of biomarkers	66.10 M€	45.10 M€
Societal challenges 6	Inclusive, Innovative and Reflective societies	DRS 18 SME instrument topic: "Protection of Urban soft targets"		
Societal challenge 6	Inclusive, Innovative and Reflective societies	INSO 13 SME business model innovation for inclusive societies		6,65M€
Societal challenge 6	Inclusive, Innovative and Reflective societies	INSO 9 Innovative mobile e-government applications by SMEs	4M€	
Societal challenge 6	Inclusive, Innovative and Reflective societies	REFLECTIVE 11 Innovative use of cultural heritage by SMEs	4M€	
Societal challenge 7	Secure, Clean and Efficient Energy	EE 17 Development and demonstration of energy-efficient products, processes and services by SMEs	6M€	9M€
Societal challenges	Secure, Clean and Efficient Energy	SIE 1 Exploiting the research and innovation potential of SMEs in a low carbon energy system	27,97M€	28,26M€
Societal challenges	Smart, Green and Integrated Transport	IT.1 Small business innovation research for Transport	35,87M€	38,96M€
Industrial Leadership	Espace	SME Instrument Call 2014 and 2015	8,5 M€	8,75 M€
Industrial Leadership	ICT	ICT 35 - 2014-15: Open Disruptive Innovation Scheme	45M€	45M€
Industrial Leadership	NMP/BIO	BIOTEC 5 - 2014-2015: SME boosting biotechnology-based industrial processes driving competitiveness and sustainability	3.8 M€	2.4 M€
Industrial Leadership	имр/віо	NMP 25 – 2014: Accelerating the industrial uptake of nanotechnologies or advanced materials, advanced manufacturing and processing by SMEs	21,8 M€	23,8M€

SME Instrument presentation

Phase 3 = 2% budget

Phase 1: Concept and feasibility assessment

Input: Idea/Concept:
 "Business Plan 1"
 (~ 10 pages)
 10% budget

Activities:

Feasibility of concept
Risk assessment
IP regime
Partner search
Design study
Pilot application
etc.

10% success

30-50% success

Output: elaborated "Business plan 2" Lump sum: 50.000 €

~ 6 months

Phase 2: R&D, demonstration, market replication

Input: "Business plan
2" plus description of activities under Phase
2 (~ 30 pages)
88% budget

Activities:

Development,
prototyping, testing,
piloting,
miniaturisation,
scaling-up, market
replication,
research

Output: "investorready Business plan 3" 500 000-2.5M€ EC

funding ~ 12 to 24 months

Phase 3: Commercialisation

Promote instrument as quality label for successful projects

Facilitate access to private finance

Support via networking, training, information, addressing i.a. IP management, knowledge sharing, dissemination

SME window in the EU financial facilities (debt facility and equity facility)

Possible connection to PPC (and PPI?)

H2020 – Thematic calls

Pillar 2/3 – SME Instrument

Opening: 01/03/2014 for phase 1 and phase 2

Cut-off dates

2014		2015	
Phase 1	Phase 2	Phase 1	Phase 2
18/06/2014 24/09/2014 17/12/2014	09/10/2014 17/12/2014	[18/03/2015 17/06/2015 17/09/2015 16/12/2015]	[18/03/2015 17/06/2015 17/09/2015 16/12/2015]



HORIZON 2020

Where to find the information?

H2020 - Information

Links

> Participant Portal de la Commission Européenne

(http://ec.europa.eu/research/participants/portal/desktop/en/home.html)

National Portal H2020

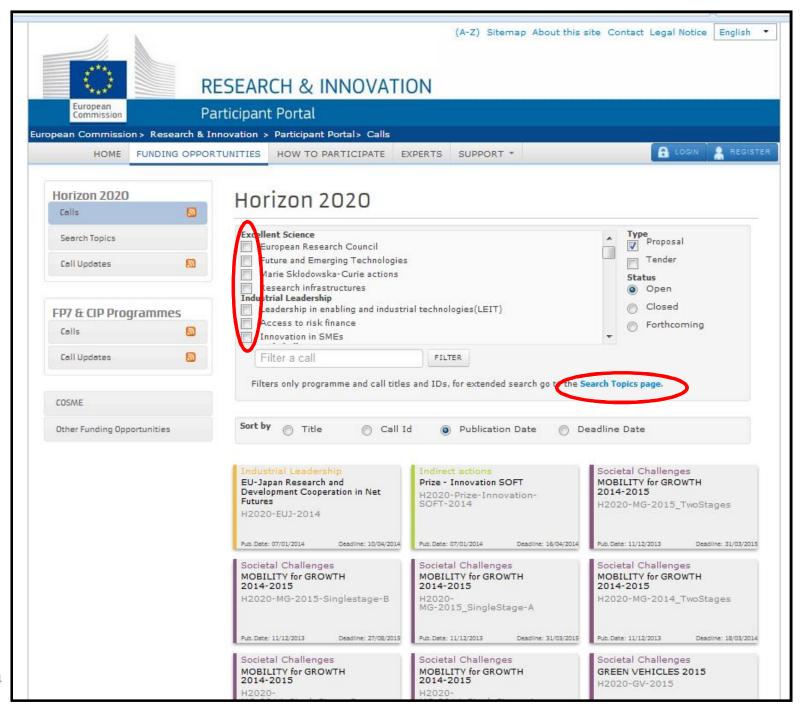
(www.horizon.gouv.fr/)

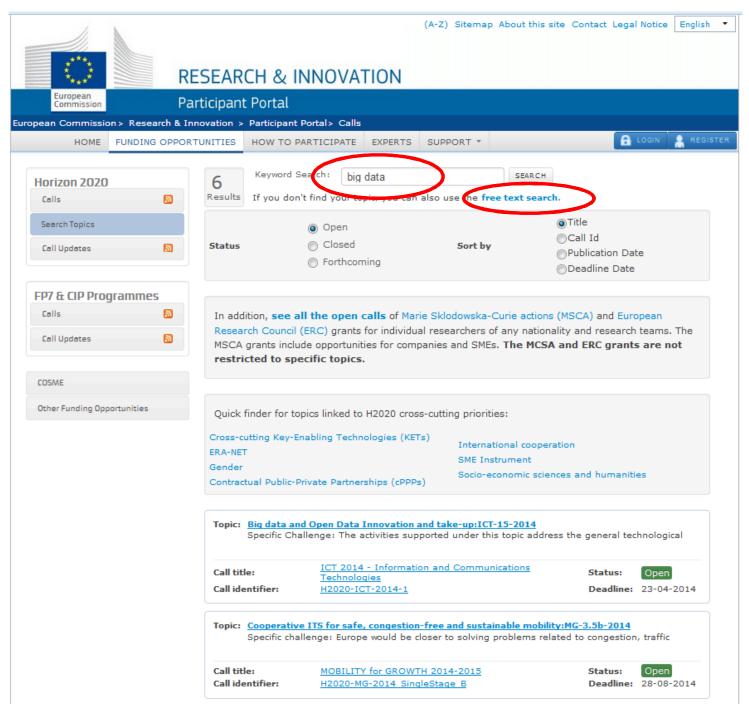
- ➤ EEN (Enterprise Europe Network) (http://een.ec.europa.eu/services/going-international)
- ➤ CORDIS partner service (https://cordis.europa.eu/partners/web/guest/home)

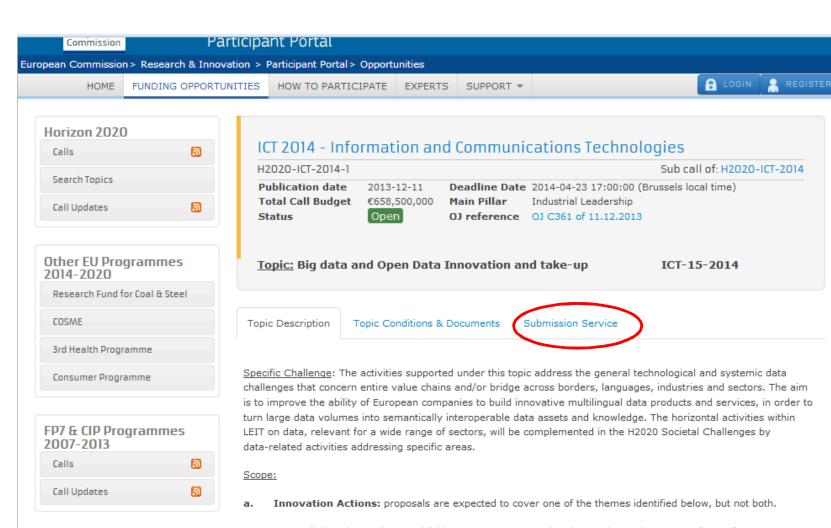


16/06/2014









- One collaborative project establishing a European open data integration and reuse **incubator** for **SMEs** to foster the development of **open data supply chains** and to educate and assist new users. Proposals are expected to:
- Identify significant opportunities to establish supply chains for products and services, based on open data resources;
- Attract the participation of European companies willing to contribute some of their own data assets as open data for experimentation or to integrate open data with their own private data as the basis for innovative applications.
- Attract and manage SMEs interested in business or technology innovation in particular on open data.
- Link to and reuse data from the European Union Open Data Portal or other local, regional or national Open Data portals, as well as to the CEF programme.

Other Funding Opportunities



Other EU Funding opportunities

EUROSTARS 2

Erasmus + - Actions in the field of Sport

Other EU Funding

Eurostars 2

- ***Objectives: Develop new /innovative products, processes, services**
- **♦ Bottom-up all activity sectors**
- ***Targeting Innovative SMEs (research performing), but not exclusively**
- **❖Leader must be a research performing SME**
- **❖Partnership** = 2 SMEs from 2 different countries min.
- **❖Duration between 2-3 years**
- *Results must be commercialised within 2 years after the end of the project
- **❖Each** country finances its own participants « national » rules apply for funding (France = BPI)
- **♦Next Deadline (2 per year: September/March) = 11 September 2014!**
 - http://www.eurostars-eureka.eu

Other EU Funding

Erasmus + - Sport Actions (1)

- Collaborative partnerships: to develop/transfer/implement/share innovative practices in the field of sport, aiming at:
 - **❖Combat doping, violence, intolerance..**
 - **❖Prevention, awareness raising, education, encourage good practices**
 - **❖Support implementation of EU policies/guidelines in the field**
- *Finances networking, development of training/education modules, prevention/promotion activities, collection of data, surveys, conferences, seminars, meetings, etc.
- ❖!! Open only to non-profit organisation and public bodies !!
- ❖12 to 36 months, 500 000 eur max. / 80% co-funding, 5 partners min. from 5 different countries
- ❖Next deadline 26 June 2014!
 - http://ec.europa.eu/programmes/erasmus-plus/index_en.htm

Other EU Funding

Erasmus + - Sport Actions (2)

- ❖Not-For-Profit European Sport Events: to support participation in Sport, encourage physical activity, encourage social inclusion, gender equality, etc.
- **❖Finances organisation of training activities for athletes, coaches, organisers, volunteers, events organisation, side activities (conferences..)legacy activities (evaluation, drafting of future plans..)**
- ❖!! Sport competitions regularly organised by international, national sport federations/leagues are NOT eligible, neither as professional sport competitions..
- *!! Open only to non-profit organisation and public bodies active in the field of sport !!
- **❖The event must involve at least 12 participants from 12 different countries,**
- **♦ Project duration up to 12 months, 2 000 000 € max. / 80% co-funding**
- ❖Next deadline: 26 June 2014!
 - http://ec.europa.eu/programmes/erasmus-plus/index_en.htm



Thank you for your attention

Magali BAYSSIERE

Lyon Ingénierie Projets

Magali.bayssiere@lip-lyon1.fr

Member of the H2020 National Contact Point network, representing Université Lyon 1