

# **FP7 2013 Work Programmes International Dimension**

# **Opportunities for the African Countries**





## **FP7 Work Programmes 2013**

All relevant information available on the FP7 participants portal :

http://ec.europa.eu/research/participants/portal

legal basis for the implementation of FP7

*full information on the calls for proposals to be published in 2012-2013 (details of activities, budgets and calls timing)* 



## **FP7 Work Programmes 2013**

• Work programme of actions of over €9,4 billion including:

Project calls open for international partners	€4.84 billion
People (Marie S. Curie Grants)	€ 0,97 billion
Ideas (European Research Council grants)	€ 1,75 billion
Iter	€ 0,94 billion
Other (special actions, general and other activities)	€ 0,89 billion





# **Participation of African countries in FP7**

### - All areas of FP7 open to the participation of African countries

- All African countries are 'International Cooperation Partner Country' (ICPC) 
Same overall rights and obligations as EU Member States

- Consortia must have the minimum required number of EU Member States/Associated Countries participants



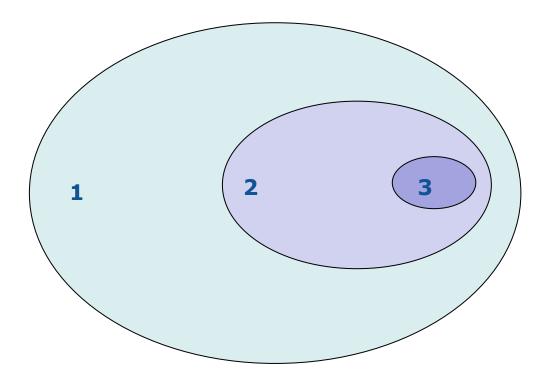


## The 4 FP7 Specific Programmes (SP)

<b>COOPERATION</b> Collaborative research 10 Thematic Areas	IDEAS	PEOPLE	CAPACITIES
1 Health	Supporting,	Strengthening the human potential in research and	1 Research Infrastructures
2 Food, Agri & Biotech	investigator-driven research projects	technology in Europe	Innastructures
3 ICT	carried out across all fields		2 Research for the
4 Nano- sciences/technology		Initial Training of Researchers	benefits of SMEs
Materials and new production technologies		Life-long training &	3 Regions of Knowledge
5 Energy		Career Development	4 Research Potential
6 Environment		Industry-academia	5 Science in Society
7 Transport (incl. AERO)		pathways	
8 Socio Economic Sciences and the Humanities		International Dimension	6 Support for the coherent development of research policies
9 Space		Specific support action	7 International
10 Security			Cooperation



#### **FP7 WP2013 INTERNATIONAL DIMENSION : GENERAL / TARGETED OPENING**



**1. GENERAL OPENING : All** FP7 WP 2013 Activities **open to international cooperation** 

2. TARGETED OPENING (A) : FP7 WP 2013 Activities with a focus on international cooperation, including but not restricted to African countries

**3. TARGETED OPENING (B) :** FP7 WP Activities with a **focus on international cooperation specifically targeting** African countries



# **1. GENERAL OPENING**

Main activities addressed in the FP7 Thematic Work Programmes 2013 (All open to international cooperation)





# SPECIFIC PROGRAMME "COOPERATION"





### 1 Health

**1.1)Biotechnology, generic tools and medical technologies for human health** 

- Detection, diagnosis and monitoring
- Suitability, safety, efficacy of therapies
- Innovative therapeutic approaches and interventions
- 1.2) Translating research for human health
  - Large-scale data gathering, systems biology
  - Brain research
  - Translational research in major infectious diseases
  - Translational research in other major diseases
- **1.3) Optimising healthcare delivery to EU citizens**
- **1.4) Other actions** 
  - Coordination and support actions
  - Responding to EU policy needs



### 2 Food, Agriculture and Fisheries, Biotechnology

#### **Knowledge-Based Bio-Economy (KBBE)**

2.1) Sustainable production and management of biological resources from land, forest and aquatic environments 2.2) Fork to farm: Food (including seafood), health and wellbeing

2.3) Life sciences, biotechnology and biochemistry for sustainable non-food products and processes.





### **3 Information and Communication Technologies**

- **3.1) Pervasive and Trusted Network and Service Infrastructures**
- **3.2) Cognitive Systems and Robotics**
- **3.3) Alternative Paths to Components and Systems**
- **3.4) Technologies for Digital Content and Languages**
- **3.5) ICT for Health, Ageing Well, Inclusion and Governance**
- **3.6) ICT for a low carbon economy**
- **3.7) ICT for the Enterprise and Manufacturing**
- **3.8) ICT for Learning and Access to Cultural Resources**
- **3.9) Future and Emerging Technologies**





4 Nanosciences, Nanotechnologies, Materials and new Production technologies – NMP

- 4.1) Nanosciences and nanotechnologies
- 4.2) Materials
  - New precursors, processing routes and functionalities for carbon fibres
  - Innovative materials for advanced applications
- 4.3) New production
  - Monitoring and assessing resource efficiency
  - Sustainable production in farms and forests

**4.4) Integration** (*integration of new knowledge from nano-, materials-, and production technologies in sectoral and cross-sectoral applications*)

**4.5)** Public-private partnerships ("Factories of the Future"; "Energy-efficient buildings"; "Green cars")





### **5 Energy**

- 5.1) Hydrogen and Fuel Cells
- 5.2) Renewable Electricity Generation
- **5.3) Renewable Fuel Production**
- 5.4) Renewables for Heating and Cooling
- 5.5) CO2 Capture and Storage Technologies for Zero Emission Power Generation
- 5.6) Clean Coal Technologies
- 5.7) Smart Energy Networks
- **5.8) Energy Efficiency and Savings**
- 5.9) Knowledge for Energy Policy Making
- 5.10) Horizontal Programme Actions





### 6 Environment (including Climate Change)

**6.1) Coping with climate change** (fundamental processes that couple land surface, atmosphere, ice-caps and oceans as well as the cumulative effects of climatic and non-climatic stressors on marine geochemistry and biodiversity)

**6.2) Sustainable use and management of land and seas** (*To improve the knowledge base on how ecosystems react to pressures*)

**6.3) Improving resource efficiency** (development and testing of highly eco-innovative technologies, processes and services to valorise urban wastes and recover raw materials from industrial wastes

6.4) Protecting citizens from environmental hazards. 6.5) Mobilising environmental knowledge for policy, industry and society



### 7 Transport (including aeronautics)

- 7.1) Eco-Innovation (greening of air transport)
- 7.2) Safe and Seamless Mobility
- **7.3) Competitiveness Through innovation** (improving cost efficiency, protection of aircraft and passengers, pioneering the air transport of the future)
- 7.4) Sustainable Surface Transport (including the "European Green Cars Initiative")





#### **8 Socio-economic sciences and humanities**

8.1) Growth, employment and competitiveness in a knowledge society – the European case.

- 8.2) Combining economic, social and environmental objectives in a European perspective Paths towards sustainable development.
- 8.3) Major trends in society and their implications
- 8.4) Europe in the world
- 8.5) The Citizen in the European Union
- 8.6) Socio-economic and scientific indicators
- 8.7) Foresight activities

**8.8) Horizontal actions** (*analysis and evaluation of outcomes of EU funded research in socio-economic sciences and humanities in the context of their contribution to building the European Research Area*)





### 9 SPACE

**9.1) Space-based applications at the service of European society** 

- Pre-operational validation of GMES services and products
- Integration of satcom and satellite navigation solutions with space-based observing systems
- Coordinated provision of observation data
- Development of earth observation satellites
- Continuity of GMES services in the areas of Marine and Atmosphere

**9.2) Strengthening foundations of space science and technology** (exploration, space transportation, reducing vulnerability of space assets)

**9.3) Cross-cutting activities** (*SME technology transfer, international cooperation*)



### **10 Security**

- **10.1) Security of Citizens**
- **10.2) Security of Infrastructures and Utilities**
- **10.3) Intelligent Surveillance and Border Security**
- **10.4) Restoring Security and Safety in Case of Crisis**
- **10.5) Security Systems Integration, Interconnectivity** and Interoperability
- **10.6) Security and society** (*Cultural and socio-economic, as well as systemic risk analyses, scenario building and other research activities related to subjects such as Security as an evolving concept, others*)
- **10.7) Security research coordination and structuring** (Develop synergies between civil, security and defence research as well as to coordinate between the demand and the supply side of security research.)





#### **Cross-thematic Call "The Ocean of Tomorrow 2013"**

- Cross thematic call focusing on marine technologies
- Three key areas will be tackled:
- sensing technologies that are necessary to improve reliable measurements of key parameters in the sea,
- new materials that can avoid bio-fouling on mobile and stationary structures, and
- ✓ innovative transport and deployment systems for the energy sector.





# SPECIFIC PROGRAMME "CAPACITIES"





### **1** Research infrastructures

# **1.1)** Support to existing infrastructures /e-infrastructures)

(Deployment, operation and evolution of the pan-European high-capacity and high-performance communication networking (GÉANT) as well as the deployment of user-centric services.)





#### **2** Research for the Benefit of SMEs

#### 2.1) Research for SMEs

('Research for SMEs' supports small groups of innovative SMEs in solving technological problems and acquiring technological know-how.)

#### 2.2) Research for SME Associations (SME-AGs)

('Research for SME Associations' supports SME associations to develop technological solutions to problems common to a large number of SMEs in specific industrial sectors or segments of the value chain through research.)

#### **2.3) Demonstration activities**

**2.4) Coordination and support action** (preparing the H2020 support function for SMEs)



### **5 Science in Society**

**5.1) A more dynamic governance of the science and society relationship** (Relationships between science, democracy and law; broader engagement to anticipate and clarify political, societal and ethical issues; improve access to S&T results,...)

#### 5.2) Strengthening potential, broadenning horizons

(promoting gender equality, youth awareness, science education in schools)

**5.3) Science and society communicate** (EU contest for young scientists, interaction with media)



#### **6 Support for the Coherent Development of Research Policies**

Activity A - Providing evidence-base and monitoring of R&I policies and supporting policy coordination to tackle societal challenges by increasing synergies and consistency at the EU level.

Activity B - Supporting a single market for R&I and delivering the ERA Framework with a focus on topics underpinning policies that foster excellent science

Activity C - Analysing how to improve the business environment and foster European partnerships in R&I in view of unleashing the EU's innovation potential,





- **7** Activities of international Cooperation
- 7.1) Bi-regional coordination of Science & Technology Activity
- 7.2) Bilateral coordination for the enhancement and development of S&T Partnerships
- 7.3) Supporting the coordination of national policies and activities of Member States and/or Associated States on international S&T cooperation
- **7.4) Supporting awareness raising of Horizon 2020 in third countries**





# SPECIFIC PROGRAMME "PEOPLE"





#### **SP People**

#### **Activity 1: Initial Training of Researchers**

1.1 MARIE CURIE ACTION: INITIAL TRAINING NETWORKS (ITN)

#### **Activity 2: Life-Long Training and Career Development**

2.1 MARIE CURIE ACTION: INTRA-EUROPEAN FELLOWSHIPS FOR CAREER DEVELOPMENT (IEF)

2.2 MARIE CURIE ACTION: CAREER INTEGRATION GRANTS (CIG)

2.3 MARIE CURIE ACTION: CO-FUNDING OF REGIONAL, NATIONAL AND INTERNATIONAL PROGRAMMES (COFUND)





#### **SP People**

# **Activity 3: Industry-Academia Partnerships and Pathways**

3.1 MARIE CURIE ACTION: INDUSTRY-ACADEMIA PARTNERSHIPS AND PATHWAYS (IAPP)

#### **Activity 4: World Fellowships**

4.1 MARIE CURIE ACTION: INTERNATIONAL OUTGOING FELLOWSHIPS FOR CAREER DEVELOPMENT (IOF)

4.2 MARIE CURIE ACTION: INTERNATIONAL INCOMING FELLOWSHIPS (IIF)

4.3 MARIE CURIE ACTION: INTERNATIONAL RESEARCH STAFF EXCHANGE SCHEME (IRSES)

#### **Activity 5: Specific Actions**

5.1 RESEARCHERS' NIGHT (NIGHT)





# SPECIFIC PROGRAMME "IDEAS"





#### **SP Ideas**

- Research at the frontier of knowledge mainly on physical sciences and engineering; life sciences; social sciences and humanities

- All calls are open to researchers of any nationality who intend to establish and conduct partly their research activity in any EU Member state or FP 7 associated country.

- Starting Grants Call / publication 10 July 2012
- Advanced Investigator Grants Call / publication 7 November 2012
- Advanced Grants Call / publication 7 November 2012
- ERC Synergy Grants Call / publication 10 October 2012





## **2. TARGETED OPENING** (A) Activities with a focus on international cooperation, including but not restricted to African countries





THEME	ΑCTIVITY	TARGET	Type + budget	Call opening
SP Cooperation /KBBE	2.3.1 Plant high value products- from dicovery to final products	All ICPC countries	Collaborative research projects/20M€	10/07/2012
SP Cooperation /ICT	3,3 Heterogeneous integration and take-up of Key Enabling Technologies for components and systems	All third countries	IP/STREP, CSA /3 M€	10/07/2012
SP Cooperation /ICT	3.9.4 International cooperation on FET research	All third countries	Additional funding to existing grants (IP, STREP)/2M€	10/07/2012
SP Cooperation /ICT	3.10.3 International partnership building and support to dialogues	ACP, Asia, Eastern Europe, Central Asia, Canada, USA, East Asia, Oceania, Latin America, MPC.	CSA / 8 M€	10/07/2012
SP Cooperation /NMP	4.4.0-5 Deployment of societally beneficial nano and/or technologies in ICPC	All ICPC countries	Coordination and Support Actions/included in a broader call of 13,9M€	10/07/2012



THEME	ΑCTIVITY	TARGET	Type + budget	Call opening
SP Cooperation/ Transport	7.3.1 Human factors (aeronautics / customer safety)	All third countries	Collaborative reserach projects/5M€	10/07/2012
SP Cooperation/ Transport	7.7.2 Coordinating research and innovation on sustainaible alternative fuels for aviation	All third countries	Coordination and Support actions/1,2M€	10/07/2012
SP Cooperation/ Transport	7.4.3 Biomechanics and advanced digital human body models and testing for vehicle safety	All third countries	Collaborative research projects/3M€	10/07/2012
SP Cooperation/ Environment	6.1-1 Climate-related ocean processes and combined impacts of multiple stressors on the marine environment	All third countries	Collaborative research projects/9M€	10/07/2012
SP Cooperation/ Environment	6.1-2 Atmospheric processs, eco-systems and climate change	All third countries	Collaborative research projects/9M€	10/07/2012
SP Cooperation/ Environment	6.1-3 Impacts of higher-end scenarios (global warming > 2° C with respect to the pre-industrial level)	All third countries	Collaborative research projects/9M€	10/07/2012



THEME	ΑCTIVITY	TARGET	Type + budget	Call opening
SP Cooperation/ Environment	6.1-4 Land cover and land use change and climate change mitigation	All third countries	Collaborative reserach projects/6M€	10/07/2012
SP Cooperation/ Environment	6.1-5 Quantification of consumption-based emissions of greenhouse gasses and assessment of policy options	All third countries	Collaborative research projects/3M€	10/07/2012
SP Cooperation/ Environment	6.1-6 Economics of adaptation to climate change	All third countries	Collaborative research projects/3M€	10/07/2012
SP Cooperation /Environme nt	6.2-6 Improved monitoring of the impact of cultivation on the environment using global earth observations	All third countries	Collaborative research projects/9M€	10/07/2012
SP Cooperation/ Environment	6.3-3 Contribution to the assessment of global water resources through the use of new earth observation datasets	All third countries	Collaborative research projects/9M€	10/07/2012





THEME	ΑCTIVITY	TARGET	Type + budget	Call opening
SP Cooperation/ Energy	5.6.1.1 Combined underground coal gasification and CO2 capture and storage	All third countries	Collaborative reserach projects/included in a broader call of 28,5M€	10/07/2012
SP Cooperation/ Social sciences & humanities	8.2.1.3 The role of multinational companies in addressing global development challenges	All ICPC, minimum conditions for ICPC partners apply to Africa	SICA /2,5M€	10/07/2012
SP Cooperation/ Security	10.2.4-1 Phase II demonstration programme on logistics and supply chain security	All third countries	Collaborative research projects	10/07/2012
SP Capacities/ International cooperation	7.4 Supporting the awareness-raising of Horizon 2020 in thrid countries	All third countries	Coordination Actions/1M€	10/07/2012



# 3. TARGETED OPENING (B)

Activities with a focus on international cooperation, specifically targeting African countries





THEME	ΑCTIVITY	TARGET	Type + budget	Call opening
SP Cooperation/ ICT	EU-South Africa cooperation on future internet experimental research nad testbed interconnection.	South Africa	CSA /0,5 M€ STREP /1 M€	10/07/2012





#### **THANK YOU FOR YOUR ATTENTION!**

