



**The EU's  
FP7 2013 Work Programmes  
International Dimension  
Opportunities for JAPAN**

Research and  
Innovation



**The last year of Framework Programme 7**

- **New calls**
- **have been published**
- **on 20 July 2012**

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**Example:**

- **SYNER-G**
- **Systemic seismic vulnerability and risk analysis for buildings, lifeline networks and infrastructures safety gain**
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**SYNER-G main goals:**

- *(1) To elaborate appropriate, in the European context, fragility relationships for the vulnerability analysis and loss estimation of all elements at risk, for buildings, building aggregates, utility networks (water, waste water, energy, gas), transportation systems (road, railways, harbors) as well as complex medical care facilities (hospitals) and fire-fighting systems. (2) To develop social and economic vulnerability relationships for quantifying the impact of earthquakes. (3) To develop a unified methodology, and tools, for systemic vulnerability assessment accounting for all components (structural and socio-economic) exposed to seismic hazard, considering interdependencies within a system unit and between systems, in order to capture the increased loss impact due to the interdependencies and the interactions among systems and systems of systems.*

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**Coordinator**  
**ARISTOTELIO PANEPISTIMIO THESSALONIKIS HELLAS (+)**

- Participants**

• UNIVERSITA DEGLI STUDI DI PAVIA	ITALIA
• UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA	ITALIA
• MIDDLE EAST TECHNICAL UNIVERSITY	TURKEY
• WILLIS LIMITED	UNITED KINGDOM
• UNIVERSITY OF PATRAS	HELLAS
• COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	
• THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS	UNITED STATES
• VCE HOLDING GMBH	ÖSTERREICH
• STIFTELSEN NORGES GEOTEKNISKE INSTITUTT	NORGE
• AMRA - ANALISI E MONITORAGGIO DEL R ISCHIO AMBIENTALE SCARL ITALIA	
• <b>NATIONAL UNIVERSITY CORPORATION KOBE UNIVERSITY JAPAN</b>	
• BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES	FRANCE
• KARLSRUHER INSTITUT FUER TECHNOLOGIE	DEUTSCHLAND

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## EU-Japan Science & Technology Agreement

- Entered into force on 29 March 2011
- With the S&T Agreement EU and Japan express their wish to collaborate more effectively in the field of Science and Technology
  - First bilateral meeting held in Tokyo in June 16 2011
  - The second will be in Brussels in early 2013




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## How to collaborate

- As the European Union (EU) is consisting of 27 countries
- All 27 countries have their own science landscape -
- We have developed a very successful international tool to collaborate in S&T
- With the Research Framework Programme we connect our best forces through the collaboration in joint projects

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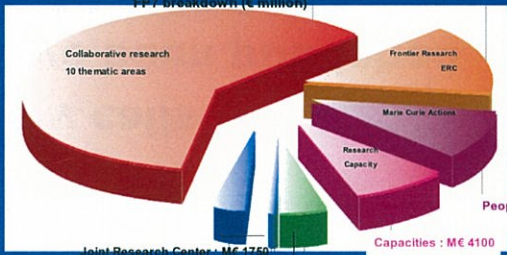
## FP7 budget (2007-2013)

Total budget : €53 500m

Cooperation : €22 500m      Ideas : €7 510m

FP7 breakdown (€ million)

Collaborative research  
10 thematic areas



Frontier Research  
ERC

Marie Curie Actions

Research Capacity

People : €4 750m

Joint Research Centres : €1 750m

Capacities : €4 100m

Euratom : €2 750m

Nuclear research

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## FP7 2007 – 2013

4

Tri Y

Cooperation

32.413 M€

1. Health
2. Food, Agriculture & Biotechnology
3. Information & Communication Technologies
4. Nanosciences, Nanotechnologies, Materials & new Production Technologies
5. Energy
6. Environment (including Climate Change)
7. Transport (including Aeronautics)
8. Socio-economic Sciences & Humanities
9. Space
10. Security



## Principles of Participation of Japan in FP7

- All areas of FP7 open to the participation of Japanese researchers and/or research organisations on the basis of mutual benefit and reciprocity
- Consortia must have the minimum required number of EU Member States/Associated Countries
  - (normally 3 Member States/Associated States participants)

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For Japanese participant co-funding is needed

- **Japan as an industrialised country needs to come into the projects with co-funding**
- **At present there are three possibilities of cooperation:**
  1. If an institution has its own funds - it can cooperate
  2. If a joint call has been negotiated with JST or NEDO or METI or a science funding agency will co-fund
  3. Or if the contribution of the Japanese partner is indispensable for the project

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10 July 2012



CALLS OPEN for 2013

All further information on

- [http://ec.europa.eu/research/participants/portal/page/fp7\\_calls](http://ec.europa.eu/research/participants/portal/page/fp7_calls)
- <http://cordis.europa.eu/fp7/>

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## FP7 Work Programmes

- Legal basis for the implementation of FP7
- Contain full information on the calls for proposals to be published in 2012-2013
  - Details of topics and expected impacts,
  - budgets and timing of calls etc
- **Work programme of actions, - over €9,4 billion, incl:**
  - Cooperation 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



**For 2013**  
**3 calls are opening**  
**that are be jointly funded by Japan and the EU**

### "Substitution of Rare Earth" –

- JST (10 July)

### "The Future of the Internet" –

- MIC/NICT (2<sup>nd</sup> October)

### "High speed aircraft" – METI

- Together with RF and AU



## International Cooperation

Four calls - 10 July

Focus on:

- Bi-regional coordination of S&T cooperation including priority setting and definition of S&T cooperation policies (FP7-INCO-2013-1, INCO-NET)
- **Bilateral coordination for the enhancement and development of S&T Partnerships (FP7-INCO-2013-2, BILAT open for Japan)**
- Supporting the coordination of national policies and activities of Member States and/or Associated States on international S&T cooperation (FP7-INCO-2013-3, ERA-NET /ERA-NET PLUS)
- Supporting the trans-national activities of International Cooperation NCPs (FP7-INCO-2013-4, INCO-NCP)
- Reinforcing cooperation with European Neighbourhood Policy countries on bridging the gap between research and innovation (FP7-INCO-2013-9, R2I-ENP)



## Health

- One major call – 10 July (€ 679million)
- *Research priorities:*
  - Emphasis will be on *innovative health research*. Areas most covered are: brain research, antimicrobial drug resistance and comparative effectiveness research
  - Other areas covered: developing personalised medicines approaches, cardiovascular research, safety and efficacy of therapies, cancer and public health research



## Health – Interest for Japan

- All topics of the main call FP7-HEALTH-2013-INNOVATION-1 are open for Japan participation
- Topics of particular interest may include:
  - HEALTH.2013.1.3-3: *Safety and efficacy of therapeutic vaccines*
  - HEALTH.2013.2.3.0-1: *Innovation in vaccines*
  - HEALTH.2013.2.3.1-3: *Contribution to global mapping of drug resistance and identification of pathogens of major importance for public health*
  - HEALTH.2013.2.3.3-1: *Clinical management of patients in severe epidemics*
  - HEALTH.2013.2.3.4-2: *Drug development for parasitic diseases*
  - FP7-HEALTH.2013.4.1-5: *Global initiative on gene-environment interactions in diabetes/obesity in specific populations*



## Food, Agriculture & Biotechnologies (FAB)

- One call - 10 July (€380 million)
- Research Priorities
  - Sustainable Agriculture and Forestry
  - Sustainable and Competitive Agri-Food Sector for a Safe and Healthy Diet
  - Unlocking the Potential of Aquatic Living Resources
  - Sustainable and Competitive Bio-based Industries
- Calls have an emphasis on
  - Completing ERA (European Research Area)
  - Stimulating innovation incl. knowledge exchange with SMEs
  - Supporting European policies (e.g. General Food Law Regulation)
  - Supporting international cooperation (e.g. Tackling challenges of a global nature, Millennium Development Goals)



## FAB – Interest for Japan

All topics open for Japan participation

Topics of particular interest may include:

- KBBE.2013.1.3-01: *Emerging viral vector borne diseases*
- KBBE.2013.2.5-01: *Assessment of the impact of global drivers of change on Europe's food security*
- KBBE.2013.2.3-02: *Network for the transfer of knowledge on traditional foods to SMEs*
- KBBE.2013.2.4-01: *Assuring quality and authenticity in the food chain*
- KBBE.2013.2.5-02: *Saving water and energy for resource-efficient food processing*
- KBBE.2013.3.1-01: *Plant High Value Products - from discovery to final product*



## Cross thematic Call *Oceans of Tomorrow*

- 4 topics of particular interest to Japan:
  - OCEAN.2013-1: *Biosensors for real time monitoring of biohazard and man made chemical contaminants in the marine environment*
  - OCEAN.2013-2: *Innovative multifunctional sensors for in-situ monitoring of marine environment and related maritime activities*
  - OCEAN.2013-3: *Innovative antifouling materials for maritime applications*
  - OCEAN.2013-4: *Innovative transport and deployment systems for the offshore wind energy sector*



## Information & Communication Technologies (ICT)

- Two ICT Calls - 10 July (€1,4 billion)
- Three Cross-thematic calls on *Factories for the Future*, *Efficient Buildings* and *Green cars* - 10 July (€150 million)
- FET call - still open for proposals
- Focus around number of key challenges:
  - pervasive and trusted network and service infrastructures
  - cognitive systems and robotics
  - alternative paths to components and systems
  - technologies for digital content and languages
- Support also for Future and Emerging Technologies



## ICT – Interest for Japan

All topics open for Japan participation  
Topics of particular interest may include:

- *Objective ICT-2013.10.3 International partnership building and support to dialogues – Horizontal International Cooperation Actions.*
- *The target is to support dialogues between the European Commission/the EU and strategic partner countries and regions, and to foster cooperation with strategic third country organisations in collaborative ICT R&D both within the EU's Framework Programmes (FP7, Horizon 2020) and under relevant third country programmes*



## Nanosciences, Nanotechnologies, Materials and New Productions Technologies (NMP)

- Nine calls + 2 coordinated calls – 10 July 2012
- Enabling and Industrial Technologies (including 3 of the 6 KETS)
- Application-Specific Innovation: Energy and energy efficiency
  - Environmental issues and sustainable development
  - Raw materials
  - Health and safety
- PPPs
  - *Factories of the future*
  - *Energy-efficient buildings*
  - *Green cars*
- Contribution to five cross-thematic calls on raw materials, oceans of the future, smart cities, water and anti-microbial resistance



## NMP – Interest for Japan

- All topics open for Japan participation
- Two topics in the *Factories of the Future* PPP are particularly suitable for collaboration at international level, particularly under the IMS (Intelligent Manufacturing Systems) scheme:
  - *FoF.NMP.2013-3 Workplaces of the future: the new people-centred production site*
  - *FoF.NMP.2013-9 Advanced concepts for technology-based business approaches addressing product-services and their manufacturing in globalised markets*