



**Instituto Superior Técnico (IST)**  
**Information Event**  
**on the Nuclear Fission and Radiation Protection Programme**  
**under the Euratom Programme complementing the Horizon 2020**

**Lisbon, 7<sup>th</sup> February 2014**

**"Euratom Fission 2014-2015 Call"**

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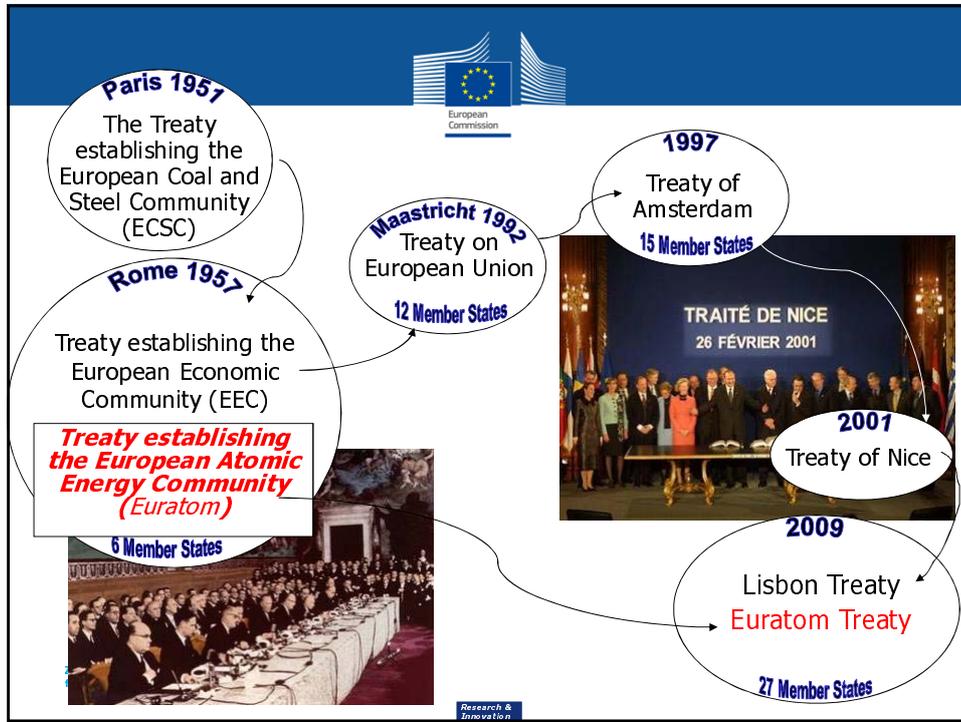


**Contents**

- *Euratom Treaty*
  - *Main areas and Community nuclear activities*
- *Horizon 2020*
- *Euratom Programme complementary to H2020*
  - *Background*
  - *Clustering*
  - *Call 2014-2015: Budget and instruments*
  - *International cooperation*
  - *Available links*

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## Euratom Treaty Four fields of action

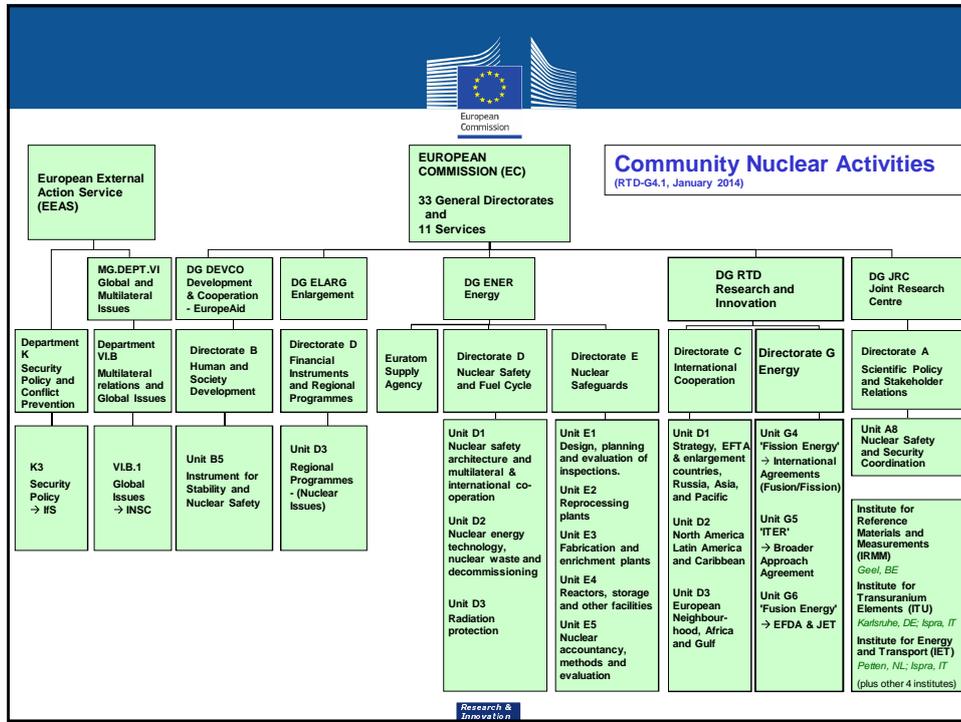
European Commission

### Rome 1957: Signature of the Treaty establishing the European Atomic Energy Community (Euratom)

- *Nuclear Energy Development, including Research Activities* (art.4-11)
- *Health and Safety* (art.30-39)
- *Safeguards (Guarantees for Peaceful Uses)* (art.77-85)
- *External Relations* (art.101-106)

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**Key challenge:** stabilise the financial and economic system while taking measures to create economic opportunities

- Smart & inclusive growth (€451 billion)**
  - Education, Youth, Sport
  - Connecting Europe
  - Cohesion
  - Competitive Business SMEs
  - HORIZON 2020**
- Sustainable growth, natural resources (€373 billion)**
- Security and citizenship (€16 billion)**
- Global Europe (€58 billion)**
- Administration (€61.6 billion)**

**TOTAL €960 billion**

[http://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/281113\\_Horizon%202020%20standard%20presentation.pdf](http://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/281113_Horizon%202020%20standard%20presentation.pdf)

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## H2020 Priorities



### 1. **Excellent science**

1. *European Research Council*
2. *Future and Emerging Technologies*
3. *Marie Curie actions*
4. *Research infrastructures*



### 2. **Industrial leadership**

1. *Leadership in enabling and industrial technologies*
2. *Access to risk finance*
3. *Innovation in SMEs*

Find out more at [www.ec.europa.eu/research/horizon2020](http://www.ec.europa.eu/research/horizon2020)

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## H2020 Priorities



### 3. **Societal challenges**

1. *Health, demographic change and wellbeing*
2. *Food security, sustainable agriculture*
3. **Secure, clean and efficient energy**
4. *Smart, green and integrated transport*
5. *Climate action, resource efficiency and raw materials*
6. *Inclusive, innovative and secure societies*

**EC Proposal: € 80 billion....**

**.... Council 8 Feb 2013: € 71 billion**

**..... Council approval on 28 June 2013**



Find out more at [www.ec.europa.eu/research/horizon2020](http://www.ec.europa.eu/research/horizon2020)

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**Funding rate ...**

**Cost model ...**

**One project = One rate**

- Same rate for all beneficiaries and all activities in the grant
- The applicable rate will be defined in the Work Programme
  - Up to 100 % of the eligible costs
  - but limited to a maximum of 70 % for innovation projects (exception for non-profit organisations - maximum of 100%)

**Single model = 25% flat rate**

- Indirect eligible costs shall be determined by applying a flat rate of 25 % of the direct eligible costs.



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**Other simplification**

**elements...**

**Simpler evaluation criteria**

- Excellence – Impact – Implementation

**Simpler time-recording requirements**

- No time-sheets for personnel working full time on a single project

**Fewer Certificates on Financial Statements and fewer but targeted audits**

- CFS only if total amount of the grant for the beneficiary as reimbursement of actual costs or average personnel costs is ≥ EUR 325.000 at the time of the payment of the balance
- Audit strategy focused on risk and fraud prevention (Note that rules on audits are defined in EURATOM H2020 Regulation and NOT in RfP)





## ... Time to grant

Horizon 2020 has specific provisions for a maximum TTG of 8 months



Exceptions: ERC, duly justified cases (complex actions) or where requested by applicants

### Measures to speed up the evaluation and grant signature

- ✓ Evaluating each proposal 'as it is', not as 'what could be' – no recommendations for changing proposals;
- ✓ Ensuring that final GAs are based to the maximum extent possible on the Description of Work of the proposal;
- ✓ Bringing the simplified legal entity validation forward into the five-month information period and basing it on the FP7 legal entity database;
- ✓ Electronic communication and signature of the GA.

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## ... Fully Electronic

### Electronic signature

- Of the Grant Agreement
- Of the Amendments
- Reporting, Financial Statements and Technical reports

### Communication between the Commission and beneficiaries

- Through the Participant Portal
- Electronic-only submission of reports as a general rule

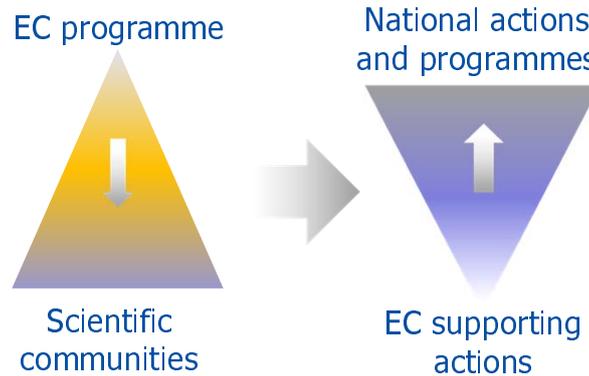


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**From a project-related logic to a programme-related logic**



EU research - the story so far

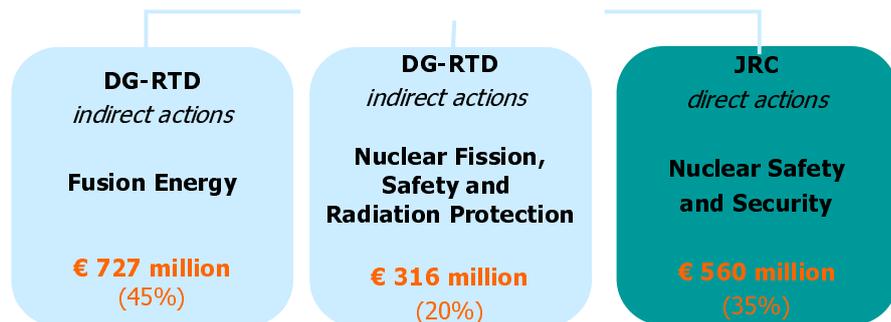


- 1957: Euratom Treaty
  - Concept of Community Research programmes
  - Joint Research Centre established
- 1984: 1<sup>st</sup> Framework Programme (1984-1987)
- 1987: 'Single European Act'
  - Science becomes a Community responsibility
  - 2<sup>nd</sup> Framework Programme (1987-1991)
- 1990: 3<sup>rd</sup> Framework Programme (1990-1994)
- 1993: Treaty on European Union
  - Role of RTD in the enlarged EU
- 1994: 4<sup>th</sup> Framework Programme (1994-1998)
- 1998: 5<sup>th</sup> Framework Programme (1998-2002)
- 2000: European Research Area (ERA) launched
- 2002: 6<sup>th</sup> Framework Programme (2002-2006)
- 2006: 7<sup>th</sup> Framework Programme (2007-2013)
  - EC Framework Programme (2007-2013)
  - Euratom Framework Programme 'FP7' (2007-2011)
- 2011: Euratom Framework Programme 'FP7+2' (2012-2013)
- 2013: Horizon 2020 (2014-2020)
  - Euratom programme (2014-2018) complementing H2020



## Euratom Programme (2014-2018) complementary to the Horizon 2020

→ Council Decision on 16 December 2013



**Total budget: € 1603 million**

ITER (2014-2020): € 2915 million in current values (outside H2020)  
→ Council Decision on 13 December 2013

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## EU/EURATOM



## ... Type of Actions

- **Research and Innovation Actions / Innovation Actions - H2020 NEW Denomination**
- **Coordination and Support Actions** (through calls for proposals or to identified beneficiaries)
- **Programme Co-fund Actions - H2020 NEW**
  - Including European Joint Programme
- **Other Actions** (relevant to EURATOM)
  - Procurement (studies, conferences)
  - Prizes **H2020 NEW**
  - Financial Instruments, e.g. RSFF **H2020 NEW**

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### Pure Innovation Actions:

'Innovation 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

#### • Ex "demo" activities

- Focus on close to market activities
- **Up to 70% funding rate**

• **'prototyping', 'testing', 'demonstrating' and 'piloting' not specific to innovation activities; they are also used to describe research and development activities (up to 100% funding)**

- in the case of a Research and Innovation action, these activities are undertaken on a small scale prototype, in a laboratory or simulated environment
- Technology Readiness Level (TRL) scale



### Programme co-fund:

'programme co-fund action' means an action funded through a grant the main purpose of which is **supplementing individual calls or programmes funded by entities**, other than Union bodies, **managing research and innovation programmes**. A programme co-fund action may also include complementary activities of networking and coordination between programmes in different countries'

- **European Joint Programme ('EJP')**
- ERA-NET
- Pre-Commercial Procurement and Public Procurement of Innovative Solutions ('PCP'-'PPI')

# EU/EURATOM



# EU Joint programme

The European Joint Programme ('EJP') is a **co-fund action designed to support coordinated national research and innovation programmes**. The EJP aims at attracting and pooling a critical mass of national resources on objectives and challenges of Horizon 2020, and at achieving significant economies of scales by adding related Horizon 2020 resources to a joint effort.

**'Critical Mass' – a stepping stone towards consolidation of transnational research**

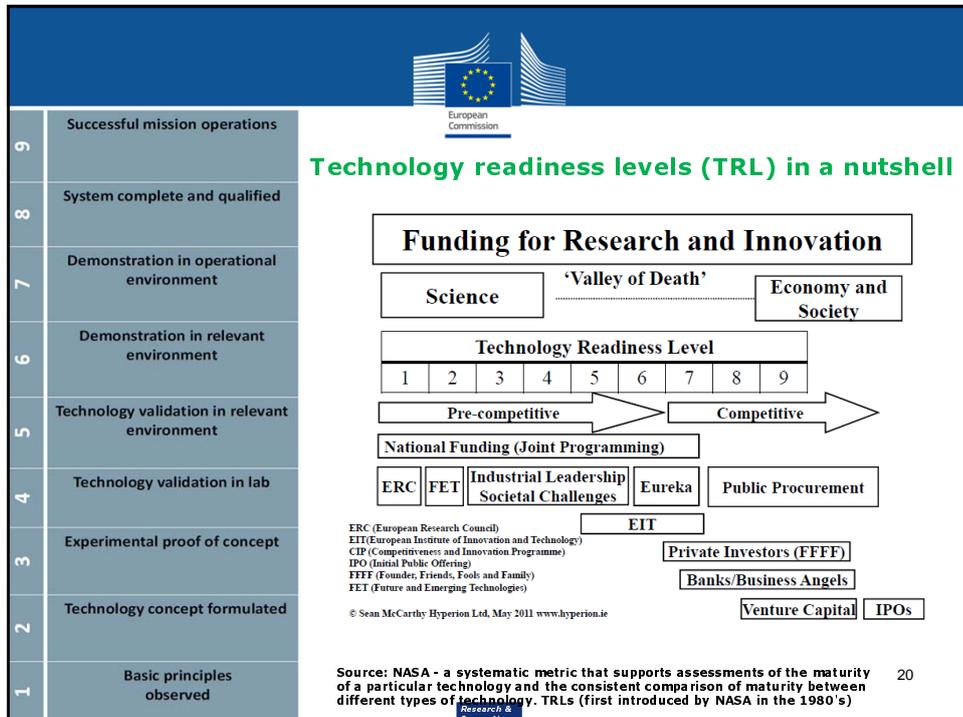
- Budget, ambition, existing transnational platforms

**Annual Programming of Joint Activities**

- Direct consortium research – call for proposals for third party research

**Public-public funding**

- Eligibility: specifically mandated research programme owners and managers
- Up to 70% funding rate – but the EURATOM/MS programme funding will be balanced (e.g. 50%)





## OVERVIEW OF EURATOM FISSION WP 2014-2015

**Interdisciplinary Study on "Benefits and limitations of nuclear fission for a low-carbon economy" (Feb. 2013) and Symposium FISA and Euradwaste (Oct. 2013)**

- Safety / Safety culture
- Socio-economics in the overall energy mix
- Civil society
- Education and training

**HORIZON 2020 main orientations**

- Challenge oriented & Emphasis on impact

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## EU/EURATOM



## Nuclear Events

### 2013 Symposium



**In collaboration with the Lithuanian Presidency**

**14-17 October 2013  
Vilnius, Lithuania**



<http://www.eesc.europa.eu/?i=portal.en.events-and-activities-symposium-on-nuclear-fission>

[http://cordis.europa.eu/fp7/euratom-fission/fisa-euradwaste-2013\\_en.html](http://cordis.europa.eu/fp7/euratom-fission/fisa-euradwaste-2013_en.html)

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- **Clustering of the WP 2014-2015 Actions**

1. Support safe operation of nuclear systems
2. Contribute to the development of solutions for the management of ultimate radioactive waste
3. Radiation protection
4. Cross-cutting aspects
5. Support the development of nuclear competences
6. Socio-economic aspects and other actions

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## **CLUSTER 1: SUPPORT SAFE OPERATION OF NUCLEAR SYSTEMS**

- NFRP-1** Improved safety design and operation of fission reactors
- NFRP-2** Tool for the fast and reliable prediction of severe accident progression and anticipation of the source term of a nuclear accident
- NFRP-3** New innovative approaches to reactor safety

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## **CLUSTER 2: CONTRIBUTE TO THE DEVELOPMENT OF SOLUTIONS FOR THE MANAGEMENT OF ULTIMATE RADIOACTIVE WASTE**

- NFRP-4** EU concerted development of Member State research on radioactive waste management
- NFRP-5** Supporting the licensing geological repositories
- NFRP-6** Supporting the implementation of the first-of-the-kind geological repositories

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## **CLUSTER 3: FOSTER RADIATION PROTECTION**

- NFRP-7** Integrating radiation research in the European Union (EJP)

## **CLUSTER 4: CROSS-CUTTING ASPECTS**

- NFRP-8** High density uranium fuel and targets for the production of medical radioisotopes
- NFRP-9** Transmutation of minor actinides (Towards industrial application)

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## CLUSTER 5: SUPPORT THE DEVELOPMENT OF NUCLEAR COMPETENCES

- NFRP-10** Education and training (Bologna and Copenhagen processes)
- B-3** Supporting access to Jules Horowitz reactor
- NFRP-14** Regional initiative aiming at nuclear research and training capacity building

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## CLUSTER 6: SOCIO-ECONOMIC ASPECTS AND OTHER ACTIONS

- NFRP-11** Modelling and analysing the energy system (together with other energy technologies)
- NFRP-12** Nuclear developments and interaction with society
- NFRP-13** Fostering the network of National Contact Points
- NFRP-15** Specific support to the work of the Sustainable Nuclear Energy Technology Platform

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## MAIN FEATURES OF 2014-2015 CALL

- One EURATOM Work Programme
- One EURATOM fission call – deadline: 17 Sept.2014
- Budget range per topic and per project
- Overall indicative budget for Euratom 2014 – 2015 Fission Work Programme – 102,87 M€
- Single stage evaluation procedure

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## Budget (in million Euros) and Instruments (1/2)

No	Title	Instrument	Per topic	Per project*
NFRP 1	Improved safety design and operation of fission reactors	Research and innovation	18.8	3-6
NFRP 2	Tool for the fast and reliable anticipation of the source term of a nuclear accident	Research and innovation	3	2-4
NFRP 3	New innovative approaches to reactor safety	Research and innovation	6	2-4
NFRP 4	EU concerted development of Member State research on radioactive waste management	Coordination and support	1.4	1-1,8
NFRP 5	EU harmonised regulatory requirements for licensing geological repositories	Coordination and support	1.2	1-1,4
NFRP 6	Supporting the implementation of the first-of-the-kind geological repositories	Research and innovation	14.6	3-6
NFRP 7	Integrating radiation research in the European Union **	Programme Co-fund Action (EJP)	20.5	20-21
NFRP 8	High density uranium fuel for the production of medical radioisotopes	Research and innovation	5	4-6

\* Indicated EU contribution **does not preclude** submission and selection of proposals requesting other amounts

\*\* The Euratom contribution will be limited to a **maximum of 50%** of the total eligible costs

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## Budget (in million Euros) and Instruments (2/2)

No	Title	Instrument	Per topic	Per project
NFRP 9	Transmutation of minor actinides (Towards industrial application)	Research and innovation	8	7-9
NFRP 10	Education and training (Bologna and Copenhagen processes)	Coordination and support	4	1-3
NFRP 11	Modelling and analysing the energy system, its transformation and impacts*	Research and innovation	-	-
NFRP 12	Nuclear developments and interaction with society	Research and innovation	2.5	2-3
NFRP 13	Fostering the network of National Contact Points	Coordination and support	0.4	0.3-0.5
NFRP 14	Regional initiative aiming at nuclear research and training capacity building	Coordination and support	2	1-3
NFRP 15	Specific support to the work of the SNETP	Coordination and support	0.5	0.4-0.6
B.3	Supporting access to Jules Horowitz reactor	Public procurement	15	-
B.6	Secretariat of the GIF	Subscription	0,3	-

\* Action is addressed in Energy Challenge WP 2014-2015 'Social, environmental and economic aspects of the energy system' under the item LCE 21

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## External Relations



## Euratom Treaty Art. 101-106

Aimed at establishing **relations with other countries** and **international organisations** and fostering progress in the peaceful uses of nuclear energy:

- through international agreements or contracts
- Euratom is party to international conventions
- close cooperation and high complementarity with the UN's International Atomic Energy Agency (IAEA) and the OECD's Nuclear Energy Agency (NEA) and International Energy Agency (IEA), the latter for Fusion research



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## International cooperation in H2020

**Strategic approach:** enhance excellence and competitiveness, tackle societal challenges, develop synergies with external policies

- **General opening:** also any legal entity from third Countries or international organization regardless of its place of establishment (with some exceptions: Community interest, security reasons)
- **Funding for third countries' entities:** just if identified in the WP; or the participation is considered essential; or funding provided under bilateral agreements/arrangements
- Targeted actions with specific third countries
- Common interest, mutual benefit and encouraged reciprocal access to third countries programmes
- Coordination and synergies with initiatives of MSs and associated countries

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## Non-EU participation in Fission Grant Agreements according to external contribution [in k€]

Third parties	Entities	Participations in projects	total cost	Co-financed participations	EC contribution
Norway	7	22 in 14	8.235	1	145
Japan	6	9 in 9	7.722	2	529
Russian Fed.	6	12 in 11	4.275	8	2.881
U.S.	8	8 in 8	2.620	2	215
South Africa	3	5 in 4	2.317	1	41
Australia	1	2 in 2	2.074	0	0
Ukraine	9	12 in 10	1.552	12	1.033
China	2	2 in 2	1.266	0	0
S. Korea	3	5 in 3	792	0	0
Canada	2	3 in 2	764	0	0
Kazakhstan	2	3 in 2	465	3	373
→ CERN	1	2 in 2	341	2	217
India	1	2 in 2	200	0	0
Serbia	1	1 in 1	198	1	148
Belarus	1	1 in 1	103	1	92
<b>totals</b>	<b>53</b>	<b>89 in 73</b>	<b>33.324</b>	<b>33</b>	<b>5.674</b>
Switzerland	13	56 in 47	24.983	All	12.998

[Not definitive figures: three proposals from the Call 2012 reserve list are still under negotiation]

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## Generation IV International Forum (GIF)

### Inter-governmental Agreement - 10 members incl. Euratom

- Six systems: Very high-temperature gas reactors (VHTR), Sodium-cooled fast reactors (SFR), Gas-cooled fast reactors (GFR), Super-critical water-cooled reactors (SCWR), Lead-cooled fast reactors (LFR), and Molten Salt reactors (MSR)
- Technology goals: sustainable development (optimal utilization of natural resources also related to security of supply, waste minimisation and environmental protection), industrial competitiveness, safety and reliability, proliferation resistance and physical protection
- Also other applications to electricity: hydrogen, heat, desalinated water...

### DG.RTD indirect actions

- 34 related projects from Calls 2007 to 2012 with EC contribution: € 122,5 m
 

Reactor systems	10 projects - € 30,2 million
Advanced fuel	8 projects - € 40,8 million
Advanced materials	8 projects - € 26,5 million
Codes and data	8 projects - € 25,0 million

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VHTR	♦	♦	♦	♦	♦	♦	♦	♦	♦	
GFR		♦	♦	♦			♦			
SFR		♦	♦	♦	♦			♦	♦	♦
LFR		♦		♦	♦			♦		
SCWR	♦	♦		♦					♦	
MSR		♦	♦					♦		

ESNII

- VHTR – Very-High-Temperature Reactor (System Arrangement)
- GFR – Gas-Cooled Fast Reactor (SA)
- SFR – Sodium-Cooled Fast Reactor (SA)
- LFR – Lead-Cooled Fast Reactor (MOU)
- SCWR – Supercritical Water-Cooled Reactor (SA)
- MSR – Molten Salt Reactor (MOU)

♦ Co-chair

♦ Interest

Joint Research Centre JRC: Implementing Agent of Euratom

GEN IV International Forum™ 36

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## Cooperation Agreements (CAs) of Euratom on FUSION & FISSION



Fission CAs also including  
nuclear research/safety

CAs negotiated by RTD-G4.1; JRC-A8; ENER-D1/D2

CAs managed by RTD-G4.1/G6; JRC-A8 & RTD-G4.1/G4; ENER-E5

	FUSION Agreements (FU-CA)		FISSION Agreements (FI-CA)
Argentina		1997	- Peaceful uses of Nuclear Energy (NE)
Australia		2012	- Peaceful uses of NE
Brazil	2013		
Canada	(1995 – expired in 2005)	1959 1998	- Peaceful uses of NE (currently being re-negotiated) - Nuclear research
China	2008 - R&D Cooperation in Peaceful Uses of NE		
India	2010		- R&D in peaceful uses of NE (under negotiation)
Japan	1988 2007 (Broader Approach)	2006	- Peaceful uses of NE - Nuclear safeguards and security (under negotiation)
Kazakhstan	2004	2003 2009	- Nuclear safety - Peaceful uses of NE
Russia	2002	2002	- Nuclear safety - Peaceful uses of NE (preliminary talks)
South Africa			- Peaceful uses of NE (entering into force pending)
South Korea	2006		- Peaceful uses of NE (preliminary talks)
Switzerland	1979 + amended in 1982		
Ukraine	2002	2002 2006	- Nuclear safety - Peaceful uses of NE
U.S.		1996	- Peaceful uses of NE
U.S. / DoE	2001	2003 2010	- Nuclear technology R&D * - Nuclear safeguards and security
U.S. / NRC		2009	- Nuclear safety research *
Uzbekistan		2003	- Peaceful uses of NE

(\*) Technical Exchange & Cooperation Arrangements

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## Structured bilateral cooperation

### **Russia**

- On-going coordinated parallel projects and strong participation in Euratom fission R&I Programmes
- Established DG.RTD-Rosatom WG becoming CA's Coordinating Committee
- 'Partnership for Modernisation' and 'EU-Russia Year of Science 2014' frames

### **US-DOE**

- Euratom-US.DOE nuclear Technology R&D Arrangement together with Int. Nuclear Energy Research Initiative (I-NERI), notably with DG.JRC
- Further bilateral collaborative activities framed under US-EU Energy Council

### **China**

- On-going coordinated parallel projects
- RD-PUNE agreement covering 4 subcommittees on fission and fusion research (DG.RTD), and on security & safeguards and nuclear safety (DG.JRC)

### **Ukraine**

- Relevant participation in Euratom fission R&I Programmes
- Usual technical working meetings becoming CA's Coordinating Committee 38

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## "Agreement between Euratom and P.R. China for R&D Cooperation in the Peaceful Uses of Nuclear Energy" (RD-PUNE Agreement)

Steering Committee MOST – European Commission (EC)

- SC-1 on 21 March 2011
- SC-2 on 15 November 2012

Subcommittee RTD - CAEA on "Fission Coordinated Actions (FCA)"  
→ FCA-1 on 22 March 2011

Subcommittee JRC - CAEA on "Nuclear Security & Safeguards (SS)"  
→ SS-1 on 24 March 2011

Subcommittee RTD - MOST on "Fusion Energy Research (FU)"  
→ FU-1 on 12 April 2012  
→ FU-2 on 9 October 2012

Subcommittee JRC – NNSA on "Nuclear Safety (NS)"  
→ NS-1 on 13 November 2012

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## Fission INCO related challenges in H2020

- Reinforcing the shift from project-based to programmatic approaches with third countries, in particular RU, CN, JP, UA and US
  - Cooperation Agreements on nuclear safety and nuclear research
  - Streamline and improve participation in multilateral fora
- Reviewing EC policy and contribution to GIF
  - Safety-related focus and possible reduction in number of systems
- Assuring added value for the EU from pooling international resources
- Building synergies and increase consistency with INCO policies and activities of EU Member States (Euratom Treaty - Art.6d), i.e. through SNETP (NUGENIA, ESNII and NC2I) ...

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## Available Links

- EU Energy research: [http://ec.europa.eu/research/energy/index\\_en.htm](http://ec.europa.eu/research/energy/index_en.htm)
- Euratom Seventh Framework Programme: [http://cordis.europa.eu/fp7/euratom/home\\_en.html](http://cordis.europa.eu/fp7/euratom/home_en.html)
- Information on FP7 and access to programmes and calls: [http://cordis.europa.eu/fp7/home\\_en.html](http://cordis.europa.eu/fp7/home_en.html)
- Euratom Seventh Framework Programme funded projects [http://cordis.europa.eu/fp7/euratom-fission/library\\_en.html](http://cordis.europa.eu/fp7/euratom-fission/library_en.html)
- **CORDIS publications**
  - [http://cordis.europa.eu/fp6-euratom/library\\_en.html](http://cordis.europa.eu/fp6-euratom/library_en.html)
  - [http://cordis.europa.eu/fp7/euratom-fission/library\\_en.html](http://cordis.europa.eu/fp7/euratom-fission/library_en.html)
  - **Euratom FP6 Research Projects and Training Activities, Volume I-II and III (PDF)**
  - **Volume I** [ftp://ftp.cordis.europa.eu/pub/fp6-euratom/docs/nuclear\\_fission\\_eur21228\\_en.pdf](ftp://ftp.cordis.europa.eu/pub/fp6-euratom/docs/nuclear_fission_eur21228_en.pdf)
  - **Volume II** [ftp://ftp.cordis.europa.eu/pub/fp6-euratom/docs/nuclear\\_fission\\_eur21229\\_en.pdf](ftp://ftp.cordis.europa.eu/pub/fp6-euratom/docs/nuclear_fission_eur21229_en.pdf)
  - **Volume III** [ftp://ftp.cordis.europa.eu/pub/fp7/docs/euratom-fission\\_eur22385\\_en.pdf](ftp://ftp.cordis.europa.eu/pub/fp7/docs/euratom-fission_eur22385_en.pdf)
  - **Euratom FP7 Research Projects and Training Activities, Volume I (PDF)**
  - **Volume I** [ftp://ftp.cordis.europa.eu/pub/fp7/docs/fin-266-euratom-web-jun09v02\\_en.pdf](ftp://ftp.cordis.europa.eu/pub/fp7/docs/fin-266-euratom-web-jun09v02_en.pdf)
  - **Volume II** <http://ec.europa.eu/research/energy/pdf/euratom-fp7-vol-2.pdf>
  - **Volume III** [http://ec.europa.eu/research/energy/euratom/publications/pdf/euratom\\_fp7\\_research\\_&\\_training\\_projects\\_volume\\_3.pdf](http://ec.europa.eu/research/energy/euratom/publications/pdf/euratom_fp7_research_&_training_projects_volume_3.pdf)
- Research\*eu magazine [http://ec.europa.eu/research/research-eu/index\\_en.html](http://ec.europa.eu/research/research-eu/index_en.html)
- **Strategic Energy Technol Plan SET-Plan** [http://ec.europa.eu/energy/technology/set\\_plan/set\\_plan\\_en.htm](http://ec.europa.eu/energy/technology/set_plan/set_plan_en.htm)
- FISA 2009 [http://cordis.europa.eu/fp7/euratom-fission/fisa2009\\_en.html](http://cordis.europa.eu/fp7/euratom-fission/fisa2009_en.html)
- **Financial Framework 2014 – 2020 "Horizon 2020"**
- [http://ec.europa.eu/budget/reform/index\\_en.htm](http://ec.europa.eu/budget/reform/index_en.htm)
- [http://ec.europa.eu/budget/biblio/documents/fin\\_fwkw1420/fin\\_fwkw1420\\_en.cfm](http://ec.europa.eu/budget/biblio/documents/fin_fwkw1420/fin_fwkw1420_en.cfm)
- [http://ec.europa.eu/research/horizon2020/index\\_en.cfm](http://ec.europa.eu/research/horizon2020/index_en.cfm)
- **2013 Symposium on "Nuclear Fission research for a low carbon economy"**
  - <http://www.eesc.europa.eu/?i=portal.en.events-and-activities-symposium-on-nuclear-fission>
- **FISA 2013 and Euradwaste'13** [http://cordis.europa.eu/fp7/euratom-fission/fisa-euradwaste-2013\\_en.html](http://cordis.europa.eu/fp7/euratom-fission/fisa-euradwaste-2013_en.html)

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## Instituto Superior Técnico (IST)

Information Event  
on the Nuclear Fission and Radiation Protection Programme  
under the Euratom Programme complementing the Horizon 2020

Lisbon, 7<sup>th</sup> February 2014

Muito obrigado pela sua atenção !  
Many thanks for your attention !

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