

Call Title: Nuclear Fission and Radiation Protection

- **Call Identifier:** FP7-Fission-2009
- **Date of publication:** 19 November 2008
- **Deadline:** 21 April 2009, at 17.00.00, Brussels local time
- **Indicative budget:** EUR 48 905 000 from 2009 budget¹

The table below provides indicative 2009 budgets for activities defined in the Specific Programme and/or in this work programme:

Group	Activities	Indicative budget repartition (EUR million)
1	<i>Fission-1</i>	5.5
2	<i>Fission-2</i>	20.0 <i>(of which EUR 1.0 million is reserved for topic Fission-2009-2.2.2)</i>
3	<i>Fission-3</i>	18.0
4	<i>Fission-5 & -7</i>	5.405
	Total	48.905

All budgetary figures in this work programme are indicative. Following the evaluation of the proposals, the final budget awarded to actions implemented through calls for proposals may vary:

- by up to 10% of the total value of the indicated budget for each call; and
- any repartition of the call budget may also vary by up to 10% of the total value of the indicated call budget.

- **Topics called:**

Usually a maximum of one project will be considered for funding per topic (indicated by a singular under *funding scheme*). Where more than one project per topic could be considered for funding, this is clearly indicated (by a plural) under *funding scheme*. In some specific cases, a larger maximum number of projects to be retained for funding, under one topic, is specified (i.e. greater than one).

Activity/Area	Topic	Funding Scheme
Management of Radioactive Waste:	Fission-1	
<i>Geological disposal</i>	<i>Fission-1.1</i>	
	Fission-2009-1.1.1: Long-term performance of Engineered Barrier Systems (EBS)	Small or medium-scale Collaborative Project

¹ Under the condition that the preliminary draft budget for 2009 is adopted without modification by the budgetary authority.

	Fission-2009-1.1.2: Actions in support of the safety case and license applications for geological repositories	Small or medium-scale Collaborative Project(s) (max. Euratom contribution EUR 1.0 million per project) and/or Coordination and Support Action(s) (coordinating or supporting actions) (max. Euratom contribution EUR 0.5 million per project)
	Fission-2009-1.1.3: Secretariat of the Geological Disposal Technology Platform (GDTP)	Coordination and Support Action (supporting action) (max. Euratom contribution EUR 0.5 million)
<i>Partitioning and transmutation</i>	<i>Fission-1.2 (refer to Fission-2.3)</i>	
Reactor Systems:	Fission-2	
<i>Safety and competitiveness of existing and future nuclear installations</i>	<i>Fission-2.1</i>	
	Fission-2009-2.1.1: Structural integrity assessment for safety and lifetime management of the Reactor Coolant System piping and components (other than the Pressure Vessel)	Small or medium-scale Collaborative Project
	Fission-2009-2.1.2: RPV irradiation effects for safety assessment in the perspective of long-term operation	Small or medium-scale Collaborative Project
<i>Advanced nuclear systems for increased sustainability</i>	<i>Fission-2.2</i>	
	Fission-2009-2.2.1: Conceptual design of lead and gas cooled fast reactor systems	Max. of 2 small or medium-scale Collaborative Projects
	Fission-2009-2.2.2: Network for the development and implementation of the European Industrial Initiative in sustainable nuclear fission energy	Coordination and Support Action (coordinating action)
<i>Cross-cutting aspects for nuclear systems</i>	<i>Fission-2.3</i>	
	Fission-2009-2.3.1: Thermal hydraulic issues and development of Computational Fluid Dynamic (CFD) codes for advanced reactor systems	Large-scale Collaborative Project
	Fission-2009-2.3.2: Improved nuclear data for advanced reactor systems	Small or medium-scale Collaborative Project
	Fission-2009-2.3.3: Other activities in support of the implementation of the Strategic Research Agenda of SNE-TP	Small or medium-scale Collaborative Project(s) (max. Euratom contribution EUR 1.0 million per project) and/or Coordination and Support Action(s) (coordinating or supporting actions) (max. Euratom contribution EUR 0.5 million per project)
<i>Advanced systems for non-electrical uses of nuclear energy</i>	<i>Fission-2.4 (refer to Fission-2009-2.3.3)</i>	

Radiation Protection:	Fission-3	
<i>Quantification of risks for low and protracted exposures</i>	<i>Fission-3.1</i>	
	Fission-2009-3.1.1: An integrated approach to low dose risk research in Europe	Network of Excellence (maximum Euratom contribution EUR 15.0 million)
	Fission-2009-3.1.2: Epidemiological studies of exposed populations in the Southern Urals	Large-scale Collaborative Project (maximum Euratom contribution EUR 5.0 million)
Infrastructures:	Fission-4 (no separate actions in 2009, but refer to topic Fission-2009-2.3.3)	
Human Resources, Mobility and Training:	Fission-5	
<i>Training & mobility of research workers</i>	<i>Fission-5.1</i>	
	Fission-2009-5.1.1: Euratom Fission Training Schemes (EFTS) in nuclear energy and radiation protection	Max. of 3 Coordination and Support Action(s) (coordinating actions)
Cross-cutting Actions:	Fission-6 (refer to <i>Fission-2.3</i>)	
Cooperation with Third Countries:	Fission-7	
<i>Cooperation with Russia is an eligibility criterion</i>	<i>Fission-7.0</i>	
	Fission-2009-7.0.1: Development of common ground for cooperation in nuclear education, training and knowledge management	Coordination and Support Action (coordinating action) (max. Euratom contribution EUR 0.5 million)
	Fission-2009-7.0.2: Advanced simulation tools for Gen-IV fast neutron reactors	Small or medium-scale Collaborative Project (max. Euratom contribution EUR 1.0 million)
	Fission-2009-7.0.3: Containment thermal-hydraulics of current and future LWRs for severe accident management	Small or medium-scale Collaborative Project (max. Euratom contribution EUR 1.0 million)
	Fission-2009-7.0.4: Molten Salt Reactor	Small or medium-scale Collaborative Project (max. Euratom contribution EUR 1.0 million)

- **Eligibility conditions:** (refer also to the eligibility criteria in Annex 1)

Minimum number of participants² as set out in the Rules for Participation:

Funding scheme	Minimum conditions
Collaborative project (also applicable for a combination of a CP with another funding scheme) and Network of Excellence	At least 3 independent legal entities, each of which is established in a MS or AC, and no two of which are established in the same MS or AC.
Coordination and support action	At least 3 independent legal entities, each of which

² MS = Euratom (EU) Member State; AC = Associated country. Where the minimum conditions for an indirect action are satisfied by a number of legal entities, which together form one legal entity, the latter may be the sole participant, provided that it is established in a Member State or Associated country

(coordinating action)	is established in a MS or AC, and no two of which are established in the same MS or AC.
Coordination and support action (supporting action)	At least 1 independent legal entity

Eligibility criteria for Euratom contribution limits differing from the generic ones in Annex 1 are given in the call text at the level of individual topics (and in the table under 'Topics called' above) and override the generic limits in Annex 1. In some cases cooperation with Russia is also an eligibility criterion.

Proposals that do not conform to the eligibility criteria will be rejected at the eligibility stage and not be further evaluated.

• **Evaluation Procedure:**

- The evaluation criteria (including weights and thresholds) and sub-criteria together with the eligibility, selection and award criteria for the different funding schemes are set out in Annex 1 to this work programme.
- The evaluation will follow a single stage procedure.
- Proposals will not be evaluated anonymously.
- Proposals may be evaluated remotely.

At the end of the evaluation process, proposals will be ranked within their indicative budget group (see table above) and funded until the indicative budget for this group is exhausted. The maxima shown in the table are flexible (see above). Hence there will be competition between topics in the same indicative budget group, and some topics may end up not being supported if proposals fail to reach a high enough standard (even though proposals in other groups with lower overall scores may be funded) or if this work programme limits the maximum number of proposals that may be funded under one single topic. Proposals scoring above all evaluation thresholds, but for which sufficient funding is not available, will be put on a common reserve list for the whole call, from which proposals will be considered for funding if additional funds become available from any part of the call. In the ranked lists per group and the reserve list, all funding schemes have the same weight, the priority order being determined by total score. To separate tied proposals, the score for criterion 1 may be given priority, followed by that for criterion 3, except if otherwise decided and justified by the evaluation panels. Proposals on the reserve list are not carried over for funding from next year's budget. Depending on the strategic nature of the topic in question, the Commission may, in such cases, decide to reinsert the topic in next year's work programme.

- **Indicative evaluation and contractual timetable:** Evaluation: spring 2009; contract negotiation and signature: autumn 2009.
- **Consortia Agreements:** Required for all projects where there is more than one partner
- **Particular requirements for participation, evaluation and implementation:** None beyond the standard rules and guidelines. The forms of grant and maximum reimbursement rates which will be offered are specified in Annex 2.