

Europhysics News Quick Guide to EU Science

Under the 4th Framework...

programmes relevant to physicists:

TMR – Training & Mobility of Researchers

provides funding for researchers to work in a second EU country, and for Europe-wide research, access to large-scale facilities and also supports Euroconferences and schools

Brite-Euram – Industrial & Material Technologies

eg High T_c superconductors, magnetic materials

Esprit – Information Technologies

eg Optoelectronics

Joule-Thermie – Non-Nuclear Energy

eg Generation and storage of energy

NFS2 – Nuclear Fission Safety

eg Reactor physics, nuclear waste disposal

Fusion – Controlled Thermonuclear Fusion

eg Joint European Torus (JET), International Thermonuclear Experimental Reactor (ITER)

Environment & Climate

eg Atmospheric physics, Earth observation

Back in May, when discussions about the 5th Framework research programme had just begun in the European Parliament, Spain held up approval of draft proposals at a meeting of EU member states because its ministers were worried that cuts to EU's subsidies to poorer regions (eg Spain) would affect their country significantly.

A report in *Nature* claimed the disagreement threatened to delay the start of the 5th Framework (which needs approval by Parliament, Council, member states and consultative bodies) but disputes

like this are commonplace and the EC is, if anything, experienced in dealing with them. This means that it will become effective at the beginning of 1999.

Framework programmes run for four years – the first was in 1984 – so the 5th will end in 2001. The budget is expected to be Ecu 15 billion. Funding for Euratom, Europe's atomic energy community, receives its slice of the cake (nine per cent) separately from the overall structure. The proportion of the cake to be given to basic research is yet to have been decided.

TMR – Training & Mobility of Researchers

Which is mostly the funding of postdoctoral research, or rather *researchers* because it provides grants for researchers to work in a European country other than their own. Sixty-five per cent of its four-year Ecu 235 million budget is for post-doc fellowships. Around 1 in 4 post-docs who apply are successful (in all sciences). 20 per cent of the budget is for post-graduates. The remaining amount is for return grants (10 per cent) and knowledge transfer by experienced scientists (5 per cent) to less favoured regions of the EU.

There is a call and deadline for proposals every six months. There have been five since the beginning of 1995. In that time 10,254 proposals have been evaluated, 2108 (21 per cent) were in physics and 3171 (31 per cent) in the life sciences; 2170 proposals have been funded, 436 in physics. Proposals are evaluated by committees of working scientists. The time between deadline and contract should be less than five months. The last deadline for proposals for research networks was 3 February 1997, and the date of selection 18 July 1997. **Do not miss the next call (16 September 1997) and deadline (15 December 1997) because there probably won't be another one until 1999.**

The percentage of grants given to different fields in physics is a direct function of the percentage of applications in that area (20 per cent of physics proposals are in elementary particles and nuclear physics, so 20 per cent of the funded proposals are, too). This is also true for the nationality of host laboratories (and candidates). In fact, 30 per cent of host labs are in the UK, 15 per cent in France and 10 per cent in Germany – Cambridge and Oxford are very popular for aspiring PhD students.

And the 5th Framework...

The 5th Framework has a new structure. Instead of the 20 programmes of the 4th Framework there will be thematic and horizontal programmes – the Commission believes the 5th Framework can be best managed with a new matrix-style structure. Most of the programmes of the 4th will continue and find a place somewhere; they may suffer a name change at least.

Thematic Programmes

Living World & Ecosystem

Information Society

Competitive & Sustainable Growth

Horizontal Programmes

International Cooperation

Small to Medium Sized Enterprises

Improving Human Potential

IHC – Improving Human Potential

This is the successor to TMR. Its share of the Framework programme has risen to ten per cent – TMR received only 6.5 per cent – because it is universally popular.

The overall structure will be as follows:

- Reinforcing the Human Capital of Europe's Researchers
 - Research training networks
 - Community fellowships
- Optimal Use of Europe's Major Research Infrastructures
 - Infrastructure cooperation networks
 - RTD projects for access improvement
 - Access to large research infrastructure
- Promoting Scientific and Technological Excellence in Europe (eg Euroconferences)
- Harnessing Socio-Economic Research to the Needs of European Society
- Supporting the Development of Science and Technology Policies in Europe

5th Framework Timetable

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| Proposal by the European Commission | 30 April 1997 |
| Decision (following consultation in parliament) | 1st quarter of 1998 |
| Decision on what the new programmes will be | 2nd/3rd quarter of 1998 |
| Beginning of funding process at DG12 | 3rd/4th quarter of 1998 |
| First calls for proposals | end of 1998/ start of 1999 |
| First contracts | 3rd/4th quarter of 1999 |

More information can be found at the following Web addresses: www.cordis.lu/tmr/home.html
europa.eu.int/en/comm/dg12/dg12tst2.html.