

A window of opportunity

Enthusiasts for European scientific integration believe the time is ripe to launch a new independent research agency. Quirin Schiermeier examines the case for a European Research Council.



“There is nothing more powerful than an idea whose time has come.”

With this quote from the nineteenth-century poet Victor Hugo, leader of the French romantic movement, the Strasbourg-based organization Euroscience drafted a position paper in July backing the creation of a European Research Council (ERC). Euroscience’s website is now soliciting views on the topic.

Euroscience is an alliance of more than 1,200 scientists, formed in 1997 to promote research at the European level. No surprise, then, that it endorses plans to create an independent pan-European body to support research across the disciplinary spectrum, driven by scientific excellence rather than political pressures. But backing for an ERC extends beyond the ranks of the scientific community to include senior figures within national funding agencies and politicians from the member states of the European Union (EU).

So what, exactly, is the idea? And has its time really come, or does the choice of a Hugo quote as a rallying call betray an incurable romanticism among the ERC’s supporters? After all, some people have been calling for the creation of a European equivalent of the US National Science Foundation (NSF) for years, with little to show for their efforts.

The answers to these questions should move into sharper focus next month, when scientists and research managers from across

the continent gather in Copenhagen to discuss the idea of creating an ERC, at a meeting hosted by Denmark’s research councils.

Research leaders argue that European nations need to pull together more effectively if they are to compete with the research powerhouse that is the United States. Indeed, fears about European competitiveness lie at the heart of a proposal by the EU commissioner for research, Philippe Busquin, to coordinate national science policies under the umbrella of a European Research Area (see *Nature* 413, 768–770; 2001). Many observers, however, believe that an independent ERC is needed to make any real headway in integrating Europe’s fragmented efforts in basic research.

Gathering speed

The ERC idea started gaining its current momentum in Scandinavia. At an informal meeting on European science policy held in Stockholm in April, Pär Omling, director-general of the Swedish Research Council, outlined a model for a multidisciplinary council financed by the EU but acting autonomously. It would concentrate on fundamental and strategic research, moving swiftly and basing funding decisions on scientific excellence judged by peer review.

ERC supporters contrast this vision with the EU’s Framework research programme, which is primarily concerned with making Europe more economically competitive and inevitably gets influenced by the political

agendas of member states. The Framework programme is widely criticized for responding sluggishly to new scientific opportunities — not surprisingly, as its budget is set in five-year chunks in a process that requires agreement among the EU’s member states and approval by the European Parliament.

Danish officials are also supportive of the ERC idea. Though Scandinavian countries are traditionally sceptical about the value of European-level institutions, they are enthusiastic about the ERC — not least because their researchers are likely to compete successfully for funding if quality is the driving factor. With Denmark now occupying the EU presidency, which rotates every six months, the ERC is in the political spotlight.

At the same time, enthusiasts spy an opportunity in the deliberations of the European Convention, a high-level panel chaired by former French president Valéry Giscard d’Estaing. The convention is preparing a far-reaching reform of EU administrative structures by 2004, when 11 more nations are due to join its existing 15 members. As it reconsiders the EU’s current activities, including the huge sums devoted to agricultural subsidies, it may be possible to throw the ERC proposal into the mix. “There is a window of opportunity,” suggests Portugal’s former research minister José Mariano Gago, head of the Portuguese Laboratory for Particle Physics in Lisbon and a long-time supporter of greater European integration in science.



José Mariano Gago: launch a voluntary pilot scheme.

Among ERC enthusiasts, however, there is a diversity of views on the best starting point, in terms of disciplinary scope, modes of funding, and governing statutes. Last, but by no means least, is the key question of where the money should come from. The wide array of competing ideas should provide ample scope for discussion at the Copenhagen meeting, which opens on 7 October.

Perhaps the most provocative proposal comes from Hans Wigzell, director of the Karolinska Institute in Stockholm, Sweden's premier centre for biomedical research. He advocates splitting the Framework budget — 17.5 billion euros (US\$17.2 billion) for the current five-year programme — straight down the middle, allocating half to the ERC. By contrast, Ernst-Ludwig Winnacker, president of the DFG, Germany's main granting body for basic research, suggests that the money should come from national agencies, which could initially contribute 0.5% of their budgets — giving a nascent ERC, involving perhaps half-a-dozen agencies, some 25 million euros per year. Other experts suggest various mixtures of EU and national funding, perhaps supplemented by donations from industry.

Some ERC proponents want it to operate like the NSF, supporting a range of activities from fellowships through project grants to funding for large facilities. Others suggest a series of ERCs in individual disciplines, possibly affiliated to existing bodies such as the European Molecular Biology Laboratory in Heidelberg or CERN, the European laboratory for particle physics near Geneva.



Ernst-Ludwig Winnacker: wants national funding.

Richard Sykes, rector of London's Imperial College, who leads a high-level working group of the European Science Foundation (ESF) considering the ERC idea, suggests that it should initially fund the cream of Europe's postdoctoral researchers to work abroad for four or five years. Making 1,000 awards per year would require an annual budget of some 200 million euros, he says.

For many working scientists, an independent ERC is an appealing idea. Some see an opportunity to overcome problems at the national level in access to major research facilities. Katherine Richardson Christensen, an oceanographer and vice-rector of the University of Aarhus, says Danish agencies



cannot obtain access to Europe's only ship capable of conducting multidisciplinary research in Antarctic waters: Germany's *Polarstern*. "Europe has a whole fleet of small research vessels, but only a few scientists get access to European resources," she says.

In candidate EU members such as Poland, where research funding is scarce, the ERC is seen as a lifeline for scientists who can compete with Europe's best. "This would be most welcome in Poland, where not even a Nobel candidate has a chance of getting serious money," says Jerzy Langer, a solid-state physicist at the Polish Academy of Science's Institute of Physics in Warsaw, and vice-president of Euroscience. He suggests that the ERC should support fellowships to allow talented researchers of all ages to stay in their home countries.

Doubts and downsides

But Ian Halliday, head of Britain's Particle Physics and Astronomy Research Council, questions whether an ERC will be able to meet all the hopes being pinned on it. "Small countries may look favourably on the ERC," he says, "but do they really know how hard it would be to compete for funds?"



Jerzy Langer: a lifeline to countries such as Poland.

Halliday backs the goal of a European funding agency supporting scientific excellence. But he warns that care will be needed to ensure that political pressures don't distort that mission, and that spending is concentrated on initiatives that require support at the European level. "Taking money away from national councils, just to spread it all over Europe, would create no added value," says Halliday. "It is easy to say that the ERC would fund only the very best, and automatically do better than the Framework programmes. But who guarantees that it does not get political?"

The ERC's supporters argue that it should be a self-governing body, run by scientists for scientists. Meanwhile, the Strasbourg-based ESF, an association of national research agencies which already runs pan-European

research projects funded by its members, suggests that it could play a role in establishing and running a fledgling ERC.

But any body using money from the EU's central coffers and from national research agencies would have to be accountable to the EU and participating states — which raises tough questions about the extent to which its paymasters would influence its priorities.

"There are no simple answers," Gago concedes. There is also the obstacle of convincing politicians and national agencies, particularly in the major scientific nations, to sanction any transfer of funds. Though Winnacker is an ERC enthusiast, for instance, the idea does not yet have the DFG's formal backing.

Nevertheless, Gago remains convinced that the political climate is more favourable than ever before. "I believe all EU member countries are open to the matter," he says. Though few observers expect the Copenhagen meeting to produce a single clear vision for the ERC, the idea's supporters hope it will



Ian Halliday: who guarantees it will not get political?

at least narrow the range of possibilities, and show a willingness by scientists and research administrators to get involved.

To seize the current window of opportunity, seasoned observers of the European scene say the ERC's proponents will have to launch at least a pilot scheme — such as Sykes's proposed fellowships — within a year. "The most simple way would be for a federation of national research agencies to launch, on a voluntary basis, one or more common programmes with their own budgets," says Gago. ■

Quirin Schiermeier is Nature's German correspondent.

Euroscience's ERC debate

♦ www.euroscience.org/WGROUPS/SCIENCE_POL/erc.htm

Copenhagen meeting

♦ www.forsk.dk/dkeuformand/information.pdf

European Convention

♦ european-convention.eu.int

European Science Foundation

♦ www.esf.org