

Europe science ministers approve 2014–20 funding framework

Eastern states and the European Parliament push for more even distribution of funds.

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After long and hard negotiations, European Union (EU) science ministers have given their backing to a general structure for Horizon 2020, the bloc's 2014–20 research-funding programme. The proposed budget is some €90 billion (US\$111 billion), but both eastern European countries and the European Parliament have urged measures to ensure that less-developed EU states will share equally in the largesse.

A letter submitted by 11 eastern states to the EU Council of Ministers, made public on Thursday, demanded a dedicated article in the Horizon 2020 legislation that would “ensure equal access” and “fair conditions for newcomers” and that would put an end to the “closed clubs”, by which they mean the dominance of western EU states in winning the bulk of funding.

To allow the legislative process to move forward — finance ministers and Parliament have yet to vote on the 140-page plan — a majority of the science ministers reached a compromise under which Horizon 2020 rules for participation will boost the “attractiveness of researchers’ careers across the Union”.

That vague wording will be tightened up by diplomats in the coming months, but the negotiations now shift over to the legislation that will govern these rules of participation.

While the eastern states are not calling for geographic quotas — which western states and the European Commission have have resisted — they stress the need for mechanisms that will ensure a more level financial playing field for researchers. Research commissioner Máire Geoghegan-Quinn said in a statement on Thursday that she would look into the issue of pay for researchers, but added that more data in this area are needed.

On the same day, Maria da Graça Carvalho, the Portuguese centre-right member of the European Parliament (MEP) responsible for shepherding the legislation through Parliament, issued a draft report outlining the initial changes that MEPs would like to see to the proposal. Parliament also wants to see rules that would ensure funding is more evenly distributed throughout the EU.

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Specifically, the MEP report calls for pairing wealthier western universities with eastern partners, with research funds being spent on travel and infrastructure to support this. Existing pilot projects that award European Research Council (ERC) grants to groups of academics — including “less well-known” research groups — rather than individuals, would also be expanded.

The report also backs the creation of a dedicated reward programme for researchers who elect to return to poorer states with less-developed research infrastructures after careers in wealthier countries — including those outside the EU.

Separately, ministers from France, Germany, Austria and Denmark, which now holds the EU's six-month rotating presidency, were successful in pushing through changes to the Horizon 2020 proposals that would ensure that social sciences and humanities are “fully integrated” across all areas of the programme.

“Radical breakthroughs with a transformative impact increasingly rely on intense collaboration across disciplines in science and technology ... and with the arts, behavioral sciences and humanities,” reads the report.

Philip Flores, a spokesman for the Danish Ministry of Science, Innovation and Higher Education, told *Nature* that humanities research have a key part to play in the societal challenges facing Europe: “If you want to change people’s minds about climate change, for example, you have to have more interdisciplinarity. Here, as with terrorism, crime and security, it is not only the natural sciences that will lead to advances.”

The ministers also said that Horizon 2020 will streamline the bureaucratic process for researchers and that particular attention will be

paid to ensuring that small and medium-sized enterprises and the private sector in general enjoy strong participation in the programme.

The plan's ethical principles around human cloning, stem-cell procurement and human genetic modification introduce no new restrictions, and close followers of EU legal concerns in these areas say that the wording around these topics has been made clearer.

Horizon 2020 has three main priorities: 'Excellent Science', to which some €28 billion is to be allocated, 'Industrial Leadership', which will receive €20 billion, and 'Societal Challenges,' which will receive €36 billion.

Within the Excellent Science heading, the ERC budget has yet to be established, awaiting wider EU budget negotiations. The ERC aims to support ground-breaking, high-risk, high-reward research.

The Industrial Leadership pillar will see funds focused on research in the realms of information technology, nanotechnology, advanced materials, biotechnology, advanced manufacturing, next-generation computing, robotics and space.

The Societal Challenges pillar will see funds channelled to research in sustainable agriculture, clean energy and transport, climate change and security. The last item is intended to aid efforts against crime and terrorism, with a focus on cyberattacks, illegal trafficking, "understanding and tackling terrorist ideas and beliefs", protecting crucial infrastructure and strengthening "border management".

"This is a very early agreement," says Flores, adding that negotiations have been tough up to now and that "it will be a hard discussion going forward."

"We all know which countries will be defending their strongholds," he adds. The funds boost to Horizon 2020 — its predecessor, the Seventh Framework Programme, has a roughly €50 billion budget — comes from a big cut in the EU's Common Agricultural Policy. France, with its large agricultural sector, is likely to lose the most.

Final decisions on the new framework will be completed in 2013. Negotiations over the budget allocations to Horizon 2020's various sub-programmes will begin shortly, and the latest figures up for discussion could push the funds available from the commission's proposed €80 billion up to €87.7 billion. The council's discussions will probably conclude in late December under the Cypriot EU presidency. Negotiations with the European Parliament begin in September or October, with all sides hoping for an early agreement.

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