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A deal on the horizon

Leaders have finally thrashed out the European Union budget for the next seven years. But how much money will go to research is yet to be confirmed.

After almost 26 hours of intense debate last week, European leaders have finally agreed on the total European Union (EU) budget for the period 2014–20. Scientists can breathe a sigh of relief — but concerns cannot be dismissed just yet.

The deal allocates €125.6 billion (US$168 billion) for initiatives to increase Europe's competitiveness and strengthen employment. That includes the budget for the Horizon 2020 research programme, which will fund basic research through the European Research Council (ERC) and applied science through other projects.

The total funding for competitiveness over the next seven years has increased by more than 37% compared with the EU budget for 2007–13. European scientists and research lobbyists have cautiously welcomed the deal, which hints at a reasonable settlement for research given Europe's current tight economic climate. As described on page 159, the deal currently sets aside around €69 billion for Horizon 2020. But that could change in coming weeks, as ministers thrash out the fine details of the agreement and the European Parliament also has its say.

The deal agreed on 8 February follows intense lobbying by scientists across the continent to protect the research budget after EU leaders failed to see eye to eye at budget talks in December. Hard-line governments including those of Britain and Germany were looking for a substantial slash to EU spending plans. Lobby groups including Euroscience, which is based in Strasbourg, France, and scientific leaders including Helga Nowotny, president of the ERC, urged decision-makers to safeguard the €80-billion research budget suggested by the European Commission.

Analysts have already begun to crunch the numbers to work out what the competitiveness budget could mean for research. According to estimates by Wolfgang Eppenschwandtner, executive coordinator of Initiative for Science in Europe (ISE), an independent science-advocacy group based in Heidelberg, Germany, the lobbyists will not get everything they wanted. The question is, on what will they lose out?

In the agreement, decision-makers said that a priority of EU spending should be to strengthen research and innovation. Horizon 2020 and the ERASMUS for All programme — which includes funding for graduate students to study abroad — have been promised more money in their yearly budgets than was provided for research and the ERASMUS programme in 2013.

Given this rhetoric, says the ISE, a research budget of €69 billion represents the worst-case scenario. In the best case, Horizon 2020 could actually be awarded between €75 billion and €78 billion.

Standing in the way of the best-case scenario are the financial commitments that EU leaders have already made from the 2014–20 competitiveness budget. They have set aside €29.3 billion for building transport, energy, broadband and digital-services infrastructure as part of the Connecting Europe Facility. They have also allocated €6.3 billion for the Galileo global-navigation satellite system; €2.7 billion for ITER, the experimental fusion reactor being built in Cadarache, France; and €3.8 billion for the Global Monitoring for Environment and Security Earth-observation satellite. Taking into account all the other initiatives that the competitiveness budget must also cover, not all that much money is actually left in the budget for research.

One possible way to free up more funds would be for the EU to pay for its agriculture research, proposed at about €4 billion, from the agriculture budget instead of the competitiveness budget. Still, even lobbyists pushing for this idea say that it is not clear whether it is legal or possible given administrative constraints.

"The lobbyists will not get everything they wanted. The question is, on what will they lose out?"

Ultimately, the final outcome for research depends on minsters' interpretation of the edict that Horizon 2020 will get a real increase over funding levels in 2013.

Keeping in mind that before the budget talks, rumours were circulating of even deeper cuts to research, scientists and lobbyists have done well to secure research funding of at least €69 billion. But the fight is not yet over. ■

Preventive therapy

Stem-cell trials must be made easier, so that treatments can be based on real data.

Last November, a Nevada court convicted two men of fraud for selling ineffective stem-cell treatments to people chronically ill with, among other disorders, multiple sclerosis or cerebral palsy.

According to the US Food and Drug Administration (FDA), one of the men, Alfred Sapse, targeted extremely ill patients with a method that he claimed to be proprietary — implanting portions of placental tissue into the abdomen. Sapse, the agency says, knew that he needed FDA approval for such a procedure. He didn't have it. He claimed to be a doctor but didn't have a licence. The other defendant, the physician who performed the procedures at Sapse's bidding — on some 34 people in Las Vegas — knew "that it would not benefit the patients". The pair "conducted no meaningful follow-up with the patients who underwent the implant procedures". They did "not use any of the money for laboratory research, animal studies or human clinical studies relating to the short- and long-term effects of the implant procedures". (Sapse made US$1 million from the treatments; he spent $700,000 of that on gambling and personal expenditure.) At least two patients suffered infections, and it is not clear what damage others might have incurred. In November 2006, the FDA issued a warning letter, telling the pair to stop. But they continued.

The incident shows the cavalier attitude with which many fraudsters