

► been issued earlier it would not have prevented the issues around scientific integrity that arose during the oil spill.

Some advocates agree that the document is a disappointment. "It was a very long wait for four pages," says Jeff Ruch of Public Employees for Environmental Responsibility (PEER), based in Washington DC, which has represented several scientist whistleblowers. "We feel frustrated that this process is horribly off schedule." Ruch says that several sentences have the potential to make things worse, rather than better, for government

scientists. For example, the guidelines say that researchers can speak to the media, provided there has been "appropriate coordination" with public-affairs offices, but they fail to define what is appropriate. They also allow scientists to speak publicly about their "official work" but fail to offer protection for scientists who are judged to have spoken up in their private capacity. "Scientists are free to speak, except when they're not," says Ruch.

Grifo says that her organization is a little more positive than PEER. She points to sections that unambiguously allow government scientists to serve on the boards of scientific societies and journals, to present findings at scientific conferences and to accept awards and honours for the science they do. These are major issues, she adds, because the UCS has heard from government scientists who have been prevented from doing these things in the past because of a perceived conflict of interest.

But she agrees with Ruch that the media policy lacks specificity, and also argues that the guidelines should have taken a stronger position against scientists with financial conflicts of interest serving as advisers to the government.

James Hansen, head of the NASA Goddard Institute for Space Studies in New York City, who became well known for speaking out publicly about censorship of his scientific work by NASA press offices during the Bush administration, says that the new policy does not change either of what he sees as two central problems; the use of political appointees to run public-affairs offices, and the requirement that the White House

screen testimonies that scientists make to Congress. "A democracy cannot function well with the present approach," he says. ■

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"It sets forth discussion questions about scientific integrity in government, but I don't think it resolves them."

FUNDING

UK science faces facilities freeze

Four-year budget protects grants but cuts capital spending.

BY GEOFF BRUMFIEL & NATASHA GILBERT

British scientists hoping for shiny new facilities this Christmas will be disappointed by their government's research-funding plans.

On 20 December, the Department of Business Innovation and Skills, which oversees research and higher-education funding, unveiled a four-year budget which makes deep cuts to cash for large projects such as particle accelerators, research ships and university lab space (see 'Capital crunch'). Meanwhile, two of the councils that support specific areas of research announced that they will put a new emphasis on the economic impact and social benefit of the work they fund. The net effect will be a squeeze on money for new projects and blue-skies research in the coming years.

By cutting the £873-million (US\$1.3-billion) annual capital budget by roughly 40%, the government says it can maintain grant funding at the current level. Yet several key facilities will be shielded from the capital cut, including the UK Centre for Medical Research and Innovation, a new £500-million biomedical laboratory in central London. The budget also protects a handful of other planned facilities, and international subscriptions to organizations such as CERN, the European high-energy physics laboratory located near Geneva, Switzerland.

But some research councils will struggle to

cope with the cuts. The Natural Environment Research Council (NERC) said that it remained committed to a handful of key projects, including a replacement for its research vessel *Discovery*. But no new projects are likely to start in the next four years, according to Marion O'Sullivan, a NERC spokeswoman. Similarly, the Medical Research Council says the capital reductions will pose "challenges", according to a statement from John Jeans, the council's deputy chief executive.

The UK government's efforts to squeeze as much value as possible from its research spending has also led two of the research councils to announce changes to their missions. The Biotechnology and Biological Sciences Research Council (BBSRC) no longer sees itself as a science 'funder', but rather as an investor of public funding in science. Matt Goode, a spokesman for the BBSRC, says this refocus is a "subtle semantic change" and that the council is not abandoning basic research. Meanwhile, the Engineering and Physical Sciences Research Council (EPSRC) announced that it would become a "sponsor" of research. "Funding is viewed as a strategic investment and not a transfer of funds without obligations," David Delpy, the EPSRC's chief, said in a video message explaining the shift. Researchers would be asked to think about impact at every stage of the research process, Delpy said.

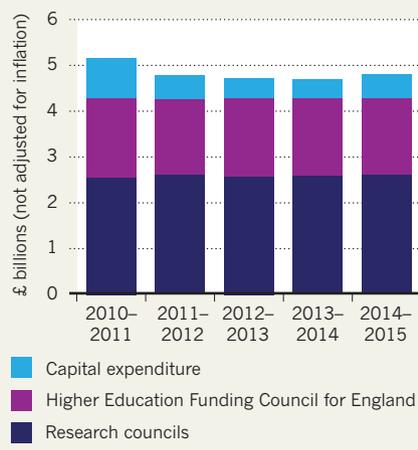
"Obviously this is sheer lunacy," says Paul Clarke, a chemist at the University of York, UK. "If I knew what the impact of the research would be, I wouldn't have to do the research."

Research funds for English universities will also be squeezed. The Higher Education Funding Council for England (HEFCE) will have its annual £1.6 billion for research grants cut by about 3% over the next four years (universities elsewhere in Britain are overseen by other bodies). But like the research councils, the biggest cuts hit the capital budget, which will be slashed by 40% from its present level of £167 million over the same period. The HEFCE will announce how it will slice up its budget between universities in March 2011.

Imran Khan, director of the Campaign for Science & Engineering in the UK, a London-based advocacy group, fears that some research councils may be forced to dip into money intended for basic research to make up for the capital shortfall. "The money will have to come from somewhere," he says. ■

CAPITAL CRUNCH

UK government funding for research has been protected, but at the expense of cash for buildings and major projects.



SOURCE: BIS