

## Regulation cost concerns

### London

BRITISH biotechnologists are concerned that proposed genetic engineering regulations, published last month by the UK government, will place British companies at a competitive disadvantage within the European Communities (EC).

The regulations are designed to comply with two EC directives regulating the contained use and deliberate release of genetically engineered organisms (see *Nature* **344**, 371; 1990). Among other things, the directives say that no environmental releases of engineered organisms will be allowed without the prior approval of national authorities, and propose that, once a product containing an altered organism is approved in one member state, it can be marketed throughout the EC.

But Louis De Gama, executive director of the BioIndustry Association, is concerned that the regulations will place a greater financial burden on researchers and industry than those being drawn up in other EC states. "We would like to know that there's going to be a consistent approach across the EC," he says.

The British government estimates that implementing the new regulations will cost between £3 million and £10 million over the next five years. Most of this money will come from companies and research institutes, which will be charged for consents to market products containing engineered organisms and to release altered organisms into the environment.

Nigel Poole, from ICI's Jealott's Hill Research Centre in Berkshire, believes that the government's estimate is many times too low. According to the UK Department of the Environment (DoE), most consents for environmental releases will cost between £2,000 and £4,000. But as the precise figure will depend on the administrative cost of each application, De Gama says that some consents may cost tens of thousands of pounds, where applications demand more attention by the government's new Advisory Committee on Releases into the Environment. The cost will be particularly crippling for academic researchers, he says. (The DoE plans to charge the same fees to academics as to industry.)

Officials in the environment directorate-general of the European Commission, which drafted the two EC directives, say that the member states will be left to draw up their own charges for consents to release organisms. Britain is one of four EC states so far to have passed laws to comply with the directive on environmental release. Among the others, Denmark and Germany are proposing similar fees for consents.

Peter Aldhous

## Oil fields under control

### London

THIS week, the last of the 700 Kuwaiti oil wells sabotaged during the Gulf War will be back under control, a mere seven months after the first well-control teams arrived in Kuwait. That period is surprising short, given that most oil-industry experts had predicted at the time the war ended that some wells would remain ablaze until at least March 1992.

Ralph Brown, who heads the Kuwait Petroleum Company's well-control task force, is one expert who was not surprised. He says his own company had always expected to cap 95 per cent of the sabotaged wells by the end of this year. And, he says, "we were able to mobilize more teams and equipment than people originally thought existed".

Brown adds that scientists and engineers from all over the world — with the notable exception of the United States — deluged his task force with well-meaning, but impractical, technical solutions (mostly based on the misperception that the main problem posed by a blazing oil well is the

fire itself, rather than the uncontrolled flow of oil and gas). The US scientific community was saved from a similar flurry of wasted effort, Brown says, by a symposium held in Washington in April (see Commentary, p. 11), which gave experts a chance to explain to interested US scientists the nature of the problems in Kuwait.

Although the Kuwaiti wells were eventually brought under control using tried-and-tested oil industry technology, Brown says the Washington symposium did produce some "first-rate ideas" that will be extremely useful in the next task faced by Kuwait — clearing the many thousands of unexploded mines and other munitions left from the conflict. In particular, Brown believes that a mine-clearing harrow, developed by William Wattenburg, an independent physicist and radio broadcaster, together with a team from the Lawrence Livermore National Laboratory in California (see p.13), will be a vital tool in the battle to remove the thousands of cluster bomblets now lying in the shallow waters off Kuwait's beaches. **Peter Aldhous**

### EC RESEARCH

## Brite's prospects dim

### Brussels

THE European Communities' (EC) centrepiece programme for industrial research, already more than a year behind schedule, faces a further delay. Many of the 12 EC member states are objecting to the European Commission's specific outline for the Brite-EuRam programme, drafted by Filippo Pandolfi, Commission vice-president in charge of research. Pandolfi plans to channel a proportion of the 660-million-ECU (about \$800 million) Brite-EuRam budget into a series of 'targeted projects' aimed at particular industrial sectors.

Brite-EuRam grants, which must be matched by funds from industry, are designed to support a broad range of projects, including research into advanced materials, new manufacturing technologies, raw-materials processing and recycling. Most of the member states, including Britain, argue that EC research money should not be used to benefit particular industries — and so are opposed to Pandolfi's targeted projects, which include specific schemes for the textiles and shipping industries as well as to develop 'clean car' technology. France (where support for particular industrial sectors is an accepted ingredient of government industrial policy) and several of the Mediterranean states are expected to back Pandolfi. If the dispute cannot be resolved quickly, Commission officials say that the entire Brite-EuRam programme will be stalled for three months.

Peter Aldhous

### SEMICONDUCTOR RESEARCH

## Retrenchment at JESSI

### London

FACED with the failure of the European Commission to provide the funds it had promised, the Joint European Submicron Silicon Initiative (JESSI) is cutting back its research programme and focusing on a smaller number of central 'flagship' projects. JESSI spokesman Klaus Knapp, from the German company Siemens, says that JESSI's budget for 1992, at around 400 million ECU (about \$490 million), will be 25 per cent less than the figure expected in 1989, when the initiative was launched.

JESSI is the European equivalent of the US Sematech consortium, bringing together European semiconductor manufacturing companies to work on collaborative research and development projects to help the European industry counter the growing dominance of Japan. One quarter of JESSI's budget was supposed to be paid by the European Commission, a matching sum by individual European governments, and the other 50 per cent by the industrial partners in JESSI projects. But Knapp says that the Commission has provided only one-third of the sum it agreed to pay.

Since 1989, JESSI has supported more than 70 different research projects. Some redesign of the JESSI programme was always planned for 1992, but the current financial difficulties will force more drastic changes than expected. The new flagship projects will include work on lithography, high-definition television, digital audio broadcasting and digital cellular telephones.

Peter Aldhous