

France faces large bill over its space station agreement

Paris. France's Centre National d'Etudes Spatiales (CNES), the world's third-largest space agency, is likely to pay a heavy price for last month's agreement by Europe's space ministers on the participation of the European Space Agency (ESA) in the international space station.

At the meeting, France increased its funding for the European station programme, led by Germany, to ECU756 million (US\$1 billion) over the period 1996–2004 (see *Nature* 377, 669; 1995). In return, Germany agreed to increase its funding for the French-led Ariane launcher programme from ECU120 to ECU292 million.

But to pay for the costs of the station, CNES will need to make economies of 5 per cent annually in its budget — which came to a total of FF10.7 billion (US\$2.17 billion) last year — over the period 1996–2000. This could threaten France's position as the only European country able to sustain vigorous national and bilateral space programmes alongside its commitments to ESA.

Anticipating such cuts, CNES staff went on strike on the first day of the meeting, which was held in Toulouse — ironically France's aerospace 'capital' — and held a protest outside the building in which it was taking place. The main concern of unions representing staff at the agency is that the cuts will inevitably translate into job losses both at CNES and within the aerospace industry. Moreover, although France has increased its participation in ESA's contribution to the station, the lion's share of industrial contracts from this programme will go to Germany, which is building the Columbus Orbital Facility (COF).

Investment in France's other space programmes is expected to stagnate as a result of the deals struck at Toulouse, says a representative of staff at Aerospatiale, which last week announced 3,000 redundancies, mainly as a result of cuts in defence spending. The space station, concluded the CNES unions, would have few economic benefits for France, while its costs would weaken the country's space sector and therefore compromise its ability to address future technological challenges.

A similar warning had already been given by the French Academy of Sciences. In a statement issued before the meeting, the academy said that the station was not based on scientific needs; it accepted that Europe might choose to participate for essentially political reasons, but demanded that scientists should not be obliged to use the station and argued that the space science programmes should be protected.

François Fillon, the French minister with responsibility for space, has admitted that

the station's scientific goals are questionable, but that the project's main *raison d'être* is political — namely that Europe could not absent itself from a global space project involving the United States and Russia. But he argues that had the meeting failed to agree on a common European role in the station, Germany would undoubtedly have participated alone, with the other international partners. That would have risked the disintegration of ESA, he asserted, and with it a risk to France's biggest interest in space, the Ariane-5 programme.

Fillon argues that CNES should be able to absorb the cuts with only minimal damage to its programmes. Only one-third of the cuts will be made in national programmes,



he says, whereas two-thirds will be made in ESA programmes other than the space station and Ariane.

André Lebeau, the president of CNES, says that some national programmes will be delayed to make economies, but that the Spot-5 Earth observation satellite and Stentor telecommunications satellite programmes will be maintained intact. French officials also argue that, while CNES will walk a financial tightrope between 1996 and 1998, the situation will then be eased by the completion of the most expensive phases of Ariane-5 development.

But Fillon admits that the effectiveness of any damage limitation exercise will depend on CNES not being subject to further budget cuts. These cannot be ruled out, as the budget committee of the National Assembly has demanded FF240-million cuts in CNES's budget next year.

Whatever the outcome, France's decision to increase its contribution to the space station seems to have put paid to recent efforts by CNES to stop the escalation of its contributions to ESA in order to reinforce its national and bilateral programmes, such as the widely-acclaimed French-US altimetric satellite Topex-Poseidon. **Declan Butler**

Safety protocol due for a rough ride in biodiversity talks

London. Signatories to the United Nations Convention on Biological Diversity will meet in the Indonesian capital, Jakarta, next week amid continued controversy over plans to establish a legally binding international protocol covering the handling, transport and use of genetically modified living organisms.

Representatives of 168 signatories to the UN's Biodiversity Convention will renew calls for a biosafety protocol at their second annual meeting from 6 November. But an advance meeting of biosafety experts specially convened in July by the United Nations Environment Programme (UNEP) failed to arrive at a consensus on the timing of new biosafety legislation.

Representatives of the biotechnology industry have said that they, too, favour loose guidelines on biosafety, or bilateral agreements between countries, such as that signed between the United Kingdom and Argentina (see *Nature* 377, 94; 1995), rather than the formal protocol suggested in article 19 of the convention.

Gavin Cree, for example, group safety adviser at the UK chemical company Amersham International, said last month at a London conference convened by the Royal Geographical Society he could "see no reason" to justify the introduction of a new international biosafety protocol. "Most of biotechnology comes under the same safety regulations as other technologies used in industry and everyday life," said Cree, who was speaking on behalf of the BioIndustry Association.

"The protocol will take time to agree, time to ratify and will not be accepted by all countries. Guidelines can be in place much quicker and will encourage biosafety in countries which lack such regulation."

The Jakarta meeting will also attempt to resolve disagreements about the convention's finances and a proposed 'clearing-house' mechanism for scientific cooperation, as well as the allocation of intellectual property rights. Biodiversity prospecting, where companies pay a tax for the privilege of hunting for an organism as well as a royalty from commercial sales, is beginning to take root in some countries. But this practice does not resolve the issue of ownership of the modified organism.

Tony Juniper, a senior campaigner with the environmental group Friends of the Earth, warns the convention's signatories not to lose sight of the bigger picture as they discuss legal minutiae. "We are losing 76 species every day. Rainforests are under threat. Such emergencies, the real reason for a convention, are drifting further away from importance," he says. Ehsan Masood