

Information technology

Britain's flagship looks for help

FLAGSHIP, an optimistic collaborative project between the British government, industry and two university departments, was launched in London last week. A £9.3 million investment is being made by the Department of Trade and Industry's Alvey programme with a consortium comprising ICL (Britain's only major computer company), Plessey, Imperial College London and Manchester University, increasing to £15.5 million for the initial three years of the project. Flagship is the long-awaited fifth-generation information processing system with many general-purpose applications. But whether the British project can keep up with Japanese and US efforts is open to question. Certainly legal squabbles over who is to reap the profits from products developed by Flagship have delayed the start of the project.

The general aim of Flagship is to evolve an architecture with sophisticated parallel hardware and "intelligent" software that will be easier for the non-technical user to operate. Imperial College has developed the software for Flagship (the Alice graph-reduction machine) and the hardware is provided by Manchester University's Dataflow machine. ICL is to develop the system at its Manchester site. The Alice prototype uses Inmos transputer chips, but ICL says that recent worries about the future of Inmos will not affect Flagship —

UNESCO minus one

THE British government last week formally announced its resignation from UNESCO (United Nations Educational, Scientific and Cultural Organization), to the consternation of many remaining members. The £6.4 million that Britain contributed will be transferred to the British Council, Mr Timothy Raison, minister for overseas development, said last week. The government will use the money to enable more students from the developing countries to study in Britain; numbers are expected to increase from 11,000 to 12,000.

Members of other European Community countries, particularly France and West Germany, Japan and members of parliament from the three major parties in Britain, all objected strongly to Britain's decision to withdraw. Mr Amadou Mahtar M'Bow, UNESCO's director general, expressed his "deep regret" at Britain's departure.

Britain, after the departure from UNESCO by the United States last year, had demanded many reforms in the organization (see *Nature* 14 November, p.98; 5 December, p.397). Some were implemented at the recent general assembly in Sofia, but Britain felt that UNESCO had not gone far enough.

Maxine Clarke

"we already have all the transputers we need".

The Flagship project will concentrate on declarative styles of programming, and will use Dactl, Alvey's compiler target language, which Alvey hopes will be adopted as a European standard. Flagship also uses Pisa (persistent information space architecture) for interfaces between applications, computers and data.

The Alvey programme was set up in 1983 to stimulate research on advanced information technology; its priorities are intelligent knowledge-based systems, man-machine interfaces, software engineering and very large-scale integration. The aims of fifth-generation computers were set out by Japan in 1982; such an architecture should produce computer

systems that work 1,000 times faster and handle 10,000 times more information than existing machines, as well as the "social" function of communication in a natural language rather than machine codes.

The applications of the Flagship type of system are enormous — project management, "knowledge" databases, image processing, robotics and office systems are some areas that Flagship will be seeking to develop in the next few years. The biggest threat to Britain's commercial aspirations is seen to be from the Japanese, who are putting considerable effort into advanced systems architectures. For example, Japan supports eight giant electronic corporations that make microchips, compared with Britain's single troubled company, Inmos. At Flagship's launch last week, Mr Geoffrey Pattie, minister for information technology, hinted that Britain might look for European collaboration for future stages of the project.

Maxine Clarke

European Synchrotron Radiation Facility**Grenoble siting hits a snag**

THE Prime Minister of France, M. Laurent Fabius, may have broken the law when he decided to site the European Synchrotron Radiation Facility (ESRF) at Grenoble rather than Strasbourg. That at least is the opinion of M. Jean Raymond, an adviser to the local government of Strasbourg, who is planning to bring the issue to a head this week. M. Fabius has only just emerged, apparently unscathed, from the trouble caused by his remark last week that he had been "troubled" by his president's reception of General Jarulewski at the Elysée Palace.

M. Raymond's case against the Prime Minister was argued at a public meeting in Strasbourg a week ago, and is based on an agreement between the national government and that of the Alsace regional council which was signed in April 1984. The national government apparently agreed to "support the candidature of Strasbourg as a site for new international organizations". It supplied a list of eligible organizations, among which ESRF was one.

One question is whether all the items on the list were to be considered for Strasbourg in the first instance, or whether they were merely examples; Raymond believes the intention was clearly the former. But the second more substantial question is whether the agreement can be legally binding whatever interpretation is correct. Raymond argues that planning laws enacted in 1982 and designed to devolve power to the French regions do indeed have the force of law. He seems to have a point when he adds that none of the procedures specified in the 1982 act for rescinding agreements between central and local governments seems to have been followed when ESRF was moved to Grenoble.

A dispute between the regional government, which belongs to the political right,

and the socialist government in Paris thus seems inevitable. M. Fabius's case would undoubtedly be stronger if the machine intended for Grenoble were already partly built. But as yet, no ground has been broken there; indeed, the government is still seeking foreign contributions towards the project. So the return of ESRF to Strasbourg is not impossible.

Robert Walgate

Satellite insurance

ARIANESPACE, the French-based company that sells space on the European space launcher Ariane, has moved quickly to offer customers insurance at reasonable cost (see *Nature* 317, 567; 1985). The company has set up a subsidiary, the Société de Réassurance des Risques Spatiales (known as S3R), which will offer users a free re-launch of a failed satellite.

S3R is designed to cover the next fifteen Ariane launches over the next five years, and will offer insurance at premiums of 10–13 per cent, compared with the 20–30 per cent being quoted unofficially by the open markets. The difference stems from S3R's sanguine view of the risks. It expects only one failure in the next fifteen Ariane launches, compared with the one-in-five risk expected by private insurers.

Even so, the new company expects to lay off some of its risks on the private re-insurance market. S3R is meant only to cover the next three years, after which it is hoped the insurance market will have been reassured by Ariane's performance.

Whether the terms now offered constitute a subsidy will be fiercely argued both by the private insurers and by those who regard Ariane as a serious competitor of the space shuttle.

Robert Walgate