# Eureka needs to grow

### Waalre, The Netherlands

INTERNATIONAL cooperation, including full support for Eureka, the European high-technology research programme initiated by France in April, forms a major plank of the Dutch government's science budget, presented to parliament last week by education and sciences minister Wim Deetman. Rumours of coolness towards Eureka were discounted by Deetman, who says that Eureka is an important initiative on the road to the "Technological Europe" envisaged by Prime Minister Ruud Lubbers when speaking at the European summit in April.

This enthusiasm for the European technological cause is likely to be continued when the Netherlands takes its turn at EEC chairmanship beginning in January 1986. The Dutch themselves now claim to be doing 1 per cent of the world's research, and Eureka, together with European Community programmes such as Esprit, BRITE and RACE, is seen as a logical step towards maintaining the country's research base.

The Dutch government feels, however, that Eureka should be broadened out to include countries outside the European Community, but that some link should also be made with the European Commission in Brussels. The Dutch science minister will be discussing Eureka with French minister M. Hubert Curien when they meet in Germany next month. The Dutch view is that if it is to be worthwhile, Eureka should be flexible enough to include basic research and complex, ambitious projects that might otherwise go unsupported.

In the science budget, it is announced that the Dutch are to take part in research in Antarctica, probably in a joint venture with West Germany. The Netherlands is also likely to be a partner (through the European Science Foundation) in the Ocean Drilling Program. The year-long oceanographic expedition to Indonesia is described as a success, and the scientific results will be discussed at an international symposium to be held in Jakarta in 1987. Further bilateral projects, in cooperation with India and China, should start soon.

In the Netherlands itself, Deetman is to set in motion a study of Dutch science policy intended "to seek especially the weak points".

The total science budget is 8,200 million guilders, 4,000 million of which comes from government sources. The rest comes from industry, mainly the Dutch-based multinationals such as Philips and Shell. Expressed as a percentage of gross national product, science spending for 1985–86 is to be 2.13 per cent, compared with 2.10 per cent in 1984–85. The government's share of this is remaining constant, at 0.96 per cent for both years.

**Caspar Schuuring** 

## A magnet for the Supercollider

#### Washington

The central design group of the proposed Superconducting Supercollider (SSC) last week announced its choice of magnet design for the accelerator. It will be the highfield (6 tesla)  $\cos \theta$  type, which was chosen over the competing 3-tesla superferric design. A special magnet selection panel appointed to advise the design group concluded that "the hope of two years ago that the superferric magnet would provide a less costly SSC has not come true".

The superconducting magnets represent a major fraction of the total cost of SSC, currently estimated at about \$3,000 million. Superferric magnets, which have for the past 18 months been under intensive development at the Texas Accelerator Center, would at \$400 million be substantially cheaper than high-field magnets, estimated to cost \$1,000 million. But if SSC used superferric magnets the tunnel would need to be 100 miles in circumference, compared with just 60 miles with high-field  $\cos \theta$  magnets. The extra tunnelling cost associated with the superferric design was a major factor against it; in addition, the panel concluded that substantially more development work remained to be done on superferric designs than on the  $\cos \theta$  magnets, which are used in all accelerators in operation or under construction.

Peter McIntyre of Texas Accelerator Center, who has devoted much of the past two years to working on the losing design, is unrepentant. He remains convinced that superferric magnets would still lead to a cheaper SSC if a site was chosen where tunnelling costs were low: six such sites have been identified in Texas and there are others in many states, says McIntyre. He will continue to perfect the superferric design for other applications while simultaneously working on high-field magnet development for SSC. The successful highfield design is the result of work at Fermilab, Brookhaven National Laboratory and Lawrence Berkeley National Laboratory.

The Department of Energy, which would foot the bill for SSC if it is ever built, has still made no formal commitment to the plan. A final decision will be made after a construction plan has been drawn up next spring, when more reliable cost estimates should be available. The latest guess is that the department will back the proposal if the likely cost is in the region of \$3,000 million, but that it will be obliged to drop the idea if SSC cannot be built for less than \$4,000-\$6,000 million. Tim Beardsley

## Polish agriculture Fight for control of peasant aid

POLAND'S controversial "Agricultural Foundation", established under church patronage to assist the recovery of private agriculture (see *Nature* **313**, p. 5; 1985) moved a few steps closer to reality last week, when the Polish government waived its objection to church control of the fund. To save face, however, the government has said "no Polish citizen" may contribute to the fund. This is clearly a direct affront to Lech Walesa, who had pledged his winnings from the 1983 Nobel Peace Prize to the fund.

The church-sponsored team, headed by Dr Andrzej Stelmachowski of Warsaw University's law department, has sponsored a major research programme into Poland's agricultural needs and capabilities: Funds have been collected mainly in the United States and West Germany, and, says the church side, sufficient reserves were available in April to launch a pilot project during 1985. The government side, however, has consistently intimated that in its opinion insufficient money was yet available even to inaugurate a pilot scheme. It pressed, moreover, for the money to be placed under the control of the Ministry of Agriculture.

By mid-August, Cardinal Josef Glemp had clearly reached breaking point. In an interview with the Austrian daily newspaper Kurier, he stated that the scheme had "failed" because the government could not permit an independent group to become strong. He followed this up, two weeks ago, by telling the church negotiators that if the government did not relax its attitude, the church would have to cancel the whole scheme and would let the foreign donors know who was responsible. The Cardinal's remarks were relayed to the government, which then waived its demands for Ministry control over the funds and agreed to try and sort out the remaining major problem - whether agricultural equipment imported under the scheme would be liable to import duty.

Uniquely in the socialist bloc, some 75 per cent of all Polish land is in private hands, mostly in tiny peasant smallholdings. The private agricultural sector suffered considerably from pricing disincentives under the Gomulka and Gierek regimes and, although the security of tenure won during the Solidarity era gave the farmers the incentive to improve their holdings and adopt more modern agricultural practices, so far they have not had the resources. The Agricultural Foundation was designed to supply those resources, but so far the government has blocked their arrival. Last week's concessions may be genuine, or just related to the 13 October election to the Sejm (parliament). Vera Rich