

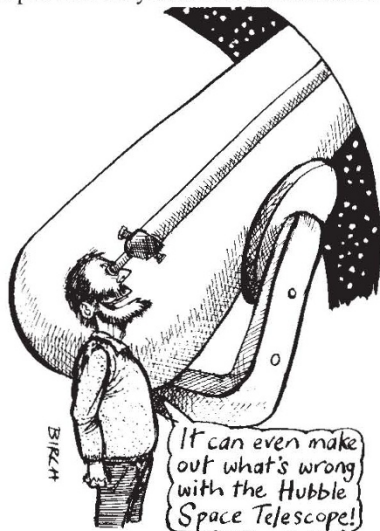
Spanish to step in?

London

THE UK Science and Engineering Research Council (SERC) last week failed to decide whether to collaborate with Spain or with the United States in a project to build what will be the most powerful optical-infrared telescope in the Northern Hemisphere.

But SERC's indecision may now tip the balance in favour of the Spanish collaboration, and is a problem for US astronomers, who need to start their project quickly.

The US National Optical Astronomy Observatories (NOAO) plan to build two 8-metre optical-infrared telescopes: one for the Northern Hemisphere at Mauna Kea, in Hawaii, and one for the Southern Hemisphere at Cerro Pachon in Chile. The National Science Foundation (NSF) can provide only half of the estimated cost



of about \$170 million, so US astronomers have been seeking foreign collaborators in Britain and Canada.

But Britain has been torn between the US collaboration and a plan to build a Northern Hemisphere 8-metre telescope in collaboration with Spain at La Palma in the Canary Islands. Here, Britain would take the lead in the instrument's construction, basing its design on the smaller William Herschel telescope, also at La Palma.

Britain's main interest is in observing northern skies. A collaboration with Spain would give more observing hours in the Northern Hemisphere, probably at a slightly lower cost, but this must be offset against the better conditions for infrared observation in Hawaii. Both projects aim to have their telescopes ready for use by the late 1990s.

The Spanish collaboration would also allow British astronomers observing time in the Southern Hemisphere. Harry van der Laan, director general of the European Southern Observatory (ESO), says

that UK and Spanish astronomers will be able to use ESO's Very Large Telescope (VLT), due to start observation in 2000, provided the arrangement is reciprocal and an adequate system of peer review for one another's projects is worked out. Neither Britain nor Spain currently participates in ESO. The VLT will be a revolutionary instrument, comprising four 8-metre telescopes that can be used independently, or in unison as the equivalent of a 16-metre telescope.

SERC, which has about £20 million to invest, has now deferred its decision until December, after the financial and contractual elements of each project have been scrutinized further. The trend towards closer relations between the United Kingdom and other European countries, both in science and economically, may influence the decision. European collaboration is increasingly seen as being essential to maintain competitiveness with the United States and Japan in 'big science' projects such as space science and particle physics. Moves towards stabilizing exchange rates between Euro-

pean Communities countries may also favour the Spanish option. In 1987, SERC's finances were badly shaken when the UK subscription to CERN, the European particle physics centre, increased as a result of the falling value of the pound.

US astronomers now find themselves in a difficult position. Sidney Wolff, director of NOAO, says that the US project has to get started as soon as NSF money becomes available, to avoid cost overruns. Important decisions on optical design and staff appointments must be made before December, she says. By the time SERC reconsiders, the potential UK input into the NOAO project will have diminished, making it a less attractive proposition for the United Kingdom. In the meantime, British astronomers will continue to refine the design of the La Palma telescope. The delay should be less of a problem for the Spanish, who have yet to finalize their own financial arrangements.

The British indecision may also undermine Canadian support for the NOAO collaboration, although Wolff is optimistic that this will not be the case. She says that NOAO may consider other international partners, while SERC makes up its mind.

Peter Aldhous

EUROPEAN SCIENCE

UK science is sold short

London

THE Treasury's system for handling UK contributions to the European Communities (EC)'s Framework research and development programme compounds the under-funding of British science, according to a report from the House of Lords EC committee, published this week.

Under EC law, member states' contributions cannot be met in full simply by diverting money from domestic spending: there must be some 'additionality' to the EC budget. But the Treasury allows only 30-35 per cent of the UK contribution to Framework as truly additional spending, which the Lords committee says "is clearly far too low". British scientists are successful in winning EC grants, recouping the UK contribution. But Treasury policy means that for every pound of EC research money gained in one year, up to 70 pence is clawed back from the following year's domestic spending on research, by a secretive process called 'attribution' against government departments' budgets.

Attribution has worried the UK research councils, who fear their funds from the Department of Education and Science may diminish as EC spending on basic scientific increases (see *Nature* 345, 376; 31 May 1990). The report charges that the Treasury has ignored the relatively small UK input in shaping EC research policy, as one member state amongst twelve. Many projects funded by

the EC do not coincide with UK priorities.

As EC research spending increases, and attribution eats into the domestic budget, "the [UK] science community's ability to set priorities for projects could steadily diminish", the committee warns.

The report says that the Treasury must be more open about the attribution process and suggests that monitoring by Parliament is needed. The Treasury should also study how other EC states manage their contributions — Treasury officials were unable to explain the arrangements made elsewhere in the EC when asked to do so by Lord Shepherd, chairman of the committee.

The committee's inquiry into EC research and development was prompted by the European Commission's proposal for a new Framework programme, to run from 1990 to 1994, overlapping with the existing programme which finishes in 1992. The peers are satisfied with the new programme's budget, and the balance of funds between different areas of research. But the report says that the Commission needs to take more account of the views of the scientific community in individual member states. This could be achieved by appointing representatives from bodies such as the UK research councils to the EC committees that advise the Commission on science and technology.

Peter Aldhous

■ New science minister, page 308.