

## UNESCO

## Soviet move too late?

THE United Kingdom, which has given notice to withdraw from the United Nations Educational, Scientific and Cultural Organisation (UNESCO) by the end of the year, last week found an unusual ally in the Soviet Union, in the final days of UNESCO's Sofia conference. British delegates return home this week after a series of post-conference committee meetings and present ministers with recommendations for Britain's final decision.

UNESCO reaches its 40th birthday this month, but whether the battered organization will survive much longer has been called into question by the departure of the United States, along with 25 per cent of the organization's budget, at the end of last year. If Britain follows suit in December, as is likely, UNESCO will lose a further £5 million from its annual budget.

Timothy Raison, Minister for Overseas Development, spelled out Britain's worries at the beginning of the conference last month. The main concerns are that UNESCO is too top-heavy, bureaucratic, poorly managed and politicized, particularly in areas of disarmament policy (duplicating the work of other UN organizations) and government control of communications in the developing countries. Britain also considers that UNESCO should demand zero real growth in next year's budget and not increase contributions required of member states following US withdrawal. Specific proposals were presented to the conference as conditions for continued British membership.

Although several concessions were made to Britain in Sofia and the meeting was considered exceptionally harmonious by UNESCO standards, none of the major changes demanded by Britain were adopted. This always seemed unlikely; UNESCO's long-term strategy, the reason for convening the conference, was decided by its secretariat in Paris well before delegates arrived in Sofia — an example, in fact, of the centralized control that Britain is seeking to change.

A major stumbling block to the Western countries' demands for UNESCO's financial responsibility and an end to political patronage is acknowledged to be Amadou-Mahtar M'Bow, the director-general, a skilled manipulator, strongly supported by the developing countries. Hence last week's surprise development, in which the Soviet Union and its allies said that they would remove their support for M'Bow at the end of his term in 1987.

Whether this move will encourage the United States to open negotiations to rejoin UNESCO remains in doubt. And the events at Sofia may well not be enough to cause a last-minute change of heart amongst British ministers. **Maxine Clarke**

## Satellite broadcasting

## Direct service standards tested

### Washington

A RIGOROUS and novel series of tests of the technical attributes of three different broadcasting systems has just been completed at the Lewis Research Centre in Cleveland, Ohio, under the supervision of the National Aeronautics and Space Administration (NASA) by the US interests in satellite television. The tests will be crucial in assisting the United States to adopt soon a technical standard for its satellites.

The tests were conducted by communications specialists and untrained observers under the auspices of the Direct Broadcasting by Satellite Association (DBSA, which represents most of the parties involved in the new industry). DBSA will present a summary of its findings and recommendations by the end of the year to the Federal Communications Commission (FCC), which in turn will give its ruling on technical standards to the four operators who now have approval for DBS satellite construction. The ruling will be made next spring at the earliest.

The Lewis tests were comprehensive. They began in the middle of September and were concluded two weeks ago. The three systems under test were examined in four principal areas — video (picture), audio, teletext (information display) and scrambling (coding signal). Experts and untrained observers gave subjective views on the quality of television pictures resulting from each system.

The systems tested were two forms of NTSC, the method now used in the United States in terrestrial broadcasting, and a version of MAC (multiplex analogue component), the system favoured, in a different form, by the United Kingdom. The results will play a significant part in determining the technical composi-

tion of the US DBS satellites due for launch in late 1988 or early 1989.

Several companies have expressed an interest in operating DBS television services in the United States since FCC invited applications for slots in the geosynchronous orbit. In June 1983 a sectional meeting of the World Administrative Radio Conference (WARC), the body internationally responsible for assigning broadcasting frequencies and satellite positions, allocated eight satellite slots to the United States.

There are at present four approved DBS systems — Satellite Television (a subsidiary of Comsat), United States Satellite Broadcasting, Dominion Video Satellite and Hughes Communications Galaxy. A further six applications for DBS services are being considered. If all are approved, the technical system adopted by the DBS operators for transmission must be able to prevent satellites from interfering with one another. Some will be using the same frequencies, but will have been separated in different slots, while others will be clustered in the same orbit but operating on different frequencies, as each slot can carry 32 channels.

All four approved operators plan multichannel systems of six to 10 channels. One aspect of the tests is to find out the degree to which each signal format is susceptible to particular interference.

The scrambling tests are also of vital importance as the DBS services are likely to be supported by subscription and may need to be protected from piracy. The Lewis tests checked whether signals could be received and viewed by pirates despite the protecting code and whether there was any deterioration in the signal quality received by the legitimate viewer because of the code's presence. **Bill Johnstone**

## Brenner to quit MRC post

BRITAIN'S top job in molecular biology will become vacant in 1987, when Dr Sydney Brenner plans to step down as director of the Medical Research Council's Laboratory of Molecular Biology at Cambridge. Brenner said last week that he plans to leave the laboratory at the age of 60, so as to be able to spend more time on his own research. He hopes to find himself a base elsewhere in Cambridge, and a small research group with which to pursue his present interests.

Brenner has been director of the MRC's best-known laboratory since 1979. An exile from South Africa by origin, Brenner joined the laboratory in 1957, when it was merely a barely tolerated collection of huts in a courtyard of the Cavendish Laboratory. During these early years, he worked with Francis Crick on the series of experiments that demonstrated that the genetic

code is a triplet code, and contributed substantially to the then rapidly deepening understanding of messenger RNA. More recently, Brenner has succeeded in opening up the study of the nematode *Caenorhabditis elegans*.

Brenner's spell as director of the Cambridge laboratory has been clouded by the consequences of a serious road accident in 1979, when a leg suffered a compound fracture. His colleagues marvel that his energy has been so little impaired.

The consequences of the vacancy at Cambridge will be considered by MRC at its meeting later in the month. The secretary, Sir James Gowans, said last week that all concerned are aware of the importance of the appointment, and that Brenner's successor will be sought on the international market. □