

Not that the conference will be free of controversy. At the technical end, Pal wants the conference to address the increased crowding of communications channels. In one paragraph which failed to receive the full endorsement of the preparatory committee, the report suggests that developed countries should consider shifting their satellite communications systems to a different frequency band, such as 11 to 14 gigahertz, leaving the currently used 4- to 6-gigahertz band primarily for use by developing countries. At present, flux density limitations resulting from overcrowding in the current band make large terminals necessary; reducing these limitations would facilitate the use of low-cost terminals in rural areas. The change would, however, create substantial costs for the developed nations.

More political controversy seems likely to focus on whether the report should refer to the military uses of space. The topic is not on the formal agenda. However, according to Pal, between 70 and 80 percent of the countries which have presented national papers have expressed concerns about the militarization of space. The suggestion has also been raised that the responsibilities of CO-PUOS be broadened to include looking at ways of ensuring that outer space is used solely for peaceful purposes.

Not all political comments come from the smaller nations. The United States, in line with the Reagan Administration's approach to foreign aid, has suggested the final report should explicitly state that "the primary responsibility for the development of developing countries rests upon these countries themselves."

The United Nations is expecting delegates from over 100 countries, including several heads of state, to attend the Vienna meeting. The agenda will be divided into three broad categories: the state of space science and technology, the applications of space science and technology, and international cooperation and the role of the United Nations. This year's conference has one great advantage over its predecessors. After the linguistic awkwardness of UNCSTD and UN-ERG, the bureaucracy has relented and come up with an acronym that slips effortlessly off the tongue, UNISPACE-2.—**David Dickson**

Budget Resolution Treats R & D Relatively Well

The Republican budget resolution that squeaked through Congress on 23 June was surprisingly generous in its treatment of research and development. That is to say, it did not slash the Reagan Administration's budget request for civilian R & D, as many had feared and as the House Republican leadership had proposed.

In general, the resolution is expected to result in budget totals for major research agencies, such as the National Aeronautics and Space Administration (NASA), the National Science Foundation (NSF), and the National Institutes of Health (NIH), that are close to those proposed in the Reagan Administration's generally discredited fiscal year (FY) 1983 budget. Many scientists may not regard those totals as generous, but R & D certainly fared better than most other areas of domestic spending.

Passage of the budget resolution is far from the final step in the Byzantine process of determining how much money each agency will have to spend next year, but it is important in establishing an overall framework. In essence, the resolution sets spending limits in broad budget categories such as defense and health, and the appropriations committees are now supposed to come up with detailed agency budgets that stay within those limits.

The resolution provides \$7.8 billion for general science, space, and technology, a category that includes NASA, NSF, and some of the basic research programs of the Department of Energy. This would represent an increase of about \$800 million over FY 1982 and provide roughly the level that Reagan had proposed. It is, however, a lot more than House Republicans wanted to spend.

The Republican budget resolution passed by the House on 10 June would have frozen spending in this category next year at \$7.0 billion, a level that would have resulted in severe cuts in some NASA and NSF programs.

That sent a wave of anxiety through the research agencies and the scientific community, but fears of impending catastrophe proved groundless.

The Senate's version of the budget resolution contained \$7.8 billion for general science, space, and technology, and that level prevailed in the House-Senate conference committee. (The budget resolution proposed by House Democrats, which was defeated, would have provided \$8.15 billion for these programs.)

As for NIH, its budget was also in jeopardy because the House resolution had made some deep cuts in spending on health. But the conference committee restored some funds specifically to protect spending on health research, and the final budget for NIH is now expected to be close to that proposed by Reagan.

It will be many weeks before the appropriations committees complete their work and it will be well into FY 1983 before program officers will know how much they will be able to spend.—**Colin Norman**

NIH Sees No Need for DNA Weapons Ban

A National Institutes of Health (NIH) advisory committee on 28 June turned down a proposal to prohibit the development of biological weapons by recombinant DNA methods. It argued that the ban is redundant because a 1972 multilateral treaty already prohibits such work. The ban, which would have been inserted into NIH's recombinant DNA guidelines, was proposed by Richard Goldstein of the Harvard Medical School and Richard Novick of the Public Health Research Institute.

Instead, the Recombinant DNA Advisory Committee voted 15 to 5 to advise the NIH director that the treaty did indeed prohibit the development of biological weapons. The committee declared that the existing treaty "includes the prohibition on the use of recombinant DNA's for development of microbial or other biological agents or toxins, of types or in quantities that have no justification for prophylactic, protective or other peaceful purposes."

The United States Arms Control and Disarmament Agency and the Army wrote that they did not object to the prohibition amendment but said it was redundant.—**Marjorie Sun**