



27 September 1979

The nuclear 1980s

Two events coming up in 1980 will influence the world's nuclear future for many years. In the spring the International Nuclear Cycle Fuel Cycle Evaluation (INFCE) will issue a report that is the result of nearly two years of study by eight working groups. Then a few months later, upwards of one hundred nations — signatories to the Non-Proliferation Treaty (NPT) — will convene for their second five-yearly review of the treaty. The events are by no means unrelated. They both reflect efforts in the world community to come to grips with the problem of capitalising on the peaceful benefits of nuclear power without opening the door to nuclear weapons. And neither, in their different ways, will be able to hold out much hope that there is any simple way forward, either in terms of technological fixes or new institutions, which will make the 1980's a time when nuclear weapons stop spreading into yet more hands.

INFCE, the backwash to President Carter's 1977 initiatives to arrest proliferation by unilateral and widely disliked measures, is likely to deliver a fairly comfortable message to nuclear states — not great surprise given the representation of nuclear enthusiasts on the working parties and the absence of any brief to consider broader issues such as environment or safety. At a meeting of the British International Studies Association last week, Dr S. Warnecke indicated that the conclusions will probably run something like this: there is no geological shortage of natural uranium although there could be political problems in international sales; if there is need for some more enrichment capacity this should be confined to technologically advanced countries (such as Japan); there is wide divergence between countries on the economic sense of reprocessing (the United States failed to get any measure of consensus on the desirability of once-through cycles); the non-proliferation risks associated with fast-breeders are no greater than those of light-water reactors; and there is as yet nothing in advanced reactor concepts

which would inherently make them more proliferation-proof than current designs. In short, the path that major nuclear nations have been taking these past ten years is neither free of proliferation risks nor is it recklessly dangerous, and no other path holds out any obvious attractions of more proliferation-proof power. This is hardly going to be a surprise to the nuclear bureaucracies of the world, although it may well disappoint President Carter who at one time hoped that INFCE would provide some international agreement on positive steps that could be taken to keep the danger of proliferation out of the nuclear fuel cycle.

The message of INFCE to the NPT Review Conference will be, then, that it is difficult if not impossible for the international technological community to do much in the final analysis to prevent the spread of nuclear weapons — a nation with a strong political will to go nuclear can easily overcome such technical obstacles as are put up. This gloomy view will coincide with unencouraging news on other fronts. On Article VI of the treaty, in which nuclear-weapon states promise as their part of the bargain to work for disarmament, there is relatively little to present except an uncertain and unimpressive SALT 2, and glacial advances towards an almost meaningless (because temporary) comprehensive test ban treaty. Furthermore the last five years have seen the emergence of a different and ominous sort of proliferator — the nation which, because of heavy hints, must be assumed to be acquiring a nuclear weapons capability even though it doesn't take the final step of firing a device.

Can the NPT survive all this? In a formal sense, yes; no doubt for the next few years it can retain all its signatories, and it must never be forgotten that there are some very desirable names on the list. But as time progresses the treaty looks more and more like every other arms control measure — a limitation only on those who have no particular desire to transgress. □

... and the broadcasting 1990s

THE World Administrative Radio Conference starts this week in Geneva and is expected to run until December. Public interest is likely to focus on the allocation of frequencies, and more particularly the North-South and East-West political conflicts inherent in these allocations. But one issue which could do with much more public exposure is the question of the accessibility of television transmissions.

Radio broadcasts, with the help of the ionosphere, know no national frontiers, and as a result there is a richness of choice open to anyone with even a modest receiver. The present, ensured that it has been much more of a national affair. As a consequence access to a mass audience has been in the hands of a relatively small number of people, all with similar cultural backgrounds.

Satellite television could change all this. Within ten or fifteen years it could be possible to tune in to French, German, Italian or Russian television by directing a rooftop aerial at the appropriate satellite. The trouble is that not every country wants its people to have that freedom, which the objectors term cultural or political subversion.

As a result a 1977 conference went to great lengths to ensure, by means of satellite placings, polarisations and radiation patterns, that the cause of international understanding is not going to be given much of a boost by television.

Time is running out for brave enterprises to resist this narrow nationalism. The Geneva meeting could be the last opportunity for anyone to raise a voice against it. □