

The NPT and its black sheep

The turmoil in what used to be the Soviet Union has distracted attention from projects for arms control, but the opposite should be the case.

Mr James Baker, the US Secretary of State, did not hide his alarm at North Korea's nuclear ambitions on his swing (instead of President George Bush) the other week through Tokyo, Seoul and Beijing. Meanwhile, US sources are busily quoting what is called intelligence information in their contention that North Korea is well on the way towards the manufacture of plutonium from reactor fuel, and that its first nuclear weapons may be only months or a few years away. He was right to say that such a development could be a calamity for the Pacific region. Not since the United States itself considered using nuclear weapons in the Korean War has there been such a serious threat to the fragile stability of the Korean peninsula and its neighbours (which include Japan). But that, sadly, is only part of an alarming story.

Nuclear weapons abound, but so now do putative nuclear weapons states. That is one consequence of the revelations in the past few months about Iraq's nuclear programme. Although it is not inherently surprising that a government well supplied with cash and with the means to be single-minded should have gone so far in the replication of a technology now half a century old, Iraq's doings have inevitably converted every non-signatory of the Nuclear Non-proliferation Treaty (NPT) into a putative nuclear power. And the list of them is too long for comfort. Apart from North Korea, there are Israel and several of its neighbours (including Egypt and Saudi Arabia), India and Pakistan, Argentina and Brazil. (The good news is merely that South Africa is now a signatory.) Although many of these states may have set aside their nuclear ambitions (like Argentina and Brazil, for example), they now have only themselves to blame if their neighbours behave as if they were nuclear weapons states.

There is worse than that. The bilateral agreements between the United States and the Soviet Union would be a greater comfort if it were clear which surviving elements of the Soviet government will have continuing responsibility for them. (Apparently there are also technical problems, such as the difficulty of dismantling weapons whose designs have been forgotten or mislaid.) As things are, there are no formal arrangements that constrain the British and French nuclear forces, which are said to have a strategic role. And China, which exploded its first bomb a quarter of a century ago and which is probably by now a major player in the field, is similarly unconstrained.

Baker, evidently hoping to win from Beijing some help with North Korea, has good reason to be disappointed with China's refusal to see a ganging-up against North Korea.

There is no easy solution. The view (see *Nature* 353, 483; 1991) that the United Nations could and should compel putative nuclear powers to sign the NPT is likely to be frustrated by the protection offered by major powers to their client states. (Would the United States be more or less likely to veto such a resolution in regard to Israel than China in regard to North Korea?) Middling powers such as Britain and France, which are permanent members of the UN Security Council, would similarly use their vetoes to fend off coercion of themselves. The outstanding difficulty is that, while China remains entirely immune from dialogue on strategic arms that, during the 1970s, drew the old Soviet Union into arms control, massive strategic forces will persist.

Yet the NPT will lapse four years from now unless its signatories persuade themselves to soldier on. It is ironical that while the major powers (the United States and the Soviet Union) have now done what the NPT requires of them (to negotiate "in good faith" strategic arms control), many of the signatories are more likely now to be given pause by the emergence of nuclear power among countries like themselves. The review conference in 1995 is unlikely to be less rowdy than its predecessors. That prospect should persuade even the major powers to see sense. Let us hope they do so in time to save the NPT. □

Hidden buildings

Overhead charges on research grants subsidize new buildings. The practice needs to be examined.

THE National Institutes of Health (NIH) have done the sensible thing in seeking to simplify accounting for indirect costs (see story on page 258), but that will not deal with one important issue — how new construction is to be financed on university campuses. Until about 15 years ago, in the United States, when the federal government was building the world's finest biomedical research enterprise through the National Institutes of Health (NIH), Congress readily provided funds for bricks and mortar to house research. Then, as the steep climb in NIH funds