nature

January 15, 1976

Time to speak out against cosy bilateralism

A YEAR and a half ago the governments of the United States and the Soviet Union declared that from March 1976 they would refrain from test-firing nuclear devices with yields of more than 150 kilotons. Atmospheric testing of devices of all sizes has been banned since 1963 (except that France and China never acceded to the treaty) but there has been a marked lack of enthusiasm among the nuclear powers for constraints on underground weapons tests. Now it looks as if even this modest bilateral measure may fail to materialise.

Testing of warheads has never been absolutely vital to a nuclear programme but there are obvious benefits in the regular, full scale firing of devices to try out new ideas. Weapons laboratories would find a total ban, if not unbearable, at least an inconvenience, and up to the present this has prevented really serious talk of a comprehensive treaty, in spite of regular pressure from nonnuclear powers who have seen the superpowers busily involved in 'upwards' proliferation while urging stringent controls against 'sideways' proliferation. For many years the vagaries of seismology were used to rule out a treaty —how could one go into an international agreement without adequate monitoring for violations? It will always be possible to deploy such an argument, of course, by insisting on lower and lower detection levels, but in recent years it has become clear that seismic monitoring capabilities are beginning to settle at a level at which a massive (and most unlikely) investment would be needed for further major advance.

When it became clear that the superpowers, under pressure to show at least some concern for the nonnuclear powers at the 1975 Non-Proliferation Treaty conference, were talking about a limited restriction, it was widely assumed that agreement would be reached on a level of about 50 kilotons (with which seismology could easily cope). When the figure of 150 kilotons was announced, there was general astonishment that anything so weak could seriously be proposed as an arms control measure. In hindsight, anyone who had seen the multilateral debates of the 1960s about strong arms control treaties give way to the bilateral SALT talks with their conveniently high ceilings should not have been surprised that the treaty had been designed to minimise inconvenience to the contracting parties. And the run-up to the treaty has allowed ample time for the testing of

larger devices—time which has been well used.

Unfortunately, two serious and entirely predictable problems have hampered the bilateral technical discussions thus far. The first is the difficulty in defining yield with any precision on the basis of remote measurements (the Soviet Union has consistently refused the United States access to any instrumentation on Soviet soil). The geological complexity of test-sites and the strange focusing and defocusing of seismic waves makes for uncertainties in yield determination of a factor of at least two, and the extensive East—West interchange of data in recent months does not seem to have brought much clarification.

The second problem is how to treat peaceful nuclear explosions. They have become very popular in the Soviet Union, which is thus unwilling to talk about even a 150-kiloton ceiling for its peaceful operations. If any doubted that warheads could be tested under a peaceful guise, India will have disabused them of that illusion. Ideally the devices would be supplied through an international agency from a stockpile, but if the International Atomic Energy Agency (IAEA) in Vienna has been approached to fulfil such a role it is being kept very quiet.

The omens are not good for the removal of these obstacles by March, but it is an election year in the United States and this tosses in many imponderables. If President Ford has to fight off a serious challenge from Mr Reagan he will probably wish to show he can be tough in foreign affairs—hence, no blind eye in treaties with the Russians, especially since Dr Kissinger has been so criticised for blind eyes to alleged SALT violations. But if President Ford wins the primary, a gesture of statesmanship before the election might well capture the public imagination (as President Kennedy found to his surprise after signing the Partial Test Ban Treaty).

Meanwhile the other nuclear and non-nuclear powers have to decide whether to raise a fuss in their forth-coming talks in Geneva about this cosy bilateralism. Some countries will. But how about Britain? Is it not time to drop the convention of not speaking against American initiatives, and to expose the treaty as a sham? Many people in high places in the United States might even be glad to have an old ally refuse to endorse a footling measure.