

## UN and the future

The present halcyon state of UN members' minds is an opportunity for administrative reform.

PREVAILING cheerfulness at the United Nations about the almost solid front against Iraq during last week's opening speeches to the annual General Assembly should not blind the rest of us to the defects of the organization that comes closest to the concept of world government. At best, it is an historical accident that most members of the United Nations agree that Iraq's annexation of Kuwait is an offence against international law. It is too soon to assume, as UN well-wishers do, that good sense will now prevail for the rest of time. Indeed, the Soviet Union which has made consensus possible in New York may not be about, in its present shape, when the next invasion happens.

That is why well-wishers have one most urgent need — to make the institutions of the United Nations effective and efficient. It is not unremarkable that most of these are technical agencies. The oldest is the World Meteorological Office, brought into being while Bismark was still in power by the felt need to share data about the weather. On balance, it is a sensible outfit, even if it has strayed from the path of good sense during its recent intervention in the global warming problem. The larger technical organizations, the World Health Organization and the Food and Agriculture Organization, do some good works, but many fewer than they might with all that money. Unesco, despite the efforts of the most able secretary-general ever (which is not very long), remains a dead end. While the politicians are happy with events in the Middle East, and therefore compliant, might not this be the time to embark on the radical reappraisal of what the specialized agencies are for, and how they should operate, that the circumstances have required for several years?

It is also important that some attempt should be made to anticipate what will next happen politically — and to guard against the over-optimism that present circumstances could engender. There is now talk of how the United Nations, with its solidity in the Middle East as a feather in its cap, might next move on to coerce countries that will not abide by international agreements to toe the line. This is an enticing concept. Would it not be marvellous if India, Israel and Pakistan could be forced to comply with the terms of the Non-Proliferation Treaty (NPT), and tomorrow? Of course it would. And would it not suffice that the permanent members of the Security Council should stitch together with the rotating members resolutions that would turn wishes into reality? That is a different proposition. Resolutions (as over Iraq) count for nothing until they are heeded. It might be different if the United Nations were more widely respected as an effective organization. That is another reason why this is a good time to put the technical agencies' affairs in good order. □

## Greenhouse numbers

The use of a single number to assess the potential damage done by greenhouse gases is premature.

By what yardsticks will greenhouse warming be regulated if and when there is an international convention on the issue? The letter from David G. Victor on page 431 of this issue should serve as a warning to those eager to believe that the choice of regulatory yardsticks can be simple.

Although carbon dioxide is acknowledged as the chief potential cause of trouble, other gaseous materials such as the chlorofluorocarbons (CFCs) and methane will have similar effects on the Earth's surface temperature. So if there is to be a limit on national emissions of potentially dangerous materials, is it not best that the limits should be related directly to the potential effect of a nation's total emission of greenhouse gases? There would then be room for manoeuvre. Some might prefer to make a start by eliminating CFCs altogether, others might prefer to cut back on carbon dioxide right away. In any convention infringing on national sovereignty, flexibility of this kind, as in the decisions governments make about compliance with carbon dioxide quotas, can only help to make irksome agreements more acceptable.

Victor's argument bears on the concept of global warming potential (GWP), put into currency earlier this year by D.A. Lashof and D.R. Ahuja (*Nature* 344, 529; 1990) and applauded in the draft report of the relevant working group of the Intergovernmental Panel on Climate Change. The idea is to represent the damaging potential of the various gases by a single number representing the integrated effect on surface temperature over the lifetime of the various gases in the atmosphere. CFCs and methane are notoriously more effective, molecule for molecule, than carbon dioxide, which is nevertheless produced so much more abundantly that its effects are likely to be predominant. In the calculation of GWP, the lifetime of the gas is crucial.

The essence of what Victor says is that the lifetime of carbon dioxide is conceptually still too uncertain for the relevant GWP to be calculated as a single number, let alone to be the standard by which the GWP of other gases is assessed. Lashof and Ahuja acknowledged as much in their original publication. Physically, the transfer of carbon dioxide either to plants or into the surface layers of the oceans can be relatively quick, but the processes governing transfer from the oceanic surface to the more commodious deeper layers are much more leisureed, while carbon locked up in plants may be dumped back into the atmosphere in a century or less. As a consequence, it is not now feasible to strike a trade-off between a gram of CFC and a gram of carbon dioxide. Thus, while the sources of methane and the sinks for CFCs other than their mutual destruction with ozone are virtually unknown, the concept of a workable GWP should be a target for the future, not a yardstick for the here and now. □