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Filling Bondi's place

PROFESSOR Sir Hermann Bondi, profiled this week (page 201), took up his post as chief scientist at the UK Department of Energy on 1 October. That the post he left at the Ministry of Defence has remained unfilled for a comparatively short while should not diminish concern over the way this and similar appointments are made.

Bondi's former post is the highest in government which any scientist can hope to achieve. Its holder has the stature to receive the most privileged information, and the access to offer independent advice, across the broadest range of issues, at the highest levels of government. To have it vacant longer than necessary is thus undesirable. Yet the Ministry of Defence has known of Bondi's departure for nearly five months—possibly longer.

The delay has a simple and not unreasonable explanation. Because the post is also the highest which can be occupied by someone from outside both political and civil service ranks, the appointee must be acceptable to those he will work with—service chiefs as well as ministers and civil servants. The choice will be further limited by the need for a 'link man' with the scientific community who has standing and prestige and who is also willing to give up his job. And even when the right man is found, there remains the crucial matter of security clearance.

The question is whether such an important appointment, of such consequence for the public interest, should be made more openly even though—perhaps because—the number of candidates is so restricted. The argument against this is that to name names would subject potential candidates to considerable pressures in their existing jobs, and that the consequences of a failed security clearance would be fearfully embarrassing—all without much good being done. But this does not mean that public canvassing of names cannot work. Indeed, it works elsewhere, notably in the United States, where experience with it is admittedly far greater. The public interest aspect aside, the US system may even work better. If so, the question now is whether a change could be implemented smoothly in Britain without ending up with the worst of both systems. The trouble is, no one is involved in or even encouraging discussion of it. □

New frontiers at Trieste

THE International Centre for Theoretical Physics (ICTP) at Trieste, dedicated to the support of physicists in the developing world, lives on several knife-edges. For one thing it relies on comparable contributions for its support from the international agencies UNESCO and IAEA and also on the continued financial goodwill of the Italian government and the City of Trieste. For another there are many, scientists, included, who wonder whether theoretical physics is a luxury that it is no business of the developed world to stimulate by means of courses at a very high level. Yet again, inevitably the quality of those who attend is much more variable than, say, amongst a group of students with a common background; thus the Centre will have more than its fair share of visitors who feel lost in its environment. And finally, there are certainly those who say 'if theoretical physics, why not experimental biology', and so on.

The Centre, under the guidance of Abdus Salam, has not, however, put up the shutters against criticism. Rather, it has been making moves to add new disciplines to its range of interests. Thus in the past couple of years it has held substantial courses on the teaching of physics at French-speaking universities in the developing world, on solar-energy conversion, on the physics of oceans and the atmosphere and, most recently, on the physics of the Earth. There is talk, also, of the possibility of a new experimental centre to be built on the Yugoslav/Italian border.

As the centre adds new peripheral interests to its core subjects of high-energy and nuclear physics, solid state physics and applicable mathematics, it finds itself closer to the tricky problems of science and society. Indeed the oceans and atmosphere course was stimulated by the Bangladesh floods, and the physics of the Earth course by the Friuli earthquake of last year which shook Trieste. Out of such courses can come politically relevant action, as happened last week. Students on the course were presented with lectures on earthquake-prediction research as practised in the United States, Soviet Union, Italy, China and Japan. But the question arose, what should developing countries be doing about this? Many of the worst losses of life and property occur in the developing world; are such countries to wait supinely until systems are perfected elsewhere, and then be confronted with a very expensive package? Yet if not, most developing countries could not mount a major research initiative.

The need, then, is for a middle way which encourages scientists to keep in touch with developments and accumulate the necessary background information and which convinces politicians that there are human and economic benefits to treating the matter seriously. The centre, it emerged during discussions, could play a significant role in assisting technology transfer. The proposal was that ICTP, with its devotion to scientific excellence and its easy relations with scientists from a wide range of developing countries, should take a formal and special interest in ensuring that such scientists are kept fully in touch with developments in prediction and the assessment of seismic risk. ICTP already takes a similar special interest in solid state physics, a subject with relevance to the developing world.

This initiative should be widely welcomed. (The Editor declares an interest, having been involved in the discussions.) Of course there are international unions and associations which could also have performed this function to a degree, but satisfaction at the possible commitment of ICTP in this work will far outweigh any quibbles over who else could have done what.

In the longer run ICTP, in conjunction with UNESCO maybe, could possibly participate more actively in the raising of political consciousness on earthquake hazards. A model already exists in the team of examiners which occasionally emerges from OECD in Paris to visit a developed country and examine its science policy. A team of experts in earthquake protection could perform a similar role of persuading politicans to take their duties in hazard reduction seriously. □