

States, similar pressures affect the Nuclear Regulatory Commission, whose reputation would quickly sink still further if it were often defeated in the courts on the grounds of not having been scrupulous about due process. And at inquiries of both kinds, there is nothing to prevent the most local objectors from raising the biggest questions that come to mind. Does the country need nuclear power anyway? Is this kind of reactor safe? Why should Blanksville or Dashby be the first prisoner of the plutonium economy, as it is called? In the United States, these pressures have led to a quite absurd proliferation of the subjects on which the Nuclear Regulatory Commission is holding public hearings. The inevitable result is more prevarication, more delay.

As things are, the only seemly escape from the dilemma is to devise a means of limiting the scope of public hearings without limiting the right of objectors to object. On the construction of

nuclear plants, it is pointless that public hearings should rehash questions of whether nuclear power as such is necessary, or economic, or likely to be overtaken by solar power. Both Britain and the United States have elected governments which reckon to include such questions in the fields of their competence. Similarly, there are questions about the relative (not absolute) safety of different reactor types which are generic in character, and which could (and should) be argued out once and for all. Questions of siting, on the other hand, are essentially local or regional matters (which is not to imply that they should not be disputed nationally). But it should be open to objectors to argue that some other site would be more suitable. The British log-jam of nuclear inquiries will not be broken until 1984. Is there a chance that Mr Reagan will be able to move more quickly in the United States when January has come?

Scope for European collaboration?

The famous conjuring trick in which the Cheshire Cat was made to disappear but to leave its smile behind is no doubt the envy of the professionals who still work the music-halls. The European Science Foundation, which held its annual assembly last week in Strasbourg (see page 204), is trying to do much the same. Its members are research councils and learned academies from most Western European nations, all of them supported financially by their national governments. Their membership of the foundation is voluntary, as are their contributions to the special research projects which are from time to time devised. It is just as if they belonged to a club for organizations like themselves and, like the members of other respectable clubs, they spend some time each year considering what the fees for membership should be. The trick, which has worked well in the past six years, lies in the foundations's insistence that it is strictly a non-governmental organization, free (if its members agree) to criticize developments at which its members' paymaster-governments may have connived. This is the spirit in which the European Space Agency has been taken to task in the past two years for the inadequacy of its plans for launching scientific satellites. On other occasions, the foundation assumes the freedom to put pressure on the same governments to act in some specific way — to build a synchrotron radiation source, for example. The hapless governments see the smile (or the grimace) but appear not to recognize the body.

That, fortunately, has been the foundation's experience so far. Part of the explanation is that it has been run on a kind of shoestring. The members' contributions to the foundation are such modest proportions of the national public funds they receive that even the most hyper-touchy governments would feel foolish if they reacted against the foundation's members' modest show of independence. But will it be the same if the foundation grows, becoming less inconspicuous in the process? That, inevitably, must be one of the concerns of those who now think that the time has come for modest growth. The time has come to ask what the foundation is for, and what it might be for. For the past few months, a domestic think-tank has been brooding on the same two questions.

The bread and butter of the foundation's business is easily justified. Plainly it is useful that there should be an umbrella under which organizations with a responsibility for the support of research and scholarships can meet from time to time, even if they talk only about administrative matters such as how to adjust research grants for inflation. In principle, it is also plainly beneficial that there should be some mechanism for tackling research problems of common European concern. European taxonomy is an obvious candidate. So too was the project to mount a coordinated study of the problems of preserving mediaeval stained glass, but that fell foul of the chauvinistic quarrelsomeness of the experts in the field. Unexpectedly, but not surprisingly, most enthusiasm seems to have been generated by the common interest of European scholars in external problems — the literature of China and Byzantine history, for example.

Collaborative research programmes within Europe itself seem more easily arranged in the social than the hard sciences — partly because of the costs involved but also because international comparisons come more naturally to mind in the social sciences; in the hard sciences, inevitably, everything is everywhere the same. Yet there is obviously plenty of scope for further collaborative research. The geophysicists have for example an ambition to mount a seismic traverse of Europe from north to south, reaching into North Africa, that could probably be mounted within the necessarily limited time-scale of *ad hoc* voluntary contributions by the member organizations. The plan to build a source of synchrotron radiation would, by contrast, require a continuing commitment of funds, and thus endanger the loyalty of some members or the compliance of their governments. The strategy the foundation has pursued — to interest governments in the idea — is thus the only practicable way of seeing such a machine built.

So where does the foundation go from here? For the time being, there are grounds for being cautious. Inevitably, in only six years, the foundation has comparatively little to show for the trouble it has been taking. Ultimately — and there should not be long to wait — it will be judged by the quality of its collaborative research. If the outcome is worthwhile, the result should be a rash of other projects crying out for supplementary contributions. In the meantime, however, there are other tasks on which the foundation could busy itself. The recent study on the mobility of academic scientists within the European Community (see *Nature* 23 October) made much of the lack of movement between European countries (as distinct from the now common journeys across the Atlantic). As things are, several of the foundation's committees organize research workshops, symposia and the like in their narrow fields, but the scale of such activities within Europe is nothing like enough, in spite of the efforts of the European Molecular Biology Organization and the federations of specialist scientific societies that have sprung up. More ambitiously, there is a case for asking the foundation to share in the administration of the European exchange fellowship scheme, so far in the hands of national academies but much in need of escaping from the strictly bilateral basis on which it was set up eight years ago. (With a little luck, an international organization might even be able to tap supranational sources of funds, the European Community for example.) Finally, there are some crucial housekeeping tasks not at present being done (or done well) for European science. There is, for example, a crying need for a directory showing who does what in European research, some means of knowing who is where and a systematic way of telling which national organizations spend how much. Coherently compiled statistics of the working (and output) of European university systems would be a great boon. If one immediate objective is to ensure that the smile remains visible and the rest of the animal inconspicuous, this must surely be the best way forward.