This is music of the future, although it would seem that there are a number of subjects of science policy which make it likely and desirable to co-ordinate national policies rather closely. Even here, however, the notion of co-ordination should not be misunderstood. In some fields, such as, probably, experimental reactors, it may lead to the creation of common instruments of research and thus the abandonment of useless competition. In other fields, such as energy research, it may lead to a co-operative division of labour. Again in other fields, such as urban planning, exchange of information gained on a decentralized and competitive basis may be indicated. And there are probably other types of effects of co-ordination, all of which serve to emphasize the flexibility of an approach which begins by setting up a machinery of voluntary concertation, with an effective membership and an experimental spirit.

Dahrendorf sees another important role for CREST besides coordination, and this is providing independent scientific advice to the commission. "It is almost impossible to develop such expertise in the present system," says Dahrendorf. "It will now be possible with CREST." The commission has lacked a mechanism which made it possible to get the opinion of highly qualified outside experts on scientific and technical matters. A lack of "built-in quality control" was one of the troubles with Euratom, says Dahrendorf. Dahrendorf hopes that CREST, which is to be made up of university and industry scientists and engineers, will fill the bill.

The new foundation will also have a modest start in life. Comparisons of the ESF with the National Science Foundation (NSF) in the United States are misleading, since ESF will start out with a budget of perhaps a half million dollars a year compared to NSF's half billion. (The Community R & D budget amounts to about \$100 million a year; this is only about 2 percent of the total spending for R & D of the Community countries.)

The ESF, it should be noted, is not to be exclusively a community organization. Eighteen countries belonged when the foundation was formally es-

## **Department of Flexible Statistics**

From a 21 November 1973 press statement issued by Dixy Lee Ray, chairman of the Atomic Energy Commission (AEC), in response to criticism that nuclear reactors are unreliable and unsafe:

Ralph Nader and the "Union of Concerned Scientists" have issued another of their scare statements on the safety and reliability of nuclear power plants and the handling of wastes from these plants. This is yet one more attempt to frighten the American people into believing that nuclear power cannot be depended upon. . . .

Mr. Nader and the "UCS" have chosen to ignore the following facts: Nuclear power plants have an excellent record of reliability. . . . A survey of nuclear reactor availability for the January-April period of 1973 showed that, of 24 utility-owned generating units of 100,000 kilowatts or larger capacity, 14 nuclear steam units were available 80 percent of the time and 8 were available 90 percent of the time. This compares with an average of about 73 percent availability for fossil plants of 600 electrical megawatts or larger over the 1960–1971 period.

From an 8 May 1974 speech to the Atomic Industrial Forum by AEC director of regulation L. Manning Muntzing:

A further disturbing finding has been that the availability of nuclear power plants has fallen short of what was expected and has in fact not exceeded the availability of comparably sized fossil fueled plants.

We have just completed our analyses of nuclear plant availability for 1973. The data show an average plant availability factor of 70 percent for 27 light-water cooled plants which were in commercial operation for at least 3 months of the year. This is a decline from the 1972 average of 73.4 percent. . . .

Numerous forced outages, due primarily to equipment malfunctions, have been responsible for the disappointing performance we have had. . . Our analysis indicates that many of these occurrences would have been prevented had strong quality assurance programs been in effect. -R.G.

tablished at a meeting in Stockholm in early May. The relation of the commission to the foundation is still nebulous, although the commission is providing the bulk of the first-year funds. Location of ESF headquarters and details of its operations are still under discussion. Dahrendorf is one who hopes that the foundation will maintain independence of action and feels this can best be accomplished if funding comes primarily through academic institutions and research councils. This would mean that money would come originally from governments, but that its use would be influenced strongly by the scientific community. Since a prime objective of the ESF is to foster basic research, the influence of scientists is thought to be essential.

Another point in the new science policy is regarded as a pet project of Dahrendorf's. This is the "Europe Plus 30" program aimed at preparing the Community for the year 2000 and beyond. The first step is to be a 1-year study to report to the commission on whether it should undertake a "comprehensive prospective study" which could be developed into a forecasting instrument susceptible to constant updating. The preliminary study is to be headed by Britain's Lord Kennett. One question that seems likely to be taken up when the report is made is whether the Community should have its own office of technology assessment. Dahrendorf has been regarded as a strong advocate of a think tank for the Community, and in Brussels the future of the Europe Plus 30 program is assumed to depend on the interest and dynamism that Dahrendorf's successor brings to the subject.

Dahrendorf is a self-proclaimed pragmatist and nowhere has this disposition been more evident than in his handling of the question of mutual recognition of professional qualifications among the member countries of the Community. As in most sectors of education, the treaties are relatively restrictive. The Treaty of Rome provides for the abolition of restrictions on the freedom of establishment of nationals of one member state in the territory of another member state and on the freedom to provide services within the Community. Meager progress was made during the 1960's, however, on the sensitive issue of increasing the mobility of professionals.

In the spring of 1973, Dahrendorf went to the commission with a lengthy set of recommended guidelines. There was not much new in his plan, but it