

executive about the needs within the executive branch for the development of Technology Assessment capabilities within the various agencies of government. We do believe that this will be an important step in our ability to deal with our environment and with other problems of technology.

Among other signs in this area is the concern of many of our industrial people about Technology Assessment. Countless speeches made by some of our industrial leaders show a significant concern about their need to develop a mechanism for Technology Assessment in order to overcome second order consequences. A candid realization is shown through these speeches that industry must, in fact, look at second order consequences, and develop an internal policy towards them so that it can handle them in the first instance rather than have control imposed from outside their own operation. There is the recognition too that it is a requirement that they must impose controls upon themselves before they are in fact imposed upon them by the public at large as the result of the tremendous public concern.

So, there seems to be developing a proper concern throughout the whole broad spectrum of government, business, and the general public about our abilities in this regard. It gives me hope that we can in fact do something of a formidable nature about this very soon. The chairman, in his remarks, touched upon the question of a national science policy, and asked whether that was desirable in our country. I know that this is one of the questions, Mr. Chairman, with which you are dealing, and, in my opinion, it is important that it be dealt with. There should be a formal policy in this regard in our country. I shall be very interested to see how your report deals with this particular subject.

The importance of doing this very soon is exemplified in our planning by a very important set of hearings which we expect to last for the better part of a month sometime during this summer and for which planning has been going on now for several months. We believe that these hearings will be able to examine the subject in a very analytical and objective way and so be able to give a judgment about it.

I would like to touch upon just one further thing, Mr. Chairman. It is my desire in this hearing today to put up before you and your committee some of the thinking that I and other members of our committee have so that

a two-way discussion may take place. We can go into specific detail about these matters, and I would like to touch on one point in particular.

Unless the importance of science and these knowledge-producing mechanisms is understood, there can be during times of stringent budgets, such as the present time in our country and in most other countries throughout the world an attack on the fundamental research activities which in the final analysis affects the knowledge-producing mechanisms. It affects our long-range ability to develop not only knowledge but the manpower necessary to handle the problems of our society in the time ahead. We can, because of economy measures, run into a lost generation of manpower. People with the kind of abilities we need in the near future will not be available, and this will certainly do great harm.

We can see a very strange development taking place, which I think we touched on when we last met, Mr. Chairman. In our country the question of basic research had been explored, and the kind of support that it needs has been examined time and time again. We have begun to see the effects of budget cutting on the Department of Defence, the AEC, and other agencies. We recognized, as transfers from one agency or another to the National Science Foundation took place, they were not accompanied by increased funds for the National Science Foundation. The obvious effect of this was to impose upon the National Science Foundation, as the agency through which general-purpose basic research was supported, an obligation to take on many of these projects, and to support under our system of peer judgment the highest quality work in various areas of science. This must then necessarily have an adverse effect on our younger scientists, who could not compete with established research groups.

Part of our national policy in science must necessarily apply to whether or not we can in fact continue to have as our only criteria high quality. Without enough funding to go around, we must have the ability to support at the other end of the spectrum young people who will some day be scientists of highest quality. We must not short circuit ourselves regarding needed abilities in the future. At any rate, Mr. Chairman, these are some of the problems with which we are dealing.

We can go from this into other areas as we continue our discussion. I believe that it is