STATEMENT OF EMILIO Q. DADDARIO, DIRECTOR
OFFICE OF TECHNOLOGY ASSESSMENT
BEFORE THE
JOINT COMMITTEE ON CONGRESSIONAL OPERATIONS
JULY 30, 1974

Mr. Chairman and Members of the Joint Committee:

As Director of the Office of Technology Assessment, the most recent of the three information arms set up by Congress in the legislative branch, I welcome this opportunity to report to you on the Office's progress. I understand you have already heard from the other two agencies - the GAO and the Congressional Research Service of the Library of Congress. OTA began its work just six months ago and yet we have already found a broad interest in utilizing technology assessment in the legislative process.

In enacting the Technology Assessment Act, - a copy of which appears in the Appendix to our Annual Report - Congress recognized the increasing pace at which it is being called to decide questions with important technological implications. There come to mind the SST, the Space Shuttle, the use of chemical pesticides, food additives, regulation of air and water quality, the health impacts of toxic substances, to say nothing of the enormous number of questions raised by our current energy problems and world wide shortages of materials and food. In these cases the committees of Congress have been searching for better and more impartial technical expertise to perform independent appraisals of the impacts to be anticipated and the alternatives that should be

considered. OTA was created to help meet this need.

It was recognized in OTA's legislative history that the term "technology" had a broad meaning; "It is important to note that 'technology' includes the so-called 'soft' or social technological inventions along with the more commonly thought of physical objects and materials" (Senate Rules Committee Report on Technology Assessment Act of 1972, "Fact Sheet on Technology Assessment", p. 19) In each of the assignments undertaken by our Office there will be the common thread of technology, but in one case we may be focussing on technical feasibility, in another on impacts and alternatives, and in a third we may be doing a full scale technology assessment touching on all the aspects listed in Section 3(c) of the Technology Assessment Act.

Because of the scale, time and expense of the major studies undertaken by the Office, the Technology Assessment Act provides for a very close tie with the Congress in decisions to initiate studies. Requests for studies from Committees must come through their Chairmen ("acting for himself, or at the request of the ranking minority member or a majority of the Committee members.") All decisions to make assessments are made by our Technology Assessment Board, composed of six Senators, six Representatives and myself. In practice there is close day to day consultation between the OTA staff and the staffs of interested committees. The latter have an opportunity to help design our studies and are kept fully informed on their progress. Ultimately, following

presentation of completed assessments to our Congressional Board, these products are made available to the committees concerned and the experts involved in their preparation may become witnesses before those committees as they begin to initiate legislation.

Our early emphasis in OTA's operations has been to try to focus our efforts while at the same time using a flexible approach to staffing, contracting and performance of studies. One of the early decisions of our Congressional Board, after reviewing the initial round of Committee requests, was that we should plan to focus our initial work in six areas: bio-equivalence of drugs, food, energy, materials, technology and international trade, and oceans. This focus would give us guidance in our staffing, a chance to build up some expertise and stronger ties with the committees concerned, and some assurance that OTA's early efforts would not suffer from scatteration. We have since added urban mass transportation to this list and will be pursuing other studies in the health area following completion of the drug bio-equivalence study.

We have proceded carefully in our staffing, assembling a core staff, project teams working on the various substantive studies authorized by the Board, and making very substantial use of advisory panels and consultants. As of today we have a staff of about 40 and about 100 outside experts serving as consultants on various projects. Senator Kennedy has already referred to the importance of OTA's Advisory Council and Assessment Panels

in OTA's work. To illustrate our use of Advisory Panels I have attached to my statement a recent press release announcing appointment of our Food Advisory Panel.

Recognizing that OTA would need more substantial resources for contract studies than the average Committee, Congress appropriated $2 million to OTA for its first partial year of operations, and the Appropriations Committees have just agreed on a $4 million new appropriation for OTA's operations in the current fiscal year.

We have proceeded flexibly in using these resources to get our various assessment projects underway. In our first assessment assignment, the drug bio-equivalence study, we utilized an expert ten man panel, led by Dean Robert Berliner of the Yale Medical School, with supporting staff work by both a contractor and our own staff. This study was accomplished in three months, indicating OTA's capacity to handle a "fast turnaround" when necessary. Our second assessment project is a twelve month study on potentialities for solar generation of electricity with a study team led by the Midwest Research Institute of Kansas City. Our third and fourth studies, relating to automated rail transit technology and planning of urban mass transportation systems, are under contract with the Battelle Institute of Columbus, Ohio, and the planning firm of Skidmore, Owings and Merrill, respectively. I submit for the record press releases announcing these three studies.

The Technology Assessment Act gives OTA considerable flexibility in its contracting procedures and we have attempted to draw from the best practices in setting up our procedures. As a matter of policy, we have generally followed an open procurement procedure, inviting indications of contractor interest and qualification through notices in the Commerce Business Daily, giving the most qualified contractors an opportunity to respond to formal Requests for Proposals (RFP's) and making the ultimate selection after review of substantial numbers of proposals, usually followed by oral presentations from the leading contractors, and full participation by our Advisory Panels. As a check against conflict of interest we have obtained basic information on employment and financial interests from both our staff and these advisory panels.

On our current agricultural information system assessment we are following a somewhat different pattern. We have undertaken an in-house Phase 1 effort to design the full assessment and do a preliminary assessment of the world food information system using our own staff with assistance from outside experts. I anticipate that in our further work we will consider use of all of these different patterns, -- panel study, contract study or in-house study with consultant assistance and perhaps find other patterns more suited to particular assignments. One possibility our Advisory Council has recommended is use of summer "workshops"

to capitalize on the judgment of experts who are available for only a brief but intensive effort. In our most recently approved assessment, a 12 month study looking at impacts of Outer Continental Shelf oil and gas development, offshore nuclear plants and deep water ports on the waters and coastal zone of New Jersey and Delaware, we expect to follow the outside contract study pattern following announcement in the Commerce Business Daily.

In initiating our OTA operations we have maintained close liaison with both the CRS and the GAO. As you know, both Mr. Jayson, the Director of CRS, and Mr. Staats, the Comptroller General, sit on our Technology Assessment Advisory Council and have been participating in its sessions. Staff from the Science Policy Division of CRS have helped us in our preparation of projects, the preparations for our Congressional Board's hearings on NSF's technology assessment related activities, and our Annual Report. GAO provides certain administrative processing support services. In our work in the areasof energy, oceans and materials we are drawing on useful GAO evaluations of executive branch activities in these areas, and in our forthcoming oceans assessment we are coordinating closely through the Senate Oceans Policy Study with the related work being done by CRS and GAO.

It will be a basic policy of OTA to encourage wide citizen involvement in the technology assessment process. Meetings of our Congressional Board and of our Advisory Panels are generally open in accordance with the policies of House and Senate Rules

and the policies of the Federal Advisory Committee Act. Our Board has determined that the purposes fundamental to technology assessment are best served by involving diverse points of view in the assessment process. Representatives of groups affected sit on our Advisory Panels and our studies are designed to describe significant impacts on the public as accurately as possible.

Hearings by our Board will also augment public participation in the technology assessment process. The first such Board hearing, involving witnesses testifying about the National Science Foundation's technology assessment related activities, occurred in June. We are developing plans for further hearings.

OTA is experimenting with data collection on materials problems. We have sent out a questionnaire to about 10,000 key groups and entities on issues that relate closely to Congress' interests in the materials availability area. In connection with our agricultural information system assessment, we are taking a look at systems modelling techniques aided by a special Advisory Panel in this area. The objective of all these efforts is to give the Congress a versatile and flexible source of information on technological questions with a full range of research tools.

Senator Kennedy has already mentioned the drug bio-equivalence study which was presented by the OTA Panel last week to the Health

Subcommittee of the Senate Labor and Public Welfare Committee. Witnesses testifying on the subject from both HEW and the pharmaceutical industry testified to the report's objectivity and quality. This first assessment by OTA is expected to help shape both HEW's regulations in this area and the committee's legislation and is a good example of how OTA can be useful to the Congress.

We believe that, practically speaking, the responsiveness and quality of OTA's specific products will shape its role in assisting the Congress. While we see the need to maintain close liaison with the Congressional Reference Service, the GAO and the new Congressional Office of the Budget, we see plenty of opportunities for technology assessments from OTA to strengthen the legislative process. If OTA's present agenda develops as soundly as I think it will, the demand for OTA assessments will continue to grow in keeping with the needs of the Congress.