

Section I

Director's Statement

Some years ago, the economist and author, Kenneth Boulding, observed that "the rise of modern technology and the growth in the complexity of the knowledge structure of society is perhaps the dominant factor in the political process of modern time." Nowhere is this more apparent than in the U.S. Congress, which is a most representative forum for deliberating and deciding upon those conflicting goals, values, and priorities raised by the increasing number of policy issues in which applications of technology affect the distribution of benefits, risks, and costs.

In meeting these challenging problems, the Congress consistently has sought accurate, timely, and independent information to enhance its understanding of both the opportunities and the problems which have accompanied the advance of scientific knowledge. The growing importance of such information led, in 1967, to the first legislative proposal for an agency to evaluate technological impacts. In 1972, this concept was enacted into law with the creation of the Congressional Office of Technology Assessment (OTA).

During the past 12 months, OTA completed its first full year as an operational advisory arm of the Congress. The accomplishments and activities of this period are described in the following report. In order to fulfill its mandate, OTA has placed special emphasis on the establishment of working relationships with the committees of the Congress and the staff personnel who support them. These relationships provide opportunities for a free and continuous two-way flow of information between OTA's assessment teams and the Congressional interests whose information needs are being served. This aspect of the Office's development, I believe, has paid dividends as committees have benefited—through hearing testimony and background briefings—from a feed-in of data from ongoing assessments. At the same time, OTA assessors have been able to refine and modify the scope of their studies by virtue of feedback they have received from Congressional committees.

The establishment of OTA was one step in the continuing trend toward the strengthening of the analytical and advisory resources of the Congress. OTA's unique role is to assist the Congress through the developing art of technology assessment, an interdisciplinary form of policy research designed to identify alternative approaches to technology-related issues and to provide thorough analyses of the probable consequences of such options. OTA assessments must be in a form suitable for use by the committees of Congress and,

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thus, are more likely to be in the form of intelligence reports or issue papers than of traditional reports.

The objective of each assessment is to provide an early appraisal of the probable impacts and uncertainties of technological programs, so that both beneficial and adverse factors can be identified and considered in the legislative planning process. Both near-term and longer-term effects, whether intended or unintended, are examined, as are the diverse interests and viewpoints of the many different parties foreseeable to be affected by the technology.

Technology assessment is not primarily an exercise in forecasting or prophecy. It is a process designed to ask the right questions, and to seek answers based-as much as is possible-on hard, factual information which can be obtained through disciplined analysis. Where important data are unavailable, the need for additional research can be spotlighted. Technology assessment is an aid to, not a substitute for, the judgments which must be reached by elected officials in policymaking positions.

During its formative stages, OTA has sought to develop the capability to respond to Congressional committees seeking timely and unbiased technological information and analyses. As the Office moves forward, it will develop an additional, longer-range capability for calling attention to emerging technological issues deserving early assessment, but which have not yet surfaced as matters of political concern. A continuing objective and goal of OTA will be to improve public understanding of the implications of science and technology through techniques which will make possible more balanced and more informed discussion and debate of technology-related public issues.

The past year has brought both challenges and opportunities for OTA in its efforts to establish a distinctive institutional capability and to provide a fresh viewpoint for dealing with complexly interrelated issues which cross traditional disciplinary boundaries. Much has been accomplished and much remains to be done. The flavor of the events of this developmental period is well captured in the outgoing statements of OTA's initial Chairman, Senator Edward M. Kennedy, and Vice Chairman, Congressman Charles A. Mosher, which are included as appendices to this report.

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This report covers the activities of the Office of Technology Assessment during the year since March 15, 1974, the date of the preceding annual report, through March 15, 1975. The sections which follow describe the structure and organization of OTA and its operating procedures, the activities of the OTA Advisory Council, and the assessment activities under way in OTA's six priority areas.

EMILIO Q. DADDARIO,
Director,
Office of Technology Assessment.