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Information Centre Speeds Israel's Development

By Carel Keren, Director, Centre of Scientific and Technological Information
National Council for Research and Development, Tel-Aviv, Israel

Israel is a small nation lacking soil and water for extensive agricultural development and natural resources for industries based on indigenous raw materials.

Like many other developing nations in similar circumstances, Israel feels a pressing need for rapid industrialization and intensive utilization of the available agricultural potential. Israel is more fortunate than most developing nations as it possesses a rather large number of trained scientists, engineers and technologists able and willing to apply their knowledge to its development. As the population has a high literacy rate and is adaptable, the country's working manpower can be retrained to enable it to deal with advanced and changing technology.

Industry in Israel, however, is mostly small or medium-sized and industrial research is in its infancy. As industry is still developing, it operates on a narrow margin of profit. With a limited market - often heavily protected - as its main outlet, developing industry seldom has the financial means or the incentive to embark on the risky and uncertain processes of technological innovation.

Scientific and applied technological research, therefore, is centred in institutions of higher learning, research foundations and government-supported activities.

The National Council for Research and Development endeavours to operate on a national scale in areas where individual efforts are negligible or lacking altogether. The Council strives to promote a national science policy and to encourage, to finance and even to undertake applied research in those areas where no other sponsor can be found. It fulfills certain co-ordinating functions for the research activities undertaken by various institutions, seeks to further science and research-based economic undertakings and assists in the exploitation of products or processes resulting from original research and development. One of the Council's aims is to integrate the scientific efforts of the country with those of the international scientific community.

The lack of natural resources and the economic necessity of building a viable nation within a short time and of creating a sound scientific basis for industry enhance the

importance of scientific and technological information services. The proper functioning of these services is to ensure that those who guide the national development have at their disposal the results of international scientific research and technological innovations and progress so they can direct the meagre resources of the country into channels not explored elsewhere.

The Centre of Scientific and Technological Information was established in 1961 as a department of the National Council for Research and Development. The Centre's tasks can be summarized as follows:

- Advancement and co-ordination of technical and scientific information work in Israel;

- Compilation of sources of information available in Israel and elsewhere;

- Provision of information-searching facilities which are not supplied by existing centres;

- Provision of information which is not readily accessible through commercial channels or which is available only on an intergovernmental basis;

- Provision of technological information to industry;

- Catering to the information needs of the National Council for Research and Development and other national bodies.

During the first few years the Centre grew very slowly. Much spade-work had to be done before the fact was recognized that budgets allotted to information provision would yield returns. The Centre had to demonstrate to industry that investment in information is as worthwhile as other forms of investment, and librarians had to be convinced that interlibrary co-operation increases their possibilities of providing service without putting any restrictions on their freedom of action.

The existing system does not yet function at the optimal level but its aims, at least, have been defined, and ways and means to accomplish them have been devised. (The accompanying chart shows the present organization of the Centre.)

The duties and responsibilities of the various departments can be outlined as follows.

Documentation services

(1) Publication of a series of directories to sources of information in Israel, such as a Union List of Periodicals in Israeli Scientific Libraries, a Directory of Scientific and Technical Associations and Institutes, a Directory of Special Libraries and a Directory of Serials in Pure and Applied Science and Economics.

(2) A reference library and quick reference service answering a wide variety of questions received by telephone, by mail, or through personal visits to the Centre, and a bibliographical and translation service which supplies clients for a nominal payment with bibliographies or translations on request.

(3) Provision of photocopies of literature from various sources in Israel and abroad.

(4) A service enabling clients of the Centre to order scientific and technological publications that are not available through commercial channels.

(5) A service giving advice to special libraries and information centres on operations, procedures and equipment.

(6) A library-training programme, directed mainly towards the special librarian. Within this programme, seminars, lectures and working sessions are arranged to clarify and improve services in libraries and information centres and to achieve closer co-operation within the profession.

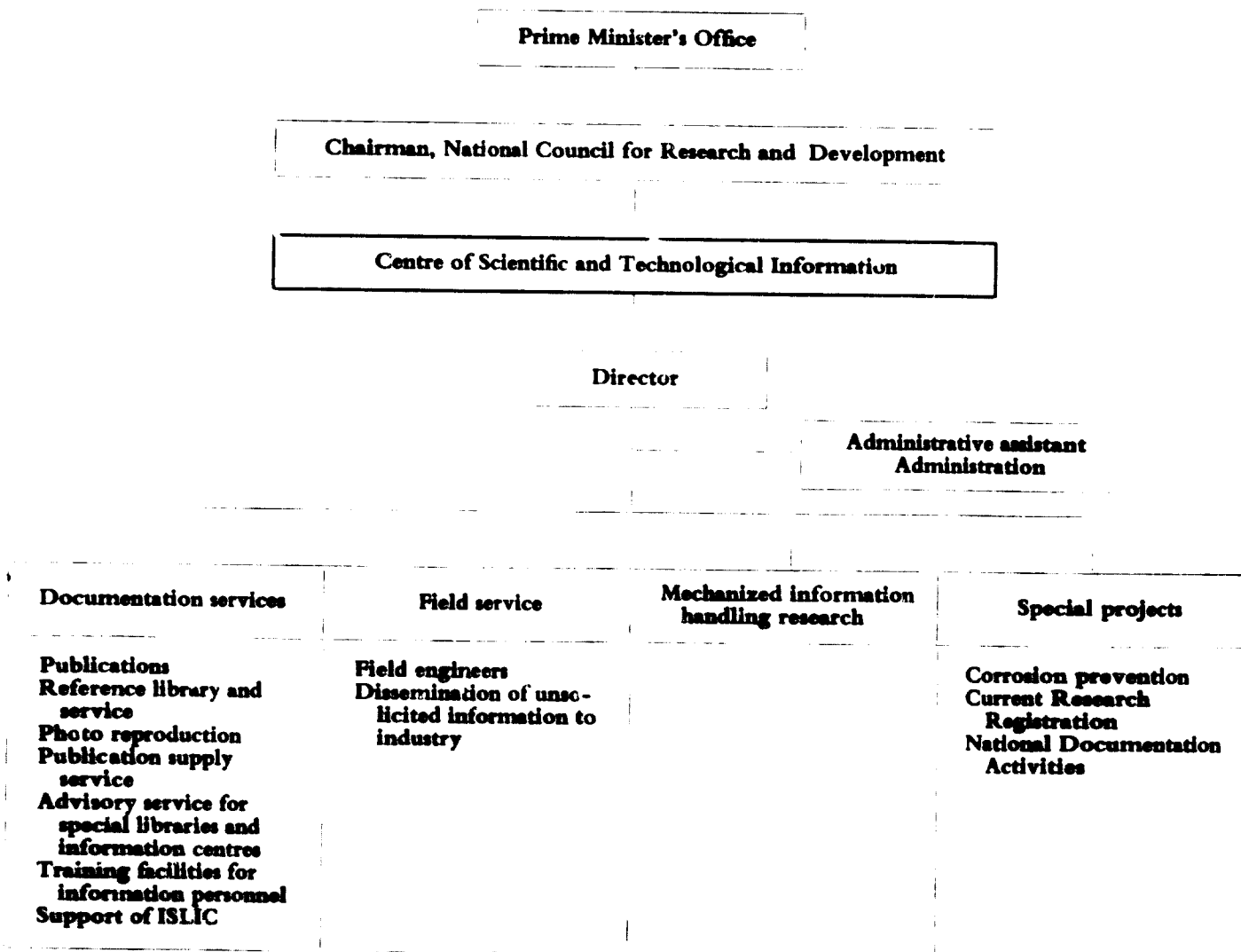
(7) Support of the activities of the Israel Society of Special Librarians and Information Centres (ISLIC). The Centre of Scientific and Technological Information, through its Division of Documentation, does everything in its power to create in ISLIC a medium through which the information scientists and special librarians can express themselves professionally.

Division of field service

(1) Issues and routes to industrial users a series of special announcement bulletins containing technical news (pertaining to specific technological fields) extracted from foreign sources.

(2) Constructs interest profiles so that industrial undertakings can be provided with pertinent items of technological

Organization of the Centre of Scientific and Technological Information



information directly relevant to their area of interest. Abstracts are sent to industrial firms, together with a prepaid postcard. On this postcard the recipient can request either a photocopy of the original paper or information as to where the original can be found.

(3) Distributes a set of contents pages of the technical journals available in Israeli libraries to appropriate industrial undertakings. These contents pages generally are produced in co-operation with the pertinent industrial research association. The subjects covered at present are: electronics, ceramics and silicates and textiles.

(4) Maintains contact with both industry and literature and information sources so that the Department can bring together parties sharing common interests. Thus a manufacturer in need of a particular raw material or piece of equipment might be referred to the proper source of supplies. A difficult technical problem might be referred to a scientific research laboratory or to a consulting engineer for further investigation or advice.

Special projects

(1) *Corrosion prevention.* Damage caused by corrosion in all its forms amounts to a considerable sum. Applied science can reduce the damage, but often great advances can be achieved through an educational campaign. At present a corrosion engineer is on the staff of the Centre and his activities are:

- (a) Lecturing on the damage and prevention of corrosion;
- (b) Compiling literature and disseminating information pertaining to corrosion;
- (c) Issuing informative material such as leaflets and posters;
- (d) Sponsoring professional working groups dealing with interference, cathodic protection and other problems concerning corrosion prevention;
- (e) Giving advice on specific corrosion problems.

(2) *Registration of current research.* To formulate a meaningful science policy and to assist in exploiting research resources available in the country, a list of current research work must be compiled and kept up to date. About 5 000 scientific and technological research projects are being carried out in Israel. These do not include projects sponsored for defence or research in the field of social sciences. Information on these subjects is now being accumulated and a mechanized system is being devised to tabulate the results. The ultimate aim is to create a system similar to that of the "Science Information Exchange" and to produce a listing similar to the United States Government "Research Grant Index".

(3) *National documentation activities.* Information activities, in order to be viable, have to fit into a given national and international environment. On the national level, it is important that an information centre complement others to ensure a minimum of duplication in holdings, maximum uniformity in registration and classification methods, optimal flow of information between centres etc. Inter-

nationally, it is vital that the national network matches the activities of organizations and institutions having similar interests and aims. The quantity and quality of information and the means of its storage and retrieval are such that no small country can aspire to build a self-sufficient system, and close international co-operation is a necessity. The Centre, therefore, fosters all activity conducive to closer co-operation between and co-ordination of national systems and endeavours to build up international ties which promise to increase the flow of information from and to Israel.

Mechanized information handling research

(1) Study of mechanized systems in the process of planning, establishment or operation abroad.

(2) Co-ordination of mechanical systems research in Israel. Evaluation of research proposals and assistance in their execution.

(3) Establishment of rules, procedures, guidelines, thesauri etc., which may be of importance in a nationally co-ordinated system.

(4) Close co-operation with manufacturers of equipment who are active in Israel. Documentation of systems tools, such as computer programmes, and systems reports, which have a bearing on operations in documentation.

Rapid increase in the quantity of available information, advances in information science and systems engineering and micro-documentation, the introduction of electronic computers in many libraries and information centres – mainly in the United States but also in some European countries – have resulted in information systems which are radically different from traditional ones.

Nearly all these systems require several years for construction, evaluation and introduction into the information network of their environment. Even if such systems are unsuitable or uneconomical in certain environments, they must be thoroughly understood, at least to the point where they can be evaluated or utilized intelligently.

The dependence of a small information centre on the holdings of large centralized institutions might mean rather deep involvement in the systems adopted there. For example, if a major abstracting service is automated, the subscriber of that service might have to be equipped to handle its magnetic tapes for an optimal information supply.

Finally – and perhaps most important in a small country – it is vital that the compatibility of information systems be preserved. Individual development of new systems should follow a co-ordinated scheme, so that the common interest always can be adhered to.

The Centre of Scientific and Technological Information is still small and its means are limited. Its aims, however, are constantly being reviewed in the light of experience and are being adapted to the changing patterns of research and development as well as to economic considerations. In sum, the Centre serves as a focal point for information activities in the country and as a contact point for international information activities. As such, it has a positive role to play in the development of the country.





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