



TOGETHER
for a sustainable future

OCCASION

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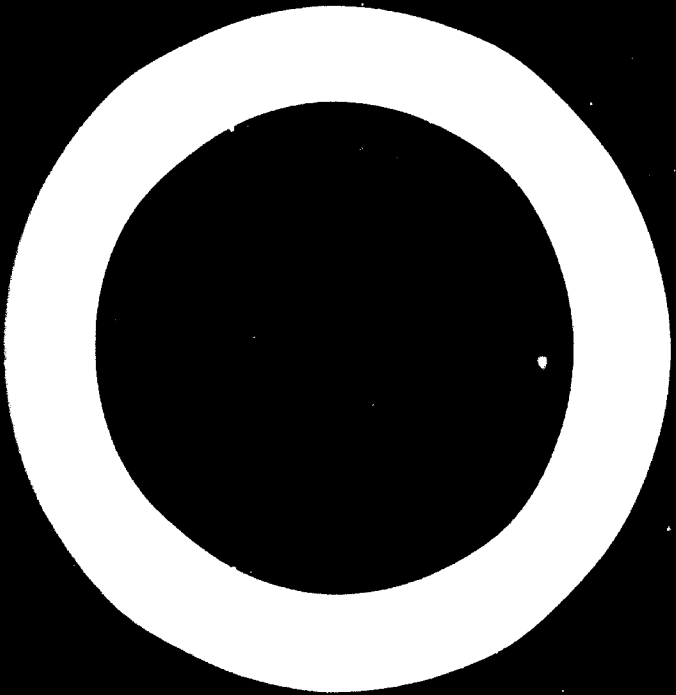
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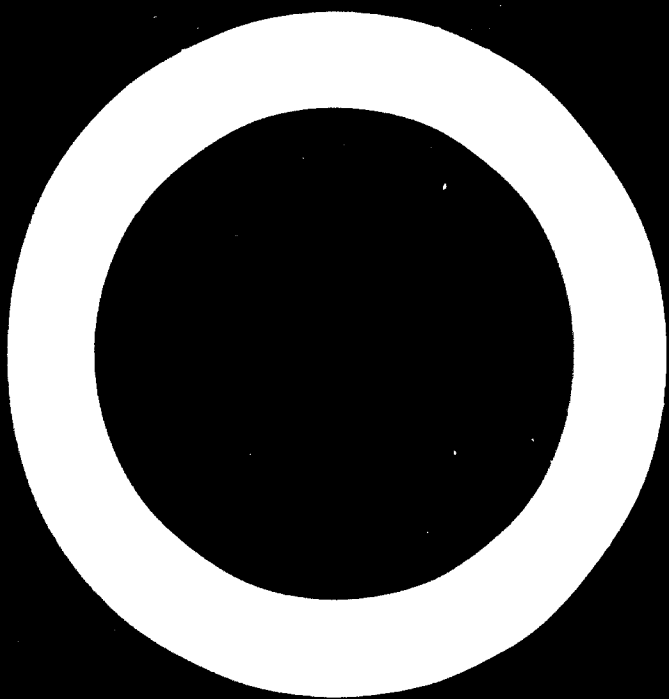
STANDARDIZATION,
QUALITY CONTROL
AND METROLOGY -

LICENSING
AND
TECHNOLOGY
TRANSFER .



UNITED NATIONS





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**UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna**

This brochure is one of a series published to inform developing countries of the types of assistance available from UNIDO to advance their industrialization programmes.

Introduction

The United Nations Industrial Development Organization (UNIDO) was established by the United Nations General Assembly in 1966 as an autonomous body within the United Nations to promote and accelerate the industrialization of the developing countries. It was given the central role in co-ordinating all the activities undertaken by the United Nations family in this field. UNIDO came into existence on 1 January 1967 and has its headquarters at Vienna.

UNIDO provides advisory and promotional assistance and training to Governments and organizations in the establishment, reorganization and reinforcement of industrial infrastructure. This assistance is provided by agreement between a requesting Government and UNIDO, and, in most cases, the United Nations Development Programme (UNDP).

The contribution of UNIDO to technical assistance projects may take many forms depending on the requirements of the requesting Government and the size of the project. Projects may include:

Provision of experts

Provision of fellowships for individual training or for participation in group training programmes organized by UNIDO or other institutions

Provision of equipment

Short-term (one month or less) exploratory or advisory missions by UNIDO headquarters staff members or consultants

Any other form of assistance mutually agreed upon between the Government and UNIDO

Of the various types of public and private industrial institutions in a country, those with a technological function naturally play a key role. Among these are three in particular, without which an industrial economy is unimaginable. UNIDO is deeply involved with the establishment, strengthening and modernization of these institutions, whose purpose and functions are outlined below

Industrial research and development institutions

To function properly, industry requires technological research and development support for solving its material problems, for developing new products and for developing and improving manufacturing processes. Various routine technical and technological services are also needed by manufacturers and customers alike. Furthermore, a country as a whole needs applied industrial research and development capabilities to support its long-range and short-term economic plans for putting its natural resources to new industrial uses, or for using them more effectively in existing ways.

UNIDO assists in establishing such needed industrial research and development institutions. It assists in the planning, designing, building and equipping of laboratories. It provides equipment, the services of experts and fellowships. Projects in this category are naturally quite large and last several years.

Assistance to strengthen existing industrial research and development institutions is also often requested and it can vary from providing a single technical or management expert all the way to setting up an additional laboratory. Therefore, such projects range from the very small to the very large and can last from a few months to several years.

Institutions for standardization, quality control and metrology

Industrial standards are the organizational backbone of the modern industrial economy. They ensure the uniformity and interchangeability of consumer and industrial products, and they are the measure of industrial product quality. Quality control is the activity itself responsible for the testing, while metrology sees to it that the measurements are accurate. UNIDO helps to establish various standardization bodies, quality control and quality certification centres, weights and measures offices, metrology laboratories and legal metrological bodies and assists in making existing ones more effective and more efficient. UNIDO provides the services of international experts and fellowships for extensive training for national staff. Such projects normally last for a number of years.

One type of project concerns the establishment of quality certification schemes, often mandatory, to make industrial products competitive abroad. Projects in this category include the establishment of special testing laboratories, provision of fellowships and provision of advisory services to industry. They can be small, as, for example, when a consultant is provided to a specific industry; but they are usually large, lasting several years, and are frequently part of projects dealing with standardization as well.

Projects concerned with metrology involve the establishment of special laboratories and the related administration for providing accurate measuring techniques to all industrial sectors. The simplest example is the establishment of offices of weights and measures, which every country, even those that are not industrialized, must have. Other projects assist a country to change over to the metric system. The projects are usually large and last from two to five years or even longer. Metrology projects are also often part of large projects dealing with standardization, quality control or both.

Institutions of licensing and technology transfer

No country's industry is completely self-developed as far as the technology it uses is concerned. Much of the technology in the world is being transferred either through the subsidiaries of transnational corporations, turn-key arrangements, joint ventures or through licensing. Licensing is an efficient, time-saving method for furthering industrialization in the developing countries and can bring great economic advantages if handled skilfully. Nevertheless, there are pitfalls to be avoided in negotiating licensing agreements, and it is the aim of UNIDO to assist the developing countries in the establishment and strengthening of various types of patent and licensing offices in order to facilitate the most efficient transfer of appropriate technologies existing anywhere in the world to a developing country that needs them. Although such institutions are often relatively small, their economic effect is considerable.

Projects to establish and strengthen national licensing and patent offices, including the development of the required, appropriate legislation, are carried out in those developing countries where insufficient or no regulations exist for patents and the licensing of foreign technology. The objective of such projects is to establish or improve the national administrative machinery for patent law and licensing. The provision of international expertise is the key element, with provision of fellowships for training playing almost as important a role. Such projects can be small and specific as well as relatively large, lasting several years.

The successful negotiation of specific industrial licensing agreements is a complex undertaking, where experience is of prime value. UNIDO can provide the services of international consultants to assist the Government or industry during such negotiations. Normally such projects are relatively small and of short duration, as they involve only a single expert, but they can be extended to include provision of fellowships as well.

Sources of finance

Technical assistance projects, or their preparation, can be financed from several sources, as shown in the table below.

TYPE OF PROJECT AND SOURCE OF FINANCE

<i>Type of project</i>	<i>Approval granted by</i>
Large-scale projects (UNDP participation more than \$150,000) financed from the UNDP Indicative Planning Figure (IPF)	UNDP, New York
Small-scale projects (UNDP participation up to \$150,000) financed from UNDP/IPF	Local UNDP resident representative ^a
Projects of any scale financed from UNIDO funds derived from voluntary contributions	UNIDO, Vienna
Projects under Special Industrial Services (SIS) (UNIDO participation generally less than \$50,000)	Local UNDP resident representative
Short-term missions by UNIDO headquarters staff members or consultants financed from UNDP/IPF, SIS or UNIDO funds	Local UNDP resident representative and UNIDO, Vienna UNIDO, Vienna

Note: UNIDO itself cannot provide capital for or participate in new industrial enterprises except small pilot plants. This capital should be obtained from development banks, private investors and other financial institutions. Through its investment promotion programme, UNIDO may, however, bring together those who require capital, know-how or partners for joint ventures and those who can meet one or more of these requirements.

^aSome types of small-scale UNDP/IPF projects also require approval from UNDP, New York.

How to apply for assistance from UNIDO

All requests for assistance from UNIDO should normally include a short description of the objectives, duration and type of assistance

required. They should be directed through the appropriate government department to the local UNDP resident representative who acts as the UNIDO representative in the country. If the originators of requests wish to have preliminary discussions about their project ideas, the office of the resident representative can arrange a meeting with the UNIDO industrial development field adviser assigned to that area.

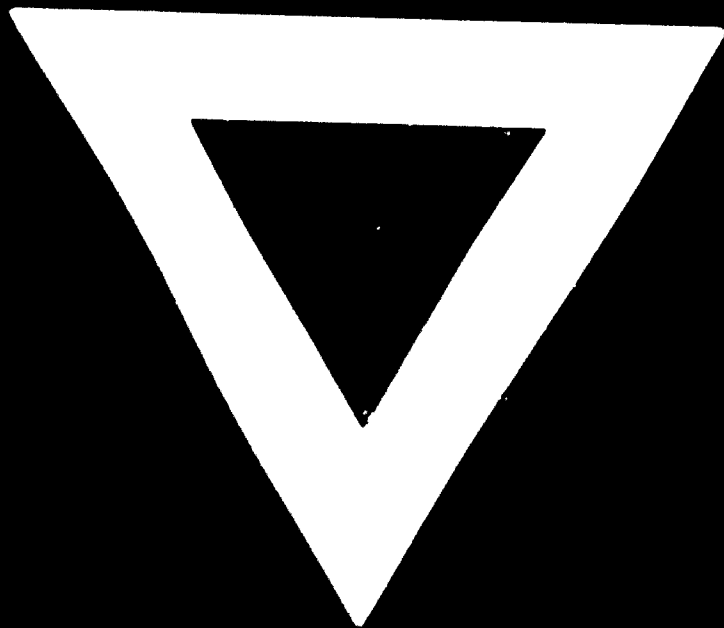
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