



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

20322

Distr.
LIMITED

IPCT.183(SPEC.)
13 August 1993

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

ORIGINAL: ENGLISH

Fifth Meeting of the Advisory Group
of the Industrial and Technological Information Bank (INTIB)

Vienna, Austria, 17-19 May 1993

REPORT*

* This document has not been edited.

V.93-88185

C O N T E N T S

	<u>Page</u>
I. RECOMMENDATIONS	3
II. INTRODUCTION	4
III. WORKING SESSIONS	7
IV. ADOPTION OF THE REPORT	9
V. ACKNOWLEDGEMENTS	9
 <u>Annexes</u>	
I. LIST OF PARTICIPANTS	10
II. MEETING PROGRAMME	14
III. LIST OF DOCUMENTS	16

I. RECOMMENDATIONS

1. INTIB should continue to assist developing countries in establishing national focal points and concentrate its resources on its main audience -- its network members, in particular to strengthen the national and regional focal points (NFPs and RFPs). INTIB should make the review and assessment of the functioning of the focal points with the aim to make more use of national expertise and locally developed technologies.
2. INTIB should continue, with the help of NFPs and RFPs, to determine the mix of services and products wanted but also needed by the ultimate end-users, in particular the SMEs and consulting organizations.
3. NFPs and RFPs should be provided with products and services in a form that can easily be adapted and repackaged to suit the individual needs of the end-users in their countries and their own circumstances.
4. INTIB should continue and increase its interactions at the enterprise level and with associations in its efforts to help NFPs stimulate the circulation of information in their countries.
5. INTIB's International Referral System should be completed and implemented as quickly as possible to increasingly supplement the traditional question/answer service at UNIDO HQ.
6. As part of INTIB training strategy, a "training-of-trainers" programme should be developed to provide the support and methodological materials to the NFPs and RFPs for organizing training locally in information resource management and appropriate effective use and dissemination of information products and services. While it is recognized that generation of income by pricing and adding value to information products is necessary it could be gradual and must stimulate rather than inhibit market development.
7. Available standardized software should be refined in co-operation with other organizations and adapted to help NFPs and RFPs produce their own information products (data bases, guides, inventories etc.). A study on available software applications in various organizations and its harmonization could be initiated.
8. INTIB was requested to develop methodologies for business and technoeconomic intelligence in co-operation with other agencies active in this field and promote them in the developing countries through the network members.
9. Recognizing the impact which has been made by the TECHMART events over a short period of time, it was recommended that more resources should be provided to maintain the INTIB leadership in TECHMART events and subsequently, it should evolve as a programme to facilitate the technology transfer and investment for SMEs at national and regional level.
10. INTIB should use its information activities to support the technology monitoring function and promote the establishment of information companies to service end-users.

11. INTIB should endeavor in close co-operation with network members to promote information as a strategic resource for development and to provide advise for policy and decision making.
12. INTIB should continue its activities in identifying the most reliable and economic means for rapid and timely communications between network members.
13. The necessity of integration of international networks and closer co-operation between them in providing access to information resources of UN system and other organizations was stressed.
14. INTIB's range of publications should be sent to reach the NFPs and RFPs quickly, if possible in electronic format, enabling them to repackage the information contained therein, in a timely manner to the end-users. Further, INTIB's publications should feature, as appropriate, elements of successful case studies in different countries and regions.

II. INTRODUCTION

BACKGROUND INFORMATION

The United Nations General Assembly passed its Resolution 31/183 on the establishment of a network for the exchange of technological information, particularly para 9, concerning the establishment of the Industrial and Technological Information Bank (INTIB) in UNIDO to strengthen the national technological information capabilities of the developing countries. Recently the ECOSOC adopted a resolution to harmonize and to improve UN informatics systems for optimal utilization and accessibility for all Member States and observers to UN databases and information systems.

Particular emphasis was placed on the Industrial and Technological Information Bank (INTIB) expanding its regional, subregional and national networks, developing sectoral information networks and applying modern information and communication technologies to upgrade the capabilities of network participants. The 9th session of the IDB stressed this approach and recommended that developing countries should be assisted in setting-up INTIB focal points, as well as subregional industrial and technological information systems.

The Fourth Meeting of the Advisory Group of the INTIB was organized by the UNIDO Secretariat at Vienna, Austria, from 26-28 November 1991. Twenty-five advisers, in their personal capacity from 16 countries participated in the meeting. The meeting discussed the themes such as Techno-economic intelligence in INTIB operation, Referral System, including development of multilingual information exchange tool for networking, marketing information services and products and Technology Market (TECHMART), and made, inter alia, conclusions and recommendations as follows:

INTIB should develop a strategy for its future activities, taking due account of the importance of:

1. The developments and changes in Eastern Europe, parts of Africa and Asia, to move from a centrally planned to a market-oriented economy and to reorient industry accordingly.
2. The need to establish a non-hierarchical decentralised network of organizations which can collect and provide information to SMEs at local level as a sub-system within INTIB.
3. Marketing information products and services world-wide and publishing guidelines for this purpose.
4. Assisting the establishment of information business centres to hasten the introduction of new and environmentally sound technologies in the developing world.

Within this context, during the last two years, UNIDO has reoriented the activities of INTIB. While INTIB still offers information and documentation services in the form of selected, analyzed and annotated information, data and advice, its emphasis is increasingly on creating direct access to, referral networks of information sources using modern communication techniques. The ultimate aim is four computer-linked regional INTIB networks (for Africa, Asia and Pacific, Latin America and Caribbean, and Europe). These are complemented by sub-regional and national networks and international networks and international sectoral networks in selected files, e.g. environment, energy, materials, food technology, and biotechnology. An information referral system on sources of industrial and technological information provides decentralized inquiry services through a collaborating network of INTIB focal points. In support, INTIB maintains its own data bases such as Industrial Development Abstracts (IDA), Technology Suppliers (TSDB), the Referral Database on Energy and Environment (REED) and others trains network trainers both in their use and in handling modern information and communication technologies. On request, INTIB assists in upgrading information handling and resource management capabilities of selected information centres through technical co-operation projects. INTIB also encourages and helps developing countries to set up their own industrial and technological data bases, either nationally or regionally. Further to enlarge information exchange on technologies available for transfer, INTIB organizes technology transfer fairs for developing countries, TECHMARTs, to bring together buyers and sellers. TECHMARTs organized in Beijing, Bulawayo and New Delhi featured not only extensive exchange of information but also conclusion of preliminary technology transfer agreements.

OBJECTIVE

The objective of the Fifth Meeting of the Advisory Group of the INTIB was to bring together experts to advise INTIB in its future operations and programmes.

The meeting discussed the following themes:

- (1) Progress Report on INTIB Programme

Trends in information process and use

- (2) Changing role of information in new international economic scene

- (3) Techno-economic intelligence
- (4) Technology monitoring
- (5) Marketing information services and products
- (6) Information resource management in developing countries

Recent trends in INTIB activities

- (7) Demand for information and for INTIB services: Case studies on INTIB networking system and sectoral network operations
- (8) Development of an international referral system and role of information networking and databses
- (9) Networking in the fields of biotechnology, materials, environment and food technology
- (10) Technology Market (Techmart)
- (11) Human resource development for management of industrial and technological information

Future work of INTIB

- (12) INTIB strategy and operation methodology in changing information scenario -- a programme for next 5 years

ORGANIZATION

The Advisory Group Meeting was attended by 20 participants from various member countries, international as well as inter-governmental organizations (see Annex I for the list of participants).

In his opening statement, the Director General Mr. M. de Maria y Campos referred to his recent assumption of office and his deep interest in the transfer of technology to developing countries. He reiterated the objective of UNIDO to promote industrial development in developing countries and described the basic thrust and strategy UNIDO envisaged to implement within the next 5 years.

He noted that information is a dynamic instrument of growth and change that has now become essential for rapid and balanced socio-economic development of the entire world. However, industry itself is undergoing a marked change as it gradually transforms from a material-based to an information or knowledge-based activity. He stated that of relevance to the current industrial scene too, are the enormous changes in the political and economic structures that have occurred throughout the world over the past few years: the globalization of industrial and technology markets, reorientation of several countries from centrally planned to market economies, moves towards regional market integration, liberalization in investment and technology regimes and concern for sustainable development among others. The Director General Stressed that to meet these challenges, which have resulted into consequently greater demand for information, the INTIB system has to become

more innovative and effective and focussed on meeting specific information needs in these countries.

He added that advantage should be taken of the rapid developments in information technology and, communications and the low prices of micro computers, which have changed the way information is accessed and used. As a product, information has a price. It is a resource that needs to be managed with value added to it. He noted that it was the duty of INTIB to sensitize developing countries to the present value and importance of information in the industrial development process.

He concluded that INTIB's five year priorities, strategies and plans as presented in the medium-term plan for 1994-1999 should be critically examined by the Advisory Group so as to chart an appropriate course of action to be followed, having in mind the fact that the objective of the programme is to increase communication with member states and other focal points involved in industrial and technological information utilization in developing countries.

ELECTION OF THE BUREAU

The meeting was invited to elect a chairman, rapporteur and assistant rapporteur. The meeting unanimously elected:

1. Chairman: Mr. Peter Szanto
Director, The Hungarian Central Technical Library (OMK)
2. Rapporteur: Mr. Brian Padgett
Managing Director, The Technology exchange Ltd., UK
3. Assistant Rapporteur: Mr. Michael Nageri
Head of Information Services, The African
Regional Centre for Technology (ARCT)

III. WORKING SESSIONS

The INTIB Secretariat paper traced the development of INTIB, its present status and future plans. In the Secretariat paper, the Chief of the Industrial and Technological Information Section called the INTIB concept "a judicious combination of a central clearing house with decentralization through a global network". Discussing ongoing activities, he told the Group that the Industrial Inquiry Service (IIS) was to be retained because it provided feedback on demand for INTIB services. He enlarged on the various regional and sectoral networks, International Referral System (IRS), Techmarts, and described recent efforts to achieve connectivity with other networks. Looking to the future, he said that INTIB aimed to develop the IRS, and the technology transfer, investment promotion and technical assistance activities demanded by SMEs, whilst making increased use of electronic networking and products.

The second session of the first day was devoted to networking issues, starting with reports from UNIDO officers on the Energy and Environment Information System (EEIS), biotechnology, new materials programme, and

networking technologies used by INTIB. The meeting then heard contributions from INTIB Regional Focal Point representatives. The Director of Asia and Pacific Centre for Technology Transfer (APCTT) emphasized the need for regional focal points to reach large numbers of clients by repackaging information and disseminating it in a timely fashion. The representative of the African Regional Centre for Technology (ARCT) drew attention to the difficult telecommunications situation in Africa. He outlined the role of information systems in the Centre's techno-enterprise incubator scheme and he further pointed out that local networks only succeeded if members were given training and support, and that end-users should be consulted before new ideas were tested. The meeting then had an opportunity to hear a first-hand report on the activities of INTIB Regional Focal Point for the Latin American and Caribbean region, FIESP.

The second day was taken up with changing role of information. A staff member from the Office of the Director of Technology Development and Promotion spoke on technology monitoring, assessment and forecasting. He said only a handful of developing countries had systems to fulfil these functions and noted that the role of UNIDO was to promote awareness of the problem, provide technical assistance and encourage regional and sub-regional cooperation, whilst continuing with its monitoring programme and publications. The representative of ADBS spoke on techno-economic intelligence. This presentation led to discussion of the difficulties of SMEs in developing countries in using information. It was noted that data bases were often under-utilized, as they did not supply the business intelligence needed by end-users. The representative of Sweden then gave a presentation on the Industry Management Support System (IMSS) software being developed by UNIDO to offer managers user-friendly support in performance monitoring and decision making. He said the system took account of the needs of a new breed of flexible, customer oriented SMEs, competing in globalized markets.

The Managing Director of the Technology Ltd., U.K. reported on the role of Techmart. He analyzed the needs of firms in developing countries seeking access to technologies, and the corresponding services and partners required. He noted that expansion of the Techmart scheme would depend on evidence of resultant technology transfers and suggested central processing of introductions would improve monitoring of the results. The Hungarian representative then described the business information systems in Hungary. He said former state enterprises showed little interest in market information services, which would have to be subsidized for some time to come. While discussing marketing information, the representative of Specialist Publishing Services, UK, delivered a paper on the marketing of information services and products. He stressed the distinction between customers' wants and needs, arguing that INTIB should set out to identify both and then develop products to meet them. He further emphasized that all information should be charged for, as this was the only way to assess demand. He called for exclusive use of the INTIB network as a delivery mechanism, "because this is the best channel there is". The representative of the Nigerian National Focal Point, FIIRO, presented a paper on market prospects for information services in Nigeria. He said the trend towards manufacturing of products from local raw materials meant that there was a strong demand for information in Nigeria, and it should be charged for.

In the last session of the second day, the representative from the Helsinki University of Technology spoke on Finnish information resources management training programmes. Then the representative from the Korea

Institute of Industry and Technology Information (KINITI) presented a paper on information resource management. He noted that with the rapid emergence of an information society, efficient management and utilization of national information resources is becoming a crucial factor in technological and economic development.

The last day started with a visit to the European Patent Office Vienna branch and a presentation on its activities followed by a guided tour to its computer and CD-ROM centres. This was followed by a round table discussion of the meeting's recommendations. Among the points raised were the importance of strengthening focal points' delivery and feedback mechanisms. Participants stressed the need to assist focal points in adapting information to local requirements, and marketing it. But it was argued that commercialization of INTIB services should be gradually introduced, so as not to kill off the market for information. It was suggested that development of the referral system should take account of focal points' concerns, and they might be given an intermediary role. Similarly, there was a proposal to involve focal points in organizing Techmart events. INTIB was urged to concentrate on a limited number of products and services marketable by focal points.

IV. ADOPTION OF THE REPORT

After detailed discussions, the meeting adopted the recommendations. The meeting urged UNIDO and the Member States for early implementation of the activities suggested at the meeting.

V. ACKNOWLEDGEMENTS

The meeting expressed its deep appreciation for the efforts made by UNIDO for the organization of the meeting and offered special thanks to UNIDO for providing excellent host facilities.

ANNEX I: LIST OF PARTICIPANTS

BRAZIL

Ms. Joice Joppert Leal
Head Officer
Department of Technology
FIESP/CIESP
Avenida Paulista 1313/5ª
01311-923 Sao Paulo SP
Brazil
Fax: (011) 288 3469
Tel: (011) 251 3522 Ext.460/470
Tlx: 1122130 FISP BR

FINLAND

Ms. M. Karivalo
Programme Director
Helsinki University of
Technology
Centre for Continuing
Education
Revontulentie 6
02100 Espoo
Finland
Fax: (358-0) 191 7930
Tel: (358-0) 191 7902

FRANCE

Prof. Jean Michel
President
Association Francaise des
Documentalistes et des
Bibliothecaires Specialises
(ADBS)
25, rue Claude-Tillier
75012 Paris
France
Fax: (1) 437 230 41
Tel: (1) 437 225 25

HUNGARY

Mr. Peter Szanto
Director
Hungarian Central Technical
Library (OMK)
Budapest VIII
Muzeum u.17
H-1428 Budapest, Pf.12
Hungary
Fax: (36-1) 1180109
Tel: (36-1) 138-4837
Tlx: 224944 OMIKK h

NIGERIA

Mr. R.O. Sodipe
Head, Information Service
Federal Institute of
Industrial Research, Oshodi
(FIIRO)
P.M.B. 21023, Ikeja
Lagos
Nigeria
Tel: 521-010, 523-260
Tlx: 26006 FIIRO NG

REPUBLIC OF KOREA

Prof. Chang Kyo Lee
KINITI Advisor
Korea Institute of Industry
and Technology Information
(KINITI)
P.O. Box 205, Cheongryang,
Seoul
Republic of Korea
Fax: (2) 962-7198
Tel: (2) 962-6211

RUSSIA

Mr. Alexandre K. Serdiouk
Director
International Technology
Information Centre Ltd. (INTERTEC)
Brahmsplatz 8/3
A-1140 Vienna
Austria
Fax: (43) 222-504-4094
Telex: 111309 ITIZ WN
Tel: (43) 222-504-4091

SWEDEN

Prof. Per Lind
Department of Management and Economics
University of Linköping
S-581 83 Linköping
Sweden
Tel: + 46 13 28 10 00
Fax: +46 829-146 S

TUNISIA

Mr. Dhemaied Faouzi
General Director
Agence de Promotion de
l'Industrie (API)
63, rue de Syrie
1002 Tunis, Tunisia
Fax: 782482
Tel: 782 144
Tlx: 1416 TN

UNITED KINGDOM

Mr. Rollo Turner
Specialist Publishing
Services
10 Lime Avenue
High Wycombe
Bucks HP11 1DP
United Kingdom
Fax: (494) 523380
Tel: (494) 534778

UNITED KINGDOM

Mr. Brian Padgett
Managing Director
The Technology Exchange Ltd.
Wrest Park
Silsoe, Bedford MK45 4HS
United Kingdom
Fax: (525) 860-664
Tel: (525) 860-333
Tlx: 825808

International and Regional Organizations

ARCT

Mr. Michael Nageri
Head of Information Services
African Regional Centre for
Technology (ARCT)
B.P. 2435, Dakar
Senegal
Fax: (221) 237-713
Tel: (221) 237-712
Tlx: 61282 CRATEC SG
E-Mail: SEN 00ORP@
@P4.FL^ 7711.Z5
GNFIDO.FIDONET.ORG

APCTT

Mr.K.V. Swaminathan
Acting Director
Asian and Pacific Centre for
Transfer of Technology
(APCTT)
Off. Mehrauli Road
New Delhi 110 016
India
Fax:
Tel:
Tlx:

EPO

Mr. G. Rubitschka
Head, Sales/Promotion
European Patent Information
(EPO)
Schottenfeldgasse 29
A-1072 Vienna
Fax: 52126 5491

IDRC

Mr. R. Lafond
Head of Information Service
International Development Research Centre (IDRC)
250 Albert Street
P.O. Box BP 8500
Ottawa
Canada
Fax: (613) 563-3858/238-7230
Tel: (613) 236-6163
Tlx: 053-3753

TIPS

Mr. Gustavo Flores
Executive-Director
Technological Information
Pilot System (TIPS)
Via Panisperna
203 - 00184 Rome
Italy
Fax: (39-6) 482 88 38
Tel: (39-6) 482 69 67

ITC

Mr. A. Paradies
Head, Trade Information
Dissemination Unit
Division of Product and
Market Development
International Trade Centre
Palais des Nations
CH-1211 Geneva 10
Switzerland
Fax: (41-22) 733 44 39
Tel: (41-22) 730 01 11
Tlx: 414 119 ITC CH

UNIDO

Mr. E. Obminski
Deputy Director-General
Department for Industrial Promotion,
Consultations and Technology
United Nations Industrial Development
Organization (UNIDO)
P.O. Box 300
A-1400 Vienna
Austria
Facsimile: +43-1-232156 or 2307584
Telex : 135612 uno a
Telephone: +43-1-21131 ext. 3631

Mr. K. Venkataraman
Director
Technology Development and Promotion Division

Mr. V. Podshibyak
Chief
Industrial and Technological Information
Section

ANNEX II: MEETING PROGRAMME

MEETING PROGRAMME

Monday, 17 May 1993

- 10.00 - 11.00 - Registration
11.00 - 11.30 - Opening session
Welcome speech - Mr. M. de Maria Y Campos,
Director-General of UNIDO
- 11.45 - 11.50 - Election of Chairman and Rapporteur
11.50 - 12.40 - Progress Report on INTIB Programme
Mr. V. Podshibyakin, Chief, INTIB
- Discussion
- 14.00 - 15.30 - Networking in the Fields of
Microelectronics - Mr. K. Fialkowski
Biotech - Mr. G. Tzotzos
Materials - Mr. V. Kojarnovitch
Environment - Mr. P. Pembleton
- Discussion
- 15.45 - 17.30 - Case Studies on INTIB Networking System
- On- and Off-line Computer Linkage:
INTIB Experience - Ms. J. Ralston
- Asia and Pacific Regional Network
Mr. K.V. Swaminathan
- Latin American Regional Network
Ms. J.J. Leal
- African Regional Network
Mr. M. Nageri
- Discussion

Tuesday, 18 May 1993

- 09.30 - 11.00 - Changing Role of Information in
the New International Economic Scene
- Technology Monitoring - Mr. P. Ellwood
- Techno-Economic Intelligence in
Enterprises - Prof. J. Michel
- Industrial Management Support System
for Small and Medium Industries -
Prof. Per Lind
- Discussion

- 11.15 - 12.30 Presentation continued...
- Strategies for Business Development
through Interfirm Co-operation: Role
of Technology Market - Mr. B. Padgett
- Business Information Support Systems
and Networks:
Case of CIS - Mr. Y. Savostisky
Case of Hungary - Mr. P. Szanto
- Discussion
- 14.00 - 15.45 - Marketing Information Services
and Products - Mr. R. Turner
- Case of Marketing Environmental
Information Services and Products -
Ms. H. Gabbert
- Market Prospects for Information
Services and Products in Nigeria -
Mr. R. Sodipe
- Discussion
- 16.00 - 17.00 - Information Resource Management (IRM)
in Enterprises - Ms. M. Karivalo
- Joint UNIDO/KINITI Training
Programme in IRM - Prof. Chang K. Lee
- Discussion
- Wednesday, 19 May 1993**
- 09.00 - 11.00 - Visit to European Patent Office,
Schottenfeldgasse 29, 1072 Vienna
Tel: 5 21 26-0
- Demonstration of Latest Developments
in CD-ROM Technology -
Mr. Rubitschka
- 11.30 - 13.00 - Round table discussion on
INTIB Strategy and Operation
Methodology in Changing Information
Scenario - a programme for next 5 years
- 14.30 - 17.00 - Discussion and Adoption of Report

- Closing Session

ANNEX III: LIST OF DOCUMENTS

1. Aide Mémoire
2. Meeting Programme
3. List of Participants
4. Progress Report on INTIB Programme (prepared by UNIDO Secretariat)
5. Monitoring, Assessing and Forecasting Technology for Industrial Development in Developing Countries (prepared by UNIDO Secretariat)
6. Market Prospects for Information Services and Products in Nigeria (prepared by R.O. Sodipe)
7. Strategies for Business Development through Interfirm Co-operation -- The Role of Technart (prepared by Brian Padgett)
8. Techno-Economic Business Intelligence -- A New Information Management for Enterprises (prepared by Jean Michel)
9. Information Resources Management in Developing Countries (prepared by Chang Kyo Lee)
10. World Class Manufacturing: Opportunities for Third World Small and Medium Enterprises (SME) (prepared by Per Lind)
11. Marketing Information Services and Products (prepared by Rollo Turner)
12. Sharing Information on Trade and Technology (prepared by TIPS)
13. INTIB's Dissemination Program for Latin America and Caribbean (prepared by FIESP/CIESP)
14. INTIB Telecommunications (prepared by J. Ralston)
15. Marketing Environmental Information Services and Products -- INTIB's Energy and Environment Information System (prepared by Harriet Gabbert)
16. The Role of Information in New Materials Programmes (prepared by V. Kojarnovitch)
17. UNIDO/ICGEB Bioinformatics Regional Resources (prepared by G.T. Tzotzos)