



**TOGETHER**  
*for a sustainable future*

## OCCASION

This publication has been made available to the public on the occasion of the 50<sup>th</sup> 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](mailto:publications@unido.org) for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at [www.unido.org](http://www.unido.org)

21927

**FINAL REPORT**

**TRAINING COURSE ON  
"TECHNOLOGY TRANSFER MANAGEMENT"  
(ICS SUB-PROGRAMME)**

**10-14 JUNE 1997  
KUALA LUMPUR, MALAYSIA**

**PROJECT NO : TF/GLO/96/105  
UNIDO CONTRACT NO : 97/118**

## 1.0. INTRODUCTION

### **The International Centre for Science and High Technology (ICS)**

The International Centre for Science and High Technology (ICS), which is a UNIDO autonomous body, based in Trieste, Italy was officially launched in July 1988 as a Project of UNIDO. Since that date, the structure and the programme of ICS were defined in the conclusion of a feasibility study completed in 1990 and pilot projects were initiated immediately after. These projects are now substantially completed and while entering into a steady regime, ICS is presently adjusting itself to the new development objectives of UNIDO and to the updated specific needs of the international community and in particular of developing countries.

In order to provide the institutional framework to enable ICS to manage its own resources in view of its strategy, the Italian Government and UNIDO signed an Agreement on 9 November 1993 on the formal establishment of ICS. The Agreement was ratified in February 1995 and has become a law of the Italian Republic.

ICS is a project aiming at strengthening the capabilities of developing countries in applying science and technologies to the development of their industrial sector. The main objective of ICS is to promote a significant transfer of know-how and a closer cooperation between enterprises and Research and Development institutions in selected keys areas of Science and Technology, reflecting the priorities of the countries and their industries. The activities of ICS follow an integrated programmatic approach where the main implementation strategies include :

- action-oriented research
- training courses
- scientific workshops
- high-level seminars
- study tours
- fellowships
- short-term exchange between research and technologist in industry
- dissemination of scientific/technological information through a documentation centre (Clearing-house)
- creation and management of a network of centres of excellence (Focal points) and of
- national correspondents
- consultancy and advisory services in specific case-studies
- promotion of twinning arrangements

One of the programmes which concerns ICS 1996-1997 scientific activities is technology management and the Sub-programme 4.6.2 Technology Transfer Management is implemented.

## **2.0. BACKGROUND OF TRAINING COURSE ON TECHNOLOGY TRANSFER MANAGEMENT**

Economic growth requires efficient planning and management of the use of all the production factors. Nowadays, technology has acquired an important position within the production function, and therefore technology management has become an important tool in the definition of the outputs.

Effective selection and application of technologies can only be achieved through technology management.

While some developing countries are still unable to define technology policies strategies others even though in quite an advanced stage of the innovation process in different industries, are still unable to properly manage the innovation process.

Their weakness in managing the innovation process causes firms in developing countries to adopt strategies which will never enable them to reach a leadership position. This reduces their global competitiveness and attractiveness.

## **3.0. OBJECTIVE**

To provide the managers of SMEs in developing countries with a broad insight overview of the major aspects related to technology management at enterprise level in order to assist them to compete in their market with better knowledge of the risks and challenges to be faced and the tools to be used and utilized become more effective.

## **4.0. STRATEGY**

The strategy to follow in order to obtain sustainable competitive advantage and foster economic growth consists of creating locally the know-how to manage the innovation processes, from invention to application. This process can be structured also through a revitalization of R&D centres and the creation of effective networks among these centres and linking R&D centres with the industry sector. Coordination of policies and collaboration in the development of high-tech programmes, joined to a business promotion activity will help industrial development and economic growth.

**5.0. ORGANIZATION OF TRAINING COURSE ON TECHNOLOGY TRANSFER MANAGEMENT**

**5.1. Date:**

June 10 –14, 1997

**5.2. Country/Venue :**

Rumah Teknologi MTDC  
22, Jalan Kia Peng  
Kuala Lumpur, Malaysia

**5.3. Language :**

English

**5.4. UNIDO Contact Persons:**

- i. Mr. J.M. de Caldas-Lima  
Programme Coordinator  
UNIDO/ITPD/TS  
Tel : +43-1-211-31-3729  
Fax : +43-1-211-31-6809
- ii. Mr. E. Vento  
ICS Liaison Officer  
UNIDO/ITPD/TS  
Tel : +43-1-211-31-3726  
Fax : +43-1-211-31-6811
- iii. Mr. T. Miyake  
UNIDO/ITPD/TS  
Tel : +43-1-211-31-3735  
Fax : +43-1-211-31-6809
- iv. Mr. G. Corbani  
ICS  
Tel : 003940224572  
Fax : 003940224575

**5.5. Co-organiser (Malaysian counterpart)**

The UNIDO/ICS Training Course on Technology Transfer Management was organised in Kuala Lumpur with the co-operation from Malaysian Technology Development Corporation (MTDC).

### **5.5.1. Background Of MTDC**

The Malaysian Technology Development Corporation Sdn. Bhd. (MTDC), a joint venture company between the Government and the private sector, is responsible for the technological development in Malaysia through the development of indigenous technologies, acquisition of strategic foreign technologies and the creation of technology-based companies. In line with its objectives of developing technology-based companies, MTDC provides venture capital to companies which are involved in technology-based projects.

### **5.5.2. Strategic Role Of MTDC**

MTDC plays an important role in term of technology development in Malaysia through :

- The promotion and creation of large investments in high technology areas.
- The provision of venture capital investment in potential companies that can be groomed for listing on the Kuala Lumpur Stock Exchange (KLSE) and to develop high technology activities.
- The utilisation of technical resources in Malaysia universities and public sector R&D
- Industrial and strategic alliances with leading medium scale technology companies in the world.

### **5.5.3. Corporate Activities**

In order to achieve its mission, MTDC is involved in a broad range of technological and financial activities and it has been categorised under three main areas as follows:

- Financial Services Activities
- Technology And Infrastructure Services
- Industrial Activities

### **5.5.4. Contact Address**

No. 84, Jalan 1/76D, Desa Pandan  
55100 Kuala Lumpur  
Tel: 03-982 8288 Fax: 03- 982 6068/6289  
Website : <http://www.mtdc.com.my>

### **5.5.5. Contact Persons**

- i. Mr. Nordin Mohamad Desa  
Acting Chief Executive Officer
- ii. Ms Mariamah Daud  
Public Relations Manager

## 6.0. MAIN ELEMENTS OF TRAINING COURSE ON TECHNOLOGY TRANSFER MANAGEMENT

Each participants of the Training Course has been given a manual/training materials which was prepared by UNIDO and brought over by UNIDO's staff from Vienna.

The UNIDO's training programme on technology transfer management consists of the following 5 key themes:

### **Module 1 : Signals and scanning**

This module deals with the environment which triggers technological change and looks at how successful organizations pick up and make sense of relevant signals about threats and opportunities.

### **Module 2 : Strategy**

This module deals with :

- how the firm analyses signals about potential threats and opportunities involving technological change
- how it chooses between different potential options
- how it plans for the resourcing and implementation of those choices

### **Module 3 : Resourcing**

This module explores the different routes through which a firm can acquire the technological knowledge it needs to exploit strategic options.

### **Module 4 : Implementation**

This module explores the issues surrounding effective implementation of technological changes which have been strategically selected.

### **Module 5 : Learning**

This module explores the ways in which organizations can capture learning from technology management projects and develop improved capabilities for future projects.

7.0. PROGRAMME OF TRAINING COURSE ON TECHNOLOGY TRANSFER  
MANAGEMENT

10 JUNE 1997 (TUESDAY)	:	INTRODUCTION TO PARTICIPANTS, COURSE AND PROCESS OF DELIVERY
9.00 am - 9.30 am	:	Registration
9.30 am - 9.40 am	:	Opening Remarks by Encik Nordin Mohd Desa Acting CEO of MTDC
9.40 am - 9.50 am	:	Speech by Mr. S. Hasnain Country Director, UNIDO
9.50 am - 10.15 am	:	Presentation on UNIDO by Mr. Kadress Vencatachellum Programme Manager Technology Services Investment & Technology Promotion Division of UNIDO
10.15 am - 11.00 am	:	Coffee Break
11.00 am -12.00 pm	:	Course road map Resources <b>Presenter : Prof. John Bessant</b>
12.00 pm - 1.00 pm	:	Overview of technology management Challenges for managing technology. The technology management process mportance of scanning and picking up signals <b>Presenter : Prof. John Bessant</b>
1.00 pm - 2.00 pm	:	Lunch
2.00 pm - 3.30 pm	:	Identifying and characterising threats and opportunities in the new environment - markets changes - competition changes - technological changes - regulatory changes - etc. <b>Presenter : Prof. John Bessant</b>
3.30 pm - 4.00 pm	:	Break



4.00 pm - 5.30 pm	:	Tools and techniques for scanning the environment - market research and forecasting - technology scanning and forecasting - competitor analysis - benchmarking <b>Presenter : Prof. John Bessant</b>
<b>11 JUNE 1997 (WEDNESDAY)</b>	<b>:</b>	<b>DEVELOPING A TECHNOLOGY STRATEGY</b>
9.30 am - 11.00 am	:	Translating signals into action Overview of technology strategy <b>Presenter : Prof. John Bessant</b>
11.00 am - 11.30 am	:	Coffee Break
11.30 am - 1.00 pm	:	Understanding the strategic direction of the business Making sense of the signals Matching internal strengths and weaknesses Building technological competence <b>Presenter : Prof. John Bessant</b>
1.00 pm - 2.00 pm	:	Lunch
2.00 pm - 3.30 pm	:	Strategic choices Prioritising Positioning <b>Presenter : Prof. John Bessant</b>
3.30 pm - 4.00 pm	:	Coffee Break
4.00 pm - 5.30 pm	:	Strategic planning Planning frameworks Policy development Monitoring and measurement <b>Presenter : Prof. John Bessant</b>

**12 JUNE 1997 (THURSDAY) : ACQUISITION - GETTING THE TECHNOLOGY TO SUPPORT THE STRATEGIC PLAN**

- 9.30 am - 11.00 am : Technology acquisition (Overview)  
**Presenter : Mr. Grier**
- 11.00 am - 11.30 am : Coffee Break
- 11.30 am - 1.00 pm : Technology acquisition (Details)  
**Presenter : Mr. Grier**
- 1.00 pm - 2.00 pm : Lunch
- 2.00 pm - 3.30 pm : Implementing developing technology projects  
**Presenter : Mr. Grier**
- 3.30 pm - 4.00 pm : Coffee Break
- 4.00 pm - 5.30 pm : Implementing developed technology  
**Presenter : Mr. Grier**

**13 JUNE 1997 (FRIDAY) : PROJECT ORGANIZATION**

- 9.30 am - 11.00 am : Dealing with technology implementation problems  
**Presenter : Mr. Grier**
- 11.00 am - 11.30 am : Coffee break
- 11.30 am - 1.00 pm : Project organization  
**Presenter : Mr. Grier**
- 1.00 pm - 2.30 pm : Lunch
- 2.30 pm - 4.00 pm : Parallel implementation / concurrent engineering  
**Presenter : Mr. Grier**
- 4.00 pm - 4.30 pm : Coffee Break
- 4.30 pm - 5.30 pm : Change management  
**Presenter : Mr. Grier**

<b>14 JUNE 1997 (SATURDAY)</b>	:	<b>ACTION AND LEARNING</b>
9.30 am - 10.30 am	:	From plan to action <b>Presenter : Mr. Grier</b>
10.30 am - 10.45 am	:	Coffee Break
10.45 am - 11.30 am	:	Learning from technology management projects Measurement for learning <b>Presenter : Prof. John Bessant</b>
11.30 am - 12.00 pm	:	Continuous improvement and learning <b>Presenter : Prof. John Bessant</b>
12.00 pm - 1.00 pm	:	Course review Individual learning review Action planning <b>Presenter : Prof. John Bessant</b>
1.00 pm - 1.30 pm	:	Closing Remarks by Mr. Kadress Vencatachellum Programme Manager Technology Services Investment & Technology Promotion Division of UNIDO

## 8.0. SPEAKERS

### 8.1. Mr. David Grier

David Grier is an agricultural engineer that has worked in a consulting capacity with small companies and entrepreneurs for 24 years. He is currently has the position of Director at the Saskatchewan Research Council (SRC) with overall responsibility for SRC's Small Industry Services Branch and specific responsibility for the Technology Management Section. The Small Industry Services Branch provides product development and technology management services to companies and individuals in the metals, plastics, electronics and construction industries. David has conducted many product development projects with clients, providing both engineering design and market research services. He was one of SRC's team that developed a holistic company diagnostic tool to help company's discern and prioritize their opportunities for improvement. David was part of an international team that benchmarked management practices in research and technology organizations (RTOs) all over the world. He is currently using this information and his 24 years of experience to work with RTOs to help them re-organize to be better able to serve industry clients. David has considerable international experience. He has worked in China, India, Europe and nine countries in Central and South America.

### 8.2. Prof. John Bessant

John Bassinet is currently Professor of Technology Management at the University of Brighton and at the Science Policy Research Unit, Sussex University. Originally trained as an engineer, he has been researching and teaching in the field of technology management for the past 20 years and has lectured/consulted widely on the subject. The author of 10 books and over 50 articles, his research interests include the development of strategic innovation capabilities in smaller enterprises, agile manufacturing techniques and continuous improvement systems. At the universities he is responsible for a series of full and part-time programmes in technology management including a pioneering industry based Master's degree for practising technology managers.

## 9.0. PARTICIPANTS

The organiser received 42 registration but the Training course was attended by 36 participants only. The details is as follows:

No. of local participants	: 28
No. of out station participants	: 08
<b>Total</b>	<b>: 36</b>
No. of participants from Government Agencies	: 11
No. of participants from private Malaysian companies	: 25
<b>Total</b>	<b>: 36</b>

(Please refer to Participants List attached – Appendix I).

## 10.0. STATEMENT OF EXPENDITURE

(Please refer to the Statement of Expenditure attached – Appendix II).

## 11.0. CONCLUSION

For evaluation purposes, the organiser (UNIDO) has prepared the followings to be filled in by participants at the end of the Training Course, each day:

- **Analysis of Training Course**  
To evaluate each unit of the training course.  
(The result of the Evaluation Form is attached - Appendix III).
  
- **Participants Evaluation Form**  
To get general comments on the overall organisation of the training course.  
(The result of the Participants Evaluation Form is attached - Appendix IV).

**TRAINING COURSE ON TECHNOLOGY TRANSFER MANAGEMENT  
KUALA LUMPUR MALAYSIA  
10-14 JUNE 1997)**

**LIST OF PARTICIPANTS**

NO	COMPANY'S NAME	ADDRESS	TEL/FAX	NAME OF PARTICIPANT	REMARKS
	<b>GOVERNMENT AGENCIES:</b>				
1.	Ministry of International Trade and Industry (Industrial Policy Division)	10 <sup>th</sup> Floor, Block 10 Jalan Duta 50622 Kuala Lumpur	T: 03-651 0033 F: 03-651 2339	Mr Azizul Kamaredzuan Assistant Director R&D & Technology Unit	ATTENDED
2.	Malaysian Cocoa Board (KL Office)	Lot 2, TB 225, 1 <sup>st</sup> Floor, Wisma MAA, Jalan Hj Karim P.O. Box 60237 91012 Tawau Sabah	T: 03-3339527/8148 F: 03-333 8272	En Zamri Abd Ghani	ATTENDED
3.	German-Malaysian Institute (Industrial Electronics Department)	No. 119, Jalan 7/91 Taman Shamelin Perkasa 3 ½ Miles Cheras 56100 Kuala Lumpur	T: 03-986 1706 F: 03-986 1707	Mr Punnose P.Kovoor Technical Training Officer	ATTENDED
4.	AIROD Sdn Bhd	Locked Bag 4004 Pejabat Pos Kampung Tunku 47309 Petaling Jaya Selangor	T: 03-746 5112 F: 03-746 4709	Mr Kamil Abdul Aziz General Manager-Marketing  <b>Replace with:</b> Mr Kong Koh Wah	ATTENDED
5.	Ministry of Science Technology and Environment	Wisma Sime Darby Jalan Raja Laut 50662 Kuala Lumpur	T:03-293 8955		

NO	COMPANY'S NAME	ADDRESS	TEL/FAX	NAME OF PARTICIPANT	REMARKS
6.	SIRIM BERHAD	Persiaran Dato' Menteri P.O. Box 7035 40911 Shah Alam Selangor	T: 03-556 7719 F: 03-559 6764	Aida Norbany Mohd Nasir Corporate Executive	ATTENDED
7.	SMIDEC (MITI)	Tkt. 9, Blok 10 Kompleks Pejabat Kerajaan Jalan Duta 50622 Kuala Lumpur	T: 03-651 0033 F: 03-651 2340	Mr Riduan Abdullah Manager	
8.	Universiti Utara Malaysia (School of Management)	Sintok, 06010 Jitra Kedah	T: 04-700 5031 F: 04-700 5546 E-mail: <a href="mailto:Asmat@uum.edu.my">Asmat@uum.edu.my</a>	Mr Asmat Nizam Abdul Talib Lecturer	ATTENDED (Outstation participant)
9.	Kota Kinabalu Industrial Park	Shop 7, First Floor, Block 1 Ruang Singgah Mata Singgah Mata (Asia City) 88000 Kota Kinabalu Sabah	T: 088-269 399 F: 088-230399	Mr Cyril Kissi Investor Services Executive	
10.	MIMOS Berhad	Teknology Park Malaysia 57000 Kuala Lumpur	T: 03-966 1896 F: 03-968 0255	Mr Collin Walter)	ATTENDED
11.	University of Technology Malaysia (Bureau of Innovation & Consultancy)	Jalan Semarak Kuala Lumpur	T: 03-290 4559 F: 03-294 6990	Dr Khalili Khalil Deputy Director	ATTENDED

NO	COMPANY'S NAME	ADDRESS	TEL/FAX	NAME OF PARTICIPANT	REMARKS
12.	Malaysian Technology Development Corporation Sdn Bhd	No. 84, Jalan 1/76D Desa Pandan 55100 Kuala Lumpur	T: 03-982 8288 F: 03-982 6289	Ms Yim Wai Cheng Manager – Tech. Dev.	ATTENDED
13.				Ms Tan Hing Ai Executive-MTDC-CTR	ATTENDED
14.				Mr Zubri Shamsuddin Manager - Tech. Dev.	ATTENDED



NO	COMPANY'S NAME	ADDRESS	TEL/FAX	NAME OF PARTICIPANT	REMARKS
	<b>MANUFACTURERS:</b>				
15.	Nekta Kiosk (M) Sdn Bhd	3, Jalan TIB 1/3 Taman Industri Bolton 68100 Batu caves Selangor	T: 03- 686 6834 F: 03-686 6832 E-mail: nekta@mail.tm.net.my	Mr Stuart TP Soo General Manager	ATTENDED
16.	Malaysian Bio-Diagnostic Research Sdn Bhd			Dr Ong Kok Hai Chairman	ATTENDED
17.	Haltech (M) Sdn Bhd	70, Jalan Radin Tengah Sri Petaling 57000 Kuala Lumpur	T: 03-958 4777 F: 03-958 1939	Mr Sow Chu Loong Director	ATTENDED
18.	Malaysian Optronic Systems Sdn Bhd	Lot 26 Jalan AU3/1 Ulu Kelang 54200 Selangor	T: 03-405 7695/6 F: 03-405 7697	Mr Kamalul Shah A. Rahim Bus. Dev. Manager	ATTENDED
19.	Vendors Network Sdn Bhd	C5-2, Level 2 Palm Square Jalan Selaman 1 Off Jalan Ampang 68000 Ampang, Selangor	T: 03-470 3242 F: 03-470 3246	Mr Azizul Nizam Bidin Managing Director (Cik Karina) Acc. Exec)	ATTENDED
20.	CHG Plywood Sdn Bhd	28 <sup>th</sup> Floor, UBN Tower Letter Box No. 26 10, Jalan P. Ramlee 50250 Kuala Lumpur	T: 03-202 2333 F: 03-201 1448	Mr Boey Tak Kong Executive Director	ATTENDED
21.	Masray Plastik Sdn Bhd	No. 32-2, Jalan 4/91 Taman Shamelin Perkasa 56100 Kuala Lumpur	T: 03-984 4105 F: 03-984 4137	Mr Abd. Razak Salleh Marketing Manager	ATTENDED
22.	Asia-Pacific Franchise Corp. Sdn Bhd	7A SPB Tower, Jalan Batai Bukit Damansara 50490 Kuala Lumpur	T: 03-456 7000 : 012 211 2276 F: 03-253 0088	Mr John Y Ying Director	ATTENDED

NO	COMPANY'S NAME	ADDRESS	TEL/FAX	NAME OF PARTICIPANT	REMARKS
23.	Daya Concept Engineering Sdn Bhd	No. 18, Jalan 2 Kampung jambu 43000 Kajang Selangor	T: 03-837 5787 F: 03-836 3477	Mr Mohamad Pauzi Md Nor Director	ATTENDED
24.	Nexquest Sdn Bhd	No. 18, Jalan 2 Kampung jambu 43000 Kajang Selangor	T: 03-837 5787 F: 03-836 3477	Tn Hj Ismail Kamari Managing Director	ATTENDED
25.	Dynamic Mould Sdn Bhd	No. 41, Jalan ASA 7 Taman ASA Jaya 43000 Kajang Selangor	T: 03-836 3973 F: 03-836 3975	Mr JK Chan Director Business Dev.	ATTENDED
26.	Penang Shipbuilding & Construction Sdn Bhd	11 <sup>th</sup> Floor, Ming Building Jalan Bukit Nanas 50250 Kuala Lumpur	T: 03-238 7770 F: 03-201 7769	Mr Abdul Manap Hj Ali Hasan Vice President	ATTENDED
27.	Weld Centre (M) Sdn Bhd	Lot 15&17, Jalan Biola Saturday 33/1A, Seksyen 33 Taman Perindustrian Elite 40350 Shah Alam	T: 03-521 9999 F: 03-521 9968	Mr David EC Ng Group Managing Director	ATTENDED
28.	Abrar Group International Sdn Bhd	Level 7, Wisma Inai 241 Jalan Tun Razak 50400 Kuala Lumpur	T: 03-245 0750 F: 03-245 1349 E-mail: <a href="mailto:hasan@abrar.com.my">hasan@abrar.com.my</a>	Mr Hasan Suyut	ATTENDED

NO	COMPANY'S NAME	ADDRESS	TEL/FAX	NAME OF PARTICIPANT	REMARKS
	<b>OUTSTATION MANUFACTURERS :</b>				
29.	Trans Capital Holding Bhd	20, Lorong Jelawat 2 Seberang Jaya 13700 Perai Seberang Perai Penang	T: 04-398 0700 : 012-482 9688 E-mail: <a href="mailto:sfloh@transcap.com.my">sfloh@transcap.com.my</a>	Ms Loh Soo Fung Director, Planning/Development	ATTENDED
30.	3M Asia Pacific Manufacturing Sdn Bhd	Lot 15 & 19 Persiaran Tanjung Bunga 2 Senawang Industrial park 70450 Seremban, NS	T:	Mr Ho Chun Yuen	ATTENDED
31.	Unicast Engineering Sdn Bhd	PT No. 740 & 744 Kwsn Perusahaan Nilai 71800 Nilai Negeri Sembilan	T: 06-799 4431 F: 06-799 4421	Ms Jane Cheong Production Manager	ATTENDED
32.	JMI Manufacturing Sdn Bhd	Lot 46614, 20 km Ipoh/K.Kangsar Main Road kanthan 31200 Chemor Perak	T: 05-201 2344 F: 05-201 1813	Mr Lee Kok Hean Process Engineer	ATTENDED
33.	Hi-Poly Industries Sdn Bhd	Office: Lot 15, Lorong Durian 3 Miles 5 ½, Jalan Tuaran Kian Yap Light Ind. Estate P.O. Box 12551 88828 Kota Kinabalu, Sabah	T: 088- 421 500 F: 088-421 508	Mr Joseph Hoh Thau Min Group Managing Director	ATTENDED
34.	Wong Engineering Industries Sdn Bhd	No. 4767, Lorong Permatang Pauh Off Jalan Permatang Pauh 13400 Butterworth Penang	T: 04-331 1672 F: 04-332 4492	Mr Chew Thong Boon Director (Automation Divison)	ATTENDED

NO	COMPANY'S NAME	ADDRESS	TEL/FAX	NAME OF PARTICIPANT	REMARKS
35.	Man Yau Holdings Berhad	Level 20, Public Bank Tower 19, Jalan Wong Ah Fook 80000 Johor Baru Johor	T: 07-276 1188 F: 07-276 11288	Mr Jalil Onn Corporate Development Manager	ATTENDED

NO	COMPANY'S NAME	ADDRESS	TEL/FAX	NAME OF PARTICIPANT	REMARKS
	<b>CONSULTANCY COMPANIES :</b>				
36.	Technology Transfer Institute	No. 5, Jln 8/3G 46050 Petaling Jaya Selangor	T: 03-757 5827 F: 03-757 5827	Mr S. Rajalingam Director of Training	ATTENDED
37.	Puji Consultancy Services	No. 84, Jalan 22/44 46300 Petaling Jaya Selangor	T: 03-774 3321 F: 03-774 3321	Mr Ghazali Kho Peck Hui Abdullah	ATTENDED
38.	Agensi Pekerjaan Jen Software Professional Sdn Bhd	17-2, Jalan SS 23/15 Taman SEA 47400 Petaling Jaya Selangor	T: 03-703 2656 F: 03-703 2956	Ms Ong An Ne Account Manager	

	COMPANY'S NAME	ADDRESS	TEL/FAX	NAME OF PARTICIPANT	REMARKS
	<b>OTHERS:</b>				
39.	Kausar Corporation Sdn Bhd	44, Jalan 2A/27A, Seksyen 1, Wangsa Maju 53300 Kuala Lumpur	T: 03-412 4780 F: 03-412 4845	Mr Muhmad Md Yusop Marketing Manager (SMI Division)	ATTENDED
40.	Bustaman & Co (Advocates & Solicitors)	Lot C9-3, Jalan Selaman 1 Dataran Palma 68000 Ampang	T: 03-470 1819 F: 03-470 1821 E-Mail: <a href="mailto:Bustaman@tm.net.my">Bustaman@tm.net.my</a>	Mr Mohd Bustaman Abdullah	ATTENDED
41.	Salza Enterprise	115-2, 2 <sup>nd</sup> Floor Jalan Kg Pandan 55100 Kuala Lumpur	T: 03-983 6983 F: 03-985 5273	Mr Mohamad Salleh Ishak	

**MALAYSIAN TECHNOLOGY DEVELOPMENT CORPORATION SDN BHD**  
**Training Course on "Technology Transfer Management" (ICS SUB-PROGRAMME)**  
**10-14 June 1997, Kuala Lumpur, Malaysia**

**SUMMARY OF ACCOUNT**

<u>Date</u>	<u>PV No.</u>	<u>Particulars</u>	<u>Amount</u>	<u>Amount</u>
<b>RECEIPT</b>				
27/06/97	TT	Received from UNIDO - USD 10,000 @ 2.5054		25,054.92
<b>PAYMENT</b>				
		Appendix II	-	25,014.46
		<b>Balance to be refund :</b>		
		M'sian Riggitt		40.46
		USD @ 2.5054		16.15

\* Details as enclosed in Appendix II

TRAINING COURSE ON "TECHNOLOGY TRANSFER MANAGEMENT" (ICS SUB-PROGRAMME)  
10-14 JUNE 1997, KUALA LUMPUR, MALAYSIA

## STATEMENT OF EXPENDITURE

NO	DETAILS	QTY	UNIT COST	NO. OF DAYS/NIGHTS	TOTAL COST
1.	ACCOMODATION FOR OUTSTATION PARTICIPANTS - (SINGLE ROOM) DATE: 09/06/97 : 10/06/97 : 11/06/97 : 12/06/97 : 13/06/97	6 8 8 8 8	RM 220.00 RM 220.00 RM 220.00 RM 220.00 RM 220.00	1 NIGHT 1 NIGHT 1 NIGHT 1 NIGHT 1 NIGHT	RM 1,320.00 RM 1,760.00 RM 1,760.00 RM 1,760.00 RM 1,760.00
2.	REFRESHMENTS: i. MEALS (2 COFFEE + 1 LUNCH) ii. Mineral water	50 240	RM 30.00 RM 1.40	5 DAYS	RM 7,500.00 RM 336.00
3.	STATIONARIES: i. Transparency ii. Notepad iii. Pencil iv. Markerpen – Artline 70 (R+B+B) v. Markerpen – Artline 500 (R+B+B)	1 box 50 50 9 9	RM 78.00 RM 1.40 RM 0.40 RM 2.00 RM 2.50		RM 78.00 RM 70.00 RM 20.00 RM 18.00 RM 22.50
4.	MISCELLANEOUS CHARGES: - POSTAGE, PHOTOSTATING & ETC. - FAX & TELEPHONE				RM 500.00 RM 176.76
5.	CERTIFICATES: - PRINTING - COLOR SEPARATION & FILM - ARTWORK CHARGES FOR CERT., ADVERTISEMENT, COURSE PROG.	40	RM 9.00		RM 360.00 RM 150.00 RM 400.00
6.	ADVERTISEMENT			1 INSERTION	RM 5,023.20
7.	RENTAL OF VENUE & EQUIPMENT		RM 300.00	5 DAYS	RM 1,500.00
8.	TECHNICAL ASSISTANCE/ MANAGEMENT FEE				RM 500.00
	<b>GRAND TOTAL</b>				<b>RM 25,014.46</b>



**TRAINING COURSE ON TECHNOLOGY TRANSFER MANAGEMENT  
KUALA LUMPUR MALAYSIA  
10-14 JUNE 1997**

**ANALYSIS OF TRAINING COURSE UNITS**

DATE : 10 JUNE 1997

<b>PRESENTATION ON UNIDO BY KADRESS VENCATACHELLUM</b>	<b>1 NOT USEFUL</b>	<b>2 SOMEWHAT USEFUL</b>	<b>3 USEFUL</b>	<b>4 VERY USEFUL</b>	<b>5 EXTREMELY USEFUL</b>	<b>ASSESSMENT OF INDIVIDUAL PRESENTER: A: EXCELLENT B: GOOD C: POOR</b>
		4(21%)	8 (42%)	7(37%)		A: 3 (16%) B: 16 (84%) C: -

DATE : 10 JUNE 1997

INTRODUCTION TO PARTICIPANTS, COURSE PROCESS OF DELIVERY	1 NOT USEFUL	2 SOMEWHAT USEFUL	3 USEFUL	4 VERY USEFUL	5 EXTREMELY USEFUL	ASSESSMENT OF INDIVIDUAL PRESENTER: A: EXCELLENT B: GOOD C: POOR
1. Course road map Resources		2 (8%)	8 (31%)	12(46%)	4 (15%)	A: 14 (67%) B: 7 (33%) C: 0
2. Overview of technology management Challenges for managing technology The technology management process Importance of scanning and picking up signals			8 (32%)	15 (60%)	2 (8%)	A: 11 (55%) B: 9 (45%) C: 0
3. Identifying and characterizing threats and opportunities in the new environment • Market changes • Competition changes • Technological changes • Regulatory changes, etc		1 (4%)	5 (19%)	15 (58%)	5 (19%)	A: 11 (58%) B: 8 (42%) C: 0
4. Tools and techniques for scanning the environment • Market research and forecasting • Technology scanning and forecasting • Competitor analysis • Benchmarking		1 (4%)	8 (33%)	12 (50%)	3 (13%)	A: 10 (53%) B: 9 (47%) C: 0

Comments : Item 4 not developed sufficiently.

DATE : 11 JUNE 1997

<b>DEVELOPING A TECHNOLOGY STRATEGY</b>	<b>1 NOT USEFUL</b>	<b>2 SOMEWHAT USEFUL</b>	<b>3 USEFUL</b>	<b>4 VERY USEFUL</b>	<b>5 EXTREMELY USEFUL</b>	<b>ASSESSMENT OF INDIVIDUAL PRESENTER: A: EXCELLENT B: GOOD C: POOR</b>
1. Translating signals into action Overview of technology strategy		1 (5%)	4 (21%)	10 (53%)	4 (21%)	A: 15 (88%) B: 2 (12%) C: 0
2. Understanding the strategic direction of the business Making sense of the signals Matching internal strengths and weaknesses Building technological competence		1 (5%)	5 (26%)	11 (58%)	2 (11%)	A: 14 (82%) B: 3 (18%) C: 0
3. Strategic choices Market changes Prioritising Positioning		1 (5.5%)	1 (5.5%)	13 (72%)	3 (17%)	A: 13 (81%) B: 3 (19%) C: 0
4. Strategic Planning Planning frameworks Policy deployment Monitoring and measurement		1 (5%)	3 (18%)	9 (53%)	4 (24%)	A: 10 (77%) B: 3 (23%) C: 0

Comments : Case study would be used instead of the industries.  
The only person has the knowledge is the owner.  
Difficult in participation.

DATE : 12 JUNE 1997

<b>ACQUISITION - GETTING THE TECHNOLOGY TO SUPPORT THE STRATEGIC PLAN</b>	<b>1 NOT USEFUL</b>	<b>2 SOMEWHAT USEFUL</b>	<b>3 USEFUL</b>	<b>4 VERY USEFUL</b>	<b>5 EXTREMELY USEFUL</b>	<b>ASSESSMENT OF INDIVIDUAL PRESENTER: A: EXCELLENT B: GOOD C: POOR</b>
1. Technology acquisition (Overview)			10 (56%)	7 (39%)	1(5%)	A: 5 (31%) B: 10 (63%) C: 1 (6%)
2. Technology acquisition (Details)		1 (6%)	10 (56%)	6 (33%)	1 (5%)	A: 5 (31%) B: 10 (63%) C: 1 (6%)
3. Implementing developing technology projects		1 (6%)	8 (44%)	8 (44%)	1 (6%)	A: 4 (27%) B: 10 (67%) C: 1 (6%)
4. Implementing developing technology		2 (11%)	7 (39%)	8 (44%)	1 (6%)	A: 5 (33%) B: 9 (60%) C: 1 (7%)

Comments : It's very good programme to develop and to sharpen the skills and knowledge.

DATE : 13 JUNE 1997

<b>PROJECT ORGANIZATION</b>	<b>1 NOT USEFUL</b>	<b>2 SOMEWHAT USEFUL</b>	<b>3 USEFUL</b>	<b>4 VERY USEFUL</b>	<b>5 EXTREMELY USEFUL</b>	<b>ASSESSMENT OF INDIVIDUAL PRESENTER: A: EXCELLENT B: GOOD C: POOR</b>
1. Dealing with technology implementation problems			6 (29%)	13 (62%)	2 (9%)	A: 7 (39%) B: 10 (56%) C: 1 (5%)
2. Project organization			6 (29%)	11 (52%)	4 (19%)	A: 7 (39%) B: 10 (56%) C: 1 (5%)
3. Parallel implementation/concurrent engineering			7 (33%)	11 (53%)	3 (14%)	A: 6 (33%) B: 11 (61%) C: 1 (6%)
4. Change management			4 (20%)	13 (65%)	3 (15%)	A: 6 (40%) B: 9 (60%) C: 0

Comments : Baring the limited in time, case study would be excellent in pressing for in depth understanding of the subject topic.  
We discuss extensively on the benefit of CE, but the big question is how are we going to do it.  
In a real co. set up, what is the organisation look like in order to implement CE>

DATE : 14 JUNE 1997

ACTION AND LEARNING	1 NOT USEFUL	2 SOMEWHAT USEFUL	3 USEFUL	4 VERY USEFUL	5 EXTREMELY USEFUL	ASSESSMENT OF INDIVIDUAL PRESENTER: A: EXCELLENT B: GOOD C: POOR
1. From plan to action			5 (36%)	8 (57%)	1 (7%)	A: 9 (75%) B: 3 (25%) C: 0
2. Learning from technology management projects Frameworks and tools for learning Measurement for learning			6 (43%)	8 (57%)		A: 7 (64%) B: 4 (36%) C: 0
3. Course review Individual learning review Action planning			5 (36%)	9 (64%)		A: 9 (75%) B: 3 (25%) C: 0

Comments :-

**TRAINING COURSE ON TECHNOLOGY TRANSFER MANAGEMENT  
KUALA LUMPUR, MALAYSIA  
10 - 14 JUNE 1997**

**PARTICIPANTS EVALUATION FORM**

**A. Concerning the Training Course**

1. Did the training course meet your professional needs? Yes : 22, No : 1

- The title is rather misleading.
- Not, exactly simply because the title suggested technology transfer and at a macro level. I was under the impression that it concerned how to formulate / regulate technology transfer in terms of policy. Nevertheless, this programme answered my query, which was to learn and get the answer myself, so to speak, the programme taught to learn. Most important.
- Would appreciate if can touch on way / methods of transfer the technology from one company to another. How to ensure that it is successfully done.
- Yes, up to a point. This is because course organizers realize that background of participants will be very diverse.

2. The training course's duration was

[ 2 ] too short                      [ 21 ] adequate                      [ 6 ] too long

Comments:

- Too long, simply because of current responsibilities perhaps part-time and longer?

3. The training course's workload was

[ 1 ] too heavy                      [ 27 ] about right                      [ 1 ] too light

4. The technical level of the training course was

[ 1 ] very high                      [ 24 ] alright                      [ 3 ] too low

5. The methods of training used were

[ 10 ] very effective      [ 17 ] adequately effective      [ 2 ] not effectively in some respects - indicate which:

- Legal aspects of technology transfer management.
- Spend more time on case studies and specific tools rather than too many group discussions. Not productive.
- What other countries do in managing technology.

6. The training course included both theory and practical knowledge. It contained

[ 3 ] too much theory      [ 22 ] the right amount of theory      [ 2 ] not enough theory

[   ] too much practical knowledge      [ 23 ] the right amount of practical knowledge      [ 6 ] not enough practical knowledge

7. Which changes would you have preferred in the methods of the training course?

	<u>no change</u>	<u>more</u>	<u>less</u>
a) presentations	14	8	6
b) group discussions	17	5	4

Comments:

- To rotate the group
- Add case studies analysis

## B. Concerning the training course presentations

1. The number of training course participants was

[ 3 ] too many      [ 24 ] just right      [ 2 ] too few

Comments:

- Too many compared to the size of the room.
- You might want see background of participants to be more focused as a 2nd workshop ... (i.e. specialized workshops - technology transfer)



2. The training course presenters were familiar enough with the subjects to present them well.

[ 26 ] yes [ 1 ] no

3. The training course presenters were adequately skilled in presenting their topics.

[ 24 ] yes [ ] no

**C. Concerning the training course services and facilities**

	<u>Adequate</u>	<u>Inadequate</u>
The training course room facilities were	20	8
Audio-visual aids were	26	3

Comments:

- Slightly congested.
- Too small.
- Seating arrangements not too cardusive.
- Maybe more interesting - videos, computer graphics, multi-media .....

**D. Analysis of training course units**

1. Which subjects of the programme did you find most valuable? Please state reason (e.g. new subject, relevant to work, new information, etc.).

<u>Subject</u>	<u>Reason</u>
- Implementing technology	This is always the most difficult process as we have to face the practicality. Very informative.
- Technology process management	
- Dealing with technology.	This is a new subject to me i.e. technology transfer management. It will really benefit me in my work.
- Translating signals into actions.	
- Strategic planning.	
- All.	

- New technology implementation. Being an industrialization, you must be always looking forward keep your plant especially improvement in looking environment.
- Managing change. Very practical and relevant to rganization in Malaysia.
- Methods to acquire technology Relevant to work.
- Implementing technology Relevant to work.
- Change management Relevant to work.
- Technology development Relevant to work.
- Modes of technology transfer Relevant to work.
- Translating signals into action Very relevant to work.
- Implementing technology Technical- 'know-how'.
- Signals, strategy, resourcing, implementing technology Relevant to our organizations to boost up technology management.
- Looking out for signals. Market is growing due to information transfer and technologically development. It was good to be reminded that complacency would not be beneficial.
- Technology acquisition Relevant to work.
- Project organization Relevant to work.
- Translating signals into action Good pointer on focus.
- Value elimination of wastage Highly relevant.
- Nil No subject is targeted to a specialized group of participants.

2. Which subjects of the programme did you find least valuable? Please state why (e.g. too elementary, inadequate, irrelevant to work, etc.).

<u>Subject</u>	<u>Reason</u>
- Project management	Familiar
- All those theories	I want to see some practical side of it.
- Technology acquisition	Too elementary / basic.
- Technology acquisition	Too theoretical. Decision a company makes would be fairly obvious, a breakdown of the options remain an intellectual exercise.
- First two days courses	Somewhat elementary and basic fundamentals.

3. Were there, in your opinion, any relevant subjects that were not adequately covered in the programme?

[ 9 ] yes

[ 16 ] no

If yes, what are these?

- The 'transfer' element relative to the course title was not touched at all.
- More case study analysis on success and failure cases of technology transfer and lesson to be learned.
- More tools to evaluate projects.
- It's a great introduction.
- Methods to acquire technology.
- Implementing technology.
- Technical transfer agreement, how you go about doing it. Patents, copyright issues. Technology acquisition and a bit on setting up R&D after receiving the technology.
- 'Transferring' problems were not discussed, and how are we going to solve it.
- The title 'technology transfer management'. Expect the course to touch on techniques of ensuring the physical technology being physical transfer from our country to another. Prefer a more practical course, more practical approach to solve a real problems / situation.
- Signals and translating signal.

**E. Assessment of expected use of knowledge and skills acquired by the training course**

1. Do you think you will have an opportunity to apply your newly acquired knowledge and experience in your present job?

[ 7 ] To a very great extent

[13] To a great extent

[ 7 ] To a sufficient extent

[ 1 ] To a small extent

[ ] To a very small extent

What difficulties, if any, would you expect to meet?

- To get others to involve in the some management of process flow consistently.
- To explain it to the technical people.
- Trying to get peers to cooperate and manage change and new ideas.
- Resistance to change.
- Implementation. Different culture from one country to another.
- Staff level of competence.

2. Will you be in a position to transfer you acquired knowledge to others in your home country?

- [ 5 ] To a very great extent
- [ 8 ] To a great extent
- [13] To a sufficient extent
- [ 7 ] To a small extent
- [ 1 ] To a very small extent

3. How will this transfer be done?

- [ 21 ] In a day-to-day work to colleagues and subordinates
- [ 13 ] In specific training activities inside present employment
- [ 5 ] In specific training activities outside present employment

What difficulties, if any, would you expect to meet?

- At a personal level, the skies the limit.
- Trying to find time resource to implement such.
- Getting the people together.
- Skeptical to technology changes.
- Managerial bureaucracy.
- It is a new field of work and need a certain ability to be process in an individual before they can get involve in this types of business.

NO	COMPANY'S NAME	ADDRESS	TEL/FAX	NAME OF PARTICIPANT	REMARKS
12.	Malaysian Technology Development Corporation Sdn Bhd	No. 84, Jalan 1/76D Desa Pandan 55100 Kuala Lumpur	T: 03-982 8288 F: 03-982 6289	Ms Yim Wai Cheng Manager – Tech. Dev.	ATTENDED
13.				Ms Tan Hing Ai Executive-MTDC-CTR	ATTENDED
14.				Mr Zubri Shamsuddin Manager - Tech. Dev.	ATTENDED