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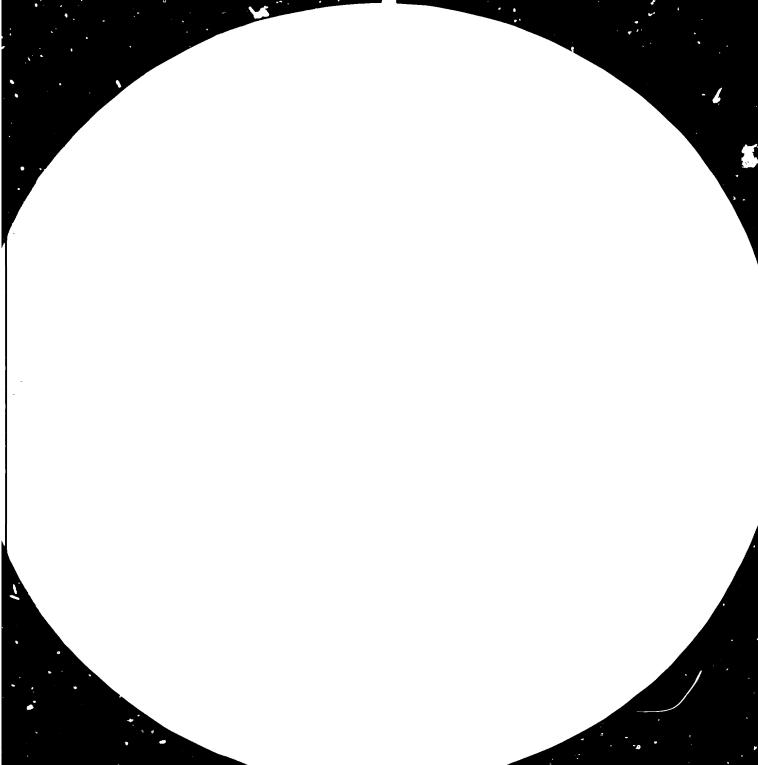
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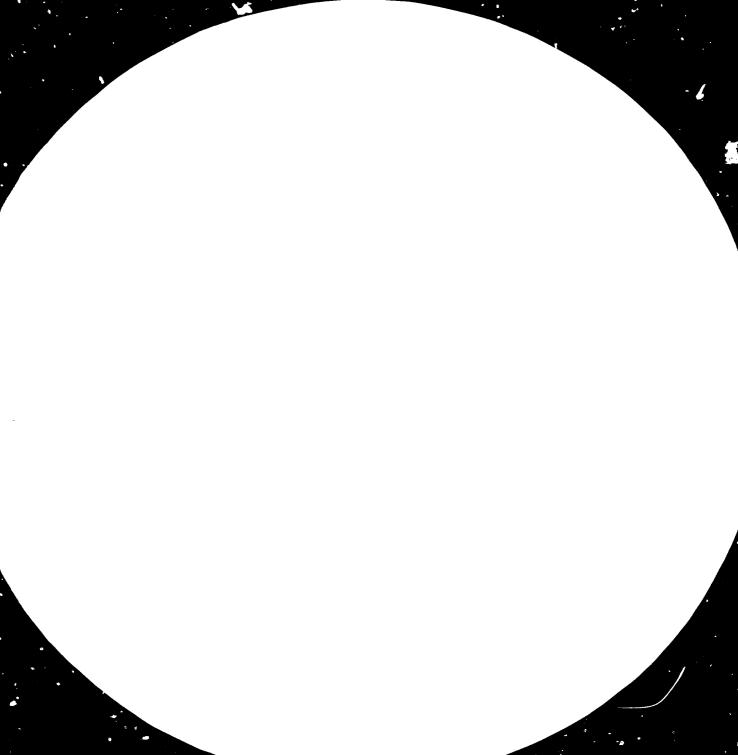
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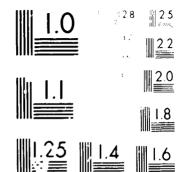
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LIMITED

ID/WG.355/10 16 December 1981 ENGLISH

United Nations Industrial Development Organization

Sixth Meeting of Heads of Technology Transfer Registries

Manila, Philippines, 25-28 November 1981

REPORT

Explanatory notes

The following abbreviations are used in this report:				
	ASEAN	Association of South-East Asian Nations		
	COIME	Committee on Industry, Metals and Energy		
	INTIB	Industrial and Technological Information Bank		
	IPF	indicative planning figure		
	LES	Licensing Executive Society		
	SILFA	Senior Industrial Development Field Adviser		
	TAS	Technological Advisory Services (UNIDO)		
	TIES	Technological Information Exchange System		
	TTB	Technology Transfer Board		
	UNCTC	United Nations Centre on Transnational Corporations		
	UNDP	United Nations Development Programme		

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INTRODUCTION

1. The Sixth Meeting of Heads of Technology Transfer Registries was held at Manila, from 25-28 November 1981, under the sponsorship of the Government of the Philippines and the United Nations Industrial Development Organization (UNIDO).

2. The purpose of the meeting was to review the progress of co-operation among members of the Technological Information Exchange System (TIES) and develop further areas of co-operation.

I. ORGANIZATION OF THE MEETING

Opening of the meeting

3. Mr. Edgardo L. Tordesillas, Deputy Minister of the Government of the Philippines, welcomed the participants to Manila. He noted that co-operation among developing countries in the field of technology transfer had grown and deepened over the years. This co-operation manifested itself primarily in the development of an active technological information exchange system which had given participating countries in the TIES data and information on the various policies, regulations, norms and procedures regarding the acquisition of technology of other participating countries. Mr. Tordesillas also cited the TIES Newsletter, which had become a useful vehicle for communications among registry offices participating in the TIES system. The emerging co-operation among developing countries had led to the establishment of direct contacts and communications between the national institutions on technology transfers and the initiation of inter-country training programmes through exchange visits of personnel. He expressed the hope that the sixth TIES meeting would further strengthen the links between the offices participating in the TIES and that it would indicate clear directions for future co-operation.

4. The Director, Division of Industrial Studies, UNIDO, thanked the Government of the Philippines, on behalf of the Executive Director of UNIDO, Dr. Abd-El Rahman Khane, for its kind co-operation and assistance in making the sixth TIES Meeting at Manila possible. He noted that the meeting was taking place at the beginning of the 1980s, which marked the end of an era of growth which started 30 years earlier. The developed countries had since become more concerned with internal problems of inflation and recession, rather than with the broader aspects of international co-operation and aid. The inevitable situation of incorporating the costs of inflation into the charges for technology exports to developing countries, and the added debt burden as a result of the high interest rates of exporting countries, had created a special situation with regard to the import of technology by the developing countries.

5. He posed the challenge to the developing countries to develop their technological capabilities and to adopt technological policies which would enable them in the 1980s to meet the Lima target by the better utilization of their resources.

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6. He noted that co-operation among developing countries would remain the nost effective strategy for reaching the Lima target. This had been stressed by the High-Level Conference on Economic Co-operation among Developing Countries from 13-19 May 1981 at Caracas, which endorsed the continuation of the TIES.

7. The Director emphasized the vital role which UNIDO could play in continuously monitoring changing industrial and technological developments, and in drawing them to the attention of developing countries. UNIDO could play an effective role in developing international co-operation, and in particular, co-operation among developing countries.

8. Mr. Pluhar, UNIDO Senior Industrial Development Field Adviser (SIDFA) in the Philippines, speaking on behalf of the United Nations Development Programme (UNDP) noted the increase in technical assistance to developing countries. He referred to the existing strong co-operation among ASEAN countries and said that this could serve as a model for other regional co-operation systems.

9. He braised the TIES for facilitating the exchange of commercial and non-confidential technical information among developing countries and suggested that the effectiveness of the TIES in strengthening the negotiating and monitoring capabilities of member countries be evaluated to enable the UNDP to judge the userclass of the system.

Election of officers and eduction of agenda

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10. Mr. Lilia R. Bautista, Vice-Chairman and Acting Executive Director of the Technology Transfer Board (TTB) was elected as Chairman of the Meeting. Mr. Fernang Jalal, Technical Adviser to the Ministry of Industry and Minerels, Government of Iraq, and Mr. S. L. Kapur, Joint Secretary, Department of Industrial Development, Government of India, were elected Vice-Chairman and Rapporteur respectively.

11. The list of participants and observers is contained in annex I. The list of documents circulated at the meeting is contained in annex II.

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II. TIES PROGRESS AND STATUS EVALUATION

12. The meeting considered "TIES progress and status report" (ID/WG.355/5), prepared by the UNIDO secretariat. The meeting noted that there were legal impediments in Portugal and Spain which prevented the full disclosure of information as required in the TIES IIE schedule. These countries would, therefore, continue to be provided, as in the past, with information at the TIES IIA level. A number of countries, particularly those who were attending the meeting for the first time, indicated that they would explore how best they could provide information. Other countries indicated that they would need assistance from UNIDO in organizing such information consistent with the TIES procedures. The valuable role played by the TIES in assisting the work of the national registries and similar offices was noted.

13. The meeting adopted the following recommendations:

(a) All countries should participate at TIES I level;

(b) TIES I level could be usefully maintained if more than half of the participants supplied data;

(c) All countries should increase efforts to participate at TIES IIA level;

(d) Efforts should be made to supply TIES IIA and TIES IIB data .o UNIDO in a uniform and accurate manner;

(e) Increasing reliance on microfiche and tapes would reduce paper work and make exchanges more efficient in order for them to be placed on magnetic tapes and microfiches for TIES IIA and TIES IIB reports:

(f) TIES data which had been rejected by UNIDO Computer Services should be again submitted by the registries to UNIDO with completed information.

14. The meeting noted that the <u>TIES Newsletter</u> had developed into an important tool in disseminating information on the activities of UNIDO and technology registries in the field of technology transfer. A suggestion was made to provide information on technologies available in developing countries. It was pointed out that UNIDO had initiated a special compilation of such information and had published it in its series of publications - <u>Development</u> and <u>Technology Transfer</u>. It was noted that the Republic of Korea and Spain had already compiled national lists. It was felt that each country might wish to compile similar lists and that UNIDO would distribute them through the Industrial and Technological Information Bank (INTIB).

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15. The meeting further recommended:

(a) That each of the TIES members should contribute once each year a write-up or résumé on the activities of their organization or on any other matter related to the transfer of technology;

(b) That TIES members provide the UNIDC secretariat with a list of potential readers in their respective countries;

(c) That a permanent correspondent for the <u>TIES Newsletter</u> should be appointed in all TIES member countries, including countries with observer status;

(d) That the <u>TIES Newsletter</u> devote a section on technology information on selected agreements registered in the respective member countries which could be identified through code numbers.

16. The meeting agreed that bilateral exchange of information in addition to the TIES should be encouraged. Members should try to put all other members of the TIES on their mailing lists for relevant national publications

related to transfer of technology. With regard to a special request on technology contracting, UNIDO would develop a suitable format for making requests which would provide feedback about the actual use to which this information was put by the recipient country.

17. The meeting noted the co-operation with organizations such as Licensing Executive Society (LES) International, Junta del Acuerdo de Carthagena (Andean Pact) and Association of South-East Asian Nations (ASEAN), and it agreed to the request of the United Nations Centre for Transnational Corporations (UNCTC) for access to the TIES data within the limitations of its operation. The meeting agreed that the following types of information should be provided: state equity ownership, host country, home country, sector and industry, and type of contract, duration etc. It was noted that UNCTC has also agreed with UNIDO to give relevant information, such as equity ownership of transnational corporations upon request, for use by the TIES members.

18. The meeting also took note of UNIDO Technological Advisory Services (TAS) an ad hoc service provided at the request of the Governments. Its purpose was to provide rapid, objective and impartial advice to Governments of developing countries for purposes of negotiation in contracting major industrial projects.

III. TIES DATA EVALUATION

19. The meeting considered "TIES data evaluation" (ID/WG.355/3), which indicated the methods through which information exchanged in the TIES could be utilized effectively by member countries. For instance, it could be used for the evaluation of individual contracts; the assessment of trends in technology contracting, in particular, sectors; payments; and the assessment of the impact of imported technology on the national economic, technological and scientific structures. It was suggested that INTIB could provide the TIES members with information on technology suppliers which was not adequately covered by the TIES system.

20. In the light of the foregoing, the meeting recommended that:

(a) All countries should make efforts to provide the following information: recipient country, industrial code, supplier country, contract data, collaboration type, product code, recipient company, supplier company, comments on products, comments on industry and if possible, comments on process. Information to be exchanged would be supplied at a uniform level of accuracy and for this purpose the coding manual would be amended and a section on "comments" would be introduced which could read:

- (i) Comments on industry. Detailed but concise description of the industry on which the technology is intended. As a reference, "United Nations publication index to the international standard classification of all economic activities" would be used;
- (ii) Comments on products. Description of the product for which the technology is intended;
- (iii) Comments on process (if possible). Concise description of the process for which the technology is intended. This section should only be completed if the object of the technology transferred could not be adequately described by product or industry;

(b) At the option of the member country, information could be provided on technology supplier listings which would indicate the supplier company, the recipient company and the product. This could be made available to non-TIES members, also through INTIB;

(c) Data for the above should either be supplied for the period July-December 1981, or as ear y as possible.

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IV. TIES SERVICE AGREEMENT INFORMATION EXCHANGE

21. The meeting discussed "TIES service agreement system" (ID/WG.355/4), and "Korean experience on transfer of technology by means of technical service" (ID/WG.355/6). The inclusion of information on service agreements was recommended by the Fourth Meeting of Heads of Technology Transfer Pegistries at Lisbon, Portugal, as a complement to the TIES. 22. The meeting adopted the following recommendations on the service agreement system:

(a) All members of the TIES would try to participate as soon as possible, with data submission beginning in January 1982;

(b) Specific attention would be given to the accuracy and uniformity of the data;

(c) All contracts rejected by UNIDO computer services would be e-submitted by the respective participants;

(d) Trends and experiences with regard to service agreements data would be compiled and analysed by the UNIDC secretariat and made available to the TIES members;

(e) Information regarding service guarantees might also be incorporated.

23. It was also agreed that there would be no limitation on the duration of the service agreements to be included in the TIES and that the recipient's and supplier's names might only be given on a voluntary basis. It was also recommended that similar country studies, such as the Republic of Korea study on technical service agreements, be undertaken by interested countries to facilitate comparison of experiences in this area.

V. CO-OPERATION AMONG TECHNOLOGY REGISTRI'S

24. The paper "Some considerations regarding co-operation amont technology registries" (ID/WG.355/1) was discussed. Co-operation among technology registries would consist of: (a) an exchange of visits and study tours;
(b) bilateral mutual assistance (arranged directly or under UNIDO auspices); and
(c) direct exchange of specific detailed and confidential information.

25. The meeting recommended the following:

(a) Publicizing, through the <u>TIES Newsletter</u>, changes in national policies and regulations. This could also help update the present UNIDO documents on the subject;

(b) Extensive exchange of trainees among registries;

(c) Exchange of detailed materials concerning various functions of registries such as evaluation and approval procedures, promotional and monitoring functions;

(d) Exploration of the possibilities of co-ordination in certain areas, and negotiations with suppliers of technology.

VI. FINANCING OF THE TIES

26. Discussion took place on the UNIDO secretariat document "Financing of TIES" (ID/WG.355/2), which outlined the need for financing of the following activities:

(a) Direct assistance to technology registries;

(b) Organization of visits to registries, study tours and exchange of information among the TIES member countries;

(c) Preliminary assistance for the new TIES members;

(d) Preliminary assistance, when requested, in establishing technology registries;

(e) Organization at the national level of training programmes for staff of technology registries;

(f) Financing, where needed, of perticipation at annual TIES meetings;

(g) Publication of research and technical material, and publication of the <u>TIES Newsletter</u>.

27.4 The UNIDO secretariat informed the participants that its attempt had failed to secure funds for financing of the TIES activities (on the basis of a standard project document) at a national level based on the indicative planning figure (IPF) of the countries involved because it was envisaged as a regional, rather than a national project. In February 1981, UNIDO had submitted a proposal to the United Nations Development Programme (UNDP) (INT/81/027) as an interregional project, stating that 10 developing countries had already endorsed it. The Committee on Industry, Metals and Energy (COIME) of ASEAN had also endorsed the project at its meeting held 19-20 October 1981 at Manila.

28. The UNDP response to date had not been positive, primarily because of lack of funds.

(a) All countries members of the TIES should endorse project INT/81/027 and convey the endorsement through official channels to UNDP:

(b) UNIDO would continue discussions with UNDP with regard to project INT/81/027;

(c) In addition, the UNIDO secretariat would assist countries in preparing specific requests for technical assistance to meet the national needs in this area, which might include the needs of TIES system.

VII: CASE-STUDIES ON TECHNOLOGY TRANSFER

Country studies

29. The meeting noted with interest the document "Management and legal aspects of technology transfer work in the Philippines, Mexico, Brazil, India and Portugal", prepared and presented by the Chinese Study Group. The work of the Group was commended by the meeting.

Malaysian experience

30. The meeting discussed "Technology transfer - Malaysia's experience" (ID/WG.349/2). The paper highlighted the selection, evaluation and actual negotiation procedures practised in Malaysia on the technology transfer management of contracts and noted that these factors were the responsibility of the national entrepreneurs themselves, since investments were made by private companies. The Government, through the Ministry of Trade and Industry, played a co-ordinating, advisory and monitoring role regarding transfer of technology.

Philippine experience

31. The meeting considered "Philippine experience in technology transfer regulation" (ID/WG.349 3). The paper outlined the organizational structure of the TTB in the Philippines, its power and functions, its policies, and an analysis of licensing and technical assistance agreements registered by the Board since its establishment. The paper also proposed an initial regional approach for the regulation of technology transfer in order to obtain a better capability vis-à-vis technology suppliers.

Polish experience

32. The meeting considered "Polish experience in regulating imports of technology, 1971-1980" (ID/WG.355/7). The paper discussed the trends in the value and structure of Polish technology imports from 1971 to 1980, the scope and direction of regulating technology imports in Poland, and the effectiveness of the regulation of technology imports. Polish experience was considered useful as it provided valuable insights into the regulation of technology imported by a socialist country with state-owned enterprises.

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33. It was suggested that UNIDO could consider revising its document "National approaches to acquisition of technology", by including the above country case studies and new and relevant updated information.

Sectoral studies

A case-study of the pharmaceutical industry in Egypt

3h. The meeting discussed "Transfer of technology through licensing agreements in Egypt's pharmaceutical sector", which described in detail the experience of Egypt with the transfer of technology in the pharmaceutical sector. The participants took the opportunity to exchange notes on the respective policies, procedures and experiences in the pharmaceutical sector. The members also reiterated their interest, subject to availability of resources and time, in participating in similar sectoral studies.

35. It was agreed that the sectoral studies, as recommended at the last meeting at Buenos Aires, should be continued in other industrial sectors. UNIDO was requested to provide the outline of such studies; the TIES members would provide the data and, if resources were available, themselves undertake such studies. TIES members would also contribute, as required, to the Consultation meetings organized by UNIDO.

VIII. NEXT MEETING OF THE TILS

36. It was noted that the TIES meetings had been held in the European, Latin American and Far Eastern regions. It was suggested that UNIDO should consider holding the next meeting in the South-Tast Asian region. The meeting requested the UNIDO secretariat to consult with interested members and inform the TIES members as soon as possible as to the venue and date of the seventh meeting of the TIES.

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Annex I

ATTENDANCE

Participants

Argentina

Carlos Otto Sanio, Director Nacional de Promoción, Instituto Nacional de Tecnología Industrial, Buenos Aires

China

Zhu Fugen, Division Chief, Technology Import Bureau, State Import-Export Commission, Beijing

Zhang Lichong, Officer, Fourth Bureau, Ministry of Economic Relations with Foreign Countries, Beijing

Chen Renhuang, Section Chief, First Ministry of Machine Building, Beijing

Colombia

Ernesto Duque Rueda, Jefe, Seccipon Regalías y Tecnología, Superintendencia de Industria y Comercio, Bogotá

Egypt

Mohamed Amin, Director, Trans of Technology Department, Cairo

Wahby Wahba, Head, Research and Information Sector, Investment and Free Zones Authority, Cairo

Ethiopia

Shiferaw Jammo, General Manager, Ethiopian Center for Technology, Development Projects Study Agency, Addis Ababa

India

S. L. Kapur, Joint Secretary, Department of Industrial Development, Government of India, New Delhi

Indonesia

Mohammad Anwar Ibrahim, Deputy Chairman, Planning and Control, Investment Co-ordinating Board (BKPM), Jakarta

Iraq

Ferhang Jalal, Technical Adviser to the Minister of Industry and Minerals, Ministry of Industry and Minerals, Baghdad

Ahnaf Kumait, President, State Organization for Industrial Development, Baghdad

Malaysia

Fazaruddin Othman, Deputy Pirector, Industries Division, Ministry of Trade and Industry, Kuala Lumpur

Nigería

Fred James Ckono, Principal Secretary, Federal Ministry of Science and Technology, National Office of Industrial Property, Lagos

Philippines

Lilia R. Bautista, Vice-Chairman, Technology Transfer Board, Assistant Secretary, Ministry of Trade and Industry, Makati, Metro Manila

Roger Collantes, Director, TUSS, Technology Resource Center, Makati, Metro Manila

Leandre M. Llave, Economic Development Specialist, Policy Co-ordination Staff, National Economic and Development Authority, Metro Manila

Rowena S. Faguio, Assistant Chief, Technology Transfer Board, Ministry of Trade and Industry, Makati, Metro Manila

Guillermo Soliver, Special Assistant to the Governor, MEDIAD, Central Bank of the Philippines, Manila

Wivinio Tordilla, Chief, Operations Research Section, Forest Products Research and Industry Development Commission, National Science Development Board

Poland

Boguslaw Sosnowski, Acting Director, Department of International Economic Organizations, Ministry of Foreign Trade, Warsaw

Portugal

Elsa Ferreira Souga, Management Board, Foreign Investment Institute, Lisbon

Republic of Korea

Young Hun Kim, Deputy Director, Technology Transfer Centre, KIST, Seoul

Saudi Arabia

M. Al-Twaijri, Director, Engineering and Projects Department, Ministry of Industry, Riyadh

Spain

Cesar Primo, Jefe del Servicio de Transferencia de Tecnología, Ministerio de Industria y Energía, Madrid

Thailand

Samnao Chulkarat, Director, Industrial Economics and Planning Division, Ministry of Industry, Bangkok

Venezuela

Rita Elena de Diaz, Dirección de Transferencia de Technología, S, I. E. X., Centro Comercial Ciudad Tamanaco, Caracas

Observer

Paul Strunk, Regional Adviser on Technology Transfer, ESCAP/UNIDO Division of Industry, Housing and Technology, Bangkok, Thailand

Technology Transfer Board, Manile

Ronol M. de la Cruz, Senior Industry Development Specialist Renatos S. Gonzales, Industry Development Specialist Eva M. Payumo, Senior Industry Development Specialist Carmen G. Peralta, Industry Development Analyst Susan G. Santos, Industry Development Researcher

Annex II

LIST OF DOCUMENTS

ID/WG.355/1	Some considerations regarding co-operation among technology registries
ID/WG.355/2	Financing of TIES (Technology Information Fuchange System)
ID/WG.355/3 ID/WG.355/3 Corr. 1	TIES data evaluation
ID/WG.355/4	TIES service agreement system, status report
ID/WG.355/5	TIES progress and status report
ID/WG.355/6	Korean experience on transfer of technology by means of technical service
ID/WG.355/7	Polish experience in regulating imports of technology, 1971-1980
ID/WG.355/8	National and regional sectoral studies on contractual technology transfer - The pharmaceutical industry
ID/WG.355/9	Investment policies and technology acquisition strategies in comparative perspectives - Canada, Republic of Korea, Philippines and Mexico
UNIDO/IS.253 UNIDO/IS.253/ Corr. 1	Review of systems for regulating technology inflows in selected developing countries
ID/WG.349/2	Technology transfer - Malaysia's experience
ID/WG.349/3	Philippine experience in technology transfer regulation
ID/WG.349/4	High level policy meeting of ASEAN on the regulation of technology transfer
INT/	Cc-operation among technology transfer and regulatory offices of selected developing countries
	Transfer of technology through licensing agreements in Egypt's pharmaceutical sector
	Management and legal aspects of technology transfer work in the Philippines, Mexico, Brazil, India and Portugal

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