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Meeting of Senior Officials and Heads of
National Technology Registries or Similar
Offices in Selected Developing Countries

Vienna, Austria, 6 - 10 March 1978

REPORT

prepared by

the secretariat of UNIDO

id.78-1744

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Corrigendum

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After the last entry insert

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INTRODUCTION

1. The Meeting of Senior Government Officials and Heads of National Technology Registries or Similar Offices in Selected Developing Countries, which was organized by the United Nations Industrial Development Organization (UNIDO), was convened in Vienna from 6 to 10 March 1978.

2. The purpose of the Meeting was principally to discuss and to reach broad agreement on the principles and operational details of technological co-operation between developing countries, and particularly to review the effective use and exchange of information and experience relating to technology agreements, with or without accompanying foreign investment. In addition, it was also proposed to exchange views on the role and experience of national technology registries and similar institutions in formulating and implementing national technology policies. The list of participants at the Meeting is contained in annex I. The agenda for the Meeting appears in annex II and the list of papers presented at the meeting in annex III.

3. In his opening address to the Meeting Dr. Abd-El Rahman Khane, Executive Director of UNIDO, stressed the role of technology as a dynamic factor essential for accelerated industrial growth. With the growth and diversification of industries in developing countries, payments for technology made by developing countries, which had been substantial, were expected to grow significantly in the future. The flow to and utilization of technology by developing countries could be enhanced and rationalized by joint action among developing countries in formulating and implementing technology policies and, in particular, in selecting and acquiring foreign technology. He stressed that the sharing of information and experience among the institutions of developing countries in this respect, both directly and through UNIDO, would provide the basis on which to build technological capabilities. The formation of a club of the developing countries participating in the Meeting and willing to exchange information on equal, reciprocal and mutually beneficial terms would go a long way towards achieving this goal. He assured the participants of the willingness of UNIDO to assist in the process by establishing the necessary mechanisms within UNIDO to facilitate the exchange of information and by helping the respective developing countries in strengthening registries or similar institutions.

4. G.S. Gouri, Deputy Director of the Industrial Operations Division of UNIDO, was requested to preside over the Meeting.

5. The discussions centred on four main issues:

(a) Review of the current situation regarding the regulation of the inflow of foreign technology to the participating countries;

(b) Programme and operational details of exchange of information among participating countries on the acquisition and use of foreign technology;

(c) Identification of areas of technological co-operation among the participating countries;

(d) Identification of the role of UNIDO in technological co-operation, particularly in promoting the exchange of information and experience to do with the acquisition of foreign technology.

I. REVIEW OF CURRENT COUNTRY EXPERIENCES

6. The representatives of each of the participating countries briefly described their country experiences with the regulation of foreign technology, and circulated relevant information on the existing policies and procedures. The discussions focused, by and large, on:

- (a) The overall policy framework within which regulatory mechanisms operate;
- (b) Legislative and administrative procedures pertaining to the inflow of technology;
- (c) Experience in the evaluation and negotiation of specific proposals.

7. It was noted that the arrangements instituted by the participating countries for regulating the inflow of foreign technology were geared to specific situations in respective countries in terms of overall economic policies and levels of industrial and technological development, apart from various constraints such as that of foreign exchange. Nevertheless, there were several common elements in the experiences of the participating countries. Most had fairly well-defined national policies for the acquisition of foreign technology, which were being implemented through regulations contained in legislative and administrative measures. Institutional mechanisms for the screening and approval of technology agreements had been established in most of the countries in the form of national registries and similar institutions. Regulatory control had generally resulted in the rationalization of the import of technology, by securing more equitable terms of technology transfer and by channeling the flow of suitable and appropriate technology into priority fields. Such measures had on the whole contributed to greater clarity and stability of governmental policies in this field and had proved to be of considerable techno-economic advantage in these countries.^{1/}

8. The participants at the Meeting also exchanged information on their respective experiences with regard to the following aspects: confidentiality, export restriction, exchange of information between licensor and licensee, guarantees, duration, remuneration, and transactions between parent and subsidiary of independent companies. After the exchange of views it was felt that these subjects merited more intensive discussions at forthcoming meetings.

^{1/} The substantial information supplied by the participants will be compiled and published by UNIDO, for distribution to the participating countries.

II. EXCHANGE OF INFORMATION

9. It was noted that, in the exercise of their functions, national regulatory agencies in the participating countries had become repositories of a large volume of significant information on contractual arrangements, implications and experiences. Such information and data were being utilized so far, however, only for purposes of comparison and co-ordination at the national level. Still, the need for sharing information and experience in this field had been stressed increasingly in recent years. In the United Nations General Assembly, in the Lima Declaration and Plan of Action and, more recently, at the Round Table Meeting of Ministers of Industry held at New Delhi in January 1977, the need had been stressed for co-operation and collaboration among developing countries under the auspices of the UNIDO Industrial and Technological Information Bank (INTIB). The Meeting of Ministers agreed that such co-operative arrangements should specifically include the examination of contracts and agreements already concluded, to provide guidance to others in order to avoid mistakes and problems relating to the use of particular technologies by a developing country.

10. It was the view of participants at the Meeting that the exchange of information and experience on technology agreements and related contractual arrangements would be a significant step forward in achieving technological co-operation among developing countries and would be of great assistance to the respective national institutions in strengthening their capabilities for the acquisition of technology on suitable terms, and in improving their bargaining position in the acquisition of technology. The initiative taken by UNIDO to promote such an exchange of information was welcomed.

11. It was recognized that several factors had to be taken into account in the design and operation of a system for the exchange of information on the acquisition and utilization of foreign technology, that what was intended to be exchanged was commercial information relating to the acquisition and use of technology and not confidential proprietary information. The extent to which national registries and other governmental agencies in these countries had compiled such information varied and also depended on internal organization arrangements. Some of the participating countries also faced certain legal and other constraints in furnishing detailed information on individual contracts. In the case of several other participating countries, on the other hand, it was felt that

there would be no practical difficulty in exchanging such information on the lines envisaged by UNIDO. Thus, while the need for exchange of information and experience on technology acquisition was fully recognized, the programme for such exchange should be conceived with great care.

12. The Meeting thought that the actual results of each contract could not be adapted to an exchange of information at this initial stage, in view of the steps needed to collect the information through questionnaires and other means. Not all participating countries had as yet established procedures for the collection of such information. It was also felt that the policies of various countries in respect of the publication of such information were not at present uniform and that, pending a more common approach, the system should be designed with this fact in mind. It was stressed that considerable care was necessary in the interpretation of such information since decisions were taken in each country according to its particular requirements and its economic policies, stage of industrial and technological development, foreign exchange situation and other related factors. After a detailed discussion, the Meeting agreed that a system for exchange of information on technology agreements and related contractual arrangements should be established along the lines set out in the following chapters.

III. PROGRAMME OF EXCHANGE OF INFORMATION

13. The Meeting recommended that the programme for exchange of information should be on a reciprocal, equal and mutually beneficial basis. It should be confined to countries willing to participate in it, the information being treated on a confidential basis. The nature and scope of the information sought should in principle strengthen the negotiating position of developing countries concerned, the terms and conditions of technology transactions would enlarge the scope of available technological options for government institutions in their respective countries.

14. The programme for exchange of information and experience relating to technology contracts should, inter alia, include:

- (a) A periodic review by each participating country of trends and features of foreign technology inflow and the regulatory control of such inflow;
- (b) General information on certain selected sectors of priority in the participating countries;
- (c) Specific information on individual contracts.

While all participating countries would be requested to furnish information relating to (a) and (b) above, information on (c) would be furnished by countries willing to exchange such information on a reciprocal basis.

15. It was considered necessary to concentrate initially on certain selected sectors having special priority in most of the developing countries and on which an exchange of information was considered particularly necessary. The following priority sectors were selected:

- Ferrous and non-ferrous metallurgical industries
- Chemicals and petrochemicals
- Agro-based and resource-based industries (including mining and extractive industries)
- Agro- and food-processing industries, including fish-processing
- Engineering goods industries, including metal-mechanic industries
- Capital-goods production, including mechanical, electrical and transport equipment
- Drugs and pharmaceuticals
- Textiles and garments
- Construction and building industries
- Electronics
- Tourism

16. In order to facilitate the exchange of information and to enable effective analysis and dissemination, it was agreed that UNIDO would be entrusted with the responsibility of receiving, processing, analysing and disseminating the information which would be supplied by participating countries under this programme. In order to enable UNIDO to perform such a clearing-house function, the information would need to be supplied in a format agreed on; UNIDO would then compile and process this information and disseminate it to participating countries on a reciprocal basis. For the purposes of the format, UNIDO would also furnish participating countries with an appropriate classification of industrial sectors. The organization would also assist countries in the collection and preparation of information for this programme, on request.

17. Taking into account the various positions of individual countries on the scope of information to be exchanged and shared, the Meeting adopted two schedules for the supply of such information; they are attached to this report. Schedule I would cover:

(a) A periodic review of trends and features of foreign technology inflow and regulatory control of such inflow;

(b) General information on foreign technology inflow in the selected priority sectors.

Schedule II would cover specific information on individual technology contracts.

18. Participating countries would have the choice of supplying information for this programme of exchange in the format either of schedule I or of schedule II, or both, wholly or in part. The scope of the information to be supplied might be further refined and extended in the light of experience and utility.

19. The information to be furnished by participating countries to UNIDO for the purpose of this programme should be supplied within three months from the time that UNIDO circulated the necessary classification of sectors and requested such information. The initial information supplied within the three-month period would relate primarily to agreements approved or registered in participating countries within the period 1 January 1975 through 31 December 1977.

20. It was suggested that information should be supplied thereafter by participating countries every six months. Information on contracts approved or registered during the first six months of 1978 might be supplied to UNIDO by 30 September 1978.

IV. TECHNOLOGICAL CO-OPERATION AMONG DEVELOPING COUNTRIES

21. Participants at the Meeting held the view that, in view of the rapidly increasing flow of technology into developing countries and the need for new forms of co-operation among developing countries to strengthen their national capabilities and to promote their industrial and technological development, it was both necessary and practicable to evolve concrete programmes of co-operation among national registries and similar institutions, which were particularly suited to play a significant part in this respect. These institutions could form a club for the purpose of technological co-operation and exchange of information and experience on a reciprocal basis within an agreed framework, with UNIDO providing the necessary facilities for such a programme.^{2/}

22. The specific objectives of such technological co-operation would, inter alia, be:

(a) To enhance significantly and develop national capabilities for the identification, evaluation and selection of foreign technology;

(b) To rationalize the inflow of foreign technology, with or without accompanying foreign investment, with emphasis on the regulatory functions of government institutions and on activities to promote the adequate inflow of suitable and necessary technology on equitable terms and conditions;

(c) To strengthen the bargaining position of government institutions and industrial enterprises in negotiations for the acquisition of foreign technology;

(d) To assist in the formulation of policies and in the implementation of programmes for technological application and development;

(e) To monitor and review the impact of foreign technology on the national economy and its assimilation, absorption and adaptation by domestic industry;

(f) To promote the development of indigenous technological capabilities including:

- (i) Appropriate indigenous processes and techniques;
- (ii) Technological service capability, including engineering and other services;
- (iii) Technology institutions engaged in R and D activities and the like.

^{2/} A formal proposal to this effect was made by the representative of Mexico. After discussion it was generally agreed that this issue would be studied further and discussed in a similar meeting to be convened subsequently by UNIDO.

23. It was recognized that co-operation between the participating countries and the institutions could take several forms. This would include activities that could be developed within a short period of time as well as those for which further studies and analyses would be necessary.

24. The Meeting felt that, in view of the urgent requirements of developing countries and their present institutional capabilities, the areas of co-operation in which activities could be undertaken would initially include the following, in the form of exchange of information or more intensive co-operation as might be appropriate among all countries or bilaterally:

(a) Exchange of information pertaining to terms and conditions of acquisition of foreign technology (which would be covered under the programme outlined above);

(b) Exchange of information concerning the experience acquired in the use of specific technologies by participating countries, including continuous sectoral analyses of approved agreements and identification of technological gaps;

(c) Exchange of information of a legislative or administrative nature including policies, norms and procedures currently followed by the participating countries, in order to facilitate the development of national guidelines and policies;

(d) Exchange of information concerning the criteria, methodologies and guidelines for evaluation currently used by participating countries, together with relevant background information on economic and industrial policies and conditions in the respective countries;

(e) Exchange of information on indigenous technologies and services which could be utilized by other participating countries;

(f) Identification of possibilities for planning and implementing industrial projects by various countries (and in particular between countries belonging to the same geographical area) through joint action for the acquisition of technology;

(g) Training programmes for strengthening the capabilities of personnel in national technology registries and similar institutions;

(h) Exchange of other available technological or commercial information of a non-confidential nature relating to technology transfer.

25. The Meeting recommended that the mechanisms for co-operation in the above fields should include:

(a) Arrangements for more direct contacts and communications between national institutions (and government officials) of developing countries having responsibilities related directly to transfer of technology, including training through an exchange of visits of the personnel of such institutions;

(b) Arrangements for the compilation and publication of information on prevailing policies, norms and procedures in respect of the acquisition and utilization of foreign technology and of the growth of domestic technological capability in developing countries, along with relevant background information on the respective countries;

(c) Arrangements for the compilation and circulation of national inventories of technology and services available in participating countries;

(d) The establishment of training programmes for personnel of national institutions on legal, economic and technical aspects of technology transfer as well as on related information-handling and use at the national level;

(e) The establishment of a clearing house within UNIDO to facilitate the exchange and dissemination of information on the terms and conditions of technological transactions (including the use of electronic data processing);

(f) The enlargement and strengthening of the Industrial and Technological Information Bank (INTIB) for handling information of an industrial and technical nature that could complement and enrich the information on terms and conditions of technological transactions;

(g) Arrangements for the periodic review of trends in and features of the acquisition and use of foreign technology in selected sectors of special priority for several developing countries.

V. ROLE OF UNIDO

26. The Meeting recommended that UNIDO should implement a comprehensive programme for the promotion of technological co-operation among governmental agencies dealing with transfer of technology. As part of such a programme it was recommended:

(a) That UNIDO should compile the necessary publications containing analytical information on the legislative, administrative and related aspects of the work of the registries of participating countries;

(b) That UNIDO should organize training for the personnel of national institutions concerned with the acquisition of technology;

(c) That UNIDO should assist national institutions through the provision of methodologies, expertise and other services, as appropriate, in the preparation of national inventories of indigenous technologies and services, and also that it should promote the dissemination of such information to other developing countries;

(d) That UNIDO should establish a clearing house of information as part of INTIB on the terms and related aspects of technology transaction;

(e) That UNIDO should provide relevant supporting services to national institutions concerned with the acquisition of technology, including:

- (i) Review of data collection and analysis of various contractual provisions relating to different sectors, and consideration of revised guidelines for technology acquisition in particular branches of production;
- (ii) Assistance to individual national registries and similar institutions in the analysis of sectoral trends and objectives and in respect of individual proposals where these might be considered necessary by participating countries;
- (iii) Analysis of technology agreements in different sectors and dissemination of the results of such analysis to participating countries;
- (iv) Organization of the regular exchange of visits of personnel of national technology registries and similar institutions in participating countries;
- (v) Under the auspices of INTIB the compilation of information on major suppliers of technology, including where possible on their corporate structures;
- (vi) Provision of technological advisory services for selected programmes and projects desired by particular countries;
- (vii) Assistance in the preparation of joint and collective negotiations for the acquisition of foreign technology for similar projects in groups of participating countries;
- (viii) Development of an integrated package of assistance linking acquisition of technology with feasibility studies, investment and technical operations and management.

27. In conclusion, the Meeting recommended that UNIDO should initiate immediate action to implement the recommendations set forth above. It also requested the secretariat to convene the next meeting within about six months to review the progress achieved and to consider additional subjects of common interest for discussion.

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Schedule I

FORMAT FOR THE SUPPLY OF GENERAL INFORMATION ON SELECTED SECTORS

- A. Review of trends and features of foreign technology inflow and regulatory control of such inflow
- B. General information on foreign technology inflow in the selected priority sectors
 - (1) Sector
 - (2) Description of product
 - (3) Major sources of technology supply (and country)
 - (4) Recipients of technology (including the range of foreign holdings)
 - (5) Type of collaboration (licence, know-how, trade marks, patents, consultancy, engineering, others)
 - (a) Maximum and minimum duration of contracts
 - (b) Maximum, minimum and average remuneration
 - (i) Percentage royalty
 - (ii) Lump sum payments
 - (iii) Other forms of payment
 - (6) Other remarks

Schedule II

FORMAT FOR DETAILED INFORMATION TO BE FURNISHED ON EACH CONTRACT

(1) Sector	(2) Description of product	(3) Name of foreign licensor and country	(4) Recipient of technology (including extent of foreign holdings)	(5) Type of collaboration (licence, know-how, trade mark, patents consultancy, engineering other)	(6) Other remarks
				(a) Duration of contract (b) Remuneration (i) Royalty percentage (ii) Lump sum payment (iii) Other forms of payment	

Annex I

LIST OF PARTICIPANTS

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Annex II

AGENDA OF THE MEETING

Monday, 6 March 1978

- 10.00 - 11.00 a.m. Opening of the Meeting
11.00 - 12.30 a.m. Presentation of the experience of participating countries
2.00 - 5.30 p.m. Continuation of morning session

Tuesday, 7 March 1978

- 9.00 - 12.00 a.m. Information required to strengthen the national capabilities for
Evaluation of foreign technological transactions
Negotiations with foreign enterprises
2.00 - 5.00 p.m. Continuation of the morning session

Wednesday, 8 March 1978

- 9.00 - 12.00 a.m. The role of national offices in promoting advisory services to industry in the selection and application of technology
2.00 - 5.00 p.m. Co-operation among national institutions for the exchange of information in the above areas
Forms of co-operation
The role of UNIDO

Thursday, 9 March 1978

- 9.00 - 12.00 a.m. Continuation of Wednesday afternoon session
2.00 - 5.00 p.m. Assistance by UNIDO in strengthening national technology registries or similar offices in developing countries

Friday, 10 March 1978

- 9.00 - 12.00 a.m. Conclusions and recommendations for future action
2.00 - 5.00 a.m. Closing of the Meeting

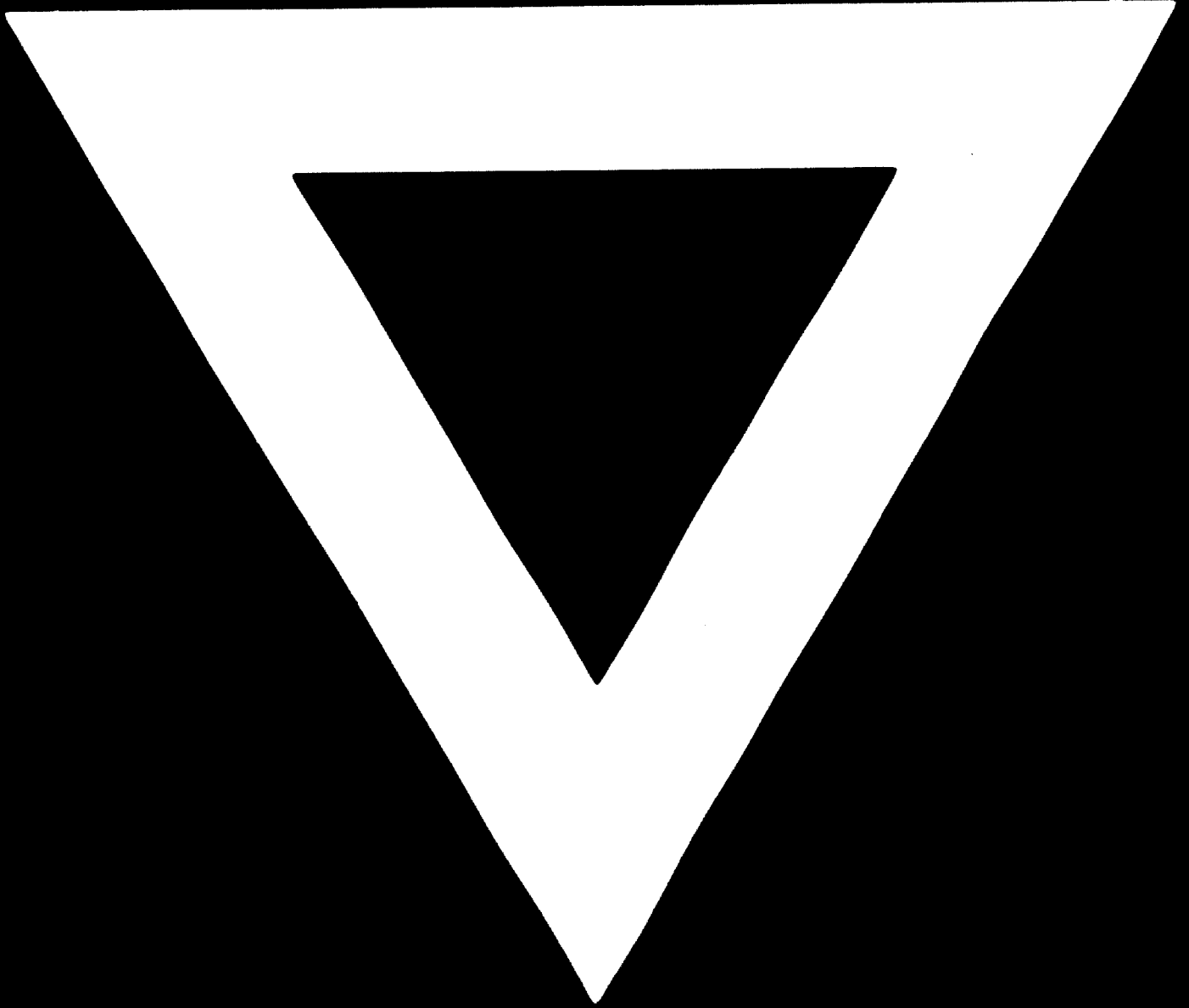
Annex III

LIST OF PAPERS PRESENTED TO THE MEETING

Opening statement by the Executive Director of UNIDO	
General policy regarding purchase of foreign technology	(Algeria)
Transfer of technology law	(Argentina)
Identificación de cláusulas que continen prácticas comerciales restrictivas en los contratos de transferencia de tecnología	(Ecuador)
Cost-benefit analysis applied to technology	(Egypt)
Transfer of technology - The case of Egypt	(Egypt)
General policy relating to inflow of foreign technology in India and procedures followed in the evaluation and approval of foreign collaborations	(India)
The experience of Iraq in the transfer and development of technology	(Iraq)
Information contained in transfer of technology agreements, its significance and possibilities for use by an international consulting system supported by UNIDO	(Mexico)
Conferencia sobre transferencia de tecnología extranjera	(Peru)
Problems relating to the transfer of technology in Portugal	(Portugal)
Policies on transfer of technology in the Philippines	(Philippines)
New five-year economic development plan of the Republic of Korea and its policy for foreign technology inducement	(Republic of Korea)
Contribución a los objetivos y funciones de un servicio de información tecnológica	(Spain)
Objetivos de la política de transferencia de tecnología en España	(Spain)
Resoluciones - Venezuela	(Venezuela)
Technological co-operation between developing countries, including exchange of information and experiences in technology and know-how agreements (ID/WG.272/1)	UNIDO secretariat



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