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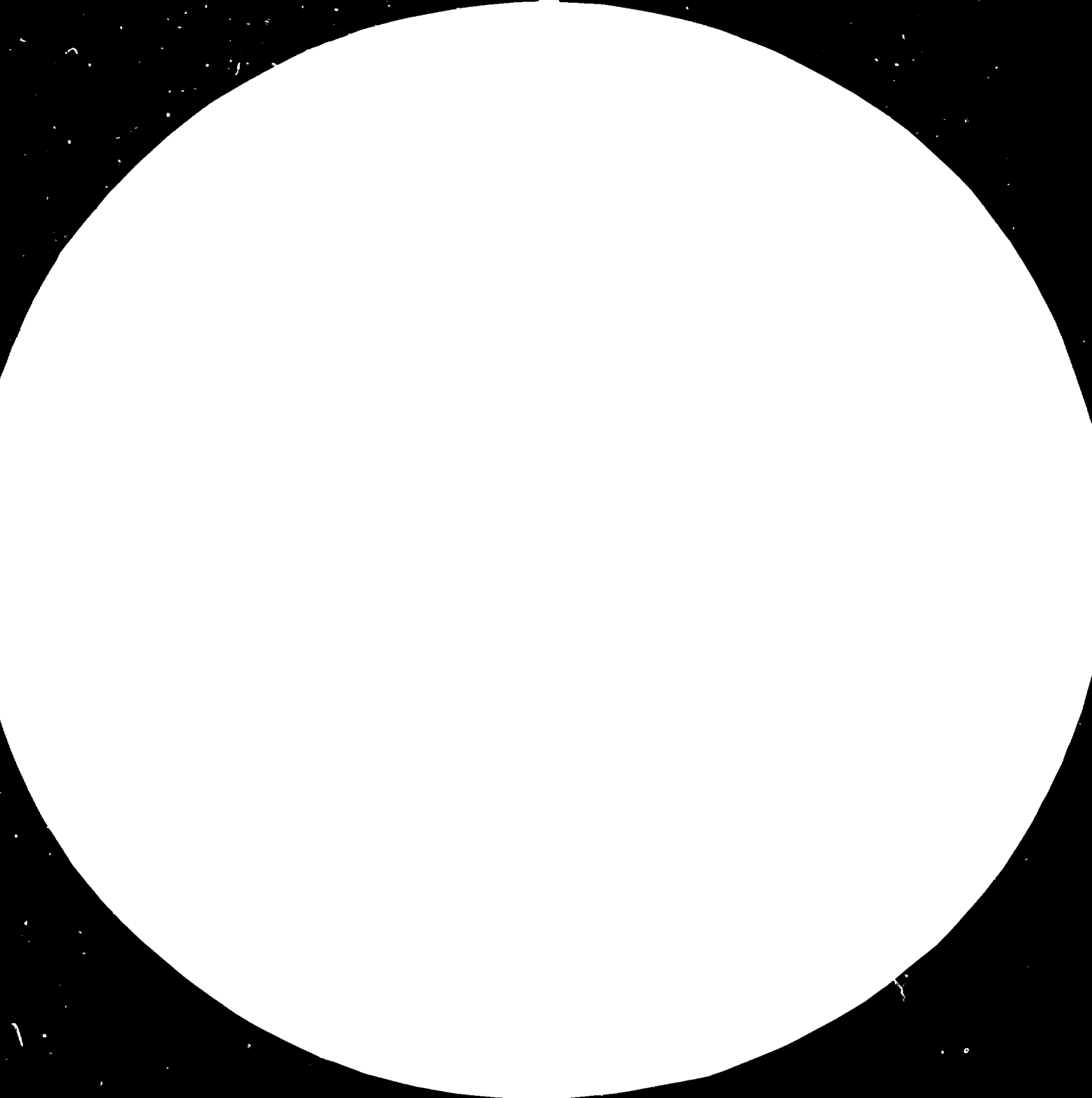
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High-Level Policy Meeting of ASEAN
on the Regulation of Technology Transfer ,

Vienna, Austria, 28-29 September 1981
Lisbon, Portugal/Madrid, Spain, 1-4 October 1981

REPORT . (ASEAN, regulation of technology
transfer).

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INTRODUCTION

1. A high-level policy meeting on the regulation of technology transfer in the member countries of the Association of South-East Asian Nations (ASEAN) jointly organized by the Committee on Industries, Minerals and Energy (COIME) and UNIDO met at Vienna, Austria, from 28-29 September 1981.

The list of participants and observers is contained in annex I and the list of papers circulated at the meeting in annex II. Mr. E.L. Tordesillas (Philippines) was elected Chairman and, in his absence, Ms. L. Bautista, Acting Chairman.

2. The objectives of the meeting were:

(a) To examine the role of technology regulatory agencies;

(b) To identify an appropriate legislative and administrative framework for their establishment and operation at the national level;

(c) To formulate guidelines for the selection, evaluation and negotiation of technology transfer arrangements;

(d) To discuss the possibilities of adopting a regional approach towards technology transfer regulation and possible areas of regional technology co-operation.

3. The meeting was opened by the Deputy Executive Director of UNIDO, Mr. F. Carré. Mr. Carré said that the meeting had been arranged so that the participants could have a two-day exchange of views at Vienna before proceeding to Portugal and Spain where they would have the possibility to gain at firsthand a knowledge of the working experience of the Portuguese Foreign Investment Institute and the Spanish Registry of Technology, both considered to be among the most sophisticated of their kind.

4. He said that while there was general consensus that increased flows of technology were essential for accelerated industrialization of developing countries, there were divergent views concerning the best way to encourage such flows. UNIDO had advocated a more active role on the part of Governments in the process of inflows of technology, principally to achieve the following short and long-term objectives: to lower the overall cost of import of

technology, to achieve the best terms and conditions for individual technology transfer transactions, to protect and assure rapid development of priority industries, and to stimulate local research and development (R and D) activity and to gradually achieve technological independence.

5. Examples from many developing countries suggested that the introduction of comprehensive national policies on technology, usually including measures for regulation of inflows of technology, could contribute to the attainment of these objectives.

6. Differing approaches were well represented in ASEAN. Malaysia and the Philippines, for example, had for some time pursued policies of direct government involvement in transfer of technology with very encouraging results. Other countries had pursued the course of rather limited government involvement. A discussion, therefore, of the advantages and disadvantages of various degrees of government involvement based on ASEAN experience would be of interest probably for other developing countries as well.

7. Another issue to which UNIDO attached particular importance was the way in which close collaboration might be established among ASEAN countries in matters relating to technology transfer. There were many facets to such co-operation, but it might start with exchange of information, along the lines of the Technological Information Exchange System (TIES) scheme developed by UNIDC. It might also be of interest to consider the ASEAN Technological Information System (ASTIS).

I. ROLE OF TECHNOLOGY TRANSFER REGULATORY AGENCIES AND THEIR ESTABLISHMENT AND OPERATION AT THE NATIONAL LEVEL

3. In introducing the first agenda item, it was pointed out that the functions of regulatory agencies/boards/offices had begun some ten years ago. Such offices were established parallel to government involvement in technology inflow from industrialized countries to developing countries to implement government policy on technology transfer. The first offices to be established were in Latin America (Argentina, Brazil, Columbia, Mexico), although India already had a similar agency incorporated in the existing government structure in the early 1960s. Since then the offices had undergone changes in terms of function and roles. ^{1/}

9. The primary role of national regulatory agencies was to put into effect the implementation of government policies towards the following goals:

- (a) Lowering the cost of technology importation;
- (b) Achieving the best possible terms and conditions;
- (c) Stimulating flows of technology to preferential or priority areas of the economy or industry;
- (d) Stimulating R and D;
- (e) Helping the country achieve technological independence.

10. The agencies had developed four functions:

- (a) A regulatory function;
- (b) A co-ordinating function;
- (c) A promotional function;
- (d) A monitoring function.

11. Regulatory function. In implementing government policy, the office's role included: obtaining for the country the technology and alternative sources of supply, regulating inflows to priority areas of the economy or industry, and obtaining the best terms and conditions for individual transactions.

^{1/} See "Organization, functions and activities of national technology transfer regulatory agencies" (UNIDO/IS.236).

12. Scope of activities. Regulatory offices dealt with flows of technology on the "software" side and left out such channels as, for instance, the technology embodied in the equipment to other offices. Some countries combined the regulation of software with the regulation of foreign investment. These functions could be separated or combined.

13. The areas at which the offices looked in order to lower the costs of technology and secure better conditions were:

- (a) The legal area;
- (b) The technical area: the question of appropriateness of a technology and whether a proper selection had been carried out, the impact on the development of the economy on the one hand and the development of indigenous capacities on the other;
- (c) Cost and conformity to foreign exchange controls, royalty levels, economic feasibility etc.

14. Regulatory functions dealt with the scope and the three areas enumerated above. Such an office was usually in sole charge of all flows of technology. It should have a large co-ordinating function in order to co-ordinate all activities at industry and government level. It was of utmost importance that once the office was established, it assumed co-ordinating functions and that there were inputs from the public and private sectors, R and D institutes, the financial sector and vice versa.

15. Surprisingly often, the negative reaction tended to come from local industry and not so much from the foreign investors. Local industry could feel that government intervention was limiting. Therefore national regulatory offices had to develop a promotional activity directed towards local industry, and towards foreign suppliers.

16. In the four areas where UNIDO had collected experience, it had been noticed that regulatory offices could take immediate care of costs and conditions of flows and then as the industry and the office matured, the office could move into monitoring and seeing how the technology had been absorbed and how it affected directly or indirectly R and D capabilities. The aim was for the country to achieve technological independence and an ability to transfer its know-how to other countries.

17. Significant points

(a) Twenty-three developing countries now had an office for regulating technology which meant there were twenty-three countries with an explicit policy on inflow of technology;

(b) Seven (Argentina, Brazil, India, Malaysia, Mexico, Philippines, Republic of Korea) out of the 23 imported 70 per cent of all technology imported by developing countries;

(c) These countries were leading in overall industrial growth and technology import. More and more countries were moving in a similar direction;

(d) Governments were increasingly introducing specific policies regarding technological development, including the import of technology, either through legislative or administrative action;

(e) An increase in co-operation between individual offices around the world had been noticed and the TIES system was to some extent responsible for this;

(f) The functions of regulatory offices had been extended towards local industry and they had progressed from a regulatory function towards assisting local industry in all technological questions;

(g) In countries which had had policies for eight years on technology transfer, a switch from the defensive protection of national interests to offensively developing the local technological base had been noted.

18. In the ensuing discussion, the participants made a number of observations. In particular, they dealt initially and in detail with the problems of how the Technology Agreement Unit of Malaysia and the Technology Transfer Board of the Philippines had been established.

19. On this basis the clarification of the scope of such offices was discussed and their potential functions. There was a consensus that the Ministry of Industry which dealt with the application of technology in industry was potentially the most suitable institution for location of such offices, however, consideration of the foreign investment aspects should also be taken into account.

II. APPROPRIATE LEGISLATIVE AND ADMINISTRATIVE FRAMEWORK AND GUIDELINES
FOR SELECTION AND EVALUATION OF TECHNOLOGY TRANSFER ARRANGEMENTS

20. Another issue taken up was how to solve the apparent contradiction between promotion of foreign investment and the establishment of regulatory offices in respect to the transfer of technology. It was explained that the regulations affecting the transfer of technology usually provided a set of conditions under which flows should take place without directly affecting the incentives offered to foreign investors. All participants agreed and stressed the need for flexibility in the application of any regulatory measures by individual countries, be they in the form of specific legislation or actual implementation of government policy. In view of the close relationship between the first two agenda items, the second agenda item: appropriate legislative and administrative framework and guidelines for selection and evaluation of technology transfer arrangements, was discussed together with the first agenda item and the country papers of Malaysia and the Philippines introduced at the same time.

21. The participants explained how co-operation between bodies responsible for investment took place and the advantages of such an inter-agency system. Specifically, the discussion centred on handling specific technology agreements like franchising agreements, joint ventures and it was explained that in Malaysia, for example, only agreements covering manufacturing were subject to evaluation whereas in the Philippines these would fall under the know-how and/or trademark category.

22. The participants also dealt with problems related to renewals of the agreements and the procedure to grant further contract extensions. A specific problem was raised in connection with manufacturing entities located in export free zones which are subject to scrutiny in Malaysia and the Philippines although both countries adopt a more lax attitude to companies in those areas in respect of royalty rates because of the export orientation.

23. Another issue discussed extensively by participants was the question of applicable law and attempts by individual countries to enforce implementation of the national laws as the governing law of the country. There was a consensus that this was the right direction and that licensors, although reluctantly, were willing to accept such a position. It was stressed, however, that in credit agreements the advancement of the use of national laws was much slower. The participants then proceeded to discuss in detail the treatment of

the most common restriction clauses as those usually were eliminated a priori either by the national legislation or administrative act, as the case might be. In this connection, the participants expressed the opinion that the confidentiality provisions extending beyond contract duration should be kept as short as possible, and the tendency at present was to limit the confidentiality period to five years. However, there were exceptions of ten years' duration as well. In the practice of some countries, the five years' duration period was based on the fact that the contract was often renewed and therefore the total duration of confidentiality usually covered a total period of 15 years, which was considered sufficient at present to maintain the secrecy of proprietary know-how.

24. Another issue which was discussed was the extent of termination of licensee activities after expiration of the agreement and here participants agreed that they should not allow licensors to impose such conditions, also in view of the current interpretation of anti-trust laws both in EEC countries and in the United States of America in this respect.

25. The restrictive practices discussed were export restrictions where it was felt that they at present constituted less of a problem than they used to be a few years ago. The practice of the countries present was not to allow such restrictions except in cases when the countries to which the exports were destined did not allow such imports.

26. Another issue taken up was the question of how to deal with grant-backs and here the attitude was that the technology regulatory offices should adopt a policy to request payments for mutually exchanged improvements. Furthermore there was a tendency to prohibit the licensors from imposing their right to patent improvements made by licensees.

27. The participants reviewed the issue of the duration of the contract and the attitudes by regulatory offices towards duration. It was found that in both Malaysia and the Philippines the average duration granted was five years, with exceptions occurring with regard to technology considered of special significance to the national economy.

28. It was found also that the registries in Malaysia and the Philippines did not have in principle different policies vis à vis subsidiaries and foreign companies versus independent companies. The same applied in respect of different industrial sectors.

29. The participants exchanged views as to the optimal organization and staffing of regulatory offices. The average number of contracts reviewed per year in the Philippines was around 100 and they were scrutinized and evaluated by a technical staff of six. In the case of Malaysia, five technical staff reviewed the approximately 250 contracts which were received each year.

30. The above staffing was considered in principle sufficient, however it was felt that more staff would allow the offices to provide better services for industry. The average time taken for evaluation was about 30 days per contract, however in the case of the Philippines the maximum time allowed for evaluation was set by law at 60 days otherwise the agreement would be considered automatically approved.

31. The participants then discussed the advantages of a legislative approach versus an administrative approach, but in view of the complex nature of both approaches no definite conclusions were drawn and it was assumed that the specific situation of each country would determine which system should be introduced.

III. THE POSSIBILITIES OF A REGIONAL APPROACH TOWARDS TECHNOLOGY TRANSFER
REGULATION AND THE POSSIBLE AREAS OF REGIONAL TECHNOLOGY CO-OPERATION

32. In introducing this agenda item, the attention of the participants was focused on the document prepared by UNIDO entitled "The Possibilities and Feasibilities of ASEAN Regional Co-operation in Technology Transfer" (ID/WG.349/1) as well as a draft project document entitled "Strengthening of Regulatory Mechanisms in the Transfer of Technology in the ASEAN Countries", which had been preliminarily endorsed by COIME for further submission to UNDP.

33. The introductory remarks covered three areas of possible co-operation which were:

(a) Possibility and feasibility of establishment of an ASEAN Technological Information System (ASTIS);

(b) Possibilities to co-ordinate technology policies particularly concerning imports of technology;

(c) Possibilities of joint acquisition of technology for ASEAN industrial projects.

34. In the discussion which followed the introductory remarks, the participants reviewed substantively the project proposal by UNIDO, stressing in particular the need to shift the overall emphasis of the project from establishment of ASTIS to assistance in the establishment and strengthening of national regulatory offices. Emphasis was put on expanded training programmes in the area of negotiation of technology agreements, including study tours, both considered by participants as being of paramount importance for their individual countries. The extent of the revision as well as the overall increase of the project value is fully reflected in the recommendations adopted by the meeting.

IV. GENERAL RECOMMENDATIONS

35. The high-level meeting agreed on the following recommendations for action for implementation by the ASEAN member countries, COME and the UNIDO secretariat, as appropriate:

(1) In order to accelerate the pace of industrial development in the ASEAN countries, the Governments should evolve appropriate technology policies oriented towards the development of the indigenous technological base and facilitate increased flows of needed industrial technologies from abroad.

(2) Since experience has shown that national technology regulatory agencies are one of the most effective tools in facilitating foreign technology inflows under the most appropriate terms and conditions, it was agreed that such agencies be established.

(3) For the purpose of strengthening the bargaining position of ASEAN member countries when acquiring technology from abroad, it was agreed that the terms and conditions of such acquisition should be harmonized. Furthermore, it was recommended that close co-operation and co-ordination among existing regulatory agencies in technology transfer should take place.

(4) The Technological Information Exchange System (TIES) provides for the exchange of information among participating countries and it is therefore recommended that all ASEAN countries should join this system.

(5) The scope, responsibilities and functions of the national technology regulatory offices should be left to the decisions and discretion of the individual interested countries.

V. SPECIFIC RECOMMENDATIONS

(1) The participants recommended that the next COIME meeting should consider the revised version of the UNIDO proposed project entitled "Strengthening of Regulatory Mechanisms in the Transfer of Technology in the ASEAN Countries" concerning the co-operation among ASEAN countries in the field of technology transfer.

(2) The meeting recommended that UNIDO revise its project document "Strengthening of Regulatory Mechanism in the Transfer of Technology in the ASEAN Countries" along the following lines:

(a) The emphasis of the project should be shifted towards assistance in the establishment of new and strengthening of existing national technology regulatory agencies including the strengthening of negotiating abilities in the field of technology transfer, while the establishment of the ASTIS system should be developed only at the later part of the project's implementation;

(b) Training in the area of strengthening of negotiating capabilities should be expanded;

(c) Study tours and working visits should be included to provide ample opportunity for the exchange of experiences within and outside the ASEAN region;

(d) The gradual establishment of national focal points for technology transfer and strengthening of existing ones in such areas as computerization should be concurrent with the acceleration of training;

(e) Existing national technology regulatory agencies in the ASEAN region should provide facilities for in-house training for other member countries;

(f) The development of ASTIS will take place at the later phase of the project once a decision of individual Governments to establish national focal points has been implemented;

(g) In view of the revisions under points (a) to (f) above, the total project value should be considerably increased; a preliminary estimate suggests the total project will cost approximately US\$450,000.

(3) The meeting recommended that all ASEAN member countries support the continuation of the TIES system as requested in the project document submitted by UNIDO to the UNDP Headquarters.

Annex I

LIST OF PARTICIPANTS AND OBSERVERS

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Mohamed Abdul Latiff, Associate Trade Commissioner, Embassy of
Malaysia, Commercial Section, Vienna, Austria

Annex II

LIST OF DOCUMENTS

Preliminary programme

Provisional agenda

Aide-memoire

- The possibilities and feasibilities of ASEAN regional
co-operation in technology transfer
Secretariat of UNIDO ID/WG.349/1
- Technology transfer - Malaysia's experience
Wong Hiong Chin ID/WG.349/2
- Philippine experience in technology transfer regulation
Lilia R. Bautista ID/WG.349/3
- Organization, functions and activities of national technology
transfer regulatory agencies
Secretariat of UNIDO UNIDO/IS.236

Background documents

Development and Transfer of Technology Series

- No. 1. National Approaches to the Acquisition of Technology (ID/187)
- No. 12. Guidelines for Evaluation of Transfer of Technology
Agreements (ID/233)
- No. 14. Case Studies in the Acquisition of Technology (I) (ID/257)
- No. 15. Technological Self-reliance of the Developing Countries:
Towards Operational Strategies (ID/262)
- Technology exports from developing countries: the cases of Ar na
and Portugal (UNIDO/IS/218)
- Information paper: technological information exchange system (TIES)
(UNIDO/IS.185)
- Bibliography of documents relating to transfer of technology compiled by
the UNIDO Technology Programme (UNIDO/IS.228)



