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> REPORT OF THE EXPERT MEETING ON THE IMPACT OF GOVERNMENT POLICY AND GOVERNMENT/PRIVATE ACTION IN STIMULATING INTER-FIRM PARTNERSHIPS REGARDING TECHNOLOGY, PRODUCTION AND MARKETING, WITH PARTICULAR EMPHASIS ON NORTH-SOUTH AND SOUTH-SOUTH LINKAGES IN PROMOTING TECHNOLOGY TRANSFERS (KNOW-HOW, MANAGEMENT EXPERTISE) AND TRADE FOR SME DEVELOPMENT

> > Held at the Palais des Nations, Geneva from 20 to 22 April 1998

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I. RECOMMENDATIONS ADOPTED BY THE EXPERT MEETING

<u>Preamble</u>

The experts reaffirmed the importance of inter-firm cooperation in 1. enabling firms to meet the challenges of the new international competitive environment. Inter-firm agreements cover a variety of arrangements between small, medium and large enterprises, including licensing and subcontracting relationships, technology, marketing and other forms of strategic partnering. Inter-firm cooperation could be an effective mechanism for capacity-building in areas such as technology, product and process quality improvements, marketing and managerial know-how, particularly for small and medium-sized enterprises (SMEs). While interfirm cooperation is relatively widespread in developed countries, evidence shows that firms in developing countries and economies in transition face certain obstacles in participating in such arrangements. The experts discussed the main conditions for successful partnering. These include the identification of the right partner, the need for a common vision, trust and strong motivation, clarity of organizational structures and a thorough preparation based on adequate information. The experts recognized that there is a vast diversity of country situations, requiring differentiated responses with regard to inter-firm cooperation, particularly in the least developed countries (LDCs).

2. The discussion at the Expert Meeting raised a number of issues that resulted in specific recommendations in terms of policy options and guidelines for different actors involved in the process of building interfirm cooperation: for governments and national organizations in terms of setting the general policy framework and infrastructure, and in terms of providing direct services to SMEs at the local level; for the international community in terms of building bilateral or multilateral technical cooperation programmes fostering inter-firm cooperation; and for UNCTAD.

Policy options and practical measures to promote inter-firm cooperation

A. <u>Recommendations addressed to governments and national organizations</u>

3. Government policies should focus on creating and maintaining an overall macroeconomic environment ("enabling environment") conducive to inter-firm cooperation. This includes providing close support to enterprises and encouraging the creation of efficient, flexible and independent local organizations such as business associations, chambers of commerce and industry associations.

4. Governments should ensure that the legal framework is favourable to inter-firm cooperation and define clearly the legal and regulatory measures that govern business and inter-firm transactions and collaboration, such as the system of property rights, contract law, commercial law, special tax measures and dispute settlement. In addition, it is important that governments ensure effective and efficient implementation of their legal and regulatory measures.

5. To enhance successful and economically viable partnering, government policies should facilitate the development of local technological, managerial and organizational capabilities. In order to have a "partnership-ready" enterprise sector, it is essential to create the necessary capabilities in terms of human resources and institutional infrastructure by enhancing the educational level and skill formation of the labour force through ongoing general and vocational training and an adequate institutional framework for apprenticeship and craftsmanship. Particular efforts are required in LDCs.

6. Governments and private sector bodies need to play an active role in preparing the ground for inter-firm partnerships through, among other measures, raising awareness of the potential benefits from such partnerships and providing local firms with access to information as well as the right mix of financial and technical support where needed. Measures should also include access to independent advice at various stages of a partnership, for example during initial negotiations or when consolidating a partnership. In this regard, governments should work with private and public sector bodies to systematically collect information on the progress being made in locating partners for technology, production and marketing cooperation and in identifying the different types of arrangements being entered into with a view to disseminating "best practices".

7. Measures are necessary at all levels of government to foster the promotion and application of R&D results in industry with a view to strengthening the ability of firms to participate in international production networks. Governments could promote interaction between firms and R&D institutions or universities through such means as technology centres and parks. Such linkages are essential for training and the provision of skills to enterprises, especially SMEs.

8. Investment promotion agencies, public and private sector bodies and academic institutions should be encouraged to promote the upgrading of local technological and managerial capacity through inter-firm arrangements such as joint ventures and subcontracting and franchising relationships, through study tours and by securing government support for R&D.

B. <u>Recommendations addressed to the international community</u>

9. The international community should enhance inter-firm cooperation through providing access to capital, technology, managerial know-how and adequate financing on the most concessional terms to SMEs in developing countries, particularly in the least developed countries.

10. In support of national and regional initiatives to promote interfirm cooperation, corresponding efforts should be made at the level of multilateral and/or bilateral cooperation. These efforts could include the creation of inter-firm cooperation opportunities (e.g. through pilot projects, fairs, study tours), training of staff from interested firms, facilitating technology transfer, provision of experts, financial assistance to support structures as well as information services. International cooperation schemes in developing countries and economies

in transition should address the requirements of modern production (e.g. quality control, just-in-time production). Partnering agencies could also assist "would-be partners" to better articulate their objectives, focusing on trust-building processes and developing activities designed for this purpose.

C. <u>Recommendations addressed to UNCTAD</u>

Several initiatives could be undertaken by UNCTAD in cooperation 11. with other international organizations, such as UNIDO, ITC and UNDP, to support the process of inter-firm cooperation. There is a need to (a) identify best practices in promoting inter-firm cooperation; (b) develop criteria and checklists of conditions, capacities and attitudes which make companies "partnership-ready", taking into account local conditions; (c) provide advice to governments in creating an appropriate policy environment for inter-firm cooperation as well as advice on policy options within specific sectors; (d) address the needs of least developed countries at the pre-collaboration level by identifying ways of enabling enterprises to build contractual trust through their legal systems, good-will trust by creating a common vision among the partners and technical trust by strengthening their technological and managerial capabilities to carry out agreed tasks; (e) establish an electronic network of North-South and South-South partnering programmes in the area of inter-firm cooperation, including useful information on intermediary match-making agencies, within UNCTAD's website and link it on-line to the EMPRETEC and the WAIPA networks; and (f) undertake a pilot project, if extra budgetary resources are made available, promoting networks of support services at the regional level.

II. CHAIRPERSON'S SUMMARY OF THE EXPERTS' INFORMAL DISCUSSIONS

12. The Expert Meeting on Inter-Firm Cooperation focused on three sets of substantive and technical issues: (i) implications of inter-firm cooperation for competitiveness and technological capacity-building in developing countries and economies in transition; (ii) creating a conducive policy environment; and (iii) support structures, measures and programmes for inter-firm cooperation.

Implications of inter-firm cooperation for competitiveness and technological capacity-building in developing countries and economies in transition

13. The discussions started with a panel of three resource persons: a researcher from the Institute for New Technologies of the United Nations University, a representative from Biocon India and a representative from Nortel, Canada.

The resource persons stressed that successful "two-way" technology 14. partnerships required a number of conditions to be met. Clarity of motives and structures was necessary because it helped focus the activities of collaborators and because firms creating new product and process knowledge required advanced forms of organization, while firms seeking knowledge to fill specific gaps could collaborate using informal agreements. Thorough preparation involved obtaining full information on emerging international trends and potential areas for collaboration, and identifying which of the potential partners could be best suited for the partnership. Also, it required minimization of the risk of conflict by systematically creating negotiating and communication skills, acquiring insights into the potential partner's corporate and national business culture, and dealing with dimensions such as the governance of the collaboration, the valuation of human and material resources, and managerial and reporting procedures. Creating the conditions for learning required partners to engage in constant and constructive communication and exchange of ideas at every level of the organization while at the same time being receptive and adaptable as regards the ideas of counterparts. Exchanging personnel between partners helped to understand better the approaches of partners to generating ideas and solving technical problems, while training and linkages to relevant universities and research centres provided external knowledge inputs. Regularly monitoring and assessing the progress of partnerships, as well as the perceptions of partners, contributed to ensuring that objectives were being met. Ensuring that the cycle of the collaboration was completed through clear and reasonable targets and timetables for new product or process development or adaptation, and termination of collaboration unless a new cycle could be initiated, helped to maximize technical and financial benefits. Building of trust throughout the process was also considered important. Three types of trust were identified: contractual, goodwill and competence. Contractual trust meant that partners respected what was stipulated in the agreement. Goodwill trust was grounded in mutual expectations of open commitment to each other. Competence trust referred to the confidence in each other's ability to perform at its best.

Two case studies of technology partnerships were presented. Biocon 15. India is an example of a successful collaborative private-sector venture from its inception. It was set up in 1978, in collaboration with Biocon Biochemicals of Ireland, to produce papain (a plant enzyme) and isinglass (a natural hydrocolloid from fish). India possessed these critical raw materials, used in brewing industries worldwide, while the Irish partner had a requirement for them, and initially provided capital funds for the venture. Because of restrictive Indian government regulations, Biocon Ireland's stake was limited to only 30 per cent in the venture, but the Indian partner offered other interesting advantages: a 10 per cent subsidy on high-tech investment provided by the Indian Government, substantial credit provided by public financial institutions, and a locational advantage, namely Bangalore - a cosmopolitan city where several scientific research institutions and a good pool of trained personnel were readily available.

16. As its contribution, Biocon India had to develop the production processes to manufacture these products. The Irish partner, on the other hand, had a market for the products. Also, it provided the initial expertise in marketing and technical support to help Biocon India market industrial enzymes which it bought from Biocon Ireland. Today Biocon India has graduated beyond making papain and isinglass, replacing enzymes bought by the Biocon Group with in-house production. It has become a base producer of industrial enzymes, pharmaceuticals and natural colours almost all the products being an outcome of its own research and development - and has generated sales of approximately \$30 million, 50 per cent of which were exported to developed countries.

17. In 1989, Biocon Ireland was acquired by Quest International, a subsidiary of Unilever, Holland. This launched Biocon India's second partnership and growth phase. Quest recognized Biocon India as a quality resource for cost-effective microbial research and initiated several joint research projects. Being a large transnational corporation, Quest imposed more formal agreements and bureaucratic procedures, but brought a knowledge of international quality standards and access to substantial databases, and thus a high level of connectivity was achieved. This allowed Biocon India to continue to advance further in the field of biotechnology research. The resource person pointed out that inter-firm cooperation had allowed Biocon India to improve its quality control, and that this was not an easy skill to develop.

18. An example of partnership in the telecommunications and software industry was presented. Nortel, Canada, a multinational, global provider of communications network solutions has strategic partnerships with four independent Indian companies (Tata, WIPRO, Infosys and SAS). These range in size from well-established larger firms to smaller start-ups. The partnerships had proved beneficial to both sides in various ways; for example, they enabled Nortel to have access to skilled human resources in India as well as to the Indian market. The Indian companies benefited financially, earning income in hard currency as well as gaining access to the North American market and being able to share "state-of-the-art" telecommunications technology. Modern technologies (electronic networking, video conferencing etc.) facilitated cooperation between research laboratories in India and North America. The building of mutual trust and the bridging of different work cultures, as well as patience in overcoming administrative obstacles, had been crucial elements in the early stages of developing these partnerships. As a result, the participating companies could look forward to long-term strategic partnerships.

It was also stated, in the context of the Nortel partnerships, that 19. partnering companies in India benefited in various ways from the partnering. They did so financially, by gaining access to the North American markets through Nortel, by taking part ownerships of the product, and by learning the "state of the art" in telecommunications technology. An example of the latter had been achieved through the setting up of "Nortel cells" within the Indian partner organizations dealing with technology aspects. With respect to Biocon and Nortel, the question was raised as to how effective the impact of these partnerships had been at the local level. As for Biocon, the impact was reflected through significant "trickle-down effects". While the company now employed 200 people, the resource person estimated that at least 10 times that number were directly or indirectly affected by its economic activities. Through its activities, the company had also upgraded local business standards, generated opportunities for local producers of equipment, upgraded laboratory design and building standards, and improved the implementation of hygienic norms. In addition, the Biocon partnership had strengthened research skills and led to the creation of a major research facility within the firms.

20. In reacting to these presentations, the experts noted that it was well understood that issues relating to successful inter-firm cooperation, particularly the identification of partners and matching issues, included social and cultural aspects. Even though it might be difficult to analyse these aspects, they played an important role in the success of cooperation and should be emphasized. The importance of clear policies and of a legal framework was stressed, as well as the existence of stable investment regimes and the development of skills. The trust element was essential: each of the partners should be fully convinced that the other contributed to the maximum extent to the success of the venture. It was noted that the main conditions for the success of partnership arrangements also included mutual respect between partners, as well as diversified forms of services infrastructure. As the partners' level of skills was of great importance, learning by doing in the course of implementation of interfirm cooperation should always be the central concern of partners. It was also noted that in many cases large companies doubted the ability of smaller firms to be viable partners in cooperation ventures. Among the reasons for the failure of inter-firm partnerships were poor preparation of deals, lack of diversified structures, information and transparency, "secret agendas", hidden motives, absence of real stimuli for cooperation or badly formulated objectives, and absence of monitoring procedures.

21. With regard to the impact of the size of companies on the success of inter-firm cooperation, the opinion was expressed that the most successful deals were those between large and smaller companies, since the first could contribute experience and clear strategy and the second could contribute flexibility. In principle, it was important that both partners had something to offer for the success of the arrangement and

were ready to take their share of the risk. North-South partnerships seemed to be more successful than South-South ones. An analysis of a selected number of cases in MERCOSUR indicated that several inter-firm cooperation efforts had failed. This was not inevitable, since if firms were helped to understand with greater clarity their specific needs and interests and build linkage capabilities, they would also succeed. In the case of South-South inter-firm cooperation, it was suggested that governments pay particular attention to initiating/promoting this cooperation. Other supportive structures, such as chambers of commerce and business associations, should also deploy efforts to assist in initiating and developing partnership arrangements among firms from developing countries, particularly LDCs. In the initiation process, maximum use should be made of opportunities provided by information centres, business support agencies, study tours, participation in trade fairs, exhibitions, etc.

22. Furthermore, it was stressed that inter-firm cooperation should have positive impacts at the local level in terms of generating additional knowledge, employment and subcontracting opportunities, and fostering networking. The expert from Italy indicated that many developing countries would like to replicate the Japanese industrial model or the Italian experience of development based on SMEs and industrial districts. However, in those "models" several factors for success had to be taken into consideration. Attention should be paid mostly to local conditions. In fact, a well-known Italian construction company, establishing partnership agreements in Argentina, South Africa and India, had obtained very different results, based on the local conditions encountered.

Several cases of corporations that had pursued diverse forms of 23. partnership for achieving a greater degree of competitiveness or for building up their technological capacity were reported. These included the Corporación de Petróleos de Venezuela, a 100 per cent state-owned body which operated with a market-based approach. It had created the Instituto Tecnológico Venezolano del Petróleo, a research body which first trained its personnel and then developed partnerships with a variety of economic agents in the oil sector, including competing companies and suppliers, as well as with research bodies from developed countries, such as Stanford University and the Massachusetts Institute of Technology. On this basis, the corporation had acquired an important technical services capability allowing it to work internationally with customers ranging from Argentina to China, Mexico and Sweden. The creation of this capability allowed it now to set up diverse worldwide consortia. A conceptual vision in which technological capacity-building and the partnership approach were central had been applied, and a market-oriented approach and the existence of a solid legal framework for its operations had been the basis for these developments.

24. Another case involved the Corporación Nacional del Desarrollo in Uruguay. Operating with both public and private sector funding, this corporation had aimed at strengthening the capacity of SMEs and microenterprises to deal with the challenges of globalization, through investments, sectoral policies and the granting of credits. In addition, it had promoted the introduction of new technologies and technological capacities through partnerships at the national level (e.g. favouring

young entrepreneurs as well as women entrepreneurs) and greater international competitiveness. The backing provided by government legislation and the use of private sector funds had proved to be a good basis for the formation of diverse partnerships. Both the Venezuelan and Uruguayan corporations had made important efforts to promote information technologies.

25. The experience of Turkey in inter-firm cooperation was illustrated by the operations of a large Turkish manufacturer of household appliances. In addition to cooperation agreements with major international companies, and know-how and production transfer to other countries (Tunisia and the Republic of Korea), this company had entered into R&D agreements with universities in developed countries with the strategic aim of developing specific technologies.

26. In Italy, small companies looking for markets abroad needed more than firm-level cooperation. For example, good contacts needed to be established with local authorities, thus broadening the "network" of economic actors involved. Inter-firm cooperation between SMEs was often a complex "project" rather than a simple cooperative venture.

27. The experience of Sri Lanka in inter-firm cooperation had helped to emphasize several areas where governments and support agencies could make a difference. These included the provision of adequate information, including the identification of joint venture needs and requirements, support in the negotiating process, and some forms of financial back-up such as guarantees or loans.

28. In the Philippines, small companies in areas ranging from food to textiles that served an informal economy well in difficult times often had problems in adjusting to the requirements of a formal economy, such as maintaining quality standards or increasing the production capacity to meet rising demand. It would thus be useful to explore how inter-firm cooperation could help to improve production standards.

Creating a conducive policy environment; and support structures, measures and programmes for inter-firm cooperation

In discussing the importance of match-making in initiating inter-29. firm cooperation it was pointed out that all facilities and sources of information should be used to this end, including the Internet and various databases. At the same time, it was stressed that a great number of SMEs from the developing world have no access to modern information technologies. It was pointed out that successful experiences of interfirm cooperation obtained through permanent monitoring should be made public and widely disseminated so that all parties interested in such cooperation could draw lessons concerning best practice and would spend less time on the preparation of inter-firm arrangements. The establishment of science parks and technology and business innovation centres in the Czech Republic and other economies in transition created synergic interrelations among enterprises and facilitated the process of innovation and capacity-building. Major actors contributing to the formation of these centres were municipalities, R&D institutions and the enterprise sector. National and international networks of such centres provided

additional opportunities for inter-firm cooperation and particularly for the involvement of SMEs in this process. The expert from the Czech Republic suggested that the experience of different countries with the formation and development of these centres should be examined in more detail.

30. The expert from Egypt presented his country's experience in promoting SMEs and partnerships through the establishment of the Social Development Fund (SDF) in 1991. The main aim of SDF programmes was to generate employment, and already 70,000 small enterprises and 200,000 job opportunities had been created. Inter-firm cooperation helped in achieving this objective. The main mechanisms used to develop inter-firm cooperation included the establishment of intermediary financial agencies and technology and business service centres, building sub-contracting links and clusters of SMEs, and promoting licensing and franchising and technology transfer agreements between large and small firms. The expert from Mexico discussed industrial and foreign trade policies aimed at achieving macroeconomic stability and expanding exports, which were currently being implemented in his country. SMEs and inter-firm cooperation played a pivotal role in achieving these aims. Conducive policies aimed at improving available infrastructure and human capital formation, and more generally at social development. They also aimed at improving backward and forward linkages through bringing together suppliers and users and establishing industrial subcontracting mechanisms and a subcontracting information database. Additional measures related to the establishment of industrial parks and credit support for SMEs' exports. Bodies to coordinate the activities of SMEs, as well as domestic and international business cooperation associations, had been established. The results of these efforts were already apparent in the high growth rate achieved by Mexico in 1997. The expert suggested the use of trade and investment offices, the Internet and UNCTAD's Trade Points for the dissemination of information on partnerships.

The expert from Japan noted that technologies could be transferred 31. through foreign direct investment (FDI), including the provision of marketing and managerial skills and on-the-job training. Technology transfer could also take place through licensing, equipment purchases and domestic R&D activities, as well as through technical assistance schemes financed by official development assistance (ODA). Regarding technology transfer through FDI, two problems were generally observed. First, TNCs were reluctant to give core technologies to local counterparts; and secondly, TNCs had weak linkages with local SMEs in developing countries, and did not purchase domestic parts and components. In both cases, the determining factors for the absorption of imported technology depended on the level of technological and educational development in the host Furthermore, TNCs found sometimes that local supporting country. industries were not able to handle large orders, or not able to meet the delivery schedule on time. Also, TNCs were afraid of "boomerang effects" if they transferred pivotal technologies to developing countries. Drawing on the Japanese experience in technology acquisition, the expert suggested that developing countries' governments could allocate certain resources for technology acquisition, provide fiscal and financial incentives to R&D activities by the private sector, establish public R&D institutions, and control patents. As for fostering efficient development of SMEs in

supporting industries, such as parts industries, local government could also play an important role in providing basic education and vocational training through local universities, local R&D public research centres, SMEs and industry associations, and through networking of those institutions.

32. A number of experts commented on the presentation by the expert from Japan. The expert from Egypt inquired whether new WTO agreements on intellectual property rights and ownership would encourage TNCs to transfer technology. The expert from Sri Lanka proposed that developed countries allocate a share of ODA to technology transfer or technology partnership programmes which would help inter-firm cooperation in developing countries. Also, it was noted that problems with the participation of developing country firms in cooperation schemes, particularly in subcontracting, were country-specific and should not be generalized.

33. One of the resource persons asked whether there were specific stages at which TNCs would transfer technologies. The expert from Japan replied that the critical stage was dependent on individual TNCs' strategies, and also was determined by the demand factors of the targeted market. If there was sufficient demand, TNCs would decide to invest overseas and then transfer relevant technologies. In general, TNCs tried to retain most value-added technologies until the last stage, and this argument was supported by the example of Japanese high-precision televisions or luxury car production in the United States of America.

34. The expert from the Norwegian Agency for Development Cooperation (NORAD) expressed the wish that the outcome of the Expert Meeting reach the most important actor in inter-firm cooperation efforts, namely investors in developed countries. There was an unmet demand among SMEs in the developing countries for partnerships. Partners from the developed countries often had to be attracted by government support. NORAD offered concessional loans to investors, with low interest rates and long pay-back periods, as well as support for setting up the necessary infrastructure in the host country.

35. Experts noted that many aspects had to be taken into consideration when analysing the conditions for the success of a North-South partnership, which went beyond the technological aspect. An entrepreneur from the North would certainly look for good technical skills in a partner from a developing country, but also for access to a share of the local market, which was absolutely essential if the newly established venture was to succeed. In addition, a viable partner should provide direct links with the local administration and local networks of SMEs, and create a sort of consensus around the initiative from the main local socio-economic counterparts.

36. In this context, an important role could be played by intermediary organizations. They could not only provide information on possible partners, but also stimulate flows of knowledge in different situations and at different points in time. Intermediary organizations could prepare diagnoses, pre-feasibility studies and evaluation reports, and also

overcome obstacles, see hidden opportunities, design a set of solutions and implement them.

37. Referring to the role of support programmes in facilitating interfirm cooperation, the representative of Belgium pointed to a number of initiatives undertaken by the European Union in developing countries and economies in transition. These programmes contributed to promoting entrepreneurship, establishing vertical and horizontal linkages in specific sectors and networking among potential partners, as well as to identifying sources of finance. Belgium made efforts to enhance interfirm cooperation, particularly through providing the required information, funding (including venture capital), guarantee systems for SMEs and establishing local support structures.

38. The expert from the United Kingdom pointed out that his Government provided support services to promote inter-firm cooperation because of the failures of the market to provide timely information about new trends in consumer demand and investment requirements, particularly in foreign Although SMEs were making a more significant contribution to markets. wealth creation, employment and trade, market failures affected them more acutely than TNCs. The role of government was to overcome these market failures by bringing together suppliers and consumers. In the United Kingdom domestic and international partnership programmes were being implemented. These programmes involved working with business organizations to identify sectors which could benefit from partnerships, finding companies and diagnosing their partnership readiness by using knowledge from companies with venture capital experience, seeking matching partners in the United Kingdom and bringing potential partners together. The expert added that experience-sharing, cooperation between match-making agencies and the raising of both companies' and governments' awareness of the importance of social development and investment for market creation would promote inter-firm cooperation.

39. The International Trade Centre (ITC) had undertaken a number of match-making activities, such as providing information and designing information systems reporting developing countries' opportunities, as well as capacity-building at the enterprise level. It had developed several tools and activities for this purpose. Among the lessons learned was that support measures had to be sector-specific and enterprises had to be selected carefully. Follow-up support needed to be provided right up until a transaction had been concluded.

40. The representative of the Belarus noted that his Government had taken a number of measures to promote inter-firm cooperation, including the creation of appropriate and permanently evolving legal and institutional structures. Measures should be taken to enhance the coherence in the functioning of these structures, as well as to strengthen linkages between R&D institutions and industry. The lack of information on opportunities for cooperation in other countries and weak marketing capabilities were among the factors impeding the process of inter-firm cooperation. A number of international programmes, including those of the European Union and the World Bank, assisted in better integrating Belarus into the world economy. UNCTAD could also play a role in this process.

41. For over 10 years Finland had supported inter-firm cooperation to promote the competitiveness of SMEs in the area of high technology. This process had been accompanied by a steady increase in public R&D resources. The experience gained was leading to a number of concrete recommendations. Thus, governments should clarify the respective roles of the public and the private sector in promoting inter-firm cooperation. The public sector could assume part of the risk in ventures involving very high risk and novelty. However, companies at both ends should be required to make financial contributions at the beginning of a partnership project and should not rely on subsidies. The existing network of science and industry, as well as attachés and counsellors around the world, could be utilized effectively in promoting the start-up of international cooperation.

42. In speaking about the problems of least developed countries, the representative of Ethiopia stressed that local capital formation in those countries was still at an early stage, enterprises urgently needed technology, knowledge and financial resources, and inter-firm cooperation might be an important tool for providing those resources. The Expert Meeting's policy recommendations should be targeted in this direction and include relevant measures to be taken at national and international levels.

43. An expert from Turkey noted that small and medium-sized enterprises would be the most important economic actor in the twenty-first century. To promote SME development in his country a special national agency had been created whose objective was to enhance the competitiveness of enterprises and facilitate their adaptation to market requirements. This was being done through establishing structures which helped SMEs to foster the process of technological innovation, improve the quality of production and obtain the required information.

44. The expert from Sri Lanka indicated measures that could be taken with the support of the international community. For example, pilot projects - as suggested by the Italian expert - could be used to encourage SMEs to enter into partnerships in developing countries. Risk guarantees could facilitate the readiness of companies to participate in cooperation agreements and technology partnerships (comparable to guarantees used in areas such as export promotion). Trade fairs and exhibitions were also a good means of establishing contacts among firms.

45. The representative of China proposed that the UNCTAD secretariat compile information on relevant associations and organizations engaged in the promotion of contacts between SMEs, intermediaries and match-makers with a view to promoting inter-firm cooperation.

III. ORGANIZATIONAL MATTERS

A. <u>Convening of the Expert Meeting</u>

46. Pursuant to a decision taken by the Commission on Enterprise, Business Facilitation and Development at its second session (1-5 December 1997),^{1/} the Expert Meeting on the Impact of Government Policy and Government/Private Action in Stimulating Inter-Firm Partnerships Regarding Technology, Production and Marketing, with Particular Emphasis on North-South and South-South Linkages in Promoting Technology Transfers (Know-how, Management Expertise) and Trade for SME Development was held at the Palais des Nations, Geneva, from 20 to 22 April 1998. It was opened on 20 April 1998 by Mr. Carlos Fortin, Deputy Secretary-General of UNCTAD.

B. <u>Election of officers</u>

(Agenda item 1)

47. At its opening meeting, the Expert Meeting elected the following officers to serve on its Bureau:

<u>Chairperson</u> :	Mr. Dilip Sinha	(India)
Vice-Chairperson-cum-Rapporteur:	Mr. Paul Frix	(Belgium)

C. Adoption of the agenda

48. At the same meeting, the Expert Meeting adopted the provisional agenda circulated in TD/B/COM.3/EM.4/1. Accordingly, the agenda for the meeting was as follows:

- 1. Election of officers
- 2. Adoption of the agenda
- 3. The impact of government policy and government/private action in stimulating inter-firm partnerships regarding technology, production and marketing, with particular emphasis on North-South and South-South linkages in promoting technology transfers (know-how, management expertise) and trade for SME development
- 4. Adoption of the report

 $[\]frac{1}{}$ See Report of the Commission on Enterprise, Business Facilitation and Development on its second session (TD/B/45/3-TD/B/COM.3/11), annex I, part C, para. 12(I).

D. <u>Documentation</u>

49. For its consideration of the substantive agenda item (item 3) the Expert Meeting had before it a document by the UNCTAD secretariat entitled "Selected policy issues, measures and programmes on inter-firm partnerships" (TD/B/COM.3/EM.4/2).

E. Adoption of the report

50. At its closing meeting, on 22 April 1998, the Expert Meeting authorized the Rapporteur to prepare the final report of the Meeting, under the authority of the Chairperson, to include the recommendations adopted by the Meeting (see section I) and the Chairperson's summary of the experts' informal discussions (see section II).

<u>Annex I</u>

SUMMARY OF INTRODUCTORY STATEMENTS

In opening the Expert Meeting, the **<u>Chairperson</u>** recalled that its 1. mandate was to consider the impact of government policy and government/private action on stimulating inter-firm partnerships regarding technology, production and marketing, with particular emphasis on North-South and South-South linkages in promoting technology transfer (i.e. know-how and management expertise) and trade for SME development. He noted that creative partnerships among firms, involving the blending of capital, technology, marketing and management expertise as well as raw material resources, had become "weapons of choice" in increasing competitiveness and developing new process and product technologies. The world-wide trend towards removal of trade barriers appeared to have opened markets previously accessible only to large companies. SMEs were targeting these new markets and were therefore more likely to enter into partnerships in order to share R&D costs and increase their capabilities. SMEs that were capable of occupying specific "niches" in the international market were seen in a novel way as key strategic actors in the economic Technological development in areas such as information setting. technologies, and the growth of knowledge-intensive production, had enabled - and sometimes forced - SMEs more than ever before to use leading-edge technologies and were compelling economic agents to respond rapidly to changes in the market. However, appropriate policies and support structures, as well as organizational set-ups and modalities ensuring great flexibility, were required with a view to further promoting inter-firm cooperation.

2. The Deputy Secretary-General of UNCTAD noted that to meet the challenge of a highly competitive economic environment, new forms of inter-firm cooperation extending beyond one-way cooperation schemes to more strategic partnership arrangements had been used to facilitate the process of enterprise development through firms' accelerated innovation capacity-building, including entrepreneurial and managerial and capabilities, which helped to strengthen their competitive potential at the global level. The common feature of these new forms of inter-firm cooperation lay in the deliberate cooperative intentions of sharing capabilities with a view to developing new products, technologies and processes, or in producing and marketing new products. The existence of an enabling environment that included incentives, an adequate legal and policy framework, and support mechanisms was of critical importance for inter-firm cooperation, particularly in respect of small and medium-sized firms.

3. Experience showed that part-financing of specific project components, assistance in finding the right partners through a matching process and "trust" building, especially in cross-national cooperation, had proved to be key elements in successful partnerships. The Expert Meeting could enrich the discussion and identify areas where further work on inter-firm cooperation might be needed, for example the identification of "best practices" in this area.

4. The Director of the Division on Investment, Technology and Enterprise Development drew attention to the growing knowledge-intensity of production and its generalization across all economic activities, and to the growing importance of the ability to continuously innovate as a key to sustained competitiveness in a liberalized market environment. This, coupled with the lack of resources for innovation - in micro, small and medium-sized enterprises in developing countries and economies in transition - made firms leverage their capabilities through a variety of partnerships which facilitated the development and commercialization of new products and processes. Inter-firm cooperation could be an effective mechanism for learning, knowledge sharing, technology transfer and upgrading, market access, and the development of technological and innovative capability. But the number of such partnerships involving firms from developing countries was still small. In this context, greater attention needed to be paid to developing and strengthening support structures that contributed to building an awareness of the role of interfirm partnerships in sustaining the competitiveness of enterprises, to enhancing the provision of information relative to inter-firm partnerships, and to strengthening training programmes that developed networking and partnering skills.

Annex II

ATTENDANCE */

1. The following States members of UNCTAD were represented at the session:

Austria Madagascar Belarus Mexico Belgium Norway Brazil Peru Canada Philippines China Poland Colombia Russian Federation Costa Rica Senegal Czech Republic Spain Sri Lanka Egypt El Salvador Swaziland Switzerland Ethiopia Thailand Finland Gabon Tunisia Germany Turkev India United Kingdom of Great Britain Indonesia Iran (Islamic Republic of) and Northern Ireland Italy United States of America Japan Uruguay Jordan Venezuela Kenya Yemen Lebanon

2. The Economic Commission for Europe was represented at the session. The International Trade Centre UNCTAD/WTO was also represented at the session.

3. The following specialized agencies were represented at the session:

International Monetary Fund United Nations Industrial Development Organization

4. The following intergovernmental organizations were represented at the session:

African, Caribbean and Pacific Group of States Agency for Cultural and Technical Co-operation Arab Labour Organization League of Arab States Organization of African Unity

*/ For list of participants, see TD/B/COM.3/EM.4/INF.1.

5. The following non-governmental organization was represented at the session:

<u>General Category</u>

World Federation of United Nations Associations

Resource persons, specially invited

<u>Resource persons</u>

Mr. Ludovico Alcorta, Institute for New Technologies, United Nations University Mr. Ajay Bhardwaj, BIOCON, India Mr. Monty (S.S.) Roy, NORTEL, Canada

Specially invited

Mr. François Ullmann, HEXA Consultants, Geneva
