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Expert Meeting on Improving the Competitiveness of SMEs
through Enhancing Productive Capacity: Financing Technology
Geneva, 28–30 October 2002

REPORT OF THE EXPERT MEETING ON IMPROVING THE COMPETITIVENESS OF SMEs THROUGH ENHANCING PRODUCTIVE CAPACITY: FINANCING TECHNOLOGY

Held at the Palais des Nations, Geneva
from 28 to 30 October 2002

CONTENTS

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Chapter I

CHAIRPERSON'S SUMMARY

1. The Expert Meeting on Improving the Competitiveness of SMEs through Enhancing Productive Capacity: Financing Technology considered national policies and programmes in both the public and private sectors to finance the technology that small and medium-sized enterprises (SMEs) need in order to compete in the global economy. In their discussions the experts identified both policies and best practices for consideration by the Commission on Enterprise, Business Facilitation and Development pursuant to paragraphs 119 and 156 of the Bangkok Plan of Action (TD/386).

2. The Secretary-General of UNCTAD said that the major obstacle to the survival and growth of SMEs was their lack of access to finance. Without finance most SMEs remained in a low-equilibrium trap, never realizing their full potential. This was true despite the fact that SMEs generated most of the gross domestic product (GDP), employed most of the labour force and controlled most of the productive capacity in all countries. Furthermore, enhancing productive capacity in developing countries had taken on a new urgency in the post-Doha period. Trade and investment opportunities would be translated into reality only if SMEs in developing countries were competitive. Technology development was a critical determinant of the ability of developing country enterprises to compete in global markets. Such development required finance in addition to information and an equitable regime for intellectual property rights.

3. A resource person presented an overview of sources of finance for technology-based SMEs. With regard to the private sector, he emphasized the importance of venture capital as a source of risk capital for high-technology enterprises. However, without further incentives such as loan guarantees, private-sector banks would not finance technology-based SMEs because of their high-risk profile. Other private-sector sources were SME-oriented stock markets, leasing and supplier credits. Governments could play a role in financing technology-based SMEs in cases where the private sector would find it difficult to finance them, for reasons such as the duration risk associated with research, development and innovation (RDI) projects. In many cases, government policies had been geared towards large enterprises, and this had hampered the competitiveness of the SME sector.

1. Main challenges and responses for financing technology

4. The experts observed that SMEs were a diverse group in terms of their ability to acquire and master technology and their capacity for continuous innovation. The discussion embraced both the hi-tech enterprises and the low- and medium-tech enterprises, all of which had to acquire and master new technologies. The experts noted that specific problems were best addressed through specific measures that took into account countries' level of development and addressed the particular aspects of the type of SME, its risks and life cycle.

5. A resource person provided a framework that described the various risks that suppliers of finance faced when they dealt with hi-tech SMEs and how they responded to those risks in terms of the type of finance provided.

Problem/risk	Response
Asset risk (absence of collateralized assets)	Collateral substitutes
Entrepreneur risk	Partnerships with business service providers
Technology risk	Venture capital
Duration risk	Guarantees for loans/equity

6. Regarding the life cycle of the SMEs, seed capital from family, friends and founders is required for start-ups; however, hi-tech start-ups may also need government grants, including for RDI. As SMEs approach the break-even stage venture capital and tax incentives are very useful. During growth stages loan capital is needed, and leasing could be an alternative way of financing expansion. Finally, when they are approaching maturity, capital markets, trade sales and initial public offerings have a role to play.

7. The experts discussed several critical challenges that must be overcome if the problem of financing technology for SMEs is to be resolved.

Clear government policy on SME finance

8. With regard to creating a suitable enabling environment to encourage and facilitate the required support to technology-based SMEs in developing economies, the proactive role of central banks and/or the designated financial service regulators assumes critical significance. It is important that the Government and public sector agencies, including the central bank, set out in the initial stages a policy framework for channelling adequate funds to the SME sector. Statistics show that while SMEs generate most of a nation's GDP and employ most of the labour force, they receive only a fraction of the loanable funds. In this regard, the pending Basel II Capital Accord needs to be closely reviewed with respect to the impact of the new risk-weighting system on SME lending. In clearly indicating the right direction to the suppliers of capital, regulators could explore set-aside mechanisms (i.e. quotas and targets) to benefit technology-oriented SMEs. Certainly, increased transparency would influence the lending practices of commercial banks. The central bank could require, for example, disclosure of the composition of bank loan portfolios by different categories of lenders. The experts recognized that a set of special measures needed to be adopted by the Government/central bank, including measures designed to reduce the risks perceived by banks. In order to encourage lending for technology development, including research and

development (R&D) and continuous innovation, venture-type equity support might require government guarantees.

9. The role and impact of non-banking finance companies can be significant in facilitating SMEs' access to finance, such as leasing, hire purchase and equipment finance. In that connection, the relationship of these companies with the central bank/regulatory authority needs to be reviewed. In particular, lending to SMEs may warrant the taking of deposits from the public as a percentage of their net owned funds.

Information gaps

10. There are three important information asymmetries that prevent the suppliers of finance from adequately serving the SME sector. First, it is very difficult for them to control their transaction costs and the risks of dealing with SMEs because the latter do not provide reliable financial information or realistic business plans. Second, suppliers of finance lack information about good business opportunities for investing in/making loans to SMEs. Third, the information gap may lead entrepreneurs to take undue risks and also be reluctant to share control. SME support agencies could assist in addressing these deficiencies by facilitating knowledge networks and networking, and promoting technology due diligence. Support is also needed from professional bodies with regard to accounting and auditing standards, technical standards and certifications, and so on.

Collateral

11. The information gaps, as well as the problem of collateral, are being addressed by a number of new risk management techniques that involve simple credit appraisal approaches. These approaches rely on the capture of real-time data on cash flows and the electronic tracking of critical SME transactions, and give a better indication of SMEs' ability to repay and/or their future profitability. Some suppliers of finance prefer such information to collateral based on fixed assets that were usually both illiquid and uncertain in value. However, the adoption of these techniques could be constrained if banking regulators do not move away from their traditional collateral requirements as the main method for reducing risk.

Making SMEs creditworthy

12. The transaction costs and risks of financing SMEs can be reduced if the latter are strengthened through business development services and through clustering. Technology expertise services and clustering are especially important for successful technology development, and particularly for the adoption and mastery of new technologies. Such services could improve the creditworthiness of SMEs. It would probably be more cost-effective for suppliers of finance to form partnerships with SME support institutions rather than try to provide these services themselves.

Business linkages

13. Many developing countries lack both local market size and comprehensive skills to develop globally competitive goods and services. Governments can support the development of such goods and services through measures that encourage business linkages between foreign investors and/or large enterprises and SMEs. Incentives could be given to expatriates who intend to invest in technology-oriented SMEs or venture capital funds in their home countries.

Venture capital

14. The experts noted the reluctance of banks to service SMEs because of perceived high risks and the associated costs of dealing with SMEs. Some of those risks and costs can be reduced by measures already mentioned. The experts noted that in most developing countries the main suppliers of finance were banks; hence there was a need to develop a venture capital industry in order to supply risk capital. Venture capital could supplement the informal sources of capital used during start-ups and in the early growth stages before the SMEs had a track record. However, the development of a venture capital industry required a stable and predictable business environment and considerable infrastructure, including transparency and reliability of financial information, a supportive legal and regulatory system, exit opportunities thanks to the presence of mature firms and capital markets, trained investment managers and financial support by government, as well as public–private sector partnerships.

Financial and fiscal incentives for loans and equity capital

15. In some instances the Government needs to directly promote the financing of technology by providing financial assistance in the form of grants, particularly in cases where uncertainty and the long lead times discourage the usual suppliers of finance. This is particularly true with regard to high-tech start-ups for R&D. The Government can also encourage suppliers of finance to service the SME sector through a number of fiscal incentives for creditors, investors and the SMEs themselves. These include tax pass-throughs for the suppliers of finance (i.e. lower tax rates for suppliers of finance on income earned from SMEs), low capital gains tax rates and tax-deductible stock options (i.e. "sweat equity").

Government guarantees for loans and equity

16. The experts generally viewed guarantee programmes in a very negative light because many had failed and few were sustainable. Many loan guarantee programmes had poor results because they failed to reach the target audience, usually on account of slow dispersals, the lack of prudential lending resulting in moral hazard problems, and the reluctance of banks to enter such programmes because of previous late payment by the guarantor in cases of default. If guarantees were justified by severe market failures, they should be partial guarantees so that risk was shared between the public and private sectors. The involvement of non-banks in such programmes would strengthen SMEs and provide technical information both to

suppliers of capital and to SMEs themselves. While some equity guarantee programmes had done well, it was important that such programmes also involve the sharing of risk with the private sector.

Consistency between international requirements and national measures for financing technology

17. The experts also considered whether national measures for financing technology were compatible with various World Trade Organization (WTO) agreements, particularly those on subsidies. A WTO expert noted that since the category of non-actionable subsidies had lapsed, all the measures under discussion were probably not "legally secure" and could be subject to procedural harassment. One expert felt that "legal security" for financing science and technology and R&D should be considered only for developing countries, not developed ones, as these already greatly benefited from government- sponsored national innovation systems that were difficult to replicate in developing countries and arguably not compatible with WTO principles and rules.

Doha Ministerial Declaration

18. The experts took note of the Doha Ministerial Declaration, especially paragraph 37 relating to trade and transfer of technology, and agreed that easy access to technology was essential for developing countries, mostly through market-driven measures, but with public support in the event of market failures or severe human distress. One expert suggested that the provisions of WTO agreements relating to transfer of technology be amended or strengthened to bridge the wide gap between the “knows” and “know-nots”. In this regard, he requested UNCTAD to continue to interact with the Working Group on Trade and Transfer of Technology so that the provisions of WTO agreements that impeded the financing and transfer of technology could be amended according to the needs of the developing countries.

Future action

19. The experts considered various follow-up actions, including:

- Formulating national action plans, including a gender perspective, to improve SME access to technology financing;
- Requesting UNCTAD to create a network/roster of experts who could advise on this issue, so that UNCTAD could better respond to individual country requests;
- Formulating a technical assistance project that would develop an assessment tool for evaluating a country’s ability to finance technology for SMEs and elaborate an action plan to remedy any weaknesses identified; this could include programmes and financing to help SMEs acquire new technologies;
- Widening the dialogue between international organizations regarding a consistent interpretation of international agreements as they apply to technology-financing issues;

- Exploring concrete ways to implement the Monterrey Consensus concerning public–private sector partnerships in the fields of R&D, information technology and infrastructure, and facilitation of enterprise partnerships;
- Recommending that the Commission on Enterprise, Business Facilitation and Development hold an expert meeting on technology creation, transfer and diffusion and their relationship to the WTO negotiations, agreements and possible future specific disciplines, including specific measures for SME financing for technology.

2. Banks, leasing and other debt-based sources of technology financing

20. The resource persons gave a number of examples of commercial banks that were modifying their credit appraisal systems so that they could better reach the SME sector. For example, Turkey's Koçbank has made organizational changes to deal with the SME market using a needs-based and client-centred approach. Technological products and services developed by the bank for SMEs include ÇEKKART® and KOBILINE. ÇEKKART® is a closed-end, card-based direct debit system for SMEs that are sub-contractees. It provides: (a) credit lines to SMEs at a reasonable price; (b) additional financial incentives from sub-contractors (i.e. large enterprises); and (c) cost reduction through elimination of commissions and fees. KOBILINE is the first business portal in Turkey. It is a one-stop shop that offers a variety of services to SMEs, such as product catalogues, payment infrastructure, reporting tools, logistical support, complete Web solutions, Internet access, e-mail address and distance learning. There are currently about 23,000 enterprises and entrepreneurs registered for KOBILINE.

21. SMEloan Hong Kong has introduced new solutions to lending to SMEs by accepting the notion that SMEs are "not strong" and cannot provide sophisticated financial information. More important, the traditional information sought, such as financial statements, cash flow projections and business plans, is too static and outdated to be relevant for judging SME business risk. Reliable information that can easily be obtained from SMEs includes: (a) who their customers are; (b) how much they sell to their customers; and (c) how much customers are going to pay. SMEloan uses the Internet to obtain such information from SME borrowers on a real-time basis in order to create a dynamic risk- management and loan-servicing model for SME lending. Loans are extended against the cash flow and business performance, and are secured by accounts receivable. The SMEloan model focuses on quantitative data to achieve consistent credit evaluations by analysing the triangular relationship between cash flows, sales and accounts receivable. The model also reduces loan-servicing costs through leveraging the Internet to obtain information from loan applicants on a real-time basis over the Internet. Scalability and consistency in credit evaluation allow SMEloan to focus only on those borrowers that are displaying irregularities and to move to resolve problem situations before other creditors detect them.

22. The financial interventions of ICICI Bank (India) for technology focus on the cluster and system level. They include cluster financing, business-to-business (B2B) models and

Internet payments in closed-user groups. In particular, the bank's initiatives in SME lending include an SME portal, supply chain financing on B2B loops, smart-card solutions and a subsidiary network role in technology financing. Leveraging technology to enhance delivery capability, the bank also provides its services through Internet kiosks to rural areas.

23. Intermediate Technology Consultants Ltd. (ITC) provides support in technology innovation to small African enterprises where there is either a public good (i.e. environmental improvement) or market failure (e.g. a weak market). It assists SMEs via co-funding, research contracts and public–private sector dialogue. Examples of technology innovation include solar lanterns and micro-irrigation. Leveraging local funds, ITC acts as an intermediary and cuts the average price of equipment, encourages transfer of know-how and reduces constraints facing SMEs.

24. DFCU Leasing Co. Ltd. (DFCU) of Uganda provides equipment leases to SMEs. These leases cover all sectors and types for two to five years. DFCU's contracting procedures are simple and its leasing contracts are structured to suit the lessee's cash flow. Leasing serves as a self-financing instrument for SMEs, as long as the equipment remains productive. DFCU assists its customers not only by providing trade and advisory services, but also by exploiting linkages in supply chains with large enterprises whereby the latter secure business prospects for SMEs and transfer skills as "big brothers".

25. Despite these innovative mechanisms in SME lending, there is still a general tendency among banks to shy away from providing loans to SMEs, as is evident from the statistics. To convince bankers to engage in lending to SMEs, it is necessary to show them that there are profits to be made from the SME sector. Such a realization relies on better risk management techniques and more efficient delivery mechanisms, for example those employed by SMEloan and Koçbank.

26. From the experts' perspective, future policy measures needed in order to encourage SME lending include: (a) removal of interest rate caps; (b) tax incentives (i.e. lower rates of tax on banks' SME income); (c) a legal system that allows financial institutions to obtain and enforce security; and (d) partial loan guarantee programmes in which the Government and banks share the risk in SME lending.

3. Equity and venture capital

27. The resource persons discussed the role of equity financing, and especially venture capital, in financing technology-based SMEs. Venture capital had played an important role in financing high-technology start-ups in some countries, but the conditions for setting up a viable venture capital industry were very stringent. Nevertheless, there were examples from developing countries where significant progress had been made in promoting venture capital as a source of finance for SMEs.

28. A resource person presented the role of equity in financing technology. The three stages of equity finance were seed and early-stage finance, development financing and

expansion financing. Financing was also available for later-stage ventures with multimillion dollar requirements. The most difficult was equity financing in the intermediate stages. This was known as the "capital chasm". Only a few of the companies in this stage could secure venture capital or grow from their own funds. Government funds and public–private sector incentives were needed to support such companies.

29. The requirements for equity investment in these companies were attractive investment opportunities, sound management, a plan and potential for high growth, a potential for investment return, a realistic potential for ultimate liquidity, a supportive legal and regulatory framework, trained and experienced investment managers, and investors with appropriate risk/return objectives.

30. The critical infrastructure for venture investing included transparency and reliability of information, a supportive legal and regulatory system, trained investment managers and financial support by the Government. The special problems for venture capital investors in emerging countries were risks associated with the unfamiliar, questions of transparency, legal and regulatory uncertainty, fluctuating currency rates and lack of convertibility, difficulty in exiting from investments, language problems, and the cost and distance involved in monitoring.

31. The Small Business Investment Company (SBIC) programme had promoted major growth in venture capital in the United States. Over a period of 40 years $30.5 billion had been invested in 90,000 companies. It had been especially important in providing opportunities for new venture capital managers. SBIC had been involved in half of all investments by venture capital companies in 2001 (3,900 investments totalling $4.7 billion). Other successful government-sponsored programmes were found in Australia and Israel.

32. One method of overcoming the information gap between SMEs and venture capitalists was to use business introduction services that acted as intermediaries between investors and entrepreneurs, allowing a reorganization of the market for risk capital with concomitant benefits for investors and entrepreneurs. These services could reduce the high transaction costs which were faced by investors primarily because it was costly for them to determine the extent of their risks before investing.

33. There was a lack of formalized mechanisms for bringing together informal investors and entrepreneurs in South Africa. This was because the economy was dominated by large businesses and because the SME sector was generally regarded as underdeveloped. Studies suggested that business introduction services could reduce transaction costs for investors if they helped entrepreneurs to prepare good business plans, cut bargaining costs for investors and entrepreneurs by addressing cognitive biases, and develop business skills. Feedback indicated that investors expected that a secondary market for equity stakes in unlisted companies would develop through business introduction services.

34. India was ranked the third most active venture capital market in Asia. Its venture capital industry had gone through three stages. In the first stage (1985–1995) development

financial institutions had set up venture capital funds. Guidelines had been issued and support had been received from multilateral agencies. In the second stage (1995–1999) further tax incentives had been put in place and the number of foreign investors had increased. There had been initial success in the software industry. An expert committee had been set up in 1999, and further regulatory changes and incentives had been introduced, such as tax pass-throughs.

35. The venture capital industry in India had passed the learning phase. Venture capital funds had invested $908 million in 101 companies in 2001. There was greater awareness of the issues among entrepreneurs, intermediaries and the Government. Linkages with R&D laboratories were increasing. The environment for creating new start-ups had become easier and quality professionals were increasingly becoming entrepreneurs. Cross-border ties were increasing, and mergers and acquisitions were emerging as exit options.

36. There were, however, a number of constraints, such as a preference for large investments and later-stage investment; lack of exit opportunities, especially for SMEs; lack of skilled fund managers; and an absence of funds from banks, insurance companies, pension funds and private sources.

37. The resource person observed that a great deal of "handholding" was still needed because of weaknesses in organization, marketing, information and financial systems. The small equity base created structuring and exit problems. There was a reluctance to part with equity and many SMEs faced a liquidity crunch owing to short time horizons. For successful firms, a time horizon of at least five to seven years was required in order to make a successful exit.

38. The experts found the following elements to be critical for establishing a successful venture capital industry in other countries: the Government should have a definite policy framework; it should choose between an intervention and a non-intervention approach; and a regulatory framework with guidelines and a regulator was needed. Issues such as tax incentives and exit routes also needed to be addressed. Furthermore, foreign investors should be encouraged. Tax incentives should be given to individuals, corporate entities, insurance companies and the like for making investments in venture capital funds. Banks should provide the working capital, and synergies with R&D should be strengthened.

39. Since most developing countries did not have capital markets, this source of finance was usually not an option for their SMEs. However, a number of developed countries have established special capital markets for either technology-based enterprises or small enterprises. For example, the Deutsche Börse had capital markets for start-ups and SMEs. The Neuer Markt was mainly for high-technology and high-growth companies, and the SMAX focused on SMEs in general. The main challenges for SMEs that were considering a listing on a stock exchange were the high costs of periodic reporting, attracting the attention of institutional investors and retaining the attention/trust of investors. Although the criteria for listing on an SME stock market were less stringent than those for listing on a regular stock market, the costs of additional requirements and the fees involved were substantial.

40. In the discussions that followed the presentations, the impact of the International Monetary Fund's structural adjustment programmes in reducing the national policy space of Governments for supporting venture capital was emphasized. In addition, one participant pointed out the difficulties caused by exchange rate devaluation for developing countries wishing to attract foreign investment. There was also a need to develop a tool kit or road map that developing countries could use when promoting the formation of venture capital. The tool kit should be tailored to national conditions.

4. Government intervention

41. In many developed and developing countries institutional rigidities have resulted in market failures. In particular, the risks posed by the development and diffusion of new technologies with great uncertainties and long lead times require long-term capital that the traditional suppliers of capital are not willing to provide. In such a situation the justification for government intervention is particularly strong.

42. The Malaysian Government provides both financial and non-financial support for financing technology for SMEs. It considers that these incentives are crucial for developing SMEs and preparing them to be technologically capable and globally competitive. Financial assistance consists of grants, conventional financing (loans) and venture capital funding. Fiscal incentives are given in the form of various tax allowances. Non-financial assistance consists of physical infrastructure. Grants are for the commercialization of R&D and for the take-up of new technologies such as information technology (IT), including e-business. The Government provides seed, start-up and early-stage equity financing for SMEs in bio-tech/life sciences, electronics, IT, semiconductors, networking/telecommunications and medical products. Its fiscal incentives include tax allowances for R&D and hi-tech projects. In terms of physical infrastructure the Government has provided technology parks, incubation centres and SME industrial sites.

43. Enterprise Ireland's mission is to accelerate Ireland's national and regional development by working with Irish companies so that they can develop and compete in world markets. In this regard, its policies focus on delivering new technology, encouraging new firms and commercializing research ideas. It has a client network of 3,500 firms. It provides them with grants, loans, venture capital vehicles, knowledge networks and technology advisers. The level of investment per worker is a rough indication of the level of technology, and Irish-owned companies lag considerably behind foreign-owned companies in Ireland, particularly in the mid-size range (over 50 employees). Government policy encourages not only foreign investment but also the parallel development of local industries, including specific programmes for SMEs. Enterprise Ireland has been particularly interested in promoting venture capital. There are 15 fully operational funds that have over 212 investments in 123 companies. Most of the investments are in start-up and early-stage companies, and 60 per cent are in software projects. In a recent survey 95 per cent of the firms receiving assistance from the venture capital fund said that they would not have existed without the fund. The representative of Enterprise Ireland expressed his concern that the

optimal development programmes for embedding technology in SMEs placed increasing emphasis on the acquisition and dissemination of knowledge, and said that they reflected the substantial advantages to societies of accelerating technology acquisition. This was, unfortunately, an expensive business, which would further disadvantage developing countries unless specific programmes were introduced by the international community to help them with the process.

44. The French Secretariat for SMEs has been working on creating a system for informational intermediation to improve the information provided by SMEs to the suppliers of finance. This requires both a common culture of information and SMEs that are better informed, better trained and better able to present their information to suppliers of finance. To promote the transparency of small businesses and thereby improve their positioning and their chances of survival, it is creating a new rating system. The traditional analysis of a firm's risk of default will be supplemented by an evaluation of its capacity to survive in the future. Such a rating system would be useful to SMEs for creditors, investors and the SMEs themselves.

45. The Austrian Bürges Förderungsbank (BF) was created in 1954 to support SMEs through grants and guarantees. It processes about 6,000 applications annually and issued 1,200 new guarantees in 2001. In Austria most SMEs depend on loans for 90 per cent of their capital requirements and on equity for 10 per cent. Since SMEs need equity throughout their life cycle, BF has introduced equity capital guarantees to try to achieve a better balance. Banks carry out pre-processing for the loan guarantees, and there is risk sharing between the banks and BF since the guarantee is a partial one (80 per cent). This enables the banks to charge SMEs a lower interest rate than they otherwise would. Currently, there is a 1.2 per cent default rate. SMEs pay a fee for the guarantee, which varies according to risk and importance to economic development.

46. Small-scale industries in India are benefiting from a renewal of the country's policies. The national modernization plan includes a technology development and modernization fund, technology exchanges, R&D support, SME linkages, standards testing and patent protection. It offers a capital subsidy of 12 per cent for investment in technology as well as a one-time grant to small firms obtaining ISO 9000 certifications and a one-time capital grant to industry associations operating testing laboratories. It is setting up incubation centres in sunrise industries. Regarding the replicability of the Indian experiences in other developing countries, the Indian resource person stressed that the Government and the central bank must set out the national objectives in terms of financing SME technology. Central bank policy should encourage banks to service the SME sector. It was also necessary to set up special funds, encourage venture capital from overseas and introduce mutual credit guarantee schemes.

5. Compatibility of government measures with international obligations

47. In introducing this topic, the Ambassador of India to the World Trade Organization drew attention to the importance of technology for developing countries, and noted that finance was necessary in order to support its introduction. He further noted that trade in

goods and services was being modernized and globalized by technology, particularly IT. The developing countries' ability to trade was therefore directly related to their ability to acquire and master technology. This ability was dependent on both the resolution of intellectual property rights and the enterprise's access to finance.

48. An expert addressed developing country perspectives and concerns about technology transfer. He spoke of the marginal role played by developing countries in technological alliances and suggested that technological needs differed in relation to the level of development; consequently, transfers must be a function of national demand or need. In his opinion, foreign direct investment, which was a channel for technology, was subject to some limitations. He noted that all provisions in the WTO agreements (including the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), the General Agreement on Trade in Services (GATS), the Agreement on Technical Barriers to Trade (TBT), the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) and the Agreement on Subsidies and Countervailing Measures (ASCM)) that mentioned the transfer of technology were "best endeavour" clauses, which had had no practical applications so far. The tasks of the Working Group on Trade and Transfer of Technology included needs assessment, identification of problems and constraints, examination of the WTO agreements in relation to those constraints, assessing developed countries' implementation of WTO provisions, and studying the design of financial instruments that developed countries could use in their own territories, which would encourage technology transfer. He recommended that export subsidies be eased for least developed countries (LDCs), that technology subsidies be reclassified as "non-actionable" and that the use of international standards be examined, as well the options for lower licensing costs for LDCs, based on their ability to pay.

49. A representative of the WTO indicated that there were no specific WTO rules with regard to financing technology. He outlined some of the fundamentals of the WTO's ASCM. Four criteria were used to determine the existence of a subsidy that was designed as a financial contribution. To meet those criteria, the contribution had *inter alia* to be a contribution from a government (or public) body; it should confer a benefit; and it should be specific (i.e. for "certain enterprises", "certain industries", "certain regions"). Articles 8 and 9 of the ASCM introduced a "traffic light" mechanism, whereby prohibited subsidies (for export or import substitution or contingent on local content) were "red light"; "yellow light" subsidies were actionable (potentially liable to be the subject of WTO dispute procedures); and "green light" subsidies were "non-actionable". It was noted that the ASCM's section on non-actionable subsidies had lapsed. This was the result of a decision taken by the developing countries, because they thought that developed countries would use them as a "safe harbour". It was pointed out that proposals to reintroduce this category had been presented in the current negotiations. Provisions in WTO agreements that allowed extra time or leverage to developing countries by virtue of their status constituted what was known as special and differential treatment. In the ASCM, this was manifested in the extension of the application deadline for most LDCs to 1 January 2003; LDCs below a certain income level were exempted from application of the ASCM for an unspecified period of time. Other developing country Members were to have applied all provisions of the ASCM as from 1 January 2000.

50. Another WTO representative addressed the standard economic theory on subsidies. Economic theory was generally negative as regards subsidies, but she noted that in certain circumstances there were situations where subsidies were advisable, namely when market imperfections existed by virtue of externalities. She detailed a few side effects of export subsidies, which included trade distortions and welfare losses to both local producers and consumers, as well as the creation of a de facto tax on other, non-subsidized sectors.

51. An expert noted that compliance with WTO rules was an important aspect of a coherent national trade policy framework. However, developing countries were allowed some exemptions from the rules in the Agriculture Agreement. For example, Article 6.2 allowed domestic support measures for low-income and resource-poor producers. Article 6.4 allowed developing countries to use domestic support measures for products that were within the *de minimis* limit of 10 per cent of the value of annual production of the product concerned. Annex II of the agreement contained “green box” programmes for development that were inherently non-actionable, such as government service programmes and regional programmes. He noted that developing countries could also provide support measures to help SMEs meet the requirements of other WTO agreements, such as the SPS and the TBT agreements.

52. The director of the World Trade Institute noted the inherent contradiction in paragraph 28 of the Doha Declaration, which called for "preserving the basic concepts" of the ASCM, while "taking into account the needs of developing and least developing country participants". He pointed out that with the removal of the non-actionable subsidies clause (due to the fact that Articles 8 and 9 of the ASCM had lapsed) member countries that subsidized technology and R&D were subject to complaints in the case of trade-distortive effects. This created an environment that lacked legal security, as Governments could be subject to procedural harassment, which could have a detrimental effect on public assistance. He noted that part of the reason why Articles 8 and 9 of the ASCM had been allowed to lapse was that developing countries perceived that these provisions would be used as a "safe harbour" by industrialized nations to continue their subsidization practices. He pointed out that the way forward for technology financing for SMEs in developing countries, in WTO terms, was to ensure that provision was made in future negotiating texts for their support. Provisions could be introduced into such texts that addressed women entrepreneurs, biotechnology and sustainable development. Their inclusion could be a way of "localizing", and thus rendering more human, this otherwise global legal instrument. Other areas that needed discussion were developing countries’ production and processing methods (PPMs) that were subject to disputes (e.g. the shrimp/turtle case). More leeway was needed on PPMs for developing countries.

53. An expert referred to the need for greater flexibility in WTO rules and disciplines, particularly as they applied to developing countries, so that they did not hamper national policies supporting greater integration of SMEs into the global economy. As the latter became more technology-intensive, growth and prosperity depended on (a) information and communication technology infrastructure for enhancing efficiencies in social and economic activities in general, and (b) innovation. He said that developed countries had the resources to

promote economic growth and innovation through publicly funded and State-supported national innovation systems, which were still largely outside the WTO's purview. Developing countries, for their part, should aim at achieving a more favourable balance of rights and obligations in future WTO negotiations than was achieved during the Uruguay Round. He proposed that certain issues be addressed by developing countries in the current round of trade negotiations, specifically:

- A revision of WTO rules regarding intellectual property rights, so as to make them less restrictive of developing countries' access to technology and know-how;
- An examination of heavily subsidized government-sponsored national innovation systems;
- Negotiation of WTO rules that help developing countries support and implement national innovation systems;
- The Internet as a tool for trade promotion and development.

54. The expert noted that many countries had adopted SME programmes, with varying degrees of success; however, much more could be achieved with innovative financing schemes. Developing countries must ensure that WTO rules did not further limit their freedom regarding government policies and measures in support of SMEs.

Chapter II

ORGANIZATIONAL MATTERS

A. Convening of the Expert Meeting

55. The Expert Meeting on Improving the Competitiveness of SMEs through Enhancing Productive Capacity: Financing Technology was held at the Palais des Nations, Geneva, from 28 to 30 October 2002.

B. Election of officers

(Agenda item 1)

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

Chairperson: Mr. Guilherme de Aguilar Patriota (Brazil)
Vice-Chairperson-cum-Rapporteur: Mr. Fionan O Muircheartaigh (Ireland)

C. Adoption of the agenda

(Agenda item 2)

57. At the same meeting, the Expert Meeting adopted the provisional agenda circulated in document TD/B/COM.3/EM.16/1. The agenda for the Meeting was thus as follows:

1. Election of officers
2. Adoption of the agenda and organization of work
3. Improving the competitiveness of SMEs through enhancing productive capacity: financing technology
4. Adoption of the outcome of the Expert Meeting

D. Documentation

58. For its consideration of the substantive agenda item, the Expert Meeting had before it an issues note by the UNCTAD secretariat entitled “Financing technology for SMEs” (TD/B/COM.3/EM.16/2).

E. Adoption of the outcome of the Expert Meeting

(Agenda item 4)

59. At its closing meeting, the Expert Meeting authorized the Rapporteur to prepare the final report of the Meeting under the authority of the Chairperson.

Annex

ATTENDANCE *

1. Experts from the following States members of UNCTAD attended the Meeting:

Angola
Argentina
Azerbaijan
Benin
Belarus
Bhutan
Brazil
Brunei Darussalam
Burkina Faso
Colombia
Congo
Cuba
Democratic Republic of the Congo
Djibouti
Dominican Republic
Ecuador
Egypt
El Salvador
Equatorial Guinea
Ethiopia
France
Georgia
Germany
Hungary
India
Indonesia
Iran (Islamic Republic of)
Ireland
Italy
Latvia
Lao People's Democratic Republic
Lithuania
Madagascar
Malawi
Mali
Mauritius
Mexico
Morocco
Nepal
Nicaragua
Niger
Nigeria
Norway
Oman
Pakistan
Panama
Peru
Philippines
Qatar
Saudi Arabia
Syrian Arab Republic
Sri Lanka
Switzerland
Thailand
Togo
Turkey
Uganda
Venezuela
Viet Nam
Yugoslavia
Zimbabwe

* For the list of participants, see TD/B/COM.3/EM.16/INF.1.

2. The following intergovernmental organizations were represented at the Meeting:

Organisation for Economic Co-operation and Development
League of Arab States

3. The following specialized agencies and related organization were represented at the Meeting:

International Labour Organization
International Trade Centre UNCTAD/WTO
United Nations Industrial Development Organization
World Intellectual Property Organization
World Trade Organization

4. The following United Nations agencies were represented at the Meeting:

Economic Commission for Europe
Office of the High Commissioner for Human Rights

5. The following non-governmental organizations were represented at the Meeting:

Special Category

International Confederation of Free Trade Unions
International Federation of University Women
South Centre

6. The following institution attended the Meeting:

World Association for Small and Medium Enterprises

7. The following panellists attended the Meeting:

Mrs. Brigitta Bildstein, Senior Expert, Bürges Small Business Guarantee Bank, Austria
Mr. Achim Brosch, Deutsche Börse AG, Germany
Mr. K.M. Chandrasekhar, Ambassador of India to the World Trade Organization
Prof. Thomas Cottier, Director, World Trade Institute, Switzerland
Mr. Victor do Prado, Counsellor, Rules Division, WTO
Prof. Rafiq Dossani, Stanford University/University of California, Berkeley Roundtable on the International Economy (BRIE), United States
Mr. Ray Holland, Managing Director, Intermediate Technology Consultants (ITC) Ltd., United Kingdom

Mr. Ibrahim Kanburoglu, Vice President, Corporate Banking and Project Management, Kocbank A.S., Turkey

Mr. Juma Kisaame, General Manager, DFCU Leasing Company, Uganda

Mr. Frank Lee, Principal Administrator, OECD

Dr. Sailendra Narain, Chairman, Centre for SME Growth and Development Finance, India

Mr. Bernard Paranque, Ministère de l'Economie, des Finances et de l'Industrie (MINEFI), France

Ms. Roberta Piermartini, Economic Affairs Officer, Development and Economic Research, WTO

Mr. P.H. Ravikumar, Senior General Manager, ICICI Bank, India

Mr. Ming W. Siu, Chairman, SMEloan Hong Kong Ltd., Hong Kong (China)

Ms. Rosetta Steeneveldt, Norwegian University of Science and Technology

Mr. Robert Stillman, President, Milbridge Capital Management, United States

Mr. Rajan Sudesh Ratna, Joint Director, Ministry of Commerce and Industry, India

Mr. Greg Young, Department of Agriculture, United States

Mr. Md. Noor Yusoff, Group Managing Director, Bank Industri & Teknologi, Malaysia

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