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ANALYSIS OF EXPERIENCES IN SELECTED SERVICES SECTORS

Note by the UNCTAD secretariat

Executive summary

The ability of developing countries to increase their participation in world trade in services is essential to their deriving benefits from globalization. Service exports provide developing countries with an opportunity to channel acquired skills into high-value export earnings. For poorer developing countries, exports of services can be particularly crucial in diversifying away from dependence on one or two primary commodities. However, the service most relied upon in such strategies, tourism, can bring additional vulnerabilities, and accordingly, a coherent service development strategy should aim at a continuous upgrading into more technologically advanced and specialized services. This requires giving the highest priority to development of competitive services sectors, particularly infrastructural services. Attracting investment to the services sectors and acquiring technologies so as to strengthen the positions of services producers in developing countries are both a key to success. Strategies must address fiscal and other institutional disincentives to services exports. Inevitably, developing country firms find themselves handicapped by lack of financing and technology, but the judicious channelling of skills and effective use of labour cost advantages can lead to an ability to penetrate world markets. Developing countries have difficulties in identifying barriers to their potential service exports. Most of the information provided to developed countries on barriers originates with TNCs that deal with the regulations of a large number of countries. Efforts should be made to assist developing countries to identify these barriers. Developing countries' potential to export services, particularly labour-intensive services through information networks, has been facilitated by the growth of the Internet; however, there are formidable technological and financial problems to be overcome, and a whole new “generation” of regulatory and competition issues to deal with, some of which may have to be addressed in GATS.

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I. EXPANSION OF TRADE IN SPECIFIC SERVICES SECTORS

A. Introduction

1. At its third session, the Commission decided to include on its agenda the "analysis of certain service sectors, including analysis of successful experiences in those sectors, particularly those which enhance the export capacity of developing countries (such as professional and business services and access to transport services), including the development implications of electronic commerce".

2. This background note has been prepared as a contribution to discussion on this item. Chapter I examines successful experiences in service strategies, both in strengthening the domestic services sector and in increasing exports of services. Chapter II identifies barriers faced by developing countries in expanding their participation in the world market for services, which can frustrate these strategies. Chapter III examines how the growth of electronic commerce has provided new challenges and opportunities for developing countries in designing such strategies and penetrating world markets for trade in services, along with the new negotiating issues that it entails.

B. Identification of comparative advantage and competitive strategies

3. Globalization, privatization and improved information technologies are expanding the global markets for services and providing increased business opportunities for suppliers from developing countries. However, these opportunities will be realized only if the following key elements are present: (i) if Governments give the highest priority to services sectors with export potential, improve the service infrastructure and undertake human and institutional capacity-building and regulatory reform; (ii) if private sector firms have sufficient capacity to produce the critical mass of services necessary for exports; (iii) if the services are cost-competitive; (iv) if the services produced are of an acceptable international quality level; (v) if the service firms are given sufficient support and incentives to develop market linkages; and (vi) if firms have access to target markets. As Article IV of the General Agreement on Trade in Services (GATS) clearly recognizes, access to technology is essential to building export supply capacities in services sectors in developing countries, which must cope with the problems presented by capital scarcity and overall supply-side constraints. These factors have presented formidable problems to many developing countries, but some developing countries have nonetheless achieved considerable success in exporting technical services where availability of highly trained professionals was the key to their success. Availability of infrastructure services, including financial, transport and high technology-based communication services, may lead to export capacity-building in other sectors, including through the attraction of private investment.

4. In many countries the first problem to be addressed in drawing up services strategies was to correct regulatory and fiscal disincentives that penalized the export of services in relation to goods. As services had traditionally not been viewed as an export sector, mechanisms used to promote exports of goods were not available to service producers. Service producers suffer from high levels of tariff protection on imports of the capital goods and other inputs required to produce the service efficiently. Service exporters often lack access to export credits and are unable to obtain the rebate of indirect taxes on exports permitted to goods exporters. By contrast, some

countries such as Colombia have introduced policies to enable service exporters, in sectors such as tourism, medical services and land transport, to benefit from duty drawback on imported goods used to produce the exportable services.

5. The development of an export capacity in the services sector has been central to some developing countries' efforts to diversify exports so as to escape from excessive dependence on the exports of primary commodities. The example of Mauritius is noteworthy. The initial strategy of the 1980s involved the development of the tourism sector, with the resources for investment coming from windfall profits arising from high world sugar prices at that time. However, Mauritius has maintained its policy of diversification into the services sector, with the development of a free port area as a hub-port for servicing southern and eastern Africa. Regional development and economic cooperation arrangements were entered into as an institutional precondition for expanding services into these countries. Capital was raised through government equity investment and loans, including assistance from multilateral financial institutions. International competitive bidding was invited and as a result, consultancy services were supplied by the foreign firm (imported) for the development and implementation of the project, since know-how was not available locally. The port services are rendering sizeable revenues at present.

C. Country examples

1. Offshore activities

6. Mauritius' policy of diversification led to the development of offshore activities. A regulatory, legislative and fiscal environment was established fully to support the development of the offshore sector, particularly in the areas of investment funds, investment holding and international trading. Provisions were made for investor protection, thus ensuring that the necessary safeguards are in place to maintain the country's reputation as a credible and safe jurisdiction. Legislation has been regularly revised to keep pace with developments in other offshore jurisdictions and to provide more efficient investment vehicles to investors. The Mauritius Offshore Business Activities Authority (MOBAA) was established as a regulatory, licensing and supervisory body for all non-banking offshore business activities. Offshore banks remained under the supervision of the Central Bank but were exempt from reserve and prudential requirements, although subject to 15 per cent profit tax. The total number of approved offshore entities reached 8,150 in 1998, with gross revenue of $ 77 million in 1997. The total direct and indirect benefits of the offshore sector has been estimated at 2.5 per cent of GDP. Total employment in the offshore sector was small (0.15 per cent of the workforce), but characterized by high value-added and earnings potential.

7. A double taxation agreement with India, which coincided with the liberalization of the Indian economy and launching of the offshore business in Mauritius, provided an extraordinary opportunity for channelling investment into India and contributed to the success of the offshore business in Mauritius. Mauritius, being a tax-planning jurisdiction, has focused the development of its offshore centre on the use of its growing network of double taxation agreements, which has reinforced the seriousness with which the country is viewed as a tax-efficient offshore jurisdiction for structuring investment abroad. The various tax treaty benefits have appealed to investors aiming to minimize their costs when repatriating income from their investment in the treaty country in which they invested. An estimated $ 6 billion worth of funds has been invested in India through Mauritius, thus representing 32 per cent of India's total foreign direct investment (FDI) inflows and foreign portfolio investments.

8. Mauritius' policy is to focus the second phase of development of the offshore sector on using acquired experience to expand services into Africa and Asia and also to build capacities in other services sectors. Among the new business activities, MOBAA is encouraging the development of the captive insurance business and of an aircraft registry and financing centre for mortgaging and leasing of aircraft and its spare parts. A crucial factor in the success of these policies has been the fact that Mauritius has sustained an excellent international "image", particularly through export of tourism services. The country's geographical location, its membership in regional blocs and its achievements as a reputable offshore jurisdiction have also been important ingredients for success.

2. Port services

9. Sri Lanka has successfully exploited its natural advantage in developing port services as a leading hub-port for container traffic in the South Asian region. Its specialization as a purpose-built container terminal was supported by internal capacity-building, leading to productivity gains and growing export earnings. Over the period 1979-1997, container throughput grew nearly hundredfold, the country's global ranking reached 31 in 1993, and demand surpassed the capacity of container handling at the Port of Colombo. To reinforce its position vis-à-vis competition in response to market demand, further expansion and modernization of ports has been envisaged, and the financing of this expansion has been provided by direct budgetary inputs, supplemented by private investment by the awarding, through open international bidding, of "build-operate-transfer" and "build-operate-own" contracts. Ancillary port services, including ship repair, were also opened up for privatization. On the institutional side, to promote fair competition among private and public service providers, an independent Port Regulatory Authority was established. Upgrading of human resources was seen as an important part of improving efficiency and productivity of the port operations, and international cooperation was sought to train key persons in use of modern technology and information and computer systems. As a result, the transportation sector has been playing an increasingly important role in Sri Lanka, with net surplus generated by the airline, shipping and port services increasing at an annual rate of 13 per cent in recent years.

3. Engineering consultancy services

10. India has created capacity in specialized engineering consultancy services, which has become an important export sector; the total export earnings of two professional associations in 1997-1998 reached $ 330 million. Exports of engineering consultancy services were first channelled to Africa and Asia, later to the Middle East, and more recently to other markets. In response to growing environmental concerns, most Indian engineering service enterprises became involved in some form of environmental and energy consultancy. Although domestic sales are at the centre of their business interests, a number of firms have adopted export-oriented strategies. As a result, 17 per cent of all engineering consultancy firms received more than half of their income from sales abroad. An important element of their success was the availability of representation offices and established networks abroad, including through joint ventures. However, Indian firms have had only limited success in international competitive bidding, since often they fail to comply with other-than-technical elements of the bidding procedure, e.g. in providing bank guarantees. India's moderate success in the export of consultancy services illustrates the difficulties faced by developing countries in exporting their knowledge-based services as a result of a credibility gap regarding the level of competence and sophistication achieved by them in science and technology and other knowledge-based fields. To offset this bias, a positive information campaign through professional journals and electronic information networks needs to be undertaken to disseminate

their successes and credentials, and multilateral financing institutions need to be encouraged to include competent consultancy firms from developing countries in ther database of consultants. On the other hand, India's proven comparative advantage in engineering consultancy services has encouraged the Government to open its markets to competition, by removing controls on foreign capital participation and extending full national treatment to foreign firms supplying their services in India to foster further innovation.

4. Telecommunications network services

11. In Chile at the beginning of 1980s, the telecommunication industry was characterized by a lack of available phone lines and of the necessary investment funds for the development of the required infrastructure. The sector was opened up for domestic and international private investment as the only viable solution for attracting the necessary funding and, by the early 1990s, the State had withdrawn fully from ownership of the national telecommunications companies. It retained a subsidiary role for assisting in the development of telecommunications in the areas that were less profitable but desirable on social grounds, and in promoting more balanced regional development within the country. State-of-the-art technology has been introduced in Chile, including network digitalization, fibre optics and satellite equipment. With the market expanding at an average rate of 20 per cent annually, the number of telecom companies was expected to reach the highest per capita in the world, and the sector has become the second largest recipient of FDI in services in Chile. The supply of fixed-line and mobile phones, marked by lower tariffs and overall telephone charges, reflected global trends and matched the growing needs of the population. The availability of an efficient telecom infrastructure contributed to attracting FDI to the economy at large and enabled Chile to enter into agreements with Peru and Argentina to supply telephone services to the border region, thus building its first export capacities regionally. It also provided a good basis for the participation of Chilean service providers in international electronic trade in services.

D. Sectoral Examples

1. Maritime transport

12. The success or failure of developing countries trading low-value goods with little potential for differentiation but considerable risk of substitution is largely determined by transport availability and cost. In 1996, the share of freight cost in import value of developing countries was 8.1 per cent. These high costs compare to an average 4.2 per cent of import value in the case of developed market economy countries. Potential transport problems are exacerbated by trade imbalances, which have an impact on the cost and availability of transport services; this can be a particular problem for countries trading low-value commodities. An example is provided by Asian trade routes, where some ocean carriers registered trade imbalances of up to 3:1 between outgoing and incoming liner cargo volumes.

13. Companies in a number of developing countries have taken over a lead role in world shipping. These countries include Taiwan Province of China, Republic of Korea, China, Singapore, Malaysia and Kuwait. Others such as Mexico, Colombia and Chile are playing a regional role. In addition, of the leading 20 container service operators, as measured by the number of vessels and total shipboard capacity, eight are operators originating in developing countries. The emergence of some of these major maritime powers has been made possible by massive government intervention. Alternatives include the formation of regional joint ventures for the operation of specific types of services on selected trade routes, concentration on intra-regional trade or the

provision of feeder services in cooperation with global mainline carriers. Liberalization of market access and globalization of production of shipping services have in principle resulted in a situation where profits are no longer reserved or market niches protected against foreign competition. However, since competitive pressures have not been limited to mainline operations but are building up everywhere, finding a market niche would not be a substitute for developing countries' carriers but only complementary to improving efficiency.

14. Developing countries have been the main suppliers of labour for the world merchant fleet. The Philippines, the world's largest single supplier of shipboard labour, accounts for some 20 per cent, or 200,000, of total seagoing staff. An estimated 50 per cent of crews on vessels flying flags of OECD member countries are nationals of non-OECD countries.

2. Construction and engineering design services

15. The international construction services market has seen the arrival of a growing number of new players from developing countries. Following the oil price explosion of 1975, the Middle East became the largest regional construction market, where financing posed no problems for international construction service firms. A few such firms, from a handful of developing countries, took advantage of the opportunities offered by this lucrative market and targeted infrastructure projects to which they assigned engineering personnel and construction workers from their home countries as well as low-cost labour from other developing countries. Their share of the international market approached 20 per cent in the early 1980s, but with the slowdown in the Middle East market, their market share dropped well below 10 percent in the 1990s. Nevertheless, a few such firms from China, Republic of Korea, Brazil, Singapore, Indonesia, Argentina, Mexico and the Philippines continued to appear among the top 250 international contractors.

16. An increasing number of developing countries have made substantial progress in producing professionals with specific skills such as engineers, architects , designers, economists, financial analysts and ecologists. Furthermore, many of these countries have succeeded in developing a managerial and organizational ability which, together with the low costs in these countries of skilled and unskilled construction labour, has helped construction firms to penetrate international markets. On the other hand, inter-firm cooperation across national borders involving construction firms from developing countries has increased and contributed to capacity-building and competitiveness. It has mainly been of an ad hoc nature and concerned with production and trade. More specifically, subcontracting has proven to be an entry point in the international market for small and medium-sized enterprises (SMEs) in this sector.

17. The global outsourcing of inputs by developed country construction firms, including the search for lower- cost engineering design, equipment and construction material on the one hand, and the interest of developing countries to acquire foreign technology on the other, are among the factors that explain the surge in North-South collaboration agreements. This has helped the international outsourcing of technology and improved marketing and managerial practices of developing country partners, thereby strengthening their export performance. Despite these positive factors, however, developing country construction firms continue to face challenges to the expansion of their exports. One important factor is the growing importance of financing in winning projects in export markets and the weakness of developing countries in tapping international financial markets. Other equally important factors are the continued obstacles to labour mobility among countries and the limited access of developing country firms to developed country markets,

due among other things to government procurement policies and procedures in these markets and various other types of non- tariff barriers which are not transparent.

18. Complex environment and safety regulations, standardization, registration procedures, personnel qualifications and licensing requirements act as deterrents to doing business in a foreign market and tend to discriminate against foreign companies. The problem is compounded in the case of some countries where these procedures vary from one state or region to another. In dealing with procurement and "buy national" preferences, consideration may be given to ways and means of achieving a more liberal and transparent government procurement policy. Wider diffusion of information technology in the construction and engineering design services industry is particularly important.

19. The weakness of developing countries in the engineering design segment is notable. In effect, over 95 per cent of the international engineering design market is controlled by developed country firms. This stems from the characteristics of the services which are knowledge-intensive, and the particularly important use of information technology (IT), in their production and delivery, mainly in developed countries. This technology has allowed time- and labour- saving and quick adjustments to changing market conditions. As a result, sizeable savings in drafting costs have occurred together with improved design speed and accuracy. This technology has added to the challenges that engineering design firms in developing countries face in today's globalized and liberalized environment. Investing in information technology is a costly and risky undertaking due in part to its capital requirements, the proliferation of IT standards and the rapid obsolescence of IT systems. Despite their weakness in this subsector, it is encouraging to note that a handful of engineering design firms from developing countries have nevertheless succeeded in entering the international design market.

E. Efforts at the regional level

20. Although, as noted above, some developing countries have been able to implement successful service export strategies aimed at the world market, for many developing countries the export markets for most services are neighbouring countries. Thus, regional and subregional integration would seem to provide excellent opportunities for expanding trade in services and for developing country firms to strengthen their capacities to export to the world market. However, developing countries have been slow to incorporate services into regional and subregional integration agreements; in fact , in most cases the GATS commitments were the first exchange of obligations among the participants in such schemes.

21. Negotiations on the liberalization of trade in services are taking place in different forums and at different levels -- bilateral, regional and multilateral. All negotiations are, however, interrelated, since commitments adopted at one level influence developments in others, making the whole negotiating process rather complex. The higher the level of commitments adopted in the multilateral framework and the wider their scope, the smaller is the space left for preferential liberalization to take place in the framework of bilateral or regional agreements. Members of subregional integration agreements therefore need to determine a common position as to the sectors in which access to foreign services could have the greatest positive impact on their respective economies and development goals. The first priority in a subregional grouping would be to strengthen and harmonize the regulatory structures governing a priority list of services. As noted from the above examples, access to the regional market and the existence of a regional or subregional institutional structure can provide the framework within which investment can be

attached to as an export-oriented services sector. New export capacities can be enhanced by preferential access to neighbouring developing countries, and that access can in turn be enhanced by cultural and linguistic factors.

22. Support for the natural tendency to export to countries in the same region may be provided, for instance, by removing visa requirements and limitations on the movement of natural persons; by establishing common curricula among the members of the regional grouping, which would greatly facilitate the mutual recognition of diplomas and other professional qualifications; by easing the requirements for obtaining the necessary permits and authorizations for foreign firms to conduct various aspects of their operations in the host country; and by opening up public procurement to firms from other countries of the region.

23. Strategies to integrate cities into the global economy by establishing an appropriate mix of services have been followed in many countries. Services are increasingly concentrated in a relatively few "global" or regional cities, whose business consists mainly of the production of specialized information services, such as financial services, media services, educational and health services and tourism, including business tourism. A city grows in importance if it performs a number of functions effectively and efficiently, which can be oriented around serving a subregion. Connections with international transportation and communications networks are crucial.

II. BARRIERS TO EXPORTS

24. The efforts of developing countries to develop services as a major export item and contributor to development and to penetrate the world market for services have faced considerable barriers. These include barriers to market access and national treatment, as defined in Article XVI and XVII of GATS, as well as difficulties in market entry caused by anti-competitive practices, subsidies and so forth. The next set of negotiations on trade in services under GATS Article XIX, aimed at the further progressive liberalization of trade in services, is scheduled to begin before the end of 1999 and can provide an opportunity for developing countries to address these barriers.

25. Matrices drawn up to illustrate the extent of GATS members' commitments generally indicate that developed countries have accepted commitments in many more sectors than developing countries. However, such comparisons conceal the facts that (a) many of the commitments offered by developed countries simply bind the status quo treatment without providing meaningful market access; (b) significant commitments have not been made in the mode of greatest importance to developing countries, i.e. movement of natural persons; (c) developing countries do not have the capacity to benefit from the access provided in developing country markets in most cases; and (d) anti-competitive situations, market dominance, restrictive business practices (RBPs) subsidies and the like prevent developing country firms from effectively competing in foreign markets. In addition, special geographical or cultural factors (e.g. non-acceptance by consensus of foreign audiovisual material in a seemingly "open" market) can also effectively close markets.

26. The GATS architecture permits developing countries to offer trade liberalization commitments in those service sectors where access to foreign services and foreign investment is considered to be most capable of having a positive impact on the economy. For example, most developing countries have made commitments with respect to commercial presence in the tourism sector so as to encourage foreign investment in tourist facilities. The GATS also permits the use of performance requirements to ensure that the beneficial effects of such foreign presence are

maximized. In certain sectors, such as environmental services, the main interest for developing countries at present is to have access to foreign services, since this is the precondition for them to be better equipped to deal with environmental problems and, eventually, to become providers in this sector. Thus, participation in the GATS negotiations should be seen as an extension of the national services strategy. Commitments could be made to encourage foreign investment, enhance efficiency and meet other sustainable development goals, with requests targeted at those foreign measures and practices which impede access by developing country suppliers to world markets or reduce the benefits to their firms of participation in trade in services.

A. Movement of natural persons

27. The movement of natural persons is key for developing countries' participation in the world market for services. Their perceived labour cost advantage has led developing countries to give priority to commitments relating to Mode 4 of GATS, the movement of natural persons. Commitments in this mode are largely linked to commercial presence, which in effect provides flexibility to transnational corporations (TNCs) in moving executives and technicians around within their global corporate networks. Both developing country firms without such commercial presence and independent professionals from those countries suffer, by contrast, from visa restrictions and economic needs tests (ENTs). This is evident for service activities involving low skills (e.g. construction and domestic help) as well as high skills, customized software, and participation in various international projects involving a multiplicity of skills and areas of expertise. Furthermore, there is a lack of sectoral specificity in the GATS commitments on movement of persons, which underscores the importance of obtaining commitments on Mode 4 in these sectors.

28. ENTs are extremely prevalent in qualifying commitments with respect to the movement of persons and, due to their discretionary and non-transparent nature, pose major barriers to trade in services and nullify the opportunities for market access otherwise extended in the commitments. The tests imply that the relevant government agency would grant market access if certain conditions were met which reflect the demand for services or the ability of nationals to supply such services. These conditions may be quantitative or qualitative, taking into account the local market conditions and availability of the local services suppliers, characteristics of the population, or any other criteria. This suggests that a further opening of market access for natural persons would depend on the extent to which the application of the ENT could be restricted or made more predictable. The growing dynamism of the markets implies that a shorter time-span is allowed for problem-solving, which in turn calls for the immediate availability of professional services. All delays related to visa applications and other similar formalities negatively affect the delivery of professional services by foreigners.

29. The lack of recognition of diplomas and professional qualifications greatly hampers the movement of natural persons, which means that the establishment of harmonized curricula or mutual recognition of qualifications is a precondition for the successful movement of natural persons and for establishment abroad. Professional associations may also set up rules which limit foreign professionals’ ability to deliver services abroad. Mutual recognition agreements among countries of diplomas or professional experience have become more popular in recent years. Several countries have notified mutual recognition agreements under GATS Article VII:4. In the Asia-Pacific Economic Cooperation (APEC) nations, work has started on the preparation of a directory on the requirements for provision of professional services, including accountancy, engineering and architecture. A large number of bilateral agreements on recognition of practice standards have also been concluded in the region. In June 1999, a text for a United States-

European Union (EU) framework agreement for negotiating mutual recognition was finalized, although it still has to be approved by the Governments. The agreement would set conditions for all services sectors for the licensing, accreditation and certification of service providers.

30. The issue of "brain drain" is relevant in the context of ensuring that the movement of natural persons is beneficial to the exporting countries. Remittances sent home by such persons, and the exposure to a new and often more stimulating and technologically advanced working environment, represent the positive sides of the phenomenon; however, the exodus of qualified personnel from needy countries to wealthier ones is a serious problem. Moreover, in most countries, the education of qualified personnel is subsidized by public funding and requires significant investment. The outflow of professionals in effect provides a subsidy to the receiving country for which there is no compensation. Measures to ensure that professionals come back to their countries of origin after a temporary stay abroad would be important in this context.

B. Movement of consumers

31. Tourism, health and education are examples of services sectors where consumption abroad is particularly relevant. Movement of consumers in the tourism sector is in some instances limited by the difficulties associated with the delivery of visas, hard currency regulations, and insufficient availability or inadequacy of air transport services to and from tourist-receiving countries. The "image" of the country is crucial for success in tourism; one of the main barriers to tourism exports by many developing countries is the negative image they receive in the media. Travel warnings issued unilaterally by Governments of the main tourist-generating countries emphasize the risks and sometimes remain in place after the cause which justified the warnings has been removed. Another related problem for some developing countries is the unilateral certification of airports in tourist-receiving countries, which may jeopardize tourist flows to these countries and consequently also the viability of the countries' airlines.

32. In the health services sector, the non-portability of health insurance is the major difficulty hampering developing country delivery of health services to foreign patients. This situation is reflected in the commitments scheduled by Bulgaria, Poland and the United States, which explicitly indicate restrictions on the coverage of public insurance schemes outside the country. The same situation occurs, however, in those countries which allow consumption abroad without limitations. The EU has dealt with the problem of non-portability of public health care insurance by a system under which sickness benefits in kind are provided according to the legislation of the country in which a EU citizen resides or stays as if he or she were insured in that country. After delivering the service, a bill is submitted to the health insurance of the home country for payment. In some other countries (e.g. Costa Rica, Egypt, Jordan), patients can be authorized to obtain treatment abroad at the cost of the national health system (NHS) when the NHS is not in a position to provide the required treatment. Some countries have signed bilateral agreements which allow a total or partial portability of the public health insurance. A multilateral solution to this problem could be of considerable utility.

33. As far as education services are concerned, the movement of students for undergraduate and postgraduate education takes place between countries at all levels of development: from developing to industrial countries, between industrial countries, and also between developing countries. Limitations on the consumption abroad of education services are very rare in all subsectors. However, any horizontal measure that restricts the mobility of students, such as immigration requirements or foreign currency controls, represents a barrier to consumption abroad.

Another indirect barrier includes degree equivalence, i.e. the difficulty students may have in translating the degrees obtained abroad into national equivalents. The recognition of diplomas, or the establishment of internationally agreed curricula, is an issue which may deserve the attention of developed and developing countries alike.

C. Commercial presence

34. The liberalization of trade in services, notably through GATS Mode 3, commercial presence, can make a major contribution to the achievement of developmental and social goals. However, certain prerequisites must usually be met for liberalization to have a positive impact. For example, it has been clearly shown that the liberalization of the financial services sector should be preceded by the implementation of sound prudential legislation. In the health sector, the presence of foreign suppliers can strengthen or weaken the health care system depending on the structure of the domestic sector. In the environmental services sector, foreign suppliers can make positive contributions to the protection of the environment if technically adequate, enforceable legislation is in place and if funds are available to the developing country concerned to pay for such imported services. Tourism development may not have a positive impact if not integrated into the local economy. Special social and ethnic conditions may call for a unique strategy, such as the Malaysian position on financial services. Maintaining cultural integrity is viewed by many countries as requiring a particularly careful approach to the liberalization of audiovisual services.

D. Sector-wide issues

35. Ensuring a positive impact of liberalization requires that liberalization commitments be devised in clear recognition of the specificities of the national service sector concerned and of the relationships between sectors. The expected benefits of trade liberalization in the services sector may be frustrated by the inadequacy of domestic policies and by the lack of a well-articulated domestic regulatory framework. An appropriate legal framework is required to prevent abuses in deregulated markets and protect domestic consumers, while ensuring transfer of technology and the development of domestic competitive supply capacities.

36. An adequate regulatory structure has to be in place, for example for prudential purposes, to ensure respect for technical standards or professional qualifications. The process under Article VI of GATS would be of considerable importance to ensure that the benefits of liberalization commitments on the national economy were maximized. Decisions as to where to make such commitments would need to take into account possible social or environmental “dividends” resulting from liberalization.

37. UNCTAD’s analysis of specific services sectors has shown that there are areas where a regulatory framework is particularly important. In the air transport sector, domestic disciplines in the area of competition policy have been necessary to avoid unfair pricing practices and to counter the effects on trade of mergers, cartels and the abuse of dominant positions by individual airlines or consortia. This is particularly important in the case of developing countries that do not have a national airline. Alliances among airlines are common, and have obtained sectoral exemptions to anti-competitive conduct, contained in anti-trust legislation, with effects in international markets. Clearly, exemptions of this type need to be carefully examined in the context of the application of competition policy to the industry. Regulators are facing problems in dealing with alliances, since they have to regulate from a national standpoint a phenomenon which has effect across national borders.

38. Regulations that would secure a competitive environment in each developing country are vital preconditions for liberalization of market access to proceed successfully . The availability of the emergency safeguard mechanism as a temporary fall-back option could also support the efforts of developing countries to further open their air transport services market for competition. In the case of the tourism sector, anti-competitive conduct -- such as exclusive dealing clauses incorporated into contracts between tour operators and hotels in developing countries, or clauses on import and supply requirements in franchising contracts -- appears to have the potential for a major impact on the ability of developing countries to benefit from trade in tourism services.

39. Appropriate legislation also needs to be in place to minimize the risk that FDI occurs only in the most profitable segments of the market. Some developing countries are already putting adequate instruments in place to counter this practice. Brazil, for example, allows foreign insurance companies to operate in the areas of life insurance and pension funds only if they are also active in the health sector. In other cases, the development and enforcement of a regulatory framework is necessary to generate the demand for specific services. Domestic environmental legislation, market-based incentives and fiscal policies are the main demand-generating factors in the environmental services market, for instance.

40. Paradoxically, in certain circumstances the liberalization of trade in services can create the risk of reduced access to essential services and vulnerability. For example, some developing countries which liberalized their air transport sectors as part of policy to promote tourism found themselves at the mercy of one or two foreign airlines. The review of the GATS Air Transport Annex will focus international attention on the need to design a system that enables developing countries to compete effectively in the world market for air transport.

41. Vulnerability can be created by the liberalization of audiovisual services if this leads to the promotion of images and tastes which further consumption of foreign goods and services and an undermining of development efforts. It has been emphasized in early theoretical literature that since most services are produced and consumed simultaneously and thus there are few means to test a service without consuming it, the "image" of the services provider is essential to competitiveness. Thus, audiovisual services have an importance going beyond their cultural aspect to include also a strategic role in the development process.

42. Appropriate domestic policies in developing countries in the field of tourism can reduce the risk of "leakage", i.e. the low retention within the country of the revenue generated by total sales to foreign tourists. Leakage, which partly negates the economic and development benefits accrued from tourism in developing countries, can be due to factors such as the import of materials and equipment for construction and consumable goods, such as food and drinks, to cater for the needs of international tourists; the repatriation of income and profits earned by foreigners; overseas promotional expenditure, among others.

43. Transparency in public procurement practices may have a particularly strong impact on certain services sectors. The lack of transparency in public procurement practices may entail unnecessary costs and delays and discourage foreign firms from offering their services. In the case of environmental services, where most developing countries still rely on foreign services, the opacity of developing country markets may limit the availability of these services.

III. ELECTRONIC COMMERCE AND SERVICES

44. Although the possibilities of exporting services through information networks has been recognized since the 1980s, most developing countries initiated their service strategies and entered into commitments in the WTO without foreseeing the dramatic expansion of the possibilities of electronic commerce. Developing countries in different geographical regions are presently delivering on-line blueprints, designs, engineering data, drawings and maps, professional and business services, health and education, travel and ticketing services, advertising computer-related services, entertainment and financial services. Cross-border trade in architectural and engineering services tends to rise along with the complexity and specialization of the services involved, which are linked to the construction services sector, where many firms in Asia and Latin America are able to offer a wide range of operations and maintenance services post-construction, based on maintenance management software. Computer software represents one of the largest segments of services delivered through the cross-border mode of supply, with a growing number of developing countries using the INTERNET to both market and deliver these services; the case of the Indian software industry is described in Box 1 below. Cross-border supply of health services from developing countries is becoming economically significant, with a growing number of commercial Telemedicine links now operating in Asia and Latin America, on-line diagnosis services being offered by China throughout South Asia, and medical samples going for diagnosis to Mexico from Central America. Many medical facilities in North America are now having their medical records or patient interviews digitally transcribed in Bangladesh, India, Pakistan, the Philippines or Zimbabwe. The value of Internet-based services is estimated to be more than $ 300 billion. The United States accounts for more than 90 per cent of global e-commerce revenues and this of course relates to the significance of its domestic market. The main exporters in terms of export share of e-commerce revenue, however, are Canada, Australia and New Zealand, and the EU, particularly the United Kingdom.

Box 1

Case study of software development services in India

The rapid growth of the Indian software services industry with a strong export orientation is owed to government strategies, a low-cost, highly skilled workforce, and policies to develop telecommunications infrastructure. India’s software exports have been growing by 50 to 60 per cent for the past seven years and are estimated at $1 billion. In November 1986, the Government of India made the first software policy announcement which was aimed at promoting the integrated development of software for domestic and export markets, capturing a sizeable share of export markets and simplifying the existing procedures in order to enable the software industry to grow at a faster pace. Between 1985 and 1990, since the domestic market for software was very small and telecommunications facilities relatively poor, Indian software companies concentrated on rendering on-site services to overseas clients, which comprised 80 per cent of export earnings. Major relaxation in the import scheme for computer hardware and software culminated in duty-free treatment in 1996. Foreign investment was welcomed and import of technology was permitted. Electronic hardware and software technology parks were established as customs-bonded areas for encouraging export-oriented production, and duty-free imports of equipment were allowed against the acceptance of export performance obligations. Protection of software was brought within the purview of the Copyright Act in 1994, and the software industry was granted tax exemption on export-related profits. To spur dynamic growth, further measures, including fiscal incentives, were adopted to encourage the creation of venture capital funds, give employees stock options with a lower incidence of capital gains tax when stockholdings are liquidated, and allow the weighted deduction of 125 per cent of expenditures on research and development. In addition, income tax exemption has also been allowed to support developers of computer software, who may not be exporting software themselves but who provide development inputs to the exporting companies.

Indian software developers have been mainly engaged in developing customized software for specific end-use applications, rather than in developing packaged software for standardized applications (such as inventory control) which offer not only better margins but also the advantage of size and volume. The developers have developed subsystems that go into the final product for major telecom/datacom equipment vendors. They have also developed skills in systems software and embedded software segments which can enable them to go in for complete systems integration and product development. WIPRO is also focusing on the health care, finance, retail and utilities areas to increase its share of higher value-added work. The Pentafour Group have acquired expertise in areas such as banking and insurance and are one of the principal partners in India of leading United States computer companies, such as IBM, EDS and Computer Associates. Infosys Technologies is building its future strategies around the Internet, with a special focus on electronic commerce. Satyam Computers have diversified into services linked with enterprise solutions, Internet, integration, enterprise resource planning (ERP) systems, process consultancy and product development. The two leading computer-education companies, NIIT and APTECH, have begun diversifying into software development. Software services contributed 42 per cent of NIIT's total revenues of Rs. 6.484 million ($152.6 million) in 1998-1999, while APTECH aims at raising the share of software in its turnover from 10 per cent at present to 30 per cent over the next 3 to 4 years. APTECH's sales revenues in 1998 were $65.3 million.

One of the problems faced by Indian software companies as they strive to climb the value-addition ladder and build up turnover volumes is the high rate of turnover of professional staff. Of the 11,000 personnel employed in the software business by India's leading software firm, Tata Consultancy Services, the annual loss is as high as 2,500. Some 90 per cent of those who leave go overseas, mostly to the Silicon Valley (United States) and to the United Kingdom. They leave carrying with them three to seven years' experience, on the average, gained with the firm. In man-year terms, the knowledge loss sustained by this level of turnover becomes much more significant, since new recruits will take a couple of years to build up comparable work experience and proficiency. To make up for this loss, more high-quality personnel will need to be turned out by educational institutions, such as science and engineering colleges and business schools. One of the main impediments in moving into higher value-added subsectors is the lack of adequate "domain knowledge", i.e. knowledge of the potential client's business, customers, vendors and financial details – information which a major foreign company may not be willing to share with an Indian software company. The way to get past this problem is to build credibility, and one way of achieving this is through build up of sheer size. By successfully exporting to the world's largest software market, the United States, and getting its shares listed by NASDAQ through a recent issue, Infosys Technologies has taken a strategic step to enhance its credibility worldwide.

Indian software exports have benefited from the following supportive factors: (i) availability of competent, English-speaking professionals in the fields of mathematics, engineering and business studies, along with trained personnel who have received diplomas in computer education; (ii) strong export orientation of Indian software firms; (iii) enabling work platforms created by government policy measures, such as the establishment of software technology parks and export processing zones where export-oriented units can access computer hardware and software on a duty-free basis; (iv) the granting of tax rebates on port-related profits of software companies; (v) strengthening of telecommunications infrastructure, both land-based and satellite-based, using digital switching/optical fibre/radio-communication devices; (vi) liberalization of imports of computer hardware and software by dispensing with quantitative restrictions and reduction of duties, in line with commitments made by India as a signatory of the plurilateral Information Technology Agreement (ITA) under WTO auspices; (vii) expansion of computer usage in domestic trade, industry and other services with attendant growth in demand for software support services; (viii) expansion of exports into the software "products" sectors, with standardized packages for large-volume applications, and tapping the extensive data entry and data processing activity at the lower end of the computer services market, e.g. processing of airline tickets, credit card payment counterfoils, and so forth, as well as venturing into the systems software area.

A. Constraints

45. The opportunities offered by electronic commerce include access to new markets, cost savings (e.g. lower personnel costs, lower cost of Internet e-mail), time savings (e.g. quicker response to markets) and quality benefits. These opportunities, however, are significantly constrained by the stage of development and interconnectivity of the telecommunications infrastructure. It should be noted that 65 per cent of the total households in the world do not have a telephone, and in low-income countries there are only 2.5 lines per 100 people, as compared to 54 lines per 100 people in developed countries. This has resulted in 96 per cent of Internet host computers being found in high-income countries. Other constraints relate to monopoly pricing for long-distance telephony connections and distance-based pricing that disadvantages countries further removed from lucrative developed markets; costing of the full circuit for Internet; lack of trust; uncertainty about the regulatory environment; and lack of human resources. Under these unfavourable circumstances opportunities currently offered by e-commerce are under heavy constraints.

46. At present, only a few developing countries are using the Internet for accessing foreign markets to supply services. Lack of awareness among developing country companies of the relevance of digital economy, and the high cost ($ 250,000 to $2 million) of setting up a significant e-commerce site (even if such costs may be lower than capital costs for conventional outlets), have contributed to this. To maintain the website and continuously upgrade and redesign also involves considerable expenditure. For the time being, therefore, developing countries are mainly consumers of Internet-based services and use the Internet to access consumer and marketing information and use electronic mail to communicate with customers and other companies or to advertise service products. Other uses relate to human resource management, financial transactions, public relations, and on-line tools, such as credit assessment and customer service.

B. Preconditions for success

47. Major elements in the success of developing countries that are exporting or have the potential of exporting through electronic commerce are the following government measures: (i) giving highest priority to the policies required for information technology, telecommunications infrastructure and Internet development; (ii) improved public network infrastructure by encouraging competition, including through liberalization; (iii) promotion of Internet access points to the public and provision of a special dialing number to ensure a favourable local service tariff for Internet services; (iv) creation of competitive markets for Internet service providers; and (v) adopting cost-based tariffing in leased lines for Internet services.

48. Efforts need to be made to ensure that access of developing countries to technology and transborder data flows is not constrained, as information constitutes an increasingly important factor of production. Information asymmetry between developed and developing country suppliers is particularly important in services, and ways and means need to be found to improve access to information. The technological leadership of developed countries in this field creates a dynamic comparative advantage and could result in consolidation of the dominant market position of those already in the technological lead.

C. Issues requiring further consideration

49. Priority attention will be needed to establish the necessary legal and financial infrastructure for dealing with commercial code, intellectual property rights, domain names, privacy, security, customs, taxation and electronic payments, as well as to build human resources by improving education in information technologies and computer and language skills; develop contents and provide market access for suppliers from developing countries. Access to the latest technology (including high-speed access to networks) will be crucial to ensure that developing countries benefit from e-commerce.

50. Some of the other issues requiring further consideration are the impact of competition, particularly by dominant brand names of developed countries, on market access by SMEs from developing countries. These SMEs suffer from low levels of productivity, poor product quality and lack of access to credit and training, but nevertheless have an important role in generating employment. The impact of capital outflows from developing countries due to e-commerce will also require further attention. Prior to any political agreement at the WTO to continue the current practice of not imposing customs duties on electronic transmissions, and prior to any decisions which could affect the market access of developing countries and their policy flexibility, the following issues will also require special attention.

51. The market structure is being affected by e-commerce and there is a need to develop competition policy-related disciplines in this area to ensure SMEs from developing countries fair competition. Safeguards need to be established to ensure that dominant suppliers do not abuse their position in the market. The impact of replacement of traditional distribution channels by direct contact between supplier and consumer, or by new channels developed by “infomediaries”, well-known brand names, and domain names on the Internet also requires attention.

52. A wide range of service transactions are carried out through e-commerce and thus are already covered by the GATS and some schedules of commitments. Some issues arising from e-commerce will need to be addressed in the future GATS negotiations, e.g. transmission through the Internet of services where no commitment on market access has been made; domestic regulation; and the distinction between goods and services . On the other hand, there are a wide range of e-commerce regulatory issues where new multilateral disciplines might not be the appropriate response. Such questions will have to be examined in future work on e-commerce.

53. The potential to provide cross-border services electronically could reduce dependence on either commercial presence (mode 3) or movement of natural persons (mode 4) . Any information that can be digitalized can be manipulated and custom-designed at a distance. Although during the Uruguay Round the emphasis was on obtaining market access through commercial presence, it is expected that the next round will concentrate on the cross-border mode. The need for commercial presence could be reduced as a result of electronically facilitated cross-border trade. On the other hand, given significant restrictions on movement of natural persons, e-commerce could provide major opportunities to supply labour-intensive services through the cross-border mode. The distinction between modes 1 and 2 has given rise to difficulties. Some suggestions have been made to collapse the modes of supply in GATS or to create a fifth mode. Other approaches under discussion relate to distinction on the basis of whom the measure impinges on, or on the basis of presence of supplier or consumer in the relevant market or where the final consumption takes place. The impact of these approaches on the architecture of the GATS and the existing commitments needs to be given careful consideration.

54. Technological neutrality has been discussed extensively in relation to existing commitments on services. The understanding reached in the context of basic telecommunications provided that any basic telecom service listed in the schedules of commitments may be provided through any means of technology, e.g. cable wireless or satellites, unless otherwise noted in the sector column. This does not mean that the notion of technological neutrality and access is automatically applicable to all sectors and modes without specific commitments on the electronic supply of services. During the Uruguay Round and the extended negotiations on basic telecommunications, few countries made commitments with e-commerce intention, except where commitments were made under the cross-border mode on specific sectors. In the future round of negotiations, the commitments on e-commerce could be clarified and restrictions on means of delivery of a service could be scheduled horizontally or as a national treatment restriction.

55. Different approaches have been put forward regarding the appropriate role of government in managing e-commerce. Most developed countries have attributed the important growth in e-commerce to the lack of a restrictive regulatory framework and government intervention. Coordination and regulation are however, unavoidable and cannot prudently be left only to the private operators. Governments will need to cooperate with the relevant United Nations organizations or specialized agencies to devise the appropriate regulatory framework in relation to fiscal issues, protection of confidentiality, management of domain names, jurisdictional questions, protection of intellectual property and encryption. To ensure conformity with standards, Governments will need to cooperate to harmonize and recognize each other's standards and qualifications. Ensuring conformity assessment would be all the more difficult in e-commerce, given that technically it is hard to establish control mechanisms for cross-border supply.

Conclusions

56. Some developing countries have adopted successful strategies of diversifying into export-oriented service sectors. Essential elements of such strategies have been to ensure that regulatory and fiscal impediments are removed, that there is a clear idea of the factors contributing to a competitive position, including existing skills and labour cost advantages, such as those prevailing in the goods sectors; climatic and geographical attributes, and cultural factors. The establishment of a supportive institutional structure at the national, bilateral and regional levels is usually required. Successful strategies require priority attention to be given to development of infrastructure, particularly the information/telecommunications infrastructure; a continuous process of upgrading technology, human resources and value-added is also required, particularly to avoid being short-circuited by technological advances. Access to financial resources or financing mechanisms is a vital element for service firms to remain competitive and to sustain their market position. It is essential to meet quality standards and cultivate an attractive image of the country.

57. Access to services, especially the “producer services”, is essential for the acquisition of technologies and increased efficiencies in the development of both the goods and services sectors. The goods sector, including agriculture, manufacturing and natural resource extraction, can give rise to specialized knowledge and expertise which can subsequently be “externalized” and exported. The domestic regulatory environment can affect the competitiveness of services and in fact “breed” new services. In the telecommunications sector, privatization and liberalization can greatly strengthen export potential. More stringent and technically demanding regulations can give rise to a new national capacity, as in the case of the environmental services sector, where legislation introduced in OECD countries led to the development of a new sector which is now seeking

markets in the developing countries. In some developing countries, such as Brazil, this process is being repeated due to the introduction of regulations and contact with foreign service suppliers.

58. Successful strategies in developing service exports often require a multisectoral approach. For example, exports of health services through movement of patients can be hindered by the non-transportability of insurance services, and health service exports through the movement of persons can be impeded by problems relating to the recognition of professional qualifications. Service development strategies can require choices between competing objectives; there may be contradictions, for example, between air transport policies and policies aimed at maximizing tourist arrivals.

59. If the next set of multilateral negotiations on trade in services is to enhance the development of developing countries, it must be recognized that further liberalization of trade in services will provide meaningful export opportunities for developing countries only if parallel action is taken to assist these countries in enhancing their supply capacities. The effective implementation of provisions of Article IV, including in relation to access to technology, is crucial. The future GATS negotiations will provide an opportunity for developing countries to address barriers to their services exports. A key goal for developing countries is to achieve the managed liberalization of market access for their natural persons, through the reduction of the scope of, and introduction of more predictability into, economic needs tests, streamlining the issuance of visas and facilitating the recognition of professional qualifications. The liberalization of trade in services, notably through commercial presence, can make a major contribution to the achievement of developmental and social goals, if certain prerequisites are met. Liberalization commitments have to be devised in clear recognition of the specificities of the national service sector concerned and of the relationships between sectors. An adequate regulatory structure has to be in place prior to liberalization. Decisions as to where to make such commitments should take into account possible social, developmental or environmental “dividends”.

60. Further sectoral analysis by the UNCTAD secretariat could be helpful in assisting developing countries to identify opportunities for service sector exports and to define their interests in the upcoming multilateral negotiations on trade in services.