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Telecommunication Development Bureau (BDT)

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For information

Chairman

**SUMMARY RECORD OF THE PARTNERSHIP ROUND TABLE
FOR LEAST DEVELOPED COUNTRIES,
GENEVA, SWITZERLAND, 23-24 NOVEMBER 2000**

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PARTNERSHIP ROUND TABLE
FOR LEAST DEVELOPED COUNTRIES**

Geneva, Switzerland, 23-24 November 2000

Chairman: Mr P. Fröhler

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1 Opening of the meeting (Documents LDC/RT/2000/ 13 and 14)

1.1 The **Director of BDT** welcomed the participants to ITU's first Partnership Round Table for Least Developed Countries (LDCs) and announced that Mr Peter Fröhler (Head, Information and Training Branch, UNCTAD) had kindly agreed to chair the meeting.

1.2 The **Chairman**, also welcoming participants and expressing his appreciation at being asked to chair the round table, delivered the statement published in Document LDC/RT/2000/14.

1.3 UNCTAD was the lead agency in coordinating support for LDCs from the international organizations, including ITU, through round tables, consultative group meetings and the first and second United Nations Conferences for Least Developed Countries held in 1981 and 1991, respectively. UNCTAD cooperation with ITU dated back many years and had recently intensified in the area of e-commerce and the Trade Point programme. There was further scope for cooperation, however, and he looked forward to the opportunity provided by the round table and to future activities on human resources development.

1.4 The Third United Nations Conference on LDCs, to be held in Brussels in May 2001, was significantly different from its predecessors in that, for the first time, the LDCs themselves were playing a key role in preparations and in the formulation of country proposals. It was now clear that the political commitment of LDCs to such proposals was indispensable to the success of partnerships for project implementation.

1.5 Globalization was a reality and everyone, including the LDCs, should seek to draw benefits from it. While infrastructure and transport of goods would remain a long-term problem for many countries, telecommunications would go a long way to facilitating efficient procedures for import/export formalities, improving trade management and tracking of goods, and providing market information. It was vital to take advantage of current opportunities to bridge the digital divide more effectively than in the past; the potential for growth was enormous, particularly in the LDCs. He therefore hoped that the round table would provide an opportunity to demonstrate concrete proposals that would attract investors and provide a sound basis for further development.

1.6 The **Deputy Secretary-General** welcomed participants on behalf of the Secretary-General, who was unable to attend. He outlined ITU's history of support for LDCs since the adoption of Resolution 19 (Malaga-Torremolinos, 1973) of the Plenipotentiary Conference through to the 1994 Buenos Aires Action Plan and the 1998 Valletta Action Plan. Assistance activities had grown from short-term technical assistance projects to a programme of action in designated priority areas.

1.7 Although considerable support to LDCs had been mobilized through the United Nations conferences mentioned by the Chairman, the telecommunication sector had not received high priority because of its perceived capacity to attract financing from other sources, particularly the private sector. ITU was therefore appealing to the private sector to help build partnerships with LDCs in order to promote the reform, restructuring and liberalization of their telecommunication sectors. That appeal was in line with Resolution 16 (WTDC-98) which specifically called upon Member States and Sector Members to establish partnerships with LDCs, either directly or together with BDT, in order to increase investment and modernize and expand telecommunication networks in those countries. Investment in infrastructure development, including telecommunication and associated information and communication technologies (ICTs), would contribute to poverty eradication in LDCs through the creation of wealth that would percolate into other sectors.

1.8 He emphasized the need to improve investment efficiency, drive down main line costs and increase the proportion of internally generated telecommunication revenues ploughed back into the telecommunication sector. A five-fold increase in investment coupled with a 50% reduction in main line cost would yield ten-fold main line growth, which would surely enable LDCs to achieve the target main line density of five per 100 of the population by 2005.

1.9 The establishment of WorldTel had been one of the important measures taken by ITU to kick-start private investment in LDCs and other countries with low teledensity, where conventional approaches to telecommunication development had failed. No country should be left behind in the digital revolution, and he therefore urged support from investors and other partners through and beyond the round table process.

1.10 The **Director of BDT**, in his opening statement reproduced in Document LDC/RT/2000/13, confirmed that the primary objective of the round table, convened in pursuance of Resolution 16 (WTDC-98), was to establish partnerships between LDCs and other ITU members in order to increase telecommunication investment in those countries. Chapter 3 of the Valletta Action Plan provided for specific actions in the 48 LDCs. WTDC-98 had decided, however, that ITU should concentrate its efforts on a smaller number of countries at any one time in order to achieve greater impact with the limited funds available. For 2000, seven countries had been chosen: Cambodia, Chad, Comoros, Ethiopia, Haiti, Sudan and Tanzania. Haiti had since dropped out of the programme owing to the political situation. A further six countries, Eritrea, Guinea-Bissau, Mozambique, Nepal, Niger and Yemen, had been chosen for attention in 2001. Selection had been conducted in accordance with the criteria established by the ITU Council in 1999, and it was hoped to cover the neediest half of LDCs by 2003.

1.11 Of the five priority areas mentioned in the Valletta Action Plan, most assistance had been directed at sector reform and restructuring, and the introduction of new technologies. Development of rural telecommunication services and human resources had also been covered in some countries. It was clear that those countries that had undertaken reform had experienced a rapid expansion of the telecommunication sector, with a gradual fall in prices to consumers. Such countries were poised to take advantage of the new technologies rapidly becoming available at competitive prices, in particular mobile services, and to move towards the goal of universal access to telecommunications and ICTs. Human resources development would be vital to ensure the capacity to manage those changes effectively.

1.12 A wide cross-section of partners was needed to assist the LDCs. There was a noticeable absence of participation in the round table of the development banks, and it therefore appeared that the private sector would be expected to play the major role. Some of the LDCs had inherent disadvantages of instability and small markets, while others, recognized by the 1998 Plenipotentiary Conference as countries in special need, were experiencing or emerging from war and civil strife and required urgent support. Despite the potential risks to investors that such conditions entailed, it was important to ensure that telecommunication development was encouraged in all nations in order to avoid new and increasing disparities between the haves and have nots.

1.13 Through the round table, ITU was seeking partners for joint ventures that would benefit all parties and would welcome pledges of support, where possible through financial assistance, to LDCs to enable them to overcome immediate problems and start building the process of partnership development. ITU was also seeking to ensure that the telecommunication sector received due attention in country reports to be submitted to the third United Nations Conference on LDCs to be held in May 2001.

2 Telecommunications and ICTs in the least developed countries, 1989-1998 (Document LDC/RT/2000/4)

2.1 The **Head, Special Unit for LDCs, BDT** introduced Document LDC/RT/2000/4, which provided an analysis of the development of telecommunications and associated ICTs in LDCs over the period 1989-1998. Following two decades of stagnation, the previous five years had seen a considerable upturn in telecommunication development in most LDCs. It was clear that

telecommunications and ICTs were becoming the driving force in the new economy and that globalization was inevitable. LDCs must seize the opportunities they offered to "leap-frog" technologies. ITU's ultimate goal was universal access to telecommunications and associated ICTs, and a preliminary target of 5% teledensity by 2005 had been set. Of the 48 countries defined as LDCs by the United Nations General Assembly on the basis of a combination of indicators, those in Africa were still experiencing the greatest problems in telecommunication development, although some were doing well. Nevertheless, a review of the overall performance for LDCs, summarized in Charts 1-11 in Chapter 3 of the document, showed an impressive change in recent years, with increases in fixed line and mobile teledensity and in the proportion of mobile subscribers, dramatic growth in personal computer and Internet use, and steady increases in numbers of television receivers and home satellite antennas. Supply had not, however, kept pace with demand for telephone lines and greater efforts were needed to provide service access through public payphones, especially MCTs.

2.2 It was vital to increase investment in telecommunication development and, in particular, investment efficiency. Internally generated revenues were the most important source of network financing. Other sources included government lending, multilateral development agencies, supplier credit and bilateral aid, accounting rate settlement payments, private sector participation and WorldTel.

2.3 Projections indicated that main line growth at the current rate would achieve a density of 0.96 per 100 by 2005. An investment of USD 15 billion per year in all the LDCs would be needed to achieve the target of 5 per 100, although that figure could be substantially reduced with improved investment efficiency. The recent upturn in telecommunication development in LDCs had been driven by sector reforms and the emergence of new technologies that were more amenable to cost-effective and rapid deployment. However, some 20 LDCs still had a main line density of less than 0.5 per 100. A comparison of teledensity, GDP per capita and the human development index (an index developed by UNDP) revealed that there was a striking correlation between main line density and the human development index in many LDCs, showing that teledensity had become an important and accurate socio-economic indicator. LDCs were therefore recommended to give top priority to the expansion and modernization of their telecommunication networks, with particular attention to reform and restructuring of the sector with a view to liberalization and introduction of competition, introduction of new technologies and services, and extension of services to rural areas.

2.4 Development partners were encouraged to increase investment in telecommunication development through loans, joint ventures and other partnership modalities. For its part, ITU would continue to implement the Special Programme for LDCs established by the Valletta Action Plan and to pursue resource mobilization for the benefit of LDCs.

2.5 The **representative of WorldTel** added that his organization had been established by ITU following the results of the Maitland Commission and an external study conducted in 1992-1993. WorldTel was a private telecommunication development and investment company, in a loose association with ITU, dedicated to investing exclusively in emerging markets. While early plans for investment to improve teledensity in a number of countries across eastern and southern Africa had failed to bear fruit, as a result of decisions by countries to proceed on an individual basis, investments had been made or were planned in a number of countries, including Mexico, Azerbaijan and Zimbabwe. WorldTel was also a major contributor to MSI, a mobile company working in some 14 African countries. WorldTel was interested in telecommunication and ICT development in any developing country and was specifically seeking proposals that included concession or joint-venture opportunities. A key element was the encouragement of local investor involvement. He would be pleased to provide further information to interested participants.

3 Introduction and examination of country reports

Cambodia (Document LDC/RT/2000/6a)

3.1 The **delegate of Cambodia** welcomed the opportunity to participate in the round table and thanked ITU for its continuing assistance to his country since its emergence from decades of conflict. Cambodia now had a real desire to achieve progress in telecommunication development.

3.2 The **ITU Senior Expert, BDT** introduced, on behalf of Cambodia, the country report contained in Document LDC/RT/2000/6a. After outlining the main geographical and demographic features of the country and providing background information on the development of the telecommunication sector since the 1993 election, which had been the culmination of the peace process, he said that between 1993 and 1996 the government had taken a number of steps to rehabilitate the telecommunication sector. Implementation of an ITU master plan for sector reform had subsequently been set in train through a series of national development strategies. While the reform process was not yet complete, distinct benefits had already accrued: post and telecommunications were now operating independently, private sector companies had been introduced, telephone growth had been rapid, revenues had steadily improved and new services such as the Internet had been introduced. The ITU Special Programme for LDCs had provided support for numerous activities in two main areas, namely introduction of new technologies, and restructuring, with a gradual move to privatization through a public sector enterprise and the establishment of a new regulatory body. Support had been received from World Bank, KFW and OFCOM in addition to ITU. Activities under the Special Programme for LDCs would continue – and it was hoped that investors would be attracted by a well structured and managed telecommunication environment.

3.3 The government had identified IT development as a cornerstone for further economic growth and social development and was also seeking support for two specific projects: network enhancement for IT development; and the formulation of a national IT masterplan. For the former, support was needed to formulate the project, evaluate its profitability and prepare a tender document for supply and installation, at an estimated cost of USD 3.1 million. The national IT Master Plan would lay the groundwork for the implementation of a new IT infrastructure and applications throughout the country. Support of around USD 170 000 was needed for the development of technical plans, specification of platforms and protocols for systems support, assessment of application needs for the public sector and market appraisals and forecasts. The government of Cambodia was highly committed to the future development and liberalization of the country's telecommunication sector and was seeking partners to support the various activities foreseen. He thanked the government for the excellent cooperation he had enjoyed during his mission there.

3.4 In reply to a question from the floor, the **delegate of Cambodia** and the **ITU Senior Expert, BDT** said that KFW grant aid had supported the laying of a fibre optic cable across the country, and a further project to extend the network to rural areas was planned, again with KFW support. The network was connected to Thailand and would ultimately extend across Cambodia through to Viet Nam and possibly beyond. The **representative of Detecom** said that KFW was also providing similar support to Laos, Mongolia, Viet Nam and many other developing countries, and the **representative of Nortel** urged other LDCs to follow the example of Cambodia in establishing a fibre optic network, which would enable companies such as his own to come in with further support.

3.5 The **representative of WorldTel** said it was important to determine how best to introduce privatization, and he welcomed Cambodia's plans to expand capacity within the Ministry of Posts

and Telecommunications before moving to full privatization, thereby enhancing the national asset. He would welcome WorldTel involvement at an early stage in such plans in other countries.

3.6 In reply to a question concerning the establishment of a regulatory body, the **ITU Senior Expert, BDT** and the **delegate of Colombia** said that Cambodia recognized the importance of an independent telecommunication regulator, and it was hoped to separate responsibility for regulation from the Ministry of Posts and Telecommunications by the end of 2000.

3.7 Regarding plans to encourage the mobilization of local resources, they said that, to date, 80-85% of all investment in Cambodia's telecommunication sector had come from foreign sources. One of the aims of restructuring was to increase the generation of domestic resources that could be re-invested in the sector. Most operational and maintenance activities were now financed from local funds, and it was hoped that as the sector matured the situation would improve still further. Other economic factors in the country would also have an influence.

Tanzania (Documents LDC/RT/2000/11a, b and c)

3.8 The **delegate of Tanzania** introduced the country report contained in Document LDC/RT/2000/11c, which outlined the telecommunication programmes being implemented in Tanzania in collaboration with ITU, and proposals for selected activities in a number of key areas for which cooperation was requested. Tanzania was sincerely grateful to ITU, which had already conducted two missions in the country, on universal access and frequency management, and a third, on cost-based tariffs, was scheduled before the end of 2000. Tanzania had separated responsibility for post and telecommunication services in 1993. At the same time it had established an independent regulatory body, one of the first countries in Africa to do so. Since 1993, a number of licences had been issued to telecommunication service providers including two for basic services, five for cellular operators, six for data communication operators, more than 12 for Internet service providers and several for equipment supply and installation. Although progress had been made in expanding and modernizing the telecommunication sector, teledensity remained low, particularly in rural areas. The major challenges were to determine how to achieve the objectives of universal access and funding of the rural telecommunication services; interconnection and tariff rebalancing; spectrum management and costing; ensuring optimal objectives of competition; and dealing with the convergence of technologies. Tanzania had planned and costed five programmes to tackle those challenges. Programmes to cover universal access and setting up a mechanism for financing universal service and for spectrum management and costing were outlined in Documents LDC/RT/2000/11a and LDC/RT/2000/11b. The other programmes covered interconnection pricing and cost-based tariffs; regulation of the post-privatized incumbent PSTN operator in the four-year exclusivity period; and local capacity building through human resources development and management. He hoped that through the round table, Tanzania would receive moral and material support for those proposed programmes.

3.9 On behalf of Tanzania, the **representative of Kemilinks International**, as the ITU consultant who had conducted the mission to Tanzania on universal access, introduced the country report contained in Document LDC/RT/2000/11c. In his view, Tanzania represented an attractive platform for investors in the telecommunication sector; it had experienced a period of political stability, had a relatively modern network, which had recently benefited from USD 250 million of investment, and had formulated a clear telecommunication policy and legislation. The newly privatized telecommunication operator had a number of obligations, including increasing the number of main lines to 800 000 over the next four years and installing a payphone in every community of 3 000 inhabitants or more. However, those targets fell short of providing universal access, and it was recommended that a detailed programme be formulated to provide a community access point for each community with 500 or more inhabitants by 2020. Universal access was clearly the route to universal service, the long-term goal. Although the government was establishing

a liberalized telecommunication environment, it currently faced a lack of capacity to regulate the existing operators and a lack of the necessary monitoring equipment. As indicated in the report, a number of recommendations had been made to rectify the situation through the establishment of interconnection and equipment-sharing agreements between the government and the various private operators, and to strengthen capacity for future market planning. All parties were now taking action to implement those recommendations. A draft outline for a project to finance universal access in Tanzania was attached to the report. The international community, in particular ITU, ATU and other development partners, was urged to continue to provide technical assistance to Tanzania for the further development of its telecommunication sector.

3.10 The **representative of Nortel Networks**, recognizing that effective regulation was of great importance, suggested that ITU should look into the possibility of developing a standardized model for regulators, which set out a code for operators, standard responses to infringement by operators, etc., which could be adopted by countries.

3.11 On behalf of Tanzania, the **Head, ITU Area Office, Harare** presented the review of spectrum management and costing undertaken by a consultant appointed by ITU. The executive summary and recommendations from the draft report of that review were contained in Document LDC/RT/2000/11b. A one-month mission had been undertaken in October 2000, as part of the ITU Special Programme for LDCs and on behalf of the regulatory body in Tanzania, to review the existing situation, and to assess requirements in terms of equipment and human resources to enable regular frequency management and costing reviews. The review had been undertaken in close collaboration with the staff of the regulatory body through a series of interviews and discussions. It had been concluded that Tanzania had a good regulatory framework in place, which should provide a sound basis for effective spectrum management. There was, however, a lack of adequate tools and sufficient expertise and experience among current staff for the implementation and enforcement of the regulatory framework. Effective spectrum pricing would be difficult to justify and implement unless effective spectrum management techniques were in place. A five-phase restructuring of spectrum management operations was recommended: establishment of a computerized record-keeping system, a computerized frequency assignment system and a frequency planning system, improvement in the monitoring and enforcement capability, and a revision of spectrum pricing. There would be a need to recruit and train additional personnel as required during the implementation of those phases. Detailed recommendations on each phase, the proposed frequency management directorate structure and proposals for funding to implement the recommendations were set out in the document. In conclusion, he drew attention to a number of other ITU regional programmes that were being actively pursued in Tanzania, including inter-country transmission links, infrastructure sharing, policy and restructuring, and regulation.

3.12 The **Chairman** welcomed the ongoing cooperation between countries in Africa to harmonize telecommunication developments, in particular as regards regulation. Sound and transparent regulatory structures were an urgent prerequisite for private sector investment.

3.13 In reply to questions from the floor, the **delegate of Tanzania** and the **Head, ITU Area Office, Harare** said that no firm recommendations on spectrum costing and pricing had as yet been established. A number of steps were needed, such as computerization, before proper pricing mechanisms could be put in place. Current pricing was based on the experience of others, and further studies were needed to permit cost-based pricing.

3.14 The **delegate of Syria**, speaking as Vice-Chairman of Study Group 1, said that spectrum pricing matters were usually considered by ITU through the Radiocommunication Sector, and a 1998 report on spectrum pricing, which comprised the experiences of many countries, was available. He cautioned that computerization alone would not solve the problems of spectrum

management. Staff should be capable of undertaking procedures manually before computerization proceeded.

Ethiopia (Document LDC/RT/2000/9a)

3.15 The **delegate of Ethiopia**, introducing the country report in Document LDC/RT/2000/9a, expressed Ethiopia's gratitude to ITU, and BDT in particular, for its ongoing support in a wide range of telecommunication development areas, including expertise assistance on regulatory and tariff matters, spectrum management and numbering plan, and telemedicine and telecentre pilot projects. After outlining Ethiopia's geographical, demographic and economic characteristics and reviewing its key telecommunication development statistics over the last decade, he drew attention to the two project proposals, relating to reform and restructuring of the telecommunication sector and to rural telecommunication development.

3.16 The key focus of the first project was expertise assistance and capacity building in the area of frequency monitoring. The objective was to assist the national telecommunication regulator (ETA), which received frequent complaints of interference from spectrum users, in building an efficient and effective frequency management system and thereby monitor spectrum use in the country. That would benefit the telecommunication sector in Ethiopia by enabling ETA: to safeguard spectrum user interests, by locating and eliminating interference; to investigate illegal and non-compliant operations; to supplement the national frequency database and hence improve frequency planning; to foster conservation of national frequency resources; and to enhance awareness and hence promote efficient and economic utilization of the spectrum.

3.17 The implementation strategy comprised two main strands, namely: expertise assistance for establishing an efficient and effective spectrum management system and building human resources capacity for its implementation; and building spectrum monitoring capability through the acquisition of simple and basic monitoring equipment. The project was designed to be implemented with the direct involvement of and strong support from ITU-BDT and, once implemented, would be totally owned, operated and managed by ETA. The total estimated cost of the project was USD 843 000, around half of which would be contributed by Ethiopia itself, the remaining balance to be covered by an interested partner or partners. Ethiopia would also bear local cost components, such as tax and labour.

3.18 The second project, relating to new technologies for rural development, was based on the report of ITU-D Focus Group 7. Its objective, given Ethiopia's extremely low teledensity and high concentration of infrastructure in the towns, was first to implement pilot projects in rural areas and subsequently to expand them to different areas insofar as available and affordable technologies allowed. The expected benefits included creation of low cost ICTs; bridging the digital divide; underpinning economic activities in rural areas; improving public administration; and enhancing Ethiopian society's information culture. Some forty pilot areas would be covered initially, with subsequent expansion to other rural and remote areas once feasibility had been proven.

3.19 Once again, the project would be implemented with strong support from BDT, using one of the technology alternatives identified by Focus Group 7. Once implemented, the project would be operated and managed by the beneficiary target communities, with assistance from ETA and ETC in the area of maintenance and management. With regard to estimated costs, there were two scenarios. The first, based on narrow-band packet radio, employed a unit cost per pilot project of USD 7 500, making an overall total of USD 300 000. The second, based on VSATs, involved a unit cost of USD 8 000, for a grand total of USD 320 000. Once again, Ethiopia would cover local cost components.

3.20 The **Head, ITU Regional Office, Harare** said that Document LDC/RT/2000/9b reflected the conclusions of an ITU consultant concerning telecommunication development policy and

regulatory aspects in Ethiopia. The main recommendation was the formulation of an infocommunication policy and policy statement, with the aim of making the necessary changes to ensure Ethiopia achieved the level of infocommunication services necessary for a middle income economy by the year 2020. That would involve forming an independent regulator; separating basic services from value-added services; at least partially privatizing the incumbent ETC; liberalizing equipment importation, assembly, manufacture, installation and maintenance to some extent; strengthening and enhancing local human resources capacity in order to improve efficiency; and simple authorization and licensing procedures.

3.21 An analysis of investment policy showed that Ethiopia had to make its environment more attractive to investment, reducing the risk factor for investors.

3.22 The **representative of Worldspace** described how Worldspace was working with the Ethiopian Media Agency (EMA) to extend tele-education to cover all schools in Ethiopia, to provide interactive real-time education, and to supply additional (radio and multimedia) education and information material, and with ITU-BDT on a telemedicine project in ten hospitals and in building mobile telehealth vans.

3.23 During the ensuing discussion in which, in addition to the previous speakers, the **delegate of Syria**, the **representative of UNESCO** and the **Chairman**, took part, emphasis was laid on the imperative need to prepare a conducive environment to attract potential partners, to which end fast and strong policy reform was essential. Concerning the possible scope of a spectrum monitoring project with such a modest budget, it was stated that the initial target was a mobile frequency monitoring station that could operate as and when needed, with the longer-term aim of assuring a fairer and more equitable regulatory environment in the area of frequency management, which would be of benefit to partners.

3.24 The **representative of WorldTel** cautioned that, while pilot projects would go some way to helping the situation, the only way for Ethiopia to be in a position to attract partners would be to heed the consultants' advice and address the fundamental regulatory issues. That was where ITU could help, and Cambodia could serve as a good model.

Chad (Document LDC/RT/2000/7a)

3.25 The **delegate of Chad**, after thanking BDT for all the assistance provided to Chad under the Special Programme for LDCs, introduced his country report in Document LDC/RT/2000/7a, updating the statistical information with the latest figures. As detailed background to the proposed projects, the presentation provided a comprehensive overview of Chad's geographical and economic situation, the status of the telecommunication sector and in particular the reform process, the national telecommunication company SotelChad and its network, as well as performance indicators and demand forecasts.

3.26 The overall objective of government telecommunication policy, which was reflected in the proposed projects, was to satisfy the growing demand for telecommunication services and ensure that as much of the population as possible had access to telecommunications; to extend the network to rural areas; to find means to attract private investment in order to accelerate development; to strengthen SotelChad's technical capabilities prior to privatization; and, last but not least, to privatize the national telecommunication company. With a view to laying the foundations for privatization, four short-term projects were envisaged.

3.27 In the area of switching, it was planned to more than double the number of main lines within a period of five years, by expanding the multipurpose switching centre; introducing Signalling System No. 7; extending exchanges in the provinces; establishing an automatic exchange in a key oil-producing region; and installing eight VSAT switches.

3.28 As to transmission and rural telephony, projects for the next five years included establishment of microwave or optical fibre links as a backup for part of the satellite transmission network; digitization of the SAOSAT network; extending rural coverage using microwave and VSAT technologies; digitizing radio-relay links; establishing an optical fibre link along the Chad-Cameroon pipeline; extending the IDR carrier to the United States; opening direct links with SENSAT countries; extension of inter-exchange connections; and improving rural coverage, through RASCOM and other means.

3.29 The above projects would be supported by training and technical assistance projects, which would seek to draw up SotelChad's human resources development plan; update the telecommunication network development plan; review telecommunication tariffs; computerize the company; and provide some 300 student weeks of training.

3.30 The expected outputs were an initial increase in teledensity from 0.14 to 0.25 per 100 inhabitants and subsequently, with privatization, up to and beyond the subregional average; lower cost of services and improved quality of service; a rise in annual growth from 7 to over 18%; coverage of rural areas using satellite, microwave or other technology; improved efficiency and competitiveness of Chad's national and international telecommunications; and a broader range of services offered with new technologies.

3.31 Replying to questions from the **delegates of Mali and Syria** and the **representative of UNESCO**, he said that SotelChad was currently entirely State-owned, but was to be privatized, hopefully within one or two years. In the cellular mobile area, there were two mobile operators - Celltel, constituted following an international invitation to tender, and Chadmobile, a subsidiary of SotelChad which held a 51% stake. The Internet network was not very highly developed, but an extension project would be completed by the end of the year and Internet would be addressed within the framework of the Central African Republic - Chad - Cameroon link. Primary energy supplies had been a problem in recent years, but one which had been solved to a large extent with the very recent privatization of the national power company, and the situation could well be improved still further by a project to connect Chad to Cameroon's electricity network. Telecommunication installations in the provinces were mainly solar powered. The modest teledensity target of 0.25% had been set in the light of the current status of the infrastructure, which had been damaged by recent conflicts and instabilities; with the privatization of SotelChad, a more ambitious objective of exceeding the sub-Saharan average would be envisaged.

3.32 Replying to a question from the floor, the **representative of WorldTel** said that while almost any telecommunication project was viable, the acid test was how it was structured, designed and implemented. In order to translate Chad's projects into a private partnership, it would be necessary for the government to determine what type of partnership it envisaged. What would probably be required was a joint venture partnership with Chad Telecom. For that, the government would have to be willing to enter into a long-term partnership arrangement, such as a joint venture partnership or a BOT concession. Chad's project needed to be reformulated as a proper business case in that direction.

Comoros (Document LDC/RT/2000/8a)

3.33 The **delegate of Comoros**, introducing the project document in Document LDC/RT/2000/8a, gave a brief description of the situation in the Comoros, particularly with regard to telecommunications and the national telecommunication company (SNET).

3.34 The projects for which Comoros was seeking support included implementation of a digital GSM cellular network; expansion of the urban network in the capital; rehabilitation of networks in main towns; digitization of transmission routes; extension of telephone coverage to rural areas, particularly through the use of cardphones; enhancement of the maritime network; modernization of

an earth station (dual polarization); establishment of a VSAT network; opening of direct links in addition to those with France and Mauritius; establishment of four local exchanges; and laying of fibre-optic cables.

3.35 The key priority objectives in the Comoros were reform and restructuring of the telecommunication sector and development of rural telecommunications. Reform would involve separating posts and telecommunications; establishing a new telecommunication company; developing an organization chart for the new entity; and setting up and installing a regulatory body. The need for rural telecommunication development was evident from the fact that 60 per cent of existing main lines were concentrated in the capital and 80 per cent of villages had no telephone access whatsoever.

3.36 With the invaluable assistance of BDT experts in various fields (financial management; organization; network planning; training; frequency management; TELECOM regulation), a national ad hoc committee had conducted a preliminary study of restructuring and a seminar on restructuring had taken place, the result being two proposed scenarios. The first - internal separation within SNPT – was to be implemented in January 2001. The second - reorganization of the telecommunication sector - would entail the establishment of four directorates - financial, administrative, production and commercial.

3.37 Comoros was deeply grateful to ITU and BDT, their experts, the Director of BDT and everyone who had assisted the country under the Special Programme for LDCs.

3.38 During the ensuing debate, in which the **representatives of UNESCO** and **ATU**, the **ITU Senior Expert, BDT** and the **Chairman** took part, comments focused on the importance of an Internet development policy; the essential need for an attitude change and change management when a public national telecommunication company became commercial or private; and the convergence of all media, including broadcasting.

3.39 The **delegate of the Comoros** said that the Internet was not highly developed (SNPT managed X.25 exchanges), but would be an important component for the future. Every effort had been made, including training and expert assistance, to prepare SNPT staff for the change in mind-set that liberalization and privatization involved.

3.40 The **Director of BDT** said that, until such time as the different sectors, such as telecommunications and broadcasting, expanded to the extent that they started to overlap, convergence would not be such a burning issue in LDCs as it was elsewhere. He took due note of the importance of providing training in commercial practices for staff of telecommunication companies being liberalized or privatized.

3.41 With regard to the forthcoming period, he said that the expert groundwork carried out under the Special Programme for LDCs in countries such as Comoros would be followed up with specific assistance under regular ITU-D programmes. In general, one of BDT's aims for the next WTDC was to reach beyond individual projects towards a broader approach bringing in the countries themselves on the basis of joint targets, common objectives and common challenges, in order to change people's lives on the ground on a much larger scale than before. That would not only help the developing countries, but also serve to boost the telecommunication industry, thus serving equally the interests of ITU-D's Sector Members.

Sudan (Document LDC/RT/2000/10a)

3.42 The **delegate of Sudan** introduced the country report contained in Document LDC/RT/2000/10a, which described a project aimed at strengthening the Telecommunication Training Centre (TTC) in Khartoum to enable it to serve national needs and act as a subregional training centre covering digital mobile communications (IMT-2000 technologies) and future

technologies in various disciplines. Since the 1990s, Sudan had been giving priority to the telecommunication sector as an important element in rural development and alleviation of poverty. A considerable improvement in telecommunication services had been observed following the formation of the privatized Sudan Telecommunication Company Limited (Sudatel) in 1993 with support from Alcatel, Siemens, Ericsson, and others. Teledensity had increased and networks had been modernized. A regulatory authority had been established by legislation passed in 1996 and steps were being taken to improve its operation. The proposal to strengthen TTC was designed as a joint project with collaboration between Sudan (represented by Sudatel), ITU (possibly with funds from the TELECOM surplus) and other parties (possibly including Alcatel). The project had four immediate objectives: to equip the centre to be able to provide training on, *inter alia*, advanced digital mobile communications and digital broadcasting; to train training manager and trainers for Sudan and neighbouring countries to enhance telecommunication training capacity; to establish a distance-education system through the Internet and low-cost videoconferencing systems; and to establish and equip the necessary laboratories to cover the digital technologies. Details of the proposed reporting and evaluation schedules and the staffing, fellowships and equipment budgets were set out in the document. It was envisaged that each group of partners would contribute one-third of the projected costs of approximately USD 2.3 million.

3.43 The **representative of UNESCO** suggested that TTC might be a suitable location for one of the planned Internet training centres.

3.44 In reply to questions from the floor, the **delegate of Sudan** said that there were already a number of local Internet trainers in the country and it had not been thought necessary to budget for an expert in that area, although occasional help might be needed. Training on switching would cover several of the systems available. He confirmed that UNDP was no longer involved in the development of TTC. The Centre was already in full operation and helped some 3 000 trainees each year.

4 Internet training centres initiative for developing countries

4.1 The **Head, Policy, Strategy and Financing Department, BDT**, introducing Document LDC/RT/2000/16, described an important new initiative very recently approved by the meeting of the TELECOM Surplus Fund Steering Committee. The initiative, which was consistent with strategic objectives set by the ITU membership, was designed to address the worldwide shortage of Internet networking professionals, which constituted a significant barrier to development in the developing countries. The aim was, by 2003, to establish 50 training centres to prepare Internet and IP networking professionals, giving priority to LDCs whenever possible. The target institutions would be non-profit, self-sustaining organizations, and participation of women would be actively encouraged. The project was a partnership venture open to any interested parties; indeed, it could only be implemented through such partnerships. Some 20 global companies had expressed significant interest, and firm commitments had already been made by, for example, Cisco Networking Academy Programme (value: USD 6.8 million) and Oracle Internet Academy (value: USD 1.13 million). Inputs from the ITU TELECOM surplus programme included coordination and support, promotion and new partnerships and complements to lab equipment (value: USD 1.5 million).

4.2 The BDT presentation gave rise to a lively debate, in which the **delegates of Switzerland and Syria** and the **representatives of Swisscom, ATU, UNESCO and Kemilinks International** took part. All participants welcomed and applauded the project. The partnership aspect was underlined. It was important for governments to show commitment and send out a political signal to the private sector, and ITU must sensitize governments and secure their genuine involvement. Other partners, not only the private sector, should be associated and the BDT regional offices should be involved. The training provided should strive to transfer competence, knowledge and know-how, in

particular through the training of trainers. Obstacles were both economic and educational (literacy was vital for use of the Internet). An appropriate needs assessment would be important, as would coordination and synergy with the many existing projects in the same field. Despite obvious problems of affordability and literacy rates, consideration should be given to how the centres could be used to help rural areas.

4.3 The **representative of Sudan** expressed Sudan's keen interest in becoming a local partner for the project.

4.4 The **representative of BDT** stressed that the project was only one of 36 projects financed with seed money from the TELECOM surplus. It would be properly harmonized with the many activities under way, in partnership not only with the private sector but also with regional organizations and agencies such as UNESCO, CTO and the *Agence de la Francophonie*. It would moreover be closely linked with the centres of excellence, whose purpose was to provide training to decision-makers in developing countries. The overriding objective would indeed be local capacity building in the developing countries and LDCs.

4.5 The **Director of BDT** said that the project was in keeping with BDT's new philosophy of moving towards more large-scale ventures that would genuinely make a difference. It would help bridge the digital divide, develop partnerships on a transparent and non-exclusive basis and outreach to all BDTs' partners. Not only was the project a large-scale venture in itself, promoting Internet access worldwide, but there would also be linkage with many other projects such as the enterprise incubator project, telemedicine and tele-application activities, the centres of excellence and rural development. With centres in 50 countries, it would be a test of BDT's capability to undertake large-scale projects and make a real impact.

5 Special Programme for Least Developed Countries (Document LDC/RT/2000/5)

5.1 The **Head, Special Unit for LDCs, BDT** introduced Document LDC/RT/2000/5 which contained a report on the ITU Special Programme for LDCs established in accordance with Chapter 3 of the Valletta Action Plan (WTDC-98). The programme's objectives were to reform the telecommunication sector of least developed countries and to increase the penetration of telecommunication services so as to achieve universal access, with a target of increasing teledensity both in urban and rural areas. The strategy was now well defined, with increased assistance concentrated on a smaller number of countries at any one time. The assistance remained catalytic and was directed at the five priority areas established in the Valletta Action Plan. The regular budget allocation for countries selected for 2001 was assured. There were no provisions, however, for activities in countries in special need, such as Burundi, Liberia, Rwanda and Somalia, which had been identified by the Plenipotentiary Conference in Resolution 34 (Minneapolis, 1998), and others, such as Sierra Leone, which had experienced difficulties since the Plenipotentiary Conference. The estimated costs for proposed actions in those countries were provided in Part C, Section 5 of the document and he hoped that support for those projects would be forthcoming.

5.2 In reply to a question from the floor, he said that assistance to the six LDCs covered by the Special Programme in 2000 would continue on an ad hoc basis and ITU funds were available for that purpose. It was hoped, however, that partnerships would emerge to ensure continuity of support.

6 Conclusions and pledges by development partners

6.1 The **Head, Special Unit for LDCs, BDT** said that during the course of the round table, participants had heard that interest had been expressed by KFW and OFCOM in continuing support for projects in Cambodia, and by Alcatel in respect of the proposal presented by Sudan. Further, Swisscom had indicated to ITU a willingness to provide experts for LDCs. TCDC and ECDC activities could also play a valuable role in telecommunication development. For its part, BDT would continue to implement the Special Programme for LDCs with ad hoc assistance to the six LDCs covered in 2000 and using the budget allocation of CHF 1.1 million to support the six countries selected for 2001. In addition, a second professional staff member would be appointed to the Special Unit for LDCs, whose tasks would include the coordination of fund raising.

6.2 In reply to a question from the **delegate of Syria** regarding traditional development funds, the **Director of BDT** said that it was disappointing that those funds had chosen not to be represented at the round table, despite the urgent need for telecommunication development in LDCs. It was hoped that with an additional staff member BDT would be able to devote greater efforts, throughout the year, to seeking external support. Despite the limited budget resources available, ITU hoped to build on the experience gained so far in the Special Programme for LDCs and would continue to play a catalytic role in the promotion of partnerships. Any suggestions for improving fund-raising approaches would be welcomed.

6.3 The **representative of UNESCO** said that, in his experience, appeals for joint ventures and multilateral or bilateral arrangements had proved more successful in generating funds than requests for voluntary contributions. Self-benefiting and deposit funds could also be approached, although such funds often imposed specific conditions.

6.4 The **representative of WorldTel** confirmed that most regional development banks followed policy directions set by the World Bank, which did not appear to favour funding of telecommunication development. His own organization, while it could not operate on the basis of pledging, was seeking to assist countries through partnerships with well-defined projects that had a potential for licences or concessions and an existing strategy. WorldTel investment was designed with an exit mechanism to allow countries to take over the operations themselves in due course or sell them on to local or outside partners. The work undertaken in collaboration with ITU in Cambodia provided a model for the type of approach WorldTel was seeking, and he hoped that WorldTel could establish a dialogue with Cambodia to consider further a number of the activities outlined in the presentation. The projects proposed by the other countries, however, would need revising to meet the criteria for consideration by WorldTel.

6.5 The **Chairman** suggested that the terms of reference of ITU experts assisting LDCs in preparing proposals should take into account the points made by the previous speaker so as to increase the chances of establishing partnerships for their implementation.

6.6 In reply to a question from the **delegate of Cambodia**, the **Head, Special Unit for LDCs, BDT** said that ad hoc follow-up assistance to the LDCs supported in 2000 would be given on a case-by-case basis, according to need. The **Director of BDT** added that BDT would continue to assist those countries in seeking partners for all the projects presented and some of those activities would be selected for possible support from TELECOM surplus funds.

6.7 The **representative of Kemilinks International** suggested that further approaches should nevertheless be made to the development banks, as some funding was available from those sources for the type of activities proposed.

6.8 In reply to questions from the floor, the **representative of WorldTel** said that his organization would like to see a similar relationship between ITU and WorldTel to that between the World Bank and IFC, such that ITU could ensure that projects were developed with a view to

WorldTel financing. Unfortunately, the projects proposed, for example, by Chad and Comoros comprised general development activities that were more suitable for financing through donation or loans.

6.9 The **Chairman** suggested that ITU should assist the six LDCs participating in the current round table to reformulate their proposals in a manner that was more likely to attract investment.

7 Closure of the meeting

7.1 The **representative of Nortel Networks** speaking on behalf of the private sector, commended ITU for convening the Partnership Round Table, which had proved an informative and worthwhile exercise that had given participants insights into the underlying policies that drive the various potential partners. Useful suggestions had been made as to how LDCs might present a more realistic business case in order to attract investment. There was clearly considerable potential in telecommunication projects in LDCs provided that the regulatory infrastructure, clear network development strategies and strong and dynamic plans were in place. A project in Uganda, for example, had succeeded in attracting a total investment of USD 300 million and had broken even in a period of nine months. It was, however, essential to create the right environment to attract such investment and take advantage of the rapid pace of development in telecommunications and information technology. For its part, Nortel Networks was sponsoring ITU centres of excellence in Senegal and Kenya and was working in a number of countries to accelerate Internet growth and extend telecommunication networks to rural areas. It was essential to turn the Internet into an instrument that was freely available to all people, whether urban or rural, rich or poor. Governments must recognize the advantages of telecommunication and information technology in enabling LDCs to leap-frog stages of development. It was therefore important for leaders and policy-makers to appreciate the developments in the telecommunication sector. Electronic applications provided an opportunity for diversification of economies away from reliance on primary production and for earnings of foreign exchange needed to finance further development and improve standards of living. Some of the IT-related posts vacant elsewhere could be outsourced to least developed countries once the appropriate infrastructures were in place.

7.2 The **delegate of Ethiopia**, speaking on behalf of the LDCs attending the round table, commended the efforts of BDT in assisting LDCs through the special programme in the five priority areas identified by the Valletta Action Plan. Ongoing telecommunication development activities would clearly stimulate socio-economic development in those countries. The six LDCs concerned greatly appreciated the opportunity to report on the status of their ongoing and planned telecommunication development projects and to appeal for investment partners for the implementation of those projects.

7.3 The **representative of UNESCO**, speaking on behalf of the United Nations system organizations, welcomed BDT's initiative in organizing the round table and expressed the hope that the projects presented would all be implemented in due course. The United Nations system had undergone a crisis of identity and financing in recent times and he hoped that Member States would encourage renewed interest in assisting all countries to develop good and democratic governments, adequate education and health systems and sound economies taking advantage of new telecommunication technologies.

7.4 The **Director of BDT** expressed the hope that the round table had provided an opportunity for potential investment partners to understand the needs and aspirations of the six LDCs and that dialogues would be established that could in due course lead to successful investment partnerships. ITU would build on the experience of the first round table to improve future assistance procedures.

7.5 Following the customary exchange of courtesies, the **Chairman** declared the round table closed.
