



INTERNATIONAL TELECOMMUNICATION UNION
TELECOMMUNICATION DEVELOPMENT BUREAU

**WORLD TELECOMMUNICATION DEVELOPMENT
CONFERENCE (WTDC-98)**

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PLENARY MEETING

Director, Telecommunication Development Bureau

BUENOS AIRES DECLARATION AND ACTION PLAN

The Buenos Aires Declaration and the Buenos Aires Action Plan (BAAP) were developed by the first World Telecommunication Development Conference (WTDC, Buenos Aires, 21 to 29 March 1994). They have been the basis of all activities undertaken in the ITU Development Sector since 1994. They are presented in Annex 1 for reference and information.

- For reasons of economy, this document is printed in a limited number of copies. Participants are therefore kindly asked •
to bring their copies to the meeting since no others can be made available.

ANNEX 1

**BUENOS AIRES DECLARATION ON
GLOBAL TELECOMMUNICATION
DEVELOPMENT FOR THE
21ST CENTURY**

The Conference was the culmination of a process highlighted by:

- a) the Maitland Report;
- b) the Arusha Declaration on World Telecommunications Development (May 1985);
- c) the decision of the Plenipotentiary Conference (Nice, 1989) to strengthen the Union's development role by establishing the Telecommunication Development Bureau (BDT);
- d) the ITU High Level Committee's Report "Tomorrow's ITU: The Challenges of Change", which recommended that "... the ITU [should] play a more clearly-defined catalytic role, as envisaged in Nice Resolution No. 14, by working cooperatively with international, regional and bilateral development and financial agencies, and by presenting to developing countries the range of policy and structural options that will generate greater resources for telecommunications development";
- e) the ITU Constitution and Convention (Geneva, 1992) which refer, *inter alia*, to the Union's catalytic role in stimulating telecommunication development, call for special attention to be given to the requirements of the least developed countries, and establish the ITU Telecommunication Development Sector;
- f) the Resolutions and recommendations of the first cycle of regional telecommunication development conferences:
 - Harare, 1990 for Africa;
 - Prague, 1991 for Europe;
 - Acapulco, 1992 for the Americas;
 - Cairo, 1992 for the Arab States;
 - Singapore, 1993 for Asia and the Pacific;
- g) the insights provided in the message from the Telecommunication Development Advisory Board;
- h) the concept of sustainable development emphasized by the United Nations Conference on Environment and Development, Rio de Janeiro, June 1992.

Taking note of the above and with a view to setting goals and objectives for the future, the Conference **declares that:**

- a) Telecommunications is an essential component of political, economic, social and cultural development. It fuels the global information society and economy which is rapidly transforming local, national and international life and despite physical boundaries is promoting better understanding between peoples. Thus, ITU Members have the duty to provide for communications to be made available to all individuals, groups and peoples. A

dynamic area of economic activity in its own right, telecommunications underlies practically all areas of economic activity and facilitates trade.

- b) New technological developments in telecommunication and information technologies have the potential to close the development gaps between developing and developed countries and, in individual countries, between densely and sparsely populated areas. Telecommunications may unintentionally perpetuate the development gaps without a more determined, integrated and strategic approach to the challenges of telecommunication development by governments, the private sector and international and regional organizations.
- c) Any strategic cooperation for the development of telecommunications must recognize the varying levels of development in developing countries. While encouraged by the convergence between medium and high teledensity countries, there is still a growing divergence between medium and low teledensity ones. This fact underscores the need to pay special attention to the requirements of the least developed countries.
- d) Given that the telecommunication requirements of most developing countries are vast, and the resources available to meet them limited, governments should establish appropriate telecommunication policies and regulatory structures.
- e) The development of telecommunications may be fostered by liberalization, private investment and competition in appropriate circumstances. Their introduction in any restructuring exercise should be compatible with national development goals and with improving service to underserved areas. Such a restructuring should include a regulatory system which will:
- create a stable and transparent environment to attract investment;
 - facilitate access of service providers to the network with a framework that promotes fair competition while protecting network integrity;
 - ensure the provision of universal service helping to achieve integrated rural development as well as promoting innovation and the introduction of new services and technologies; and
 - guarantee the rights of users, operators and investors.

Restructuring should promote partnerships between telecommunication organizations in developing and developed countries that equitably take account of the interests of developing countries.

- f) The ITU has a special role to play in advising policy-makers options available in tailoring policies and regulatory structures to fit a country's particular requirements. The ITU should work in close cooperation with regional telecommunication organizations and international, regional and national development and financing agencies.
- g) Since the resources available through multilateral cooperation will not be sufficient to meet the requirements of developing countries, the ITU must play a creative catalytic role in concert with all the entities forming part of its wide family, and with global, regional and national organizations and agencies, and the private sector. These development, financing and investment agencies, both global, regional and national, are urged to attach higher priority to the development of telecommunications in developing countries.

- h) The studies carried out in the ITU Radiocommunication and Telecommunication Standardization Sectors play a significant role in the transfer of knowledge and technology. Close cooperation between these Sectors and the Telecommunication Development Sector is necessary to bring about new dynamism to this transfer.
- i) Development strategies should encompass sound and television broadcasting via terrestrial and satellite systems as one of the key factors in promoting social and cultural development. The new broadcasting technologies being developed will provide opportunities, including those of distance learning, for a greater contribution to development.
- j) No telecommunication network can be designed, installed and operated efficiently without appropriately skilled staff at all levels. Human resources development and management require innovative approaches to meet the challenges of the rapidly changing telecommunication environment.
- k) The Buenos Aires Action Plan, adopted by this Conference, establishes a programme of cooperation among the members of the Telecommunication Development Sector (development conferences, study groups, etc.), a programme of assistance to developing countries, and a special programme to enable the least developed countries to reach a threshold of sustainable telecommunication development.

**BUENOS AIRES ACTION PLAN
FOR THE GLOBAL DEVELOPMENT
OF TELECOMMUNICATIONS**

Work Programme of the Telecommunication Development Sector
for the period 1994-1998

INTRODUCTION

This work programme for the Telecommunication Development Sector (ITU-D) for the period 1994-1998 was developed by the first World Telecommunication Development Conference (WTDC, Buenos Aires) which was convened from 21 to 29 March 1994. It comprises the following parts:

- Chapter I: A programme of cooperation among the members of the Telecommunication Development Sector
- Chapter II: A plan of action by the BDT for assisting the developing countries
- Chapter III: A special programme for the Least Developed Countries

These three parts are based on the Buenos Aires Declaration, specifying the long-term goals and orientation and a Resolution defining the policy and strategy for the Sector over the same period.

This work programme also contains in chapter III a certain number of activities which could be financed by extrabudgetary resources (including voluntary contributions) in accordance with Nos. 486 and 487 of the Convention of the ITU (Geneva, 1992) and Resolution 24 and Recommendation 1 of the Plenipotentiary Conference (Nice, 1989).

CHAPTER I

Programme of cooperation among the members of the Telecommunication Development Sector

I.1 Introduction

This programme is intended to include all meetings in world and regional development conferences, in study groups, in associated working parties and in the Telecommunication Development Advisory Board (TDAB).

I.2 World telecommunication development conferences

It is assumed that in accordance with the Convention, the Council will convene a world telecommunication development conference in 1998.

I.3 Regional telecommunication development conferences

Taking into account the programme of meetings in the period 1994-1998 and considering the need to plan for meetings of the study groups set up by this Conference, the Director of the BDT in consultation with the Secretary-General shall propose to the Council the regions for which such conferences should be convened.

I.4 Study groups

In accordance with Resolution No. 2, this Conference sets up two study groups as well as the Questions to be studied by them and their working methods. Each of the two study groups shall normally have two meetings within the study period. Study groups may set up working parties and decide on their meetings within their budgetary limits.

The following Questions were adopted by the Conference for study by Study Groups 1 and 2 during the period 1994-1998. Council (1994) may consider the order of priority.

Study Group 1

- Question 1/1: Role of telecommunications in economic, social and cultural development
- Question 2/1: Telecommunication policies and their repercussions at the level of institutional, regulatory and operational aspects of services
- Question 3/1: Impact of the introduction and utilization of new technologies on the commercial and regulatory environment of telecommunications
- Question 4/1: Policies and ways for financing telecommunication infrastructures in developing countries
- Question 5/1: Industrialization and transfer of technology

Study Group 2

- Question 1/2: Special concerns of developing countries in relation to the work of the Radiocommunication and Telecommunication Standardization Sectors¹
- Question 2/2: Preparation of handbooks for developing countries
- Question 3/2: Planning, management operation, and maintenance of telecommunication networks
- Question 4/2: Communications for rural and remote areas
- Question 5/2: Human resources development and management
- Question 6/2: Impact of telecommunications in health-care and other social services
- Question 7/2: Telecommunication support for the protection of the environment
- Question 8/2: Public service broadcasting infrastructure in developing countries

I.5 Priority

The Conference agreed that the special programme for the LDCs will be the first priority.

I.6 Telecommunication Development Advisory Board (TDAB)

The Conference considered that a more efficient management of the Sector would require a review of the membership and the function of the TDAB and adopted in this respect a Resolution recommending to the Plenipotentiary Conference (Kyoto, 1994) to make consequential changes to the Convention. Six meetings of the TDAB are foreseen for the period 1994-1998.

¹ The study of the work of the Radiocommunication and Telecommunication Standardization Sectors relating to regulation and tariff aspects as well as to the development of new services will be dealt with jointly by Study Groups 1 and 2.

CHAPTER II

Plan of action by the BDT for assisting the developing countries

II.1 Introduction

This chapter covers all BDT activities in supporting the study groups in carrying out global or regional programmes and studies, in assisting individual countries, and in executing United Nations Development Programme (UNDP) and Funds-in-Trust projects.

II.2 Global and regional programmes and studies

These programmes and studies are either in support of the study group or are undertaken within the framework of the normal assistance provided by the BDT.

II.2.1 Updating existing programmes and studies

A number of programmes and studies were carried out by the former Technical Cooperation Department. Other programmes and studies have been initiated by the BDT and are on the way to completion. Appropriate manpower is required for updating and compiling these programmes and studies.

II.2.2 New programmes

The Buenos Aires Action Plan proposes 12 new programmes which will provide a focus for the work of the ITU Development Sector. The underlying philosophy is to use resources available within the budget of the ITU Development Sector to leverage a much wider, coordinated effort on the part of the telecommunication community.

The Action Plan refers mainly to coordinated activities of regional and global relevance. It is expected that these activities will be complemented by multilateral and bilateral projects, executed or supported by the BDT and its development partners. The impact of such projects and their contribution to the goals and objectives of the Buenos Aires Action Plan will be greatly enhanced if they are designed and implemented in a coordinated manner within the framework of this Plan. This should be taken into account when assigning priorities related to proposals and requests for multilateral and bilateral programmes and projects.

a) Programme No. 1: POLICIES, STRATEGIES AND FINANCING

1. Programme goals, objectives and strategies

The purpose of this programme is to develop models and guidelines for the harmonization of national policies, regulations, including national regulation of the spectrum and its pricing, and institutional structures conducive to accelerated and balanced development of telecommunication systems worldwide.

Such policies and strategies would enable all nations in the world to fully exploit all telecommunication tools for sustainable social, economic, and cultural development, for international and regional cooperation, for protection and improvement of the environment, for rescue and relief operations, and for peaceful coexistence. One of the objectives of the programme is to facilitate the exchange of information and experiences between and among members of the ITU Development Sector and other development partners.

2. Proposed actions:

The following actions are recommended and shall be reviewed by Study Groups 1 and 2.

1. To organize roundtables, seminars, and workshops on telecommunication policies, strategies, and financing.
2. To develop documentation on national telecommunication policies, strategies, finance and regulation. (Can also be useful for Programme No. 11.)
3. To produce surveys and studies (handbooks) on the specific policies carried out in various countries, and to bring the results of these studies to the attention of national policy-makers and planners.²
4. To train national policy-makers, regulators, and planners in this field and provide other assistance that may be necessary.

² Refer to Questions 1/1, 2/1, 3/1 and 4/1 of Study Group 1 and 4/2 and 5/2 of Study Group 2.

b) Programme No. 2: HUMAN RESOURCES MANAGEMENT AND DEVELOPMENT (HRM/HRD)

1. Programme goals, objectives and strategies

The long-term goal is to provide human resources, particularly in developing countries, with the competencies and motivation required for regulatory bodies and telecommunication service providers to operate efficiently in the changing telecommunication environment and contribute effectively to the achievement of the goals of the Buenos Aires Action Plan.

These goals also imply that the HRM/HRD programme, besides providing a framework for coordination of ITU Members' and other development partners' efforts to develop the human resources within the telecommunication sector, should contribute to the development of flexible and open learning systems which particularly address the needs of people and small enterprises in rural and low-income urban areas (see also Programmes Nos. 9 and 12 - Integrated Rural Development and Development of Telematics and Computer Networks).

Thus, the HRM/HRD programme will contribute to improve the relevance and accessibility of distance education and training offered at regional and global levels and support current initiatives to bring together academic and R&D institutions as well as other potential suppliers of distance learning in a global effort for the transfer of know-how and harmonization of diplomas and certificates. In particular, the competent study group and the BDT should continue to play a leading role in the development of models and standards for the cooperative design of flexible, portable and adaptable, modular distance learning programmes as well as standardized management information systems capable of handling both needs for and supply of such programmes, i.e. an "electronic market place" easily accessible by users as well as providers of training courses.

2. Proposed actions:

The following programmes are recommended and shall be reviewed by Study Groups 1 and 2.

1. Management Development for Telecommunications (MANDEVTEL)
2. TeleProject
3. Needs analysis, provision of training (joint ventures, etc.)
4. Global distance learning system for technicians³
5. Development of standards, models, guidelines and other tools
6. Global Telecommunication University
7. Development of R&D capabilities
8. Direct assistance for improvement of HRM/HRD
9. Distance education and training for rural and low-income areas⁴
10. Information system on HRM/HRD activities ("electronic market place" for training).

³ Feasibility studies and pilot projects.

⁴ In coordination with Programmes Nos. 9 and 12 (Integrated Rural Development and Development of Telematics and Computer Networks).

c) Programme No. 3: GUIDELINES FOR THE ELABORATION OF A BUSINESS-ORIENTED DEVELOPMENT PLAN

1. Programme goals, objectives and strategies

The long-term goal is to enable national administrations to produce and update their business-oriented development plan.

The immediate objective of the programme is to prepare a guide, to prepare the corresponding training material, and to organize regional seminars to disseminate the know-how. In view of the large number of countries in the developing regions, regional ITU-sponsored training centres such as the ESMT (multinational telecommunication high school) and AFRALTI (African Advanced Level Telecommunication Institute) could be used to achieve a faster and sustainable penetration.

2. Proposed actions:

The following actions are recommended and shall be reviewed by Study Group 2.

1. Preparation of guidelines for the elaboration of a business-oriented development plan
2. Development of training material
3. Field trial(s)
4. Training courses.

d) Programme No. 4: DEVELOPMENT OF MARITIME RADIOCOMMUNICATION SERVICES

1. Programme goals, objectives and strategies

The goal of this programme is to provide a framework for the development of maritime radiocommunication services which will: provide facilities for the introduction of the Global Maritime Distress and Safety System (GMDSS) within the time limit established by the Safety of Life at Sea (SOLAS) Convention; provide facilities for the efficient operation of maritime transport systems and the development of trade; promote further use of maritime activities, such as commercial fishing, off-shore oil exploration, tourism and transport of people, animals and goods.

The immediate objective is to prepare for each country a plan for the development of maritime radiocommunication services including the implementation of the GMDSS, and to train national counterparts to undertake this work. Such plans will contain all information needed to be submitted to national and multinational financial institutions. The projects for all regions are planned to be concluded two years before the deadline for implementation of the GMDSS.

2. *Proposed actions:*

The following actions are recommended and shall be reviewed by Study Group 2.

1. Training courses
2. Preparation of plans
3. Review of plans
4. Resource mobilization for implementation of plans.

e) **Programme No. 5: COMPUTER-AIDED NETWORK PLANNING**

1. *Programme goals, objectives and strategies*

The long-term objective is to develop telecommunication network planning capabilities in all interested organizations, particularly in developing countries, in order to increase their self-reliance in this field. Participation in these activities will promote the acceptance of globally standardized tools, including the further development of ITU software (PLANITU), for telecommunication network planning, reduce duplication of software development and maintenance, and facilitate cooperation between Members. Administrations participating in this programme will have: network planning unit(s) established and work procedures organized; network planning software installed; and staff trained in traffic engineering and network planning activities.

2. *Proposed actions:*

The following actions are recommended and shall be reviewed by Study Group 2.

1. Software development
2. Development of training material
3. Training courses
4. Software support
5. Equipment procurement.

f) **Programme No. 6: FREQUENCY MANAGEMENT**

1. *Programme goals, objectives and strategies*

The objective is to assist developing countries in this field in computerizing their spectrum management. A Basic Automated Spectrum Management System (BASMS) is to be developed. Furthermore, it is envisaged to develop in the near future an Advanced Spectrum Management System (ASMS) based on the BASMS' functional requirements, to provide increased flexibility and networking capabilities in a multi-user environment. Training programmes on both systems in all ITU official languages will be organized for developing countries. Expected outcomes include: the establishment of national spectrum management units in administrations; the installation of software for national computerized spectrum management; and the training of staff in computerized spectrum management.

2. *Proposed actions:*

The following actions are recommended and shall be reviewed by Study Group 2⁵.

1. Development of national spectrum management software
2. Development of guidelines for radio spectrum management
3. Development of basic spectrum management specifications
4. Training programmes.

g) Programme No. 7: IMPROVEMENT OF MAINTENANCE

1. *Programme goals, objectives and strategies*

The objectives of this programme are to improve the maintenance organization, including the Management Information System (MIS) designed to monitor quality of service, handling of customers' complaints and fault repair, and to improve material and spare-parts management in developing countries, as required to reach the quality of service (e.g., call completion rates, fault repair time) presently achieved in developed countries. This is expected to increase considerably the return on investment in the countries concerned. It is also planned to develop maintenance guidelines, support software and pilot maintenance organizations and centres in some 10-20 countries in developing regions, with priority given to the LDCs. The experience gained would be shared through regionally organized seminars and through the mechanism of study groups. BDT experts and consultants would assist in the introduction of guidelines and support tools in the participating countries and later in other countries. The participation of telecommunication entities in advanced countries in the development of handbooks and support software will be necessary to achieve these goals initially. BDT experts, particularly those based in the regions, and in some cases consultants employed by the BDT, would provide assistance to individual countries.

2. *Proposed actions:*

The following actions are recommended and shall be reviewed by Study Group 2.

1. Develop guidelines and handbooks (refer to Question 3/2)
2. Development of a MIS for maintenance
3. Planning of maintenance organization
4. Implementation of maintenance organization (measuring equipment, etc.)
5. Training of staff (see also Programme No. 2).

⁵ The Radiocommunication Sector is requested to study appropriate spectrum pricing strategies for effective utilization and management of this natural resource.

h) Programme No. 8: MOBILE CELLULAR RADIO TELEPHONE SYSTEMS

1. Programme goals, objectives and strategies

The programme will: prepare manuals through Study Group 2 that would assist in planning and engineering of mobile cellular radio telephone systems; using manuals and handbooks, train engineers from developing countries in the planning and engineering aspects; compile software tools for planning and engineering and provide training programmes on such software tools; assist administrations in the development of mobile cellular radio telephone systems infrastructure and in the transfer of related know-how. Manuals and handbooks will be drafted by Study Group 2, external experts and BDT staff. Pilot training programmes will be implemented by BDT staff and consultants at the regional level, with fellowships given to LDCs from the BDT budget and possibly from external sources. Training and dissemination of manuals and handbooks will then be ensured at country level by national entities.

2. Proposed actions:

The following actions are recommended and shall be reviewed by Study Group 2.

1. Development of planning methodology (refer to Questions 1/2 and 2/2)
2. Development of manuals and training material on planning and engineering
3. Training seminars.

i) Programme No. 9: INTEGRATED RURAL DEVELOPMENT

1. Programme goals, objectives and strategies

In the long term, the goal is to provide 'community telecentres', equipped to offer telematic services and support, and public phone booths for all rural communities in developing and, where needed, in developed countries, serving approximately 10,000 inhabitants. This will be piloted during the next cycle (1994-1998) by the establishment of community telecentres in some 20 countries in developing regions, priority being given to the LDCs. The experience gained, including an evaluation of the telecentres' contribution to sustainable development, will be shared through the study groups, seminars, etc. Policy guidelines for integrated rural development will also be produced in conjunction with Programme No. 1. Bearing in mind the importance of trade and international cooperation, regional programmes will create the critical mass required to bring about and demonstrate the benefits of this concept which are so difficult to realize in isolated country programmes. Networking rural community telecentres, not only among themselves but also with telecommunication networks in developed countries, will contribute significantly to sustain this development (see also Programme No. 12 - Development of Telematics and Computer Networks).

2. *Proposed actions:*

The following actions are recommended and shall be reviewed by Study Groups 1 and 2.

1. Develop appropriate national policy guidelines ⁶
2. Coordination with other UN specialized agencies at international level in the promotion of integrated rural development
3. Participate in long-term planning of integrated rural development at regional and national levels
4. Planning of rural networks⁷ (e.g. satellite, cellular radio, fibre optics)
5. Implementation of networks (providing access to global networks)
6. Provision of terminal equipment
7. Training of community telecentre staff⁸
8. Evaluation of pilot project
9. Promotion of the community telecentre concept and services.

j) Programme No. 10: BROADCASTING INFRASTRUCTURE

1. *Programme goals, objectives and strategies*

The long-term objective is to develop the planning, management and operational capabilities of those broadcasting organizations and independent broadcasting service providers, particularly from the developing countries, that are willing to increase their self-reliance and efficiency.

The immediate objective is to produce guidelines that serve both the nationwide service providers and the independent broadcasters and, in particular, to develop and test in a real environment, software, manuals and procedures to improve the planning of the sound and television broadcasting services.

The experience gained would be shared by means of regionally-held seminars/workshops organized specifically to ensure a transfer of know-how and to enable an exchange of experience at the national level.

⁶ To be integrated into Programme No. 1 (Policies, Strategies and Financing).

⁷ In coordination with Programmes Nos. 5 and 12 (Computer-Aided Network Planning and Development of Telematics and Computer Networks).

⁸ In cooperation with Programme No. 12 (Development of Telematics and Computer Networks). As the Community Telecentre obtains equipment for distance learning and technology-based training (TBT), and after initiation in the use of multimedia, the continuous training of Community Telecentre staff will increasingly be carried out through distance learning and electronic networking.

2. *Proposed actions:*

The following actions are recommended and shall be reviewed by Study Group 2.

1. Elaboration of guides and preparation of development master plans for broadcasting infrastructure (related to the business-oriented development plans)
2. Preparation of a planning manual for broadcasting technologies
3. Development of PC user-friendly software for the FM/TV planning of a broadcasting transmitter coverage area with adjacent and co-channel interference calculations within a transmitter service area applicable at the national level
4. Regular organization of regional seminars on new technologies in sound and TV broadcasting
5. VHF/UHF propagation measurement campaign for tropical areas.

k) Programme No. 11: INFORMATION SERVICES

1. *Programme goals, objectives and strategies*

The long-term goal of the programme is the establishment of a comprehensive databank of information including broad coverage of the communication sector, organizational profiles, responsibilities and activities; regulatory environments; multilateral and bilateral project assistance; private sector activities and financing indicators, to benefit the worldwide telecommunication community. This will allow the BDT to provide a better range of services and to be more responsive to requests for information from its members and its information services customers. The short-term objectives are to:

- establish a Working Group on telecommunication indicators to identify and define required information and to serve as a forum for presenting research on the impact of telecommunications, and for reviewing draft documents before publication; Study Groups 1 and 2 will coordinate the work of this Working Group;
- increase the frequency of publication and expand the coverage of the BDT indicators to include projections and more detailed regional and global telecommunication outlooks.
- increase resources to expand the database and to collect, harmonize, verify, analyse and disseminate information.

2. *Proposed actions:*

The following actions are recommended and shall be reviewed by Study Groups 1 and 2.

1. To extend and enhance the database and electronic information dissemination
2. To produce indicator series and analytical reports
3. To create a Working Group on Telecommunication Indicators
4. To develop national MISs and to develop training for use of MISs
5. To continuously respond to requests for information and analysis
6. To explore the use of telecommunication and information services to create a global library, linking the developed and developing countries alike, in collaboration with other organizations dealing with these matters.

I) Programme No. 12: DEVELOPMENT OF TELEMATICS AND COMPUTER NETWORKS

1. *Programme goals, objectives and strategies*

The long-term goal is to facilitate access to information resources available in many countries by establishing connections to computer networks from many locations, including rural communities in countries that presently have little or no access to such resources. More specifically, to give decision makers at all levels, researchers and agents of change (and in the longer term, ordinary citizens), including those located in rural areas in developing countries, access to telematic services enabling them:

- to participate actively in global cooperative activities related to the UN Conference on Environment and Development, Agenda 21
- to exchange electronically stored and transmitted data, information, graphics, still pictures and video for the purpose of improving trade, transport, health-care, education and training, etc.
- to participate in conferences (telephone, on-line computer and video)

In the next cycle (1994-1998) the objectives are:

- to connect all BDT field offices in a network which enables communication via electronic mail, and through the exchange of electronically stored multi-media and participation in video conferences. The offices would then function as hubs and training centres for the countries in which they are located and for neighbouring ones
- to carry out a globally coordinated regional pilot project for the development of telematics and computer networks in conjunction with Programme No. 9
- to provide an electronic forum (i.e. list service or bulletin board) to allow community telecentres to exchange experiences.

2. *Proposed actions:*

The following actions are recommended and shall be reviewed by Study Groups 1 and 2:

1. Develop and promote appropriate national policy guidelines⁹
2. Planning of networks¹⁰
3. Implementation of networks (providing access to global networks)
4. Provision of terminal equipment
5. Training and capacity building
6. Evaluation of pilot project
7. Advise on and facilitate, through the BDT and the study groups, the means of establishing a global library, on an individual country basis, in collaboration with other organizations dealing with these matters.

II.3. Ad hoc assistance

Ad hoc assistance comprises assistance given to individual countries or groups of countries which is not directly related to Programmes Nos. 1-12 described above. It includes missions of BDT staff, for instance for needs identification, project formulation, monitoring and evaluation, tender specifications and evaluation, etc. It also includes ad hoc seminars, information meetings and advisory missions in response to urgent requests.

II.4 Execution of UNDP and Funds-in-Trust projects

This includes all the technical and administrative support provided for the implementation of projects, partly or fully financed by other development partners, and executed by the ITU.

⁹ To be integrated into Programme No. 1 (Policies, Strategies and Financing).

¹⁰ In coordination with Programme No. 5 (Computer-Aided Network Planning).

CHAPTER III

Special Programme for the Least Developed Countries (LDCs)

The LDCs should, as with the other developing countries, benefit from the programmes and the ad hoc assistance described in Chapter II. A special programme for the LDCs financed from the ITU resources is contained in Resolution No. 1 (Special Programme of Assistance for the Least Developed Countries (LDCs)).

As a general target, at least 70% of the resources allocated for Programmes Nos. 1 to 12 will directly support the LDC activities, in the following order of priority:

- 1) development of rural telecommunications
- 2) human resources development
- 3) management
- 4) maintenance
- 5) planning.

Taking into account the exceptional situation of the LDCs, the Conference decided to request the Secretary-General of the ITU and the Director of the BDT to use untied voluntary contributions as well as any excess income from world and regional telecommunication exhibitions and forums (Recommendation No. 1, Nice, 1989) for the benefit of the LDCs.

In order to mobilize additional resources (see Resolution No. 1 on Special Programme of Assistance for the LDCs), Council is requested to set up a group of experts to study the way in which these resources would be used.

PROGRAMMES

Strategy

The overall strategy of the LDC programme is to implement augmented ITU assistance as a catalytic input to generate sustained investment in telecommunications in the LDCs. The LDC programme primarily seeks to eliminate bottlenecks in the five key areas of critical weakness which have been identified above in order to enhance the capacity of the LDCs to absorb such investments.

Targets

The ITU LDC programme has not set particularly ambitious objectives and/or targets. For the year 2000 the programme is targeted at:

- a) fully meeting the demand for telecommunication services in urban areas. This means virtually eliminating the waiting list for services by that year, which translates into an average urban main line (ML) density of 5 per 100 population;
- b) achieving a rural ML density of 1 ML per 10,000 inhabitants. This density will not as yet amount to easy access to telecommunication services as suggested in the Missing Link report, but is a bold move in that direction.

The 1994-1998 Programme

The 1994-1998 Programme has been devised on the basis of:

- an expected rise of 25% in demand for ITU assistance as a result of an unfavourable international scenario in the provision of technical assistance
- an attempt to meet presently unmet, but deserving, demands in the order of 25% of the current budget
- inclusion of a new area of priority (rural telecommunications) and a new sub-area of priority (sector reform and restructuring)
- an increase in the number of LDCs from 42 in 1989 to 47 in 1991, a figure which is expected to rise to 52 by 1999.

Activities/Action Plan for the 1994-1998 Programme

1. Development of rural telecommunications

- 1.1 Study of appropriate technologies for rural telecommunications
- 1.2 Implementation of pilot projects on rural telecommunications
- 1.3 Workshops/seminars on rural telecommunications
- 1.4 Support for regional rural telecommunication activities

2. Human resources development

- 2.1 Training of outside plant instructors
- 2.2 Training of staff in modern methods of outside plant maintenance
- 2.3 Training of senior telecommunication maintenance managers in modern management maintenance techniques
- 2.4 Training managers of training centres in training management techniques
- 2.5 Individual fellowships for instructors and training managers
- 2.6 Miscellaneous fellowships
- 2.7 Seminars/workshops
- 2.8 Periodic training missions to training centres
- 2.9 Support for regional training centres

3. Management

- 3.1 Workshops/seminars for qualified senior and middle-level telecommunication managers to develop general management strategies and skills
- 3.2 Workshops/seminars on financial management
- 3.3 Assistance in telecommunication sector reform/restructuring
- 3.4 Assistance in tariff studies and implementation
- 3.5 Workshops/seminars in network management
- 3.6 Introduction of MIS/Decision Support Systems (DSS)
- 3.7 Assistance in telecommunication regulation and legislation
- 3.8 Establishment of performance indicators

4. Maintenance

- 4.1 Identification of quality of service indicators
- 4.2 Identification of performance indicators (maintenance)
- 4.3 Development of a guide on the introduction of a Computerized Subscriber Maintenance System (CSMS)
- 4.4 Pilot project for the CSMS
- 4.5 Development/introduction of network management systems
- 4.6 Updating and implementation of the National Plan for the Improvement of Maintenance (NPIM) in Africa
- 4.7 Support for regional maintenance projects/activities

5. Planning

- 5.1 Development of a guide for the preparation of business-oriented development plans or comprehensive development programmes
- 5.2 Updating of business-oriented development plans
- 5.3 Sectoral studies and reviews
- 5.4 Assistance in the introduction of new technologies/services
- 5.5 Preparation and organization of roundtable/donor conferences
- 5.6 Support for regional planning projects/activities
- 5.7 Traffic study and analysis as a tool for network expansion

6. Individual unforeseen country requests

- 6.1 Development of rural telecommunications
 - 6.2 Human resources development
 - 6.3 Management
 - 6.4 Maintenance
 - 6.5 Planning.
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