INTERNATIONAL TELECOMMUNICATION UNION

TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

WORLD TELECOMMUNICATION STANDARDIZATION CONFERENCE

HELSINKI, 1-12 MARCH 1993

BOOK No. 2

MINUTES AND SUMMARY RECORDS OF THE MEETINGS

REPORTS OF THE CONFERENCE COMMITTEES

LIST OF PARTICIPANTS AND LIST OF DOCUMENTS

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Contents

ORGANIZATION AND WORK OF THE WORLD TELECOMMUNICATION STANDARDIZATION CONFERENCE (HELSINKI, 1993)

1 – ORGANIZATION OF THE WORLD TELECOMMUNICATION STANDARDIZATION CONFERENCE (Helsinki, 1993)

1.1 The World Telecommunication Standardization Conference met in Helsinki (Finland) from Monday, 1 March to Friday, 12 March 1993. The meetings were held at the Marina Congress Center in Helsinki.

In all, 68 countries Members of the ITU, represented by 65 administrations and 19 recognized operating agencies, took part in the proceedings. Eight international organizations sent observers. A total of 459 participants attended the meetings.

1.2 Chairman and Vice-Chairmen of the Conference

Chairman: Mr. S.J. HALME (Finland)

Vice-Chairmen: Mr. J.J. SILVA (Brazil)
Mr. E.S. BARBELY (United States)
Mr. Y.A. TOLMACHEV (Russia)
Mr. S. MBAYE (Senegal)
Mr. WANG ZHANNING (China)

Senior Counsellor in charge of the Conference: Mr. M. MALEK ASGHAR

1.3 Committees of the Conference

1.3.1 Committee 1 – Steering Committee

Composed of the Chairman and Vice-Chairmen of the Conference and the Chairmen and Vice-Chairmen of the Committees

1.3.2 Committee 2 – Budget Control Committee

Chairman: Mr. S.S. AL-BASHEER (Saudi Arabia)

Vice-Chairman: Mr. J.N. SANCHEZ VALLE (Spain)

Secretary: Mr. A. TAZI-RIFFI

1.3.3 Committee 3 – Working methods of the ITU Telecommunication Standardization Sector

Chairman: Mr. W. STAUDINGER (Germany)

Vice-Chairman: Mr. S. KANO (Japan)

Secretaries: Mr. M. MALEK ASGHAR
Mr. H. ZHAO

1.3.4 Committee 4 – Structure and work programme of the study groups

Chairman: Mr. M. ISRAEL (Canada)

Vice-Chairman: Mr. J. HAYDON (Australia)

Secretaries: Mr. Z.J. TAR
Mr. A. GANGULI

1.3.5 Committee 5 – Technology of telecommunication networks

Chairman: Mr. H. K. PFYFFER (Switzerland)

Vice-Chairman: Mr. M. ASFAW (Ethiopia)

Secretaries: Mr. F. BIGI
Mr. M. BETANCOURT

1.3.6 Committee 6 – Telecommunication services

Chairman: Mr. J. S. RYAN (United States)

Vice-Chairman: Mr. J. GALVAN TALLEDOS (Mexico)

Secretaries: Mr. J. LEPESQUEUR
Mr. S. TANAKA

1.3.7 Committee 7 – Editorial Committee

Chairman: Mr. P. GONIN (France)

Vice-Chairmen: Mr. D. A. HENDON (United Kingdom)
Mr. V. RUBIO CARRETON (Spain)

Secretary: Mr. G. TURNBULL

Committee 2 held two meetings, Committees 3 and 4 held four meetings each and Committees 5 and 6 held three meetings each.

2 – MINUTES OF THE PLENARY MEETINGS

Chairman: Mr. S. J. HALME (Finland)

OPENING MEETING

(Minutes approved at the third Plenary Meeting)

Monday, 1 March 1993, at 1100 hours

1. Opening of the Conference by the Secretary-General of the ITU
2. Address by the Minister of Transport and Communications of Finland
3. Election of the Chairman of the Conference
4. Address by the Chairman of the Conference
5. Address by the Secretary-General
6. Address by the Director of the Radiocommunication Bureau
7. Address by the Director of the Telecommunication Standardization Bureau

1. Opening of the Conference by the Secretary-General of the ITU

1.1 The *Secretary-General* welcomed all participants to the first World Telecommunication Standardization Conference, which he declared officially open.

2. Address by the Minister of Transport and Communications of Finland

2.1 The *Minister of Transport and Communications of Finland* delivered the address reproduced in Annex 1.

2.2 The *Secretary-General* thanked the Minister for his address and expressed warm appreciation of the hospitality extended by the Government of Finland in hosting the Conference.

3. Election of the Chairman of the Conference

3.1 The *Secretary-General* proposed that, in keeping with the wishes expressed by the Heads of delegation, Mr. S. J. Halme, Head of the delegation of Finland, should serve as Chairman of the Conference.

3.2 Mr. Halme was *elected* Chairman of the Conference by acclamation.

3.3 *Mr. Halme took the Chair.*

4. Address by the Chairman of the Conference

4.1 The *Chairman* delivered the address reproduced in Annex 2.

5. Address by the Secretary-General

5.1 The *Secretary-General* delivered the address reproduced in Annex 3.

6. Address by the Director of the Radiocommunication Bureau

6.1 The *Director of the Radiocommunication Bureau* delivered the address reproduced in Annex 4.

7. Address by the Director of the Telecommunication Standardization Bureau

7.1 The *Director of the Telecommunication Standardization Bureau* delivered the address reproduced in Annex 5.

The meeting rose at 1155 hours.

ANNEX 1

Address by the Minister of Transport and Communications of Finland

Mr. Secretary-General,
Ladies and Gentlemen,

It is an honour for me to speak to this important gathering and in the name of the Finnish Government wish you all very welcome to Finland and to this first World Telecommunication Standardization Conference.

The telecommunications system in Finland has always been rather original and different from that of most other countries. It may surprise you that there has never been a State-wide monopoly on telecommunications. Of course, there has been, and still is, a State-owned PTT, which takes care of international and long-distance calls and local telephony mostly in rural areas.

But in addition to that, there has always been a large number, now 58, of local telephone companies, which operate mainly in the cities. They cater for the local telephony needs of 70 per cent of the Finnish population. Together, they act as the Association of Telephone Companies in Finland, which was established already in 1921. The Association has later created subsidiaries for more advanced telecommunications services.

The reasons for this particular situation are historical. During the Russian period of Finland's history, it was considered that telephone had no strategic importance and could therefore be left in the hands of local authorities. History has shown how wrong this judgement was: telecommunications from the simplest voice telephone to the most advanced telecommunications services have become a worldwide necessity, without which the existence and development of modern society would not be thinkable.

This fact is illustrated by the situation in the Central and Eastern European countries, the economies in transition, as they are called. It has been clearly shown that Western business is reluctant to settle down there because of non-existent or very poor telecommunications. In order to get their own companies going and to attract investors from abroad, the economies in transition will need massive action to upgrade their telecommunications and infrastructure in general.

At the same time it is in the interests, not only of those countries, but of their Western European neighbours, that peace, stability, democracy and economic reform take root in the eastern half of our continent. Many efforts are in progress, but much more could, and should, be done to facilitate the transition.

Although I have here mentioned the emerging market economies in Central and Eastern Europe, which are situated near Finland and with whom we have rapidly developing contacts, I am of course aware of the fact of the huge challenges facing mankind in the developing countries. The global village may be a little more than a phone call away, but it will be connected by telecommunications. Let us strive towards that goal, together.

Due to the long period of coexistence between a great number of telephone companies, Finland has been rather open-minded and eager to adopt new ideas. The cooperation between the companies was well organized, especially when it came to technical questions. This led to uniform and highly functional network systems in all companies, and extensive competition in the field of know-how and modern technology was a fact.

Standardization, in which your organization, the International Telecommunication Union, has played and no doubt will continue to play, a decisive role, was a major element in this development. It gradually opened the doors for international competition in selling and buying new telecommunications equipment. This, along with the efforts of your Union, helped to transfer technological know-how between telecommunications companies. Consequently, their contribution to research and development in the field was important, especially because state authorities were not in a position to control, on grounds of either employment or industrial policy, the procurements made by private companies nor to favour exclusively the home industry.

At the same time this kind of cooperation, without any real commercial competition, naturally had its negative aspects, especially from the user's point of view. The users found the pricing to be too high. On the other hand, it was the high prices which made the fast development of the telecommunications networks possible.

It thus became necessary to open new ways. In Finland we started already in the 1980s, when a Telecommunication Act was enacted in 1987, separating regulatory functions from commercial operations and thus making it possible for the government to grant competing licences.

The following steps were taken rapidly thereafter. Thus the most advanced mobile GSM were opened for competition in 1990. In September 1992, the Association of local telephone companies was granted the right for domestic nationwide voice services. As a countermove, the PTT obtained full competition rights to local telephony in the concession areas of the private companies.

Thus, at the moment the PTT only retains the monopoly in the international voice services. And even there, some private telecom companies have exceptionally been granted the right to establish international services to Estonia in the South, to Karelia in the East and to Sweden in the West.

This competition is to begin fully on 1 January 1994. The Government has also decided that at the same moment the PTT will become a limited liability company.

My ministry has estimated that the opening of competition will decrease the telecommunication costs of the nation by about US$ 150 million per year. About US$ 100 million would be saved by business firms and the rest by residential customers. Long-distance tariffs are expected to drop by up to 55 per cent and local telephone charges by some ten per cent.

Finland thus may be considered as the leading country in the liberalization of telecommunications. In other respects too, Finland has come quite far in the development of the telecommunications sector. The European Community is moving in the same direction and is expected to adopt solutions which we already use. The forthcoming entering into force of the EEA Agreement and Finland's membership of the European Community will help to enhance and facilitate this cooperation for all sides.

Thanks to her advanced status in the telecommunications field, Finland has successfully participated in telecommunications development projects towards third countries, among others the Central and Eastern European countries. Thus we are building mobile telephone networks in Russia and Estonia. We are installing optic cables from Finland to Estonia and St. Petersburg. We have established joint ventures in Russia, Estonia, Hungary, etc. We have been very competitive in the telecommunications field even in more remote countries, e.g. Turkey and Thailand.

I hope that this short introduction to telecommunications in Finland explains to you why I believe that telecommunications is one of the most advanced field in Finland, compared with even the highest international standards. I very much hope that the further programme of this Conference will allow you to gain a more concrete picture of what today's telecommunications in Finland are all about.

I thank you for your attention and I hope that you will have an interesting Conference and a rewarding stay here in Finland.

ANNEX 2

Address by the Chairman of the Conference

Mr. Minister,
Excellencies,
Delegates,
Ladies and Gentlemen,

First I have to thank all delegations for your trust in me. It is a great honour to my country, celebrating her 75th anniversary since its Declaration of Independence, to host this important international meeting, the First World Telecommunication Standardization Conference, which was also planned to be the Xth Plenary Assembly of the CCITT. I will try my best to help it to be a success.

A few words on the prospects of the Conference.

The First World Telecommunication Standardization Conference will be the first ITU conference after the Additional Plenipotentiary Conference in December 1992 in Geneva which some of us will remember. The latter body passed decisions on the new ITU Constitution and Convention based on the work of the High Level Committee, headed by Mr. Warren. Our work will proceed according to those decisions and resolutions, some of which were expressly intended for the WTSC.

The reason for the ITU reorganization is the change in times, not political changes but ones which in large part come from rapid technological and economical change. This has had its greatest effect in both data processing and data communications. Even the telephone network can be characterized today as a data network, consisting of powerful computers and its nodes. The emergence of personal computing has already changed telecommunications, but much more will come in future. The telecommunication network is not only based on local loops made of copper, but radio access has become a strong competitor to it. Broadband fibre-optic loops are also a fact, at least for business telecommunications. Many agents of change feel that the ITU and the CCITT are too slow in standardization work. We will hear more about this from Mr. Irmer when he tells us how much is being done. Numerous activities have been started on many levels to promote change, starting from national and regional standardization groups. Less formal working parties and forums for numerous purposes have been formed. Large manufacturing companies and groups of such companies have formed alliances to seek strategic advantage and also to have some influence in standardization. No doubt there is a place for all these activities, but truly international standardization is also required. We hope that the ITU with its long traditions could adapt to modern demands and provide the benefit of its wide basis. After all, it has more countries as members than any other standardization body.

Let me recall the words of the Secretary-General, who said that if it cannot change, the ITU may have no future at all. This change requires hard work from all of us, and we have to put some of our national resources to contribute. This contribution is certainly not in vain, but will help each of us to better fulfill our tasks to build and maintain a better telecommunication network for our citizens, our local and state Administrations, and our business enterprises.

Yesterday, 28 February, was Kalevala's Day in Finland. Kalevala is a literary work by Lönnroth, based on collections of folklore, a national epic. It emphasizes the power of the word, indeed in the form of magic. This is indeed oral communication. The magic part is equivalent to electrical communications and electronic data processing. I think that it is really magical, it is so much beyond the grasp of our understanding, even though we practise and design it as engineers. But the point in communications is the message, the content and meaning of communications. This is the task of the users of telecommunication services; our role is in making the magic work and in trying to improve its standards.

ANNEX 3

Address by the Secretary-General of the International Telecommunication Union

Kokouksemme kunnioitettu herra puheenjohtaja,
Excellences, Mesdames et Messieurs,
Ladies and Gentlemen,
Dear Friends,

I have a personal tradition. I have tried to open all the conferences and meetings in the language of the host country. Today I will deviate from that tradition. I have nothing against the beautiful Finnish and Swedish languages, but this time I would like you not just to remember that I spoke some strange language; I would like you to remember my message, at least something of what I said, and probably English is a better means for this purpose. Today is a landmark date in the long history of the International Telecommunication Union. The first of March is of course an important date – according to the official Finnish calendar, it is the first day of spring, so I hope you will be able to enjoy the beautiful warm Finnish spring during the next few days. 1 March 1993 is of course especially important because it is the opening day of the first ever World Telecommunication Standardization Conference. This event certainly deserves to be celebrated, not least because it is taking place in this beautiful city, Helsinki, capital of my homeland. But today's date is important for other reasons. 1 March 1993 is the birthday of a new ITU, the inauguration of a new organization that will carry this old Union, founded 128 years ago, forward into the twenty-first century. And this event should surely be celebrated as well.

Our Chairman already mentioned the Additional Plenipotentiary Conference, the first ever in the history of the Union. The purpose of the APP in December last year was to consider proposals for reforming the structure and functioning of the Union, so that it might better respond to the rapidly changing global telecommunications environment. The APP was a great success. In only two weeks' time, delegates completely overhauled the ITU Constitution and Convention along the lines recommended by the H.L.C. In the shortest ITU conference ever, they succeeded in modernizing and updating arrangements that were put in place almost half a century ago, by the 1947 Atlantic City Conference which founded the modern ITU. What better indication could there be that ITU members recognize the urgent need for fundamental change, and are prepared to achieve it?

As a result of the APP, the activities of the ITU have been reorganized and revitalized, so that the Union will be better positioned to serve the needs of its clients. The most dramatic changes have taken place in the areas of standardization and radiocommunications, where the responsibilities of the old CCITT, CCIR and IFRB have undergone major restructuring.

The new Telecommunication Standardization Sector – which consolidates the standardization activities formerly carried out by the CCITT and the CCIR – is a timely response to the integration of wireline and wireless communications, which is particularly evident in areas such as mobile services.

By bringing CCIR activities aimed at supporting the development of radio regulations together with IFRB responsibilities for applying these regulations, the new Radiocommunication Sector is an integral element of our broader strategy for improving the efficiency and effectiveness of the ITU's regulatory role.

The APP considered that these new arrangements should be implemented as quickly as possible. Instead of waiting until 1 July 1994 – the date the rest of the new Constitution comes into effect – the conference decided that today 1 March 1993 should be the birthday of the new Standardization, Radiocommunication and Development Sectors. Therefore, as of today, the CCITT, the CCIR and the IFRB cease to exist, and the new ITU is born!

The structural changes made by the APP position the ITU to remain the lead player in international telecommunications for the rest of this decade, and perhaps into the next century. But, dear friends, this will happen only if we put these new arrangements to work in the true spirit of reform in which they were born.

The World Telecommunication Standardization Conference can be seen as the first test case for the new ITU. Is the ITU membership prepared to thoroughly reform and revamp the ITU standardization process? The next two weeks will give us the answer to this question which – I hope – will be a clear and resounding "yes"!

Evidence of a real willingness to change the way we do business is of prime importance for ITU's standardization activities. Perhaps more than any other area of ITU activity, the Standardization Sector reflects the changing telecommunications environment, where we are seeing a steady breakdown of monopolies in manufacturing and service provision, the emergence of new players, and a shift in the role of government from operator to regulator. This new environment has increased the role of the private sector in the standardization process. It has also led to the emergence of new regional standardization organizations, which are young and dynamic. As a result of these changes, standardization is becoming a competitive "business" and needs to be treated as such!

Dear Delegates, we will have many discussions over the next two weeks, and hear many different viewpoints presented. At the end of the day, I hope that the Conference will be able to agree on mechanisms and strategies for producing global ITU telecommunication standards, and that we will be able to do this as economically and efficiently as possible, in ways that serve the interests of all members of the ITU family – whether they are developed or developing countries, government or the private sector, manufacturers or service providers. Above all, we should of course aim to serve the best interests and real needs of our final customers – consumers of telecommunications goods and services everywhere.

This is a most challenging agenda for the first World Telecommunication Standardization Conference. Under the able leadership of our Chairman, I am confident we will succeed, but I am also confident that we will not succeed unless we all work in the same direction. I wish you every success in your work.

ANNEX 4

Address by the Director of the Radiocommunication Bureau

We share a great privilege to participate in this first World Telecommunication Standardization Conference. The CCITT may look back on a history of remarkable achievement of compatibility in telecommunication networks. But the ITU's new Telecommunication Standardization Sector looks to an even stronger regime, and new image, for global network standardization. I appreciate especially our invitation to Finland. Finnish radio experts contribute great substance and leadership to the ITU's radio technical and regulatory activities. And it is no secret that the vision of our Secretary-General, Dr. Pekka Tarjanne, led to much of the new horizon for the International Telecommunication Union.

Radiocommunication, approaching its centennial year, is an important facet of the changing environment in telecommunications. Radio sowed the earliest seeds of competition and remains an agent for change.

Digital systems are sustaining the competitiveness of satellites in global communication. Wireless technology is creating its own new services and markets. Satellites and terrestrial radio are especially suited to early economic development for developing regions. A United Nations Workshop on Space Communication Development, held in Korea in December, gave a striking preview of growth and competition in satellite telecommunications for the Asia-Pacific Region. Coordination of orbit/spectrum utilization is increasingly intense in the Asia-Pacific, Central and South American Regions.

A joint ad hoc Experts Group from 1990 to 1992 identified and served to remove incompatibilities between ISDN protocols and satellite transmission. Coordination arrangements are now in place to assure future compatible development in broadband ISDN, and to cope with advancing satellite technologies, such as very small aperture earth terminals (VSATs) and even low-earth-orbiting satellites (LEOs). VSATs are economical, easy to install and operate, and the market is growing worldwide.

The 1992 World Administrative Radio Conference designated frequency bands for future mobile communication services. Cellular telephone, cordless telephone and radio paging, have led to some sort of gold rush to Personal Communication. Recommendations have been developed for a future generation of public land mobile telecommunication systems (FPLMTS) and UPT. A terrestrial component would cover densely populated areas with a satellite component for larger areas, including rural and isolated areas.

Geostationary-satellite and low-earth-orbiting satellite proposals are competing for the space component of personal communications. LEO systems allow a low-power handheld terminal to work with lower-power satellites, but multiple satellites are required to provide a coverage comparable to that of a geostationary-satellite system, and frequency coordination is more complex.

Digital broadcasting is the 21st century technology to provide listeners with compact disk sound quality and data broadcasting services at home or on the move. Digital audio broadcasting and digital high-definition television promise to strengthen both terrestrial radio and satellite media for future delivery of broadcasting programmes.

As another part of the ITU's new perspective, the CCIR's study group work on the technical aspects of radio systems and spectrum utilization becomes part of the new Radiocommunication Sector. The radio family includes world radio conferences, the Radiocommunication Assembly and its study groups, the frequency registration activities of the former IFRB, a new Radio Regulations Board, and a continuing Advisory Group. The CCIR secretariat and the IFRB's frequency registration secretariat are joined as of today. The new structure should reinforce activities not only in the secretariats, but also in participating organizations and Administrations.

Activities in both the CCIR and the CCITT following the APP have endeavoured to follow up promptly on the redistribution and allocation of appropriate network standards topics to standardization study groups. Reports of the Joint Advisory Group meeting and a follow-up by the Directors are being made available to your Conference. A further joint meeting is foreseen in June 1993. Special future cooperation is foreseen regarding future public land mobile telecommunications, and the compatibility of satellite systems in ISDNs. There is no doubt that network standardization will be carried out in the Telecommunication Standardization Sector. There has been a spirit of goodwill and cooperation in this work appearing to assure, in good time, fulfillment of the intentions of the new Constitution and Convention.

I thank you very much.

ANNEX 5

Address by the Director of the Telecommunication Standardization Bureau

Mr. Chairman,
Distinguished Delegates, Dear Colleagues,
Ladies and Gentlemen,

I am pleased that so many of you are attending this first World Telecommunication Standardization Conference (WTSC), thus testifying to your interest in standardization work. I am most grateful for this and I wish all of you a most cordial welcome to Helsinki: and I am sure I am speaking on your behalf when thanking our Finnish hosts for having invited us to come to their beautiful country high in the North, where I learnt, to my great surprise, that springtime has come already.

With us in this WTSC are also many representatives of international and regional organizations. Let me greet all these representatives, and especially those who represent their organization for the first time at our Conference.

I would also like to extend a warm welcome to delegates of other standardization bodies, and here I would like to address in particular ISO, IEC and the regional standardization organizations, with whom we have worked extremely successfully during the current study period.

Last but not least, I am pleased to welcome all my colleagues from the ITU headquarters in Geneva who will join us and assist us during the next two weeks, and we will still be relying on their assistance just as during the preparations for this Conference.

Dear Colleagues,

As our Secretary-General has already pointed out, a new era begins for the ITU today when the decisions taken last December by the Additional Plenipotentiary Conference (APP-92) enter provisionally into force, changing the structure, objectives and working methods of the Union. From today the CCITT ceases to exist and is replaced by the new Telecommunication Standardization Sector.

And today, the first World Telecommunication Standardization Conference (WTSC-93) opens in Helsinki, taking the place of what would have been the Xth CCITT Plenary Assembly. And there is still a third, somewhat smaller, event to be reported, particularly for my ISDN freaks, to whom I still belong – the new ITU PABX goes into service and it is an ISDN PABX, so the ISDN era is starting in Geneva and it is a good indication that ITU is implementing its own standards – a good sign that they have received attention.

There are always sceptics who might think that these changes are a mere reshuffling of what existed so far whilst leaving the fundamentals untouched. This is not the case. What happens on this 1 March 1993 to ITU's standardization activities is not just taking down some doorplates and replacing them by others, but a decisive stage in the deep-rooted reform, which started at the IXth Plenary Assembly in Melbourne in 1988, and this will be carried on at WTSC-93 in Helsinki and beyond.

Rapid evolution of telecommunication technologies and a dynamic, changing environment characterized by buzzwords like liberalization, privatization, competition, globalization and regionalization (to name just a few) are the forces shaping today's standardization. Only an organization which is flexible and adapts itself continuously to these determining factors will survive.

The reform process started, as you know, in Melbourne under the famous slogan "the spirit of Melbourne", carried by our Secretary-General, who was not at that time Secretary-General but the Chairman of Committee A, which was undertaking a lot of structural and working method reforms. This was an initial overhaul of our structure and has resulted in quite a few areas of success. One result to which I would like to draw your attention (and here I refer to our Chairman who was saying that the CCITT was too slow) is the fact that since Melbourne we have been able to bring the production time of standards down to 18 months, as compared with four years or more before Melbourne. This is only one part of the success story and I hope that I shall be able to tell you more this afternoon.

But of course, this is no reason to rest on our laurels. Since Melbourne, both the technology and the telecommunication environment have changed and this should be reflected in the decisions of WTSC-93. In addition, the Helsinki conference will have to take account of the decisions of APP-92 concerning the transfer of network-related standardization from the former CCIR to the Standardization Sector and the creation of a Telecommunication Standardization Advisory Group as a new instrument to improve the efficiency of global standardization in the future.

What is to be expected from WTSC-93? Rather than speculate on details, let me summarize my expectations in just two areas:

First, WTSC-93 *must* carry on the reform of standardization, recognizing that today's changing world of telecommunications requires continuous adaptation. The old recipes, albeit successful in the past, no longer work; continuous change has to be accepted as the lifeblood of a modern standardization organization.

Second, WTSC-93 should not be afraid to take unconventional and innovative decisions. Yes, such decisions *do* bear risks and there is no such thing as a guarantee for success. But where there is a will there is a way. The experience we have gained during the four years since Melbourne clearly demonstrates that if we want to reform we can, even in a long-standing and sometimes, to my mind wrongly, called conservative organization such as the CCITT. Let us face the challenge, under the chairmanship of Mr. Halme, let us master it and let us not talk any longer, but go to work. I thank you for your attention.

FIRST PLENARY MEETING

(Minutes approved at the third Plenary Meeting)

Monday, 1 March 1993, at 1435 hours

Subjects discussed:

1. Tribute to deceased delegates
2. Expression of appreciation to retired delegates
3. Election of Vice-Chairmen of the Conference
4. Establishment of Committees (Structure of the Conference)
5. Election of Committee Chairmen and Vice-Chairmen
6. General information on the Secretariat and organization of the Conference
7. Allocation of documents to Committees
8. Report by the Director of the TSB on CCITT activities since the IXth Plenary Assembly (Melbourne, 1988) and on the decisions of the Additional Plenipotentiary Conference (Geneva, 1992)

1. Tribute to deceased delegates (Document 4 + Add.1)

1.1 *On the proposal of the Director of the TSB, the delegates observed a minute of silence in tribute to the memory of those CCITT delegates who had died since the IXth CCITT Plenary Assembly.*

2. Expression of appreciation to retired delegates (Document 5 and addenda)

2.1 The *Director of the TSB* expressed his appreciation to all those delegates who had retired since the IXth Plenary Assembly, wishing them a long and happy retirement. He added that any names of retirees that had not been included in Document 5 and addenda should be notified to the Secretariat so that a complete list could be issued before the end of the Conference.

3. Election of the Vice-Chairmen of the Conference

3.1 The *Secretary-General* proposed, on the basis of suggestions made at the meeting of Heads of delegation for the election of four Vice-Chairmen and subsequent comments by the United States delegate to the effect that it was customary to elect five Vice-Chairmen at CCITT Plenary Assemblies, that the following persons should be nominated:

Mr. J. J. Silva (Brazil)

Mr. E. S. Barbely (United States)

Mr. Y. A. Tolmachev (Russia)

Mr. S. Mbaye (Senegal)

Mr. Wang Zhanning (China).

3.2 The Vice-Chairmen of the Conference were *elected* by acclamation.

4. Establishment of Committees (Structure of the Conference) (Document DT/1)

4.1 The *Secretary-General* drew attention to the proposed structure of the Conference outlined in Document DT/1, which was the result of prior consultations and had also met with the approval of the Heads of delegation at their meeting that morning.

4.2 Document DT/1 was *noted.*

5. Election of Committee Chairmen and Vice-Chairmen

5.1 The *Secretary-General* read out the names of those proposed by the Heads of delegation for the posts of Committee Chairmen and Vice-Chairmen:

Committee 2	Chairman:	Mr. S. S. Al-Basheer (Saudi Arabia)
(Budget Control)	Vice-Chairman:	Mr. J. N. Sánchez Valle (Spain)
Committee 3	Chairman:	Mr. W. Staudinger (Germany)
(Working Methods)	Vice-Chairman:	Mr. S. Kano (Japan)
Committee 4	Chairman:	Mr. M. Israel (Canada)
(Structure and Programme)	Vice Chairman:	Mr. J. Haydon (Australia)
Committee 5	Chairman:	Mr. H. K. Pfyffer (Switzerland)
(Networks)	Vice-Chairman:	Mr. M. Asfaw (Ethiopia)
Committee 6	Chairman:	Mr. J. S. Ryan (United States)
(Services)	Vice-Chairman:	Mr. J. Galván Talledos (Mexico)
Committee 7	Chairman:	Mr. P. Gonin (France)
(Editorial)	Vice-Chairmen:	Mr. D. A. Hendon (United Kingdom)
		Mr. V. Rubio Carretón (Spain)

5.2 The Committee Chairmen and Vice-Chairmen were *elected* by acclamation.

6. General information on the Secretariat and organization of the Conference (Documents INF/1, 2)

6.1 The *Secretary* explained the practical arrangements for the Conference, referring to the relevant information documents in that connection. He then informed the meeting that the duties of the Conference Secretariat would be performed by the following officials:

Committee 2: Mr. A. Tazi-Riffi

Committee 3: Mr. M. Malek Asghar and Mr. H. Zhao

Committee 4: Mr. Z. J. Tar and Mr. A. Ganguli

Committee 5: Mr. F. Bigi and Mr. M. Betancourt

Committee 6: Mr. J. Lepesqueur and Mr. S. Tanaka

Committee 7: Mr. G. Turnbull

6.2 The meeting *took note* of that information.

7. Allocation of documents to Committees (Document DT/7)

7.1 The *Secretary* introduced Document DT/7 which contained preliminary information on the allocation of documents to the various committees. After explaining the three different document symbols he said that, for practical reasons, documents would be distributed gradually throughout the Conference, as required.

7.2 Document DT/7 was *approved.*

8. Report by the Director of the TSB on CCITT activities since the IXth Plenary Assembly (Melbourne, 1988) (Documents AP X-2 and 3) and on the decisions of the Additional Plenipotentiary Conference (Geneva, 1992) (Document 1)

8.1 The *Director of the TSB* presented his report on CCITT activities since the IXth Plenary Assembly with the help of transparencies graphically illustrating the material contained in Documents AP X-2 and 3, updated to take account of recent developments. The period separating Melbourne '88 from Helsinki '93 had been one of transition, during which the reform of the CCITT had produced positive results, such as greater consolidation, the acceleration of standardization, fewer meetings and some savings. The key to that success had been the understanding, help and goodwill of the membership and the staff. During the interim period it had proved necessary, on occasion, to stretch the rules to the limit, but all concerned had shown that they fully understood the need for those exceptional measures.

8.2 A noteworthy feature had been the evolution of participation in the Telecommunication Standardization Sector, where the operating agencies, whether governmental or private, had continued to take part to an ever-increasing extent over the last few years. Nevertheless, he drew attention to a recent decrease in the number of participating operators; while not catastrophic, the situation should be carefully monitored in the future. As for the participation of the three main categories of member organizations – Administrations, operators and manufacturers – in the work of the study groups, it should be noted that, on average, over 60 per cent were at present non-administration. In other words, there had been a noticeable shift from Administrations to non-administrations, particularly in the more technical groups.

8.3 Contrary to what was sometimes maintained, there had been a steady decline in the number of meeting days of study groups and working parties since the 1981-1984 period. The same was true of the number of reports and contributions, where some degree of concentration could be observed. Thanks in particular to a fall in contributions, the general trend was downwards. In the case of Recommendations, the number of new Recommendations had remained roughly stable while revised Recommendations were on the increase. The really disturbing feature, however, was a dramatic rise in the number of pages. The 1988 Blue Book had totalled some 19 000 pages, whereas the corresponding figure for the present year would probably amount to some 40 000 pages. The reason for the expansion was the increasing complexity of standards, which required many more pages in order to provide a full description. It was a problem facing all standards organizations and a solution had yet to be found.

8.4 Referring to the annual meeting expenses, he recalled that the previous pattern of expenditure, before the adoption of Resolution No. 2, had been characterized by very high mailing costs in the fourth year of the cycle when all the draft Recommendations had had to be dispatched to member Administrations prior to their adoption by a Plenary Assembly. In 1988, for example, such costs had amounted to some 1.4 million Swiss francs, i.e., roughly one third of the total budget. In 1992, despite rising tariffs, mailing costs had been held to approximately 800 000 Swiss francs, which represented a considerable saving. Furthermore, estimated expenditure for 1993 was comparable with that for 1989.

8.5 The staff of the former CCITT had declined steadily over the years and that trend was destined to continue in 1993. By redistributing the work, it had so far proved possible to continue to run the programme, but the limit would soon be reached and a solution would have to be found by 1994. It should be noted, moreover, that all savings had been achieved without resorting to compulsory terminations. Even the staff of the CCITT Laboratory, now closed, had been integrated into the Secretariat.

8.6 With regard to his hopes for the results of the present Conference, he looked forward to the continuation of the reform process initiated in Melbourne, with special reference to the reports of the ad hoc Group – Resolution No. 18. In particular, he hoped that the transitional problems which had arisen under the new arrangements would not be used as a justification to call for drastic change: the new system was now operational and beginning to work well. He also looked forward to setting up the Telecommunication Standardization Advisory Group, which was scheduled to hold its first meeting in June, and to beginning the transfer of certain tasks from the Radiocommunication Sector to the Standardization Sector, with 1994 as the target date for completion of the work. Lastly, measures should be taken to strengthen collaboration with other standardization organizations, including the regional ones.

8.7 The introduction of new electronic information systems, such as ITUDOC, was now proceeding and should take over an increasing share of the paperwork. There was also a proposal to produce a new, easy-to-read information bulletin, to be issued quarterly. A reorganization of the TSB was about to be undertaken and the Bureau would, of course, be actively involved in the ITU reform programme. Finally, preparations must now begin for the 1994 Plenipotentiary Conference.

8.8 Concluding his roundup of problems and successes during the period between Melbourne and Helsinki, he reminded all present that it was essential to adapt in order to survive in the rapidly changing telecommunications environment.

8.9 Finally, the documents listed under the present agenda item included Document 1, which contained extracts from important texts approved at the APP and provisionally in force as of 1 March 1993. While not wishing to introduce the document page by page, he pointed out that reference would need to be made to the various Resolutions it contained, since some of them gave instructions on how to proceed in the various Committees.

8.10 The *delegate of Spain* suggested that it might be useful to discuss the new acronyms and abbreviations in order to render them more attractive in the various languages. He supported the idea of an information bulletin, which should appear in English, French and Spanish. As for the new changes, they should make it possible to establish priorities and to evaluate the overall cost of formulating recommendations. He requested further explanation of the transparency relating to the budget for the present Conference and for 1992. Finally, savings should continue to be made through the use of new technologies.

8.11 The *Director of the TSB* said that much discussion on acronyms had already taken place within the ITU and that lists had been produced. The matter could perhaps be taken up at a later stage of the Conference, as could questions relating to the proposed information bulletin. Regarding the request for clarification as to costs, he pointed out that what his transparency had shown for 1993 were only estimated expenses, as approved the previous year by the Council.

8.12 The *delegate of Mexico* emphasized the views expressed at the previous Plenipotentiary Conference to the effect that Administrations should not lose control over standardization, particularly in view of the increasing participation by private firms in the provision and operation of equipment. The Conference must make an effort to ensure that the benefits of both standardization and of the changes within the ITU became available to an ever-increasing number of Member countries, thereby serving to raise the overall level of participation – including that of developing countries – in the formulation of Recommendations.

8.13 The *delegate of Greece* observed that the short reports of study groups reproduced as Conference documents referred to other documents, including the reports of final study group meetings, that is, to a great number of voluminous documents. It was therefore not always easy to locate specific new or revised Recommendations, given the considerable amount of cross-referencing involved. Accordingly, he suggested that the Standardization Sector should seek to harmonize and improve the new procedure for the forthcoming period, particularly in view of the fact that not all the study groups had followed the same pattern in respect of the presentation of new and revised Recommendations for approval by the Conference.

8.14 The *delegate of Sweden* said that his country's telecommunication industry, Administration and operators had agreed on the need to reduce the time taken to adopt standards, given the increasing pace of technological advance. He agreed on the importance of setting up the Telecommunication Standardization Advisory Group during the present Conference. The ongoing transfer of radio standardization matters to the Telecommunication Standardization Sector was also very important, as was the strengthening of cooperation with other standardization bodies. It was to be hoped that the Conference would produce some input to the forthcoming ISO/IEC JTC 1 meeting in Berlin.

8.15 The *delegate of Mali* requested information as to how the groups concerned with the problems specific to developing countries were to be transferred from the Standardization Sector to the Telecommunication Development Sector, since that question had not been touched upon in the report presented by the Director of the TSB.

8.16 The *delegate of the Republic of Korea* noted that the Conference would have to take up a number of important issues which had not been completed at the APP. Those issues included the allocation of CCIR and CCITT work, the membership and duties of the Telecommunication Standardization Advisory Group, the new terminology created by the revised Constitution and Convention, and relations with other organizations, particularly in the field of telecommunication standardization. He wished to take the opportunity to welcome all Conference participants to EXPO'93, to be held in the Republic of Korea from August to November 1993, where, among other things, they would be able to see at first hand the advances made in his country's telecommunication technology.

8.17 The *delegate of Lebanon*, referring to the remarks by the delegate of Sweden to the effect that the time taken to adopt standards should be reduced, called for caution in that regard in view of the fact that developing countries were unable to proceed as rapidly as industrialized countries. In that connection, he expressed the wish that developing countries should be represented in the Telecommunication Standardization Advisory Group.

8.18 The *Director of the TSB* assured delegates that all the points raised would be discussed in greater detail in the various committees. Replying to the delegate of Greece, he stressed once again that the problems experienced had been of a transitional nature. Quite a number of draft Recommendations had had to be submitted to the present Conference as a consequence of all the changes in the working methods and of the time-frame involved. He acknowledged that Resolution No. 2, like others, could be improved, and noted that the ad hoc Group on Resolution No. 18 was already making proposals to that end. There was therefore no cause for concern: the desired improvements were on the way. The concerns expressed by the delegate of Mali would be taken up in the report to be presented by the Senior Chairman of the GAS Groups. He also drew attention to APP Resolution 7 which contained instructions on how to transfer and continue the activities in question. As for the Telecommunication Standardization Advisory Group, that Group was open to the entire membership of the Sector, without restriction. Finally, he fully supported the delegate of Mexico's comment to the effect that there should be ever-increasing participation by developing countries in the work of the Telecommunication Standardization Sector.

The meeting rose at 1705 hours.

SECOND PLENARY MEETING

(Minutes approved at the seventh Plenary Meeting)

Thursday, 4 March 1993, at 1400 hours

Subjects discussed:

1. Accession of the Czech Republic

2. Tribute to CCITT study group Chairmen (period 1989-1993)

3. Statements by international organizations working in liaison with the CCITT

4. Preliminary reports of the Committees of the Conference

5. General remarks on cooperation between the BDT and the TSB

1. Accession of the Czech Republic

1.1 The *Secretary-General* said he was pleased to announce that the Czech Republic had officially acceded to membership of the Union, taking the number of ITU Members to 177.

1.2 The *delegate of the Czech Republic* expressed satisfaction at his country's accession to ITU membership. The Czech Republic would contribute to the Union's activities to the best of its ability.

2. Tribute to CCITT Study Group Chairmen (period 1989-1993)

2.1 The *Director of the TSB* wished to thank the CCITT study group Chairmen for their invaluable work by awarding to each of them silver medals.

2.2 *Souvenir medals were then presented to the study group Chairmen.*

3. Statements by international organizations working in liaison with the CCITT

3.1 The *representative of INTELSAT* delivered the statement reproduced in Annex 1.

3.2 The *representative of ETSI* was glad that the European Telecommunication Standardization Institute was able to participate for the first time in the work of what used to be the "CCITT Plenary Assembly", and had now become the World Telecommunication Standardization Conference. ETSI's work was based on worldwide standards, including the CCITT Recommendations, but there was also a high demand for European standards, since CCITT Recommendations were not always sufficient or available. ETSI maintained extremely close and mutually beneficial relations with the different world standardization bodies.

3.3 The scope of ETSI's activities was broader than the terms of reference of the WTSC; for instance, ETSI dealt with not only public but also private networks and services. ETSI was structured differently from the ITU, in that administrations, manufacturers and network operators were direct members. ETSI currently had some 320 members, plus around 60 observers and a number of associate countries from outside Europe. ETSI maintained excellent relations, at the European level, with bodies such as CEN, CENELEC and EBU, and, at the world level, with telecommunication standardization organizations in the United States, Japan, Australia, Canada, etc., through a world cooperation group on standardization, in which the ITU participated, and which sent a representative to the ETSI Technical Assembly, held twice or three times yearly.

3.4 The *President of IEC* delivered the statement reproduced in Annex 2.

3.5 The *Secretary-General of IEC* recalled that the IEC had always maintained close ties with the ITU, and in particular the ex-CCITT. On matters of terminology, which were of mutual concern, he was pleased to announce that IEC had published all the chapters of the International Electrotechnical Vocabulary relating to telecommunications, which had also been incorporated in a new multilingual dictionary. The IEC had also developed a terminological database, which would pave the way for future cooperation with ISO on the establishment of a joint terminology database. It was probably with JTC 1 that collaboration had been most productive. The Chairman of JTC 1, who was unable to attend the Conference, had asked him to state that links between the ex-CCITT, now the Telecommunication Standardization Sector, and JTC 1 had never been as close and that the two bodies were working together in many areas of technical standardization. JTC 1's aim was to be as accessible as possible to all users. JTC 1 and the CCITT had also endeavoured to harmonize their procedures. A revised version of the Guidelines for Cooperation between the CCITT and JTC 1 had been prepared and would be submitted to the Conference. Finally, the Chairman of JTC 1 had expressed the wish that, when considering Recommendation E.161, participants should adopt a single solution consistent with ISO Standard 9995.

3.6 The *Secretary-General of ISO* delivered the statement reproduced in Annex 3.

3.7 The *representative of EUTELSAT* delivered the statement reproduced in Annex 4.

4. Reports of the Committees of the Conference

4.1 The *Chairman of Committee 2* reported that his Committee had assessed the Conference's budgetary needs and reviewed the agreement concluded between the host country and the Conference, and that it wished to thank the Finnish authorities for making available all the facilities required for the smooth running of the Conference. The Committee had also studied the position of the accounts at 3 March 1993, which it would be presenting in the detailed report on its work.

4.2 The *Chairman of Committee 3* reported that his Committee had already discussed the main item, namely draft Resolution No. Res. 18/X, and in particular section 8 thereof, concerning the approval of new and revised Recommendations. It was generally agreed that the Resolution constituted a sound basis for developing new working methods for the Telecommunication Standardization Sector, although there was still room for improvement on some aspects. As far as section 8 was concerned, participants acknowledged that there were some points of disagreement on the text, but had been unable to reach unanimity on a solution. That section had thus been entrusted to a select group, chaired by Mr. E. J. Exton (Canada). A text was currently being drawn up consolidating all the proposed amendments, which the select group would use as a point of departure. Committee 3 had not yet started to discuss Documents AP X-25, X-26 and X-40, or the contributions submitted by Administrations.

4.3 The *Chairman of Committee 4* reported that his Committee had made considerable progress in determining study group responsibilities and work programmes. Experts had been appointed to consider two specific matters, namely, coordination of activities between study groups and between the two Sectors, and the transfer of ex-CCIR Questions to the Telecommunication Standardization Sector.

4.4 The *Chairman of Committee 5* said that his Committee had examined the reports of Study Groups IV, V, VI, X, XI, XII, XVII and XVIII, most of which had merely given rise to requests for clarification or general comments. All the reports had been approved within Committee 5, except that of Study Group VI, for which one point had still to be clarified.

4.5 The *Chairman of Committee 6* stated that his Committee had considered the reports of Study Groups I and II and started its consideration of Study Group III's report. Under the report of Study Group I, it had proved necessary to draft a Resolution on one item in order to find a solution acceptable to all concerned. A problem had also been raised concerning the report of Study Group II, to which a speedy solution was expected. Moreover, it was likely that Study Group VIII's report would give rise to some problems. With respect to the management of country codes for telephone and telex, the Committee had accepted the proposed additions to the list of telephone country codes, although the procedure for allocating such codes remained problematic. Since that matter was outside the terms of reference of Committee 6, it had been referred to Committee 3. Committee 6 had also considered the reports of the Special Autonomous Groups (GAS).

4.6 The *Chairman of Committee 7* reported that, since only three sections of Document AP X-23(Rev.1) had been approved, the Editorial Committee preferred to wait until more substantial progress had been made before pursuing its work.

5. General remarks on cooperation between the BDT and the TSB

5.1 The *Director of the BDT* expressed satisfaction that the BDT was able to participate in what constituted the first instance of official cooperation between the Sectors. Through its presence, the Telecommunication Development Sector sought to achieve three objectives: integrating standardization in its work, communicating with all the participants in the Standardization Sector, and incorporating the work of the GAS in its own programme. He drew attention to the problem of developing countries' participation in ITU standardization work, arrangements for which were set out in Recommendations 49 to 53 of the H.L.C., and read out APP-92 Resolution 7, highlighting the role which the affiliation system might play within the Development Sector. INTELSAT had been the first organization to request affiliate status during the present Conference.

5.2 The *delegate of Senegal* feared that the appeal launched by the Director of the BDT might be inconsistent with the decision taken by the Additional Plenipotentiary Conference, on the H.L.C.'s recommendation regarding the transfer of the GAS. To his mind, that recommendation did not introduce the concept of a two-speed ITU in the field of standardization. On the contrary, APP-92 Resolution 10 aimed to strengthen the developing countries' effective participation in the work of the Union, particularly in the standardization area, in order to foster international cooperation among the Members. As a representative of a developing country, therefore, he would welcome some explanation concerning the transfer of those activities.

5.3 The *Coordinator of the GAS* thanked the Director of the Standardization Bureau for the assistance provided in preparing the GAS Handbooks. He was very pleased to hear the comments by the Director of the BDT, who could count on his collaboration for future work. He pointed out that the GAS activities had hitherto involved the CCITT and the CCIR, as well as Technical Cooperation.

5.4 The *delegate of Poland* said that it would be interesting to know what would become of the world and regional Plan Committees. With the globalization of telecommunication networks, the activities of the Plan Committees became even more important. He therefore wondered which body would take over that work.

5.5 *The Director of the TSB* said that he would inform the delegate of Poland outside the meeting of the recommendations made by the H.L.C.

The meeting rose at 1545 hours.

ANNEX 1

Statement by the representative of INTELSAT

Mr. Chairman,

INTELSAT as many here know is the intergovernmental organization that operates the global satellite communication system. It has a membership of 125 nations. These nations, or entities that they nominate, are the owners and users of the system. They use the system by installing earth stations that are linked to one or more INTELSAT satellites. The users of the INTELSAT system include many non-member countries, territories and dependencies. Practically all ITU members are users of the INTELSAT system.

The connection between INTELSAT and the ITU begins from a simple requirement of membership, namely, that to apply for INTELSAT membership a nation must first be a member of the ITU. Secondly, the INTELSAT Operating Agreement requires that the INTELSAT space segment and earth segment be designed, constructed and operated in conformity with the ITU Telecommunication Regulations as well as the Radio Regulations and with due regard to the Recommendations of the CCIR and CCITT.

Mr. Chairman, INTELSAT is the major worldwide system to which the fruits of your labours here in the Standardization Sector are directly applied.

For all these reasons, Mr. Chairman, we in INTELSAT are proud to be associated with the work of the Standardization Sector. Our participation in the study groups has been increasing and our experts are getting to know and to be known within these study groups. With this knowledge, we hope that there will be greater appreciation and sensitivity to our problems and that this awareness will trickle down further into the working parties, the expert groups and the Rapporteur system.

But quite frankly we will not make complete progress in this area without breaking down the cultural barriers that, in our experience, appear to separate the satellite experts from the network experts within your own Administrations.

Mr. Chairman, we welcome the changes that have occurred in the ITU and specifically the changes relating to efficiency and speed of generating Recommendations. Quite naturally so, since along with RPOAs and SIOs, we contribute to the budget of the ITU. Moreover, due to the worldwide nature of our system, we have an entrenched interest and concern that ITU standardization remains pre-eminent in the field of world telecommunications.

Mr. Chairman, we are glad to participate in this meeting and to collaborate with the new TSS. We are part of what you do, ladies and gentlemen, and, for the reasons explained earlier, we have to be.

Thank you, Mr. Chairman.

ANNEX 2

Statement by the President of IEC

Mr. Chairman, Ladies and Gentlemen,

There are two reasons why it is a great honour as well as a pleasure for me to address you at this World Telecommunication Standardization Conference. As a telecom engineer for most of my professional life, I always knew that CCITT Recommendations represented the rules of the game, and the results of your Plenary Assemblies were always eagerly awaited. Actually to participate in this first of the new generation of conferences, which arise out of last year's changes to the ITU Constitution and Convention, is therefore an exciting experience.

Secondly, I am of course representing the IEC, your sister organization in global electrotechnical standardization. I do not need to tell you, the telecommunications community, that the trend towards global markets is growing every day. You have always been aware that, in telecommunications, the world is your oyster. And these days, we also have to include part of space. The demand for international compatibility has always existed in your field.

For nearly 90 years, the IEC has been developing and harmonizing technical standards in many areas of electrotechnology, the result of these endeavours being more than 3 000 bilingual standards comprising 100 000 pages. But it is only now, with the growing volume of international trade and the development of companies that operate on a truly global level, that standardization is becoming an eco-political affair, as demonstrated by the EC's efforts to harmonize European standards. Thus the major challenge to our organization – to deliver our products to meet market, or political, demand – is growing. And a critical part of that demand is to reduce the time to market.

But there are many other challenges. First among them is the rapid pace of technical development, mainly in microelectronics and information technology, which is spreading to more and more products. And because of this, more products incorporate different technologies that combine to work as a system. Communications technology is also of increasing importance in these systems.

Technical committees and standards organizations that in the past have been accustomed to working separately now have to find new and efficient ways of working together. I am happy to say that our two organizations are already cooperating in many projects, and IEC General-Secretary, Tony Raeburn, will be reporting on some of our common activities later.

The pace of technical development also poses other challenges. Nowadays, the market for our standards cannot wait until the state-of-the-art is established and mature, so we are required to standardize concurrently with the development process. But how can we get competing developers to agree?

On another level, society in general increasingly urges protection of the environment, and we have to develop standards to answer this demand. To prevent governments and public administrations from inventing their own, and of course unharmonized, rules for environmental protection, and thus creating new barriers to trade, we have to act together.

We should bear in mind that the original *raison d'être* for electrotechnical standardization was to protect the user of this new technology from any harm arising from improper manufacture or misuse of electrotechnical goods, and this was to be done in such a way that no government regulations were needed. I am sure that the three global standards organizations – ITU, ISO and IEC – can also meet the demand from their customers for environmental protection.

These and other new tasks created by the political and economic changes in the world have been analysed and defined by the IEC. The result is a strategic plan, the Masterplan, which must guide the IEC towards the end of this decade.

This plan was accepted by our Council at the IEC General Meeting in Rotterdam last year. Implementation has now started in several project teams under the chairmanship of our vice-presidents and other members of the General Policy Committee.

The strategic approach we are taking requires even closer cooperation with our sister organizations in future, so again I have to thank you for the invitation to attend your conference, for which I wish you every success.

ANNEX 3

Statement by the Secretary-General of ISO

Ladies and Gentlemen,

On behalf of the ISO President and the 90 member countries of ISO I am pleased to join the IEC President and General-Secretary in conveying our best wishes to this first World Telecommunication Standardization Conference.

Both ISO and the IEC have been attentive observers during the ITU reorganization processes over the past three years, and in particular to the new organizational aspects of your standardization work. We have been attentive, but not worried, because we have continued to see a satisfying evolution in our cooperation and collaboration efforts. For most of us in ISO and IEC, and particularly at the level of technical cooperation, it has been business as usual, and I would definitively describe it as good business.

We, the ITU, the IEC and ISO enjoy an important *de facto* recognition as the natural apex organizations for global standardization in today's world. Maintaining this stature requires that we make continuous and conscientious efforts to ensure that our standardization work is both complementary and mutually reinforcing. Most importantly, we must not be the cause of wasteful duplication of time, effort and money among our common clients.

We have, until now, been rather successful in living up to our responsibilities for coordination and coherence in international standardization work – our most visible success being in the general area of information technology. Mr. Raeburn, the IEC General-Secretary, has already expanded on this aspect of our cooperation.

As the President of IEC has noted, our future challenges will continue to call for due diligence in all of our cooperation efforts. I cite here as an example new work in ISO on electronic data interchange standards (EDI), and on road transport informatics. In both cases, ITU, IEC and ISO have already established joint planning groups in order to position ourselves for future demands. I wish to express my appreciation to Messrs. Irmer and Kirby for their tireless efforts to ensure ITU participation and support for these joint undertakings.

Among the many cooperative efforts between our three organizations, I would mention in particular the work on a proposed code of good practice for standardization. This code, which has been through a rigorous consensus development process at the national, regional and international levels, is now being submitted for approval within the ISO and IEC membership. The ITU will also take up the question of approval, at the most appropriate level, during the next few months.

Thank you, Mr. Chairman, for this opportunity to speak on behalf of ISO to this ITU Conference.

ANNEX 4

Statement by the representative of EUTELSAT

Mr. Chairman,
Mr. Secretary-General,

I should like to thank you for giving EUTELSAT the opportunity to address a short message to this Assembly, which I shall do on behalf of the Director-General of EUTELSAT, Mr. Grenier. This is the first time that our intergovernmental organization, EUTELSAT, is represented at a CCITT Plenary Assembly. The timing of our participation is of dual significance:

- firstly, the Plenary Assembly has been elevated to its new status of World Standardization Conference;
- secondly, international organizations such as EUTELSAT now enjoy an improved status, in line with the decisions of the APP.

EUTELSAT is currently undergoing a period of considerable growth. Its European vocation is close to fulfilment. Its 36 member countries include countries from the former Western European group, such as, for example, Iceland, Finland, Spain and Turkey, as well as many countries from the former Eastern European group, such as Poland, Hungary and Lithuania. Its membership stretches to the outer reaches of the geographical area constituted by the European continent, with the recent accession to the EUTELSAT Convention of countries like Azerbaijan, Georgia and Armenia. Other countries outside Europe, such as Tunisia and more recently Morocco, are already using our transponder capacity in orbit.

Today, EUTELSAT's fleet boasts eight satellites in orbit, offering a wide range of services:

- analogue or digital telephony;
- various types of public or private digital links;
- VSAT networks;
- various forms of television transmission;
- the radiolocation service and communications with mobile stations.

In order to harmonize the EUTELSAT system with telecommunications under development worldwide, close contacts have been established and will be maintained with radiocommunication and standardization circles. Indeed, in this respect EUTELSAT sees things from both sides of the dividing line between radiocommunication and standardization, which was discussed at such length at the Additional Plenipotentiary Conference. In 1990, reflecting the wishes of its signatories and Member countries, EUTELSAT took the step of requesting the CCIR Plenary Assembly in Düsseldorf to set up a group of CCIR and CCITT experts to coordinate the integration of satellite systems with the terrestrial network and the ISDN in particular.

ITU's rapid and effective response to that request testifies to its vitality and to its ability to adapt to a constantly changing world.

For these reasons, although by virtue of its initially European vocation EUTELSAT enjoys privileged ties with European structures such as ETSI and the European Community, it believes that the ITU and the new Telecommunication Standardization Sector in particular, have the potential to play an increasingly catalytic role on a worldwide scale, including therefore in Europe.

Thank you Mr. Chairman.

THIRD PLENARY MEETING

(Minutes approved at the seventh Plenary Meeting)

Tuesday, 9 March 1993, at 1515 hours

Subjects discussed:

1. Consideration of the report of Committee 5
2. Oral progress reports by Committee Chairmen
3. Proposed additions to Annex 1 to draft Resolution No. Res. 18/7 relating to the publication of [CCITT] Recommendations
4. Abbreviations and acronyms
5. Approval of the minutes of the opening and first Plenary Meetings

1. Consideration of the report of Committee 5 (Documents 38, 40 + Addendum 1 and Corrigendum 1)

1.1 The *Chairman of Committee 5* introduced the Committee's draft report contained in Document 40 and its Addendum 1 and Corrigendum 1. Outlining the work carried out by the Committee and some of the issues it had discussed, he made particular reference to the observations reflected in §§ 2.2 and 6.2 of Document 40. The Committee had unanimously approved the study group Chairmen's reports as well as the deletion of the Recommendations listed in Annex 2 to Addendum 1 and Corrigendum 1 to Document 40; Annex 1 to the same document contained a list of Recommendations for approval by the Conference, which the Committee had also unanimously approved subject to the amendment to draft new Recommendation L.16 set out in Document 38. He thanked all study group Chairmen and Vice-Chairmen for their contributions, and the Vice-Chairman of Committee 5 and the Secretariat for their valuable support.

1.2 There being no comments on the report of Committee 5, Document 40 its Addendum 1 and Corrigendum 1 were *noted*. The list of Recommendations submitted for approval by the Conference in Annex 1 to the Addendum/Corrigendum was *approved*, subject to the amendment to draft new Recommendation L.16 contained in Document 38, as was the list of Recommendations proposed for deletion in Annex 2 to the same document. The whole report was *approved*.

2. Oral progress reports by Committee Chairmen

2.1 The *Chairman of Committee 4* gave a brief oral report on the progress achieved by his Committee with regard to the main issues covered by its mandate. The Committee had completed all its work on study group structure and mandates, with the exception of CMTT, and on study group work programmes. It had agreed that five joint coordination groups and two intersector coordination groups should be established, and was currently reviewing the transfer of work from the Radiocommunication Sector to the Telecommunication Standardization Sector. With regard to the regional tariff groups, the Committee considered that they should be continued and would be reporting to the Plenary Meeting on that subject in due course.

2.2 The *Chairman of Committee 3* reported briefly on the work carried out by his Committee, which had involved setting up a Working Group to discuss certain aspects of draft Resolution No. Res. 18/X. The Committee had successfully completed all its work and approved all the texts it had prepared, although some of the latter required further minor editorial amendments before their submission to the Plenary Meeting.

2.3 The *Chairman of Committee 7* said that his Committee had thus far held four meetings, during which it had completed its examination of Document 48 submitted by Committee 3, containing proposals for the revision of draft Resolution No. Res. 18/X. The revised version of the draft Resolution, which laid down the rules of procedure and working methods for the new Telecommunication Standardization Sector, would be issued in the three working

languages the following day. Likewise, a revised version of Document 42 submitted by Committee 3, concerning study group structure and mandates, would be available shortly. Lastly, the Committee had considered Documents AP X-50, DT/5, DT/10 and DT/28 concerning terminology, with a view to producing a consolidated document. The agreed text would be submitted to a forthcoming Plenary Meeting in the form of a draft Resolution.

2.4 The meeting *noted* the progress reports by the Chairmen of Committees 3, 4 and 7.

3. Proposed additions to Annex 1 to draft Resolution No. Res. 18/7 relating to the publication of [CCITT] Recommendations (Document 46)

3.1 The *Secretary* explained that Document 46, containing proposals for the amendment of Annex 1 to draft Resolution No. Res. 18/7 set out in Document AP X-26, had been referred to the Plenary Meeting on account of the possible legal implications of those proposals.

3.2 Speaking on behalf of the sponsors of Document 46, the *delegate of the United States* introduced the proposals it contained, stressing the recognition and confidence that the CCITT had earned worldwide and the consequent value of retaining reference to the CCITT "trademark" in Recommendations published during a transitional period which would run from 1993 to 1997.

3.3 The *delegate of Switzerland*, speaking as one of the sponsors of Document 46, pointed out that specific references to the CCITT appeared all over the world in contracts, specifications and other such documents.

3.4 The *delegate of Australia* observed that Recommendations published by the Telecommunication Standardization Sector and the Radiocommunication Sector represented one very important area in which the structural changes adopted for the ITU could be made clearly visible to the outside world. In his view, any decision on the matter under consideration should be reached in consultation with the Radiocommunication Sector, which faced the same problem but would not be addressing it before the Radiocommunication Assembly in November 1993. However, his delegation would be willing to accept a compromise solution to the effect that, during the transitional period, Recommendations would also be qualified as "formerly CCITT Recommendation", rather than simply "CCITT Recommendation".

3.5 The *delegate of Saudi Arabia*, after observing that his Administration had co-sponsored Document 46, drew attention to the fact that Recommendations developed or revised and approved during the transitional period would not only carry the name "CCITT Recommendation"; they would obviously also bear the relevant new abbreviation.

3.6 Following a discussion in which the *delegates of Brazil, Lebanon, the United Kingdom, Hungary* and *Portugal*, the *Secretary-General* and the *Secretary* participated, and during which it emerged that there was general support for the Australian compromise proposal, the *delegate of the United States* said that he too could accept the compromise, which met his practical concerns and also appeared to be legally acceptable. He hoped that it would not prove too costly to include the same qualification on the covers of publications as well.

3.7 Follwing further comments by the *delegates of Canada, Poland, Mexico* and *Lebanon*, all of whom supported the Australian proposal, the additions set out in Document 46 were *approved* subject to that amendment.

4. Abbreviations and acronyms (Documents 6; DT/22)

4.1 The *delegate of Spain*, explaining the rationale behind his Administration's proposal in Document DT/22, said that it had been traditional practice in the ITU for acronyms pertaining to the permanent organs to be in one language only. Despite the implementation of the Union's new structure that practice had been retained, as borne out by Document 6 which he regarded solely as an information document. Since none of the acronyms or abbreviations listed in that document were in Spanish, his Administration proposed that the abbreviation for the Telecommunication Standardization Bureau should be BNT; that would not only meet the concerns of both Spanish and French speakers but, more importantly, would be consistent with the decision taken at the Nice Plenipotentiary Conference to adopt the acronym BDT for the Telecommunication Development Bureau. Furthermore, since the Spanish-speaking countries had particular difficulty in pronouncing TSAG – the English acronym for the Telecommunication Standardization Advisory Group – the alternative Spanish acronym GANT was proposed.

4.2 The *delegates of Mexico* and *Senegal* endorsed the previous speaker's proposal and comments.

4.3 The *delegate of Gabon*, while endorsing the Spanish delegate's proposal, said that, in French, he would prefer an acronym for the Advisory Group which resembled more closely the abbreviation for the Bureau of the Telecommunication Standaridzation Sector, namely BNT.

4.4 The *delegate of France* said that, for the sake of simplicity, the original proposal from the Coordination Committee contained in Document 6 would be preferable. While sympathizing with the concerns expressed by the Spanish delegate, he feared that the approval of a special Spanish acronym for the Advisory Group would set a precedent; that acronym should be in either one language only or all three working languages. However, should the Spanish delegate's proposal meet with the approval of the Plenary Meeting, a suitable French acronym would have to be found.

4.5 The *delegate of Argentina* also endorsed the Spanish proposal, but not solely on the grounds of pronunciation. Efforts should be made in future to seek appropriate acronyms for the ITU in all three working languages with a view to launching the Union's standardization activities on a sound footing.

4.6 The *delegate of Lebanon* said that his main concern was the adoption of the acronym BNT, for the sake of consistency with BDT. However, he had no objection to the Spanish proposal for an alternative acronym to TSAG.

4.7 The *Secretary-General* recalled that the task of implementing decisions relating to the Union's new structure had been entrusted to the Secretary-General and the Coordination Committee by the Additional Plenipotentiary Conference and the Council in December 1992. Since the question of acronyms and abbreviations had not been settled in either of those forums, and new acronyms were clearly required, the Coordination Committee had taken appropriate action. Consequently, the information contained in Document 6 did not reflect the proposals of the Coordination Committee, but rather its decisions. As to the legal implications of the issue, should the Plenary Meeting approve the adoption of acronyms which were different from those given in Document 6, he would be bound to refer the matter to the Council for further action, since it was the competent ITU forum for decisions on such matters.

4.8 The *delegate of Spain* expressed surprise that following the decisions of the Additional Plenipotentiary Conference for the overall improvement of the Union, the Coordination Committee, which was chaired by the Secretary-General, had adopted the acronyms in Document 6 for the Union's new structure, before any decision had been taken in that respect by the competent organs. He urged the meeting to accept his proposal for the alternative Spanish acronym GANT, for which there seemed to be sufficient support.

4.9 The *delegate of Saudi Arabia*, while recognizing the sensitivity of the issue, said that it was essential to comply with relevant ITU regulations. Such matters clearly came within the purview of the Council and not the Coordination Committee. One universal acronym would certainly be preferable in order to facilitate the work of Administrations using different languages. He therefore proposed that the matter be referred to the forthcoming session of the Council and that, in the meantime, acronyms for the Advisory Group in the three working languages be used.

4.10 In the ensuing discussion, the *Secretary* expressed concern regarding the documents to be published in the interval prior to the 48th session of the Council. The *delegate of Lebanon* endorsed the Saudi Arabian proposal. Following further comments by the *Chairman*, the *delegates of Brazil* and *Spain* and the *Secretary-General*, the *delegate of France* said that, pending a decision by the Council, the French acronym for the Advisory Group should be GCNT.

4.11 The *Chairman*, summing up the discussion on Document DT/22, said that if he heard no objection he would take it that the Saudi Arabian proposal was acceptable to the meeting. It was therefore understood that appropriate acronyms for the Telecommunication Standardization Advisory Group in the Union's three working languages would be used pending a decision by the 48th session of the Council, which was the competent body in the ITU for decisions on acronyms and abbreviations.

4.12 It was so *agreed.*

5. Approval of the minutes of the opening and first Plenary Meetings (Documents 34, 37)

5.1 Documents 34 and 37 were *approved.*

The meeting rose at 1655 hours.

FOURTH PLENARY MEETING

(Minutes approved by the Chairman)

Wednesday, 10 March 1993, at 1540 hours

Subjects discussed:

1. Consideration of the report of Committee 6

2. Draft Resolution relating to the importance of telecommunication standardization for the developing countries

1. Consideration of the report of Committee 6 (Document 76)

1.1 The *Chairman of Committee 6* introduced Document 76, which contained the report on the work covered by his Committee during its three meetings. A number of controversial issues had been tackled and satisfactorily resolved thanks to the spirit of compromise which had prevailed among participants; he warned against any further amendment of the carefully drafted texts, in order not to upset the delicate balance of the agreements reached. One of the Committee's most notable achievements had been the consensus reached in respect of draft revised Recommendation E.161 produced by Study Group I. The selection of a preferred standard for the position of the letters "Q" and "Z" on the telephone keypad, with suitable phase-out arrangements for existing equipment built to another standard, augured well for the subsequent adoption of a single solution worldwide. Another difficult issue, raised by Study Group II, had been that of UPT numbering in connection with draft Recommendation E.168. The issue had been resolved by the inclusion of a paragraph in the introduction to the draft Recommendation, indicating that the text was not yet "mature" and that certain issues would require further study. Study Group VII had encountered problems in connection with ten Recommendations originally intended for approval by the Conference, which were not in line with more recent ISO/IEC documentation. In order to eliminate any inconsistencies, it had been agreed to defer approval of those Recommendations until the Study Group's first meeting of the forthcoming study period. No undue delay would be caused in the publication of the Recommendations, which were to be approved under the Resolution No. 2 procedure – further proof of the usefulness of that system. Annex C to Recommendation T.30 had given rise to lengthy debate during the Committee's meetings and had also been the subject of much informal discussion. The compromise solution finally agreed upon was that the Recommendation and its Annex should be approved, subject to the inclusion of a note stressing the need for further study of compatibility issues, as well as consequential amendments to Recommendation T.4, Question E/VIII and Question 10/1.

1.2 Several issues which did not fall within the competence of the Committee, including the future of the regional tariff groups and procedures relating to country codes, had been referred to other Committees for further action.

1.3 After drawing attention to the list of Recommendations proposed for approval and deletion contained in Annex 1 to Document 76, he commended the efforts of the study group Chairmen and Vice-Chairmen and thanked all those who had assisted Committee 6 in its work.

1.4 The *Chairman* invited comments on the report of Committee 6.

1.5 The *delegate of Brazil*, referring to § 1.2.3, and in particular the agreement reached concerning the position of the letters "Q" and "Z" on the telephone keypad, recalled the statement made at the second Plenary Meeting by the General Secretary of IEC, and suggested that the Plenary Meeting should request the Director of the TSB to notify the Chairman of JTC 1 of the terms of the agreement reached on revised Recommendation E.161.

1.6 It was so *agreed.*

1.7 The *delegate of Australia*, referring to the third line of § 1.2.3, requested, for the sake of clarity, that the word "Members" be replaced by "those present", and also emphasized the desirability of securing the unanimous approval of study group members for standards relating to international services. As to the compromise solution reached on revised Recommendation E.161 mentioned in the penultimate subparagraph, he stressed the importance of seeking a global solution on the issue, in particular with regard to GSM and FPLMTS.

1.8 The *delegate of Brazil*, referring to section 4, suggested that the report should include some reference to the fact that the request for accelerated approval of the ten Recommendations in question had been made by the Conference, in accordance with the provisions of Resolution No. Res. 18/X. The *Secretary* confirmed that a note along those lines would be included in the final report.

1.9 The *delegate of Greece*, referring to § 5.2.2, drew particular attention to his delegation's comments and amendments in respect of draft Recommendation T.52 and revised Recommendation T.101.

1.10 Subject to those comments and amendments, sections 1 to 9 of the report were *approved.*

1.11 The *Chairman* drew attention to Annex 1 containing the list of Recommendations proposed by Committee 6 for approval and deletion, as well as to Annexes 2, 3 and 4 relating, respectively, to draft revised Recommendation E.161, country codes and draft Recommendation T.52.

1.12 The *delegate of Mexico* suggested some editorial amendments to the text in Annex 2.

1.13 The *Chairman of Study Group I* suggested, in the absence of experts on the subject, that the matter be referred to the first meeting of Study Group I in the forthcoming study period.

1.14 It was so *agreed.*

1.15 The *delegate of the Slovak Republic*, supported by the *delegate of the Czech Republic*, requested that the information contained in Document 43 be incorporated in Annex 3.

1.16 The *Secretary* said that the changes to the list of country codes contained in Document 43 and its Corrigendum 1 would be reflected in the appropriate part of the final version of the report.

1.17 Subject to those comments and amendments, Annexes 1 to 4 were *approved.* The report of Committee 6 as a whole, as amended, was thus *approved.*

2. Draft Resolution relating to the importance of telecommunication standardization for the developing countries (Document 49 and Addendum 1)

2.1 The *delegate of Senegal*, speaking on behalf of the co-sponsors, introduced the draft Resolution in Document 9 and Addendum 1, observing that it was intended to highlight the importance which the developing countries attached to telecommunication standardization. If approved, the draft Resolution would give tangible expression to the decisions taken at APP-92 and would ensure an essential link between the Standardization and Development Sectors.

2.2 The *delegate of Mexico* said that standardization was of benefit to both developing and developed countries. He fully supported the draft Resolution and expressed concern at the decreasing participation in telecommunication standardization meetings. It was important to take into account the specific needs of developing countries and to keep them up to date with technological developments. Delegates had a responsibility to promote telecommunication standardization within their Administrations, so as to achieve more effective participation in the related activities.

2.3 The *delegates of Spain, France, the Republic of Korea* and *India* supported the draft Resolution, as did the *delegate of China*, who observed that the higher the participation the more effective the standardization work, especially as rapidly changing technologies were involved, and emphasized that worldwide standardization was impossible without the participation of the developing countries.

2.4 The *delegate of Saudi Arabia*, supported by the *delegate of Kuwait*, considered that the title of the draft Resolution covered too vast an area, and proposed that it be amended to read "The participation of the developing countries in the Telecommunication Standardization Sector" – a change which in no way affected the substance.

2.5 The *delegate of Poland* observed that the generalization of digital techniques was leading to greater simplification in the operating of telecommunication systems. Once developing countries had introduced digital switching and transmission systems, their task would be much easier. He would prefer the title of the draft Resolution to remain as it stood, because there was a need not only for increased participation by developing countries but also for more assistance from developed countries with broad experience of telecommunication systems.

2.6 After a discussion in which the *delegates of Senegal, Kenya* and *Mali* took part, the *delegate of Saudi Arabia* withdrew his proposal.

2.7 The draft Resolution in Document 49 and its Addendum 1 was *approved.*

The meeting rose at 1700 hours.

FIFTH PLENARY MEETING

(Minutes approved by the Chairman)

Thursday, 11 March 1993, at 1045 hours

Subjects discussed:

1. Consideration of the report of Committee 2

2. Consideration of the report of Committee 3

1. Consideration of the report of Committee 2 (Document 75)

1.1 The *Chairman of Committee 2* introduced Document 75 containing the report by the Budget Control Committee to the Plenary Meeting. He drew attention, under Section 3, to the fact that expenditure for 1989 to 1991 had been lower than foreseen in the budgets and, under Section 6, to the fact that the total expenditure estimated for the Conference was below the credit adjusted at 9 March 1993. Under Section 4, ten days had been allowed for the next WTSC, but eight days might in fact prove sufficient; the question would have to be taken up by the Council and the Kyoto Plenipotentiary Conference. In accordance with the usual practice, he requested the Secretary-General to submit the report to the Council, together with any comments it might elicit.

1.2 The report by the Budget Control Committee to the Plenary Meeting was *approved.*

2. Consideration of the report of Committee 3 [Documents 60(Rev.2), 69, 71, 72, 73, 74, 78, 79, 81 and Corrigendum 1, 82, 83 and Corrigendum 1, 85]

2.1 The *Chairman of Committee 3* introduced Document 82 containing the overall report of the work of Committee 3. The Committee had held four meetings and had set up a working group to deal with proposals relating to draft Resolution No. Res. 18/X. At its third and fourth meetings it had approved all its texts, although some editorial work had been carried out on them subsequently by Committee 7, and some substantive changes had been made to them further to work carried out by Committee 4. Reviewing Document 82 section by section, he indicated, where appropriate, in which conference documents the latest texts of particular Resolutions or draft Resolutions would be found, pointing out that the draft Resolution in Document 85 was intended for adoption by both the WTSC and the RA. Finally, he paid a special tribute to ad hoc Group – Resolution No. 18 and its Chairman for the work carried out over the four years since the Melbourne Plenary Assembly, to the Chairman of the Working Group set up by Committee 3, and to the Secretary of Committee 3.

2.2 The report by Committee 3 to the Plenary Meeting set out in Document 82 was *approved.*

Draft Resolution No. Res. 1 – Rules of procedure and working methods of the TSS (Document 69)

2.3 The *Chairman* invited the meeting to consider Document 69, which was submitted by Committee 7 and contained the draft Resolution that had previously borne the provisional number "18/X".

2.4 The *Chairman of Committee 7* said that the question of how the Telecommunication Standardization Sector should be referred to had caused some concern in Committee 7, since no final decision had yet been taken with regard to the relevant acronym or abbreviation. The different abbreviations used in the draft Resolution would need to be modified subsequently, as appropriate.

2.5 Further to comments by the *delegate of Mexico* and the *Secretary*, the *delegate of Spain*, speaking as Vice-Chairman of Committee 7, said that all references to the Convention should be aligned.

2.6 The *Secretary* said that those and any other editorial amendments required would be made by the TSB.

2.7 It was so *agreed.*

Preambular section

2.8 *Approved.*

Section 1

2.9 In reply to the *delegate of the Russian Federation*, who sought clarification with regard to the "members" mentioned in § 1.3, and further to comments by the *Chairman of Committee 7*, the *Secretary* suggested that the paragraph should be rewritten to make it clear that the reference was to all members of the Telecommunication Standardization Sector.

2.10 It was so *agreed.*

2.11 Further to a suggestion by the *representative of INTELSAT* that the final sentence of the footnote relating to duly authorized entities should be brought in line with No. 236 of the Geneva Convention, and following comments by the *Secretary*, the *delegate of the United Kingdom* suggested that the simplest solution would be to amend the sentence to read: "... handled in conformity with Article 19 of the Convention".

2.12 It was so *agreed.*

2.13 The *delegate of the United States* proposed that the word "normally" should be inserted after the word "shall" in § 3.9 in order to provide for the eventuality of the WTSC being unable to appoint the Vice-Chairmen of the TSAG. The matter had already been discussed at the meeting of Heads of delegation and should perhaps be left open until further discussions had been held.

2.14 The *delegate of Spain* opposed the amendment but agreed to a suggestion by the *delegate of the United Kingdom* that Section 1 be approved, leaving § 3.9 in abeyance until the matter referred to by the United States delegate had been settled.

2.15 It was so *decided.*

Section 2

2.16 The *delegate of Australia* pointed out that Committee 4 had approved some modifications to § 1.7.

2.17 Section 2 was *approved* subject to those amendments.

Sections 3 to 7

2.18 *Approved.*

Section 8

2.19 Section 8 was *approved* subject to the deletion of the square brackets in § 3.1 and the addition of new § 6.5 from Document DT/24.

2.20 With the exception of § 3.9 of Section 1, the draft Resolution as a whole, as amended, was *approved.*

Resolution No. 7 (amended) – Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) (Document 83, Annex 1)

2.21 In response to an observation by the *delegate of Canada*, the *Chairman* pointed out that the acronym ISO in *resolves* 8 should read "ITU-T".

2.22 With that correction, Resolution No. 7 (amended) was *approved.*

Draft Recommendation A. [23] – Collaboration with other international organizations on information technology, telematic services and data transmission (Document 83, Annex 2)

2.23 *Approved.*

Draft Resolution No. Res. [18/7](Rev.3) – Publication of ITU-T Recommendations (Document 83, Annex 3, and Corrigendum 1)

2.24 The *delegate of Brazil* pointed out that the reference in **noting further** h) to Section 8, Subsection 2 should be deleted, while the *delegate of Mexico* queried the reference to the Nice Convention in **considering** b).

2.25 The *Secretary* said that the appropriate modifications would be made and drew attention to revisions to the French and Spanish texts of Corrigendum 1 to Document 83.

2.26 After a discussion on the substance of Corrigendum 1 to Document 83 in which the *delegates of Brazil, Australia,* the *United Kingdom,* the *United States, New Zealand* and *Hungary,* the *Chairman of the Working Group set up under Committee 3* and the *Chairman of Committee 3* took part, the *Chairman* suggested that the Conference approve the **considering** and **noting** paragraphs as they appeared in the Corrigendum and set up a drafting group composed of the delegates concerned, under the chairmanship of the Chairman of Committee 3, to produce an agreed text for **decides** 8. The Conference would return to the matter later.

2.27 It was so *agreed.*

2.28 On that understanding, draft Resolution No. Res. [18/7](Rev.3) was *approved.*

Draft Resolution No. Res. 18/8(Rev.3) – Identification and layout of Recommendations (Document 83, Annex 4)

2.29 *Approved.*

Draft Resolution No. Res. 18/10(Rev.1) – Supplements to the ITU-T Recommendations (Document 83, Annex 5)

2.30 *Approved.*

The meeting was suspended at 1225 hours and resumed at 1405 hours.

2.31 The *Chairman* invited the Plenary Meeting to continue its consideration of the draft Resolutions and Recommendations arising from the report of Committee 3.

Draft Resolution No. Res. 18/11 – Development of Electronic Document Handling (Document 72)

2.32 *Approved.*

Draft Resolution No. Res. 18/12 – EDH Group within the TSAG (Document 73)

2.33 *Approved.*

Draft Resolution No. Res. 18/13 – An information bulletin for the Telecommunication Standardization Sector (Document 74)

2.34 *Approved.*

Draft Resolution No. Res. 18/14 – Relations with other standardization organizations [Document 60(Rev.2)]

2.35 *Approved,* with the addition of the words "in each country" after "coordination" in **resolves** 4).

Draft Resolution on principles and procedures for the allocation of work to, and coordination between, the Radiocommunication and Telecommunication Standardization Sectors (Document 85)

2.36 *Approved*, on the understanding that the forthcoming Radiocommunication Assembly would approve a corresponding text.

Draft Recommendation A.15 – Elaboration and presentation of texts for Recommendations of the ITU Telecommunication Standardization Sector (Document 71)

2.37 *Approved.*

Resolution No. 11(revised) – Collaboration with the Consultative Council for Postal Studies (CCPS) of the Universal Postal Union (UPU) in the study of new services concerning both the postal and the telecommunication sectors (Document 78)

2.38 *Approved.*

Draft Resolution No. Res. 2 – Study Group responsibility and mandates (Document 81, Annex 1)

2.39 *Approved.*

Draft Recommendation No. Res. A.14 – Production, maintenance and publication of ITU-T terminology (Document 81, Annex 2, and Corrigendum 1)

2.40 The *Chairman* drew attention to the corrections to the Spanish text of the draft Recommendation, set out in Corrigendum 1 to Document 81.

2.41 Draft Recommendation No. Res. A.14 was *approved.*

2.42 The *Chairman* said that, with the exception of the matters left in abeyance, the Conference had completed its consideration of Committee 3's output. He thanked the Chairman and members of that Committee for their efforts.

The meeting rose at 1425 hours.

SIXTH PLENARY MEETING

(Minutes approved by the Chairman)

Thursday, 11 March 1993, at 1430 hours

Subject discussed:

1. Consideration of the report of Committee 4

1. Consideration of the report of Committee 4 (Documents 86, 42 and Addenda 1 and 2, 81)

1.1 The *Chairman of Committee 4*, introducing the report to the Plenary Meeting contained in Document 86, drew attention also to the Committee's report to the Conference in Document 42 and its two addenda. The Committee's work had focused on five main aspects: study group structure and mandates; work programme of the study groups; joint coordination groups (JCG); intersector coordination groups (ICG); and transfer of work from the Radiocommunication Sector to the Telecommunication Standardization Sector. The Committee's proceedings were summarized in Document 86, and their outcome was reflected in the proposals set out in Document 42 and its addenda. He stressed that the question of study group mandates remained fluid and would be kept under review by the TSAG.

Draft Resolution No. Res. 18/9 – Study group responsibility and mandates (Documents 86, Annex 1, and 81)

1.2 The *Chairman of Committee 7* said that the revised text, renumbered draft Resolution No. Res. 2, appeared in Annex 1 to Part II of his Committee's report to the Conference (Document 81).

1.3 The *Chairman* invited the Plenary Meeting to consider Annex A to that draft Resolution as set out in Document 81, taking into account also the results of the related work summarized in Parts 2 and 3 of Committee 4's report (Addenda 1 and 2 to Document 42).

1.4 The *Chairman of Committee 4*, replying to a question by the *delegate of the United States*, said that the text relating to Study Group XV in Annex A to the draft Resolution would be amended to bring it into line with the title "Transmission systems and equipment" shown on page 6 of Addendum 2 to Document 42. He also endorsed a suggestion by the *Chairman of Committee 3* concerning the transmittal to the Secretariat of an editorial amendment to the title of Study Group VIII.

1.5 Following a question by the *delegate of the United Kingdom* and observations by the *delegate of the Russian Federation* and the *Chairman of Committee 4*, it was agreed to leave the title of Study Group XVII as it stood in Annex A but to clarify certain related details informally.

1.6 Annex A, as amended, was *approved.*

1.7 Annexes B and C were *approved*, subject to a minor editorial amendment to the text in Annex B relating to Study Group XII.

1.8 The draft Resolution as a whole, as amended, was *approved.*

Amended Questions and additional amendments to Questions (Document 86, Annex 2, Parts A and B)

1.9 *Approved.*

Draft Resolution relating to the initiation of joint coordination groups to deal with matters of concern to multiple study groups in the Telecommunication Standardization Sector in accordance with Resolution No. 18/X (Document 86, Annex 3)

1.10 *Approved.*

Annex 3 to the draft Resolution relating to principles and procedures for the allocation of work to, and coordination between, the Radiocommunication and Standardization Sectors (Addendum 2 to Document 42, Annex 3)

1.11 *Approved.*

Draft Resolution relating to the establishment of an Intersector Coordination Group to deal with activities relating to the FPLMTS in the Telecommunication Standardization and Radiocommunication Sectors (Document 86, Annex 4, Part A)

1.12 The *Secretary*, replying to a query by the *delegate of the United Kingdom*, said that the last phrase under **instructs** should read "(as modified by Document 42, Addendum 2, Annex 3)". A further editorial correction mentioned by the *delegates of France* and the *Russian Federation* would also be taken into account.

1.13 With those corrections, the draft Resolution was *approved.*

Draft Resolution relating to the establishment of an Intersector Coordination Group to deal with satellite matters of common interest to the Telecommunication Standardization and Radiocommunication Sectors (Document 86, Annex 4, Part B)

1.14 The *Secretary* said that, as in the case of the previous draft Resolution, the last phrase under **instructs** should read "(as modified by Document 42, Addendum 2, Annex 3)".

1.15 With that correction, the draft Resolution was *approved.*

Draft Resolution relating to inclusion of appropriate work from the CCIR into the programme of the Telecommunication Standardization Sector (Document 86, Annex 5, Part A)

1.16 The *Chairman of Committee 4* said that a group of experts coordinated by the Vice-Chairman of Committee 4 had conducted an extensive review of the Questions transferred from the former CCIR to the ITU-T, as well as Questions from the former CMTT, which would be renumbered as a normal ITU-T study group. To align the establishment of that new group with Resolution No. 18/X and with the Convention, it had been necessary to amend § 1.7, Section 2 of Resolution No. 18/X; the new version of that paragraph was to be found in Document 86, Annex 5, Part B.

1.17 The *Vice-Chairman of Committee 4*, replying to a question by the *delegate of New Zealand*, said that the amendment made at a previous meeting to Annex 3 to Document 55 concerning referral of items by the ITU-T to the Radiocommunication Assembly did not entail any consequential amendment of the present draft Resolution.

1.18 The draft Resolution in Document 86, Annex 5, Part A was *approved*, subject to minor editorial amendments read out by the Secretary.

Amendment to § 1.7, Section 2 of Resolution No. 18/X (Document 86, Annex 5, Part B)

1.19 *Approved.*

Draft Resolution relating to the collection and dissemination of operational and service information by the TSB (Addendum 2 to Document 42, Annex 5)

1.20 The *Chairman of Committee 4* said that in the second preambular paragraph, the words "**but also**" before "**considering**" should be deleted.

1.21 The *delegate of Japan* proposed that the words "International Telecommunication Regulations" in **in view of** c) and **mindful** a) should be replaced by "WATTC".

1.22 The *delegate of Spain*, supported by the *delegate of France*, proposed that the words "to administrations and the ITU-TSB" in **resolves** 3) should be deleted, following the discussion in Committee 4; the phrase would then read "how costs could be reduced". The *delegate of the United Kingdom* having said that he would prefer that phrase to read "how costs to the TSB could be reduced", the *delegate of Spain* observed that the deletion of any reference to specific bodies left more leeway to reduce costs as appropriate.

1.23 The *delegate of Hungary* proposed replacing the phrase "Study Group I" in **resolves** 1) by the phrase "Study Groups I, II and III".

1.24 The draft Resolution, as amended by the delegates of Japan, Spain and Hungary, was *approved*, subject to the editorial amendment read out by the Chairman of Committee 4 and to further editorial corrections by Committee 7, as required.

Draft Resolution relating to future procedures for allocation of country and network codes (Document 86, Annex 6)

1.25 The *Chairman of Committee 4* said that the words "data country codes" should be inserted after "ISDN country codes" in **considering** a), and the phrase "in accordance with the appropriate Recommendations" deleted from the **recognizing** paragraph.

1.26 The draft Resolution, as amended, was *approved.*

1.27 The report of Committee 4 (Documents 86, 42 and Addenda 1 and 2) as a whole was *approved.*

1.28 The *Chairman* thanked the Chairman and members of Committee 4 for their valuable work.

The meeting rose at 1550 hours.

SEVENTH AND LAST PLENARY MEETING

(Minutes approved by the Chairman)

Friday, 12 March 1993, at 0905 hours

Subjects discussed:

1. Tribute to the memory of Mr. Cecil Crump
2. Consideration of the report of Committee 7
3. Addendum and Corrigendum to the report of Committee 3
4. Appointment of the Chairmen and Vice-Chairmen of the study groups in the Telecommunication Standardization Sector
5. Approval of the minutes of the second and third Plenary Meetings
6. Statements by the delegates of Germany and Argentina

1. Tribute to the memory of Mr. Cecil Crump

1.1 On the proposal of the *Director of the TSB*, the delegates observed a minute of silence in tribute to the memory of Mr. Cecil Crump of the United States (AT&T), who had very recently passed away.

2. Consideration of the report of Committee 7 (Documents 69, 81, 83, 87, 90)

2.1 The *Chairman of Committee 7* introduced the five parts of the report on the activities of that Committee, drawing attention to the principal Resolutions and Recommendations dealt with. He concluded by thanking the two Vice-Chairmen of the Committee and all the delegates who had participated in its very demanding work.

2.2 The *Chairman of Committee 4*, referring to Corrigendum 1 to Document 87, which contained draft Resolution No. T-8 approved at the previous Plenary Meeting, observed that certain of the editorial amendments to which he had drawn attention on that occasion did not seem to have been picked up by the Editorial Committee. The *Secretary* replied that those modifications had been noted by the Secretariat and would be taken care of in the final version.

2.3 The *Chairman* commended the Committee for its excellent work.

3. Addendum and Corrigendum to the report of Committee 3 (Addendum 1 to Document 69, Corrigendum 3 to Document 83)

3.1 The *Secretary* recalled that § 3.9 of draft Resolution No. Res. 1 (Document 69) had been left in abeyance pending further discussion of an issue raised by the United States delegate. The matter had now been settled and an agreed text produced; that text was contained in Addendum 1 to Document 69, and there appeared to be no need for further discussion, since it had been approved by those concerned.

3.2 Corrigendum 3 to Document 83 took account of various amendments proposed to draft Resolution No. Res. 18/7(Rev.3), in particular by the delegates of the United States, Australia and New Zealand. Those texts too had been seen by those concerned.

3.3 The *delegate of the United States*, referring to Corrigendum 3 to Document 83, said that in discussions between his delegation and the representative of the TSB, it had been agreed that the word "formerly" should be replaced by "previously" in the expression "formerly CCITT Recommendation" in order to avoid any possible confusion with the word "formally", the pronunciation of which was identical.

3.4 The *Chairman of Committee 3* read out the text of a new **decides** paragraph which, as he understood it, was acceptable to the delegates of both Australia and the United States, namely: "that new or revised Recommendations published by the ITU shall carry at the bottom of the first page the following note: "ITU-T Recommendations were previously known as CCITT Recommendations". A similar note referring to CCIR will be included in any published revision concerning responsibility for Radiocommunication Recommendations transferred to the Telecommunication Standardization Sector."

3.5 It was so *agreed.*

3.6 In the absence of further comments, the texts in Addendum 1 to Document 69 and in Corrigendum 3 to Document 83 as amended by the Chairman of Committee 3 were *approved.*

4. Appointment of the Chairmen and Vice-Chairmen of the study groups in the Telecommunication Standardization Sector (Document 93)

4.1 The *Director of the TSB*, introducing the proposals in Document 93, said that the Conference had been entrusted with the very difficult task of reducing substantially the number of study group Vice-Chairmen, further to the Additional Plenipotentiary Conference's decision that, as a rule, study groups in the new Sector should have only two Vice-Chairmen. The matter had been discussed at several meetings of the Heads of delegation and the final compromise solution had only been unanimously approved the previous day. The issues on which there had been differences of opinion included the need for highly qualified Chairmen and Vice-Chairmen, with due regard to geographical distribution and regional representation. He greatly appreciated the spirit of cooperation demonstrated by the Heads of delegation, which had resulted in the package of proposals now before the Conference.

4.2 He then drew attention to the revised numbering system proposed for the study groups, both for the sake of simplicity and in order to be in line with the Union's recent restructuring. In particular, it was proposed to discontinue the use of Roman numerals to designate study groups in favour of Arabic numerals, with a view to facilitating computer operations and avoiding confusion among those who were unfamiliar with Roman script. Study Groups 1 to 8 would remain unchanged, while the former CMTT would become new Study Group 9. Likewise, Study Groups 10, 11 and 12 would remain unchanged, whereas former Study Groups XVIII and XVII would be renumbered 13 and 14 respectively. Finally, in the case of Study Group 9 (former CMTT), it had been considered appropriate for the Chairman and Vice-Chairmen to be appointed at the forthcoming Radiocommunication Assembly in November 1993; for the time being, therefore, the present Chairman and Vice-Chairman of CMTT would remain in their posts.

4.3 The *delegate of Japan* expressed support for the package of proposals contained in Document 93, which were fully in line with the Union's recent restructuring and would ensure that activities in the Standardization Sector were launched successfully.

4.4 The *delegate of Mali* said that the absence of candidatures from the developing countries was by no means symptomatic of a lack of interest in standardization activities. On the contrary, those countries were greatly concerned by the fact that they were lagging behind in the areas of technology and services. He welcomed the proposals in Document 93 as reflecting the consensus reached at the Conference, and expressed the hope that after their appointment Chairmen and Vice-Chairmen alike would serve the interests of the developing countries.

4.5 The *Director of the TSB* assured the delegate of Mali that due attention would be paid to providing greater support for standardization activities in the developing countries, in accordance with the relevant resolutions adopted by the Conference.

4.6 The *delegate of Kenya*, after endorsing the package of proposals in Document 93, requested that a full list of the candidatures submitted be attached to the document.

4.7 Following a further expression of support for the proposals by the *delegate of the Netherlands*, the *Chairman* said that if he heard no objection he would take it that the proposed list of Chairmen and Vice-Chairmen for Study Groups 1 to 15 was acceptable to the Conference.

4.8 It was so *agreed.*

4.9 The *Chairman* invited the Plenary Meeting to consider the proposal by the Heads of delegation relating to the Chairman and Vice-Chairmen of the Telecommunication Standardization Advisory Group.

4.10 The *Director of the TSB* said that there had been lengthy discussions on the number of Vice-Chairmen to be appointed for the Advisory Group. Due to the absence of candidatures and the fact that the Group's structure had yet to be determined, it had been decided to allow Administrations to submit their applications up until the Group's first meeting, which was scheduled for early June.

4.11 The *Chairman* said that if he heard no objection he would take it that the proposals in Document 93 concerning the Chairman and one of the Vice-Chairmen of the Advisory Group were acceptable to the meeting, on the understanding that further Vice-Chairmen would be appointed at the Group's first meeting in June 1993.

4.12 It was so *agreed.*

4.13 The *Chairman* invited the meeting to consider the list of Chairmen and Vice-Chairmen proposed for the regional tariff groups in the table on the last page of Document 93.

4.14 The *Director of the TSB* said that, in accordance with past practice, it had been agreed among the Heads of delegation that only the Chairmen of the regional tariff groups should be appointed by the Conference, leaving the Vice-Chairmen to be appointed by the groups themselves at their opening meetings on the basis of regional representation.

4.15 Following comments by the *delegates of the Netherlands* and *France* concerning typographical errors, the *Chairman* said that if he heard no objection he would take it that the list of names in the table was acceptable to the meeting.

4.16 It was so *agreed.*

4.17 Subject to the necessary typographical corrections, Document 93 as a whole was *approved.*

4.18 The *delegate of Hungary*, pointing out that under section 3, § 1.3, of Resolution No. 1 working party Chairmen enjoyed the same status and rights as the study group Vice-Chairmen elected by the WTSC, expressed the hope that that information would be widely disseminated outside the working parties themselves.

4.19 The *Director of the TSB* gave the assurance that that would be done; the names of all working party Chairmen would be published and circulated in the near future.

5. Approval of the minutes of the second and third Plenary Meetings (Documents 57 + Corrigendum 1, 92)

5.1 The minutes of the second Plenary Meeting (Document 57 and Corrigendum 1) were *approved* subject to an editorial amendment to Annex 4.

5.2 The minutes of the third Plenary Meeting (Document 92) were *approved* subject to an amendment to § 4.8 to be handed in to the Secretariat by the *delegate of Spain.*

5.3 The *Secretary* made a brief announcement on the procedure which would be followed for the minutes and summary records that had not yet been published.

6. Statements by the delegates of Germany and Argentina

6.1 The *delegate of Germany*, speaking on behalf of all administrations members of CEPT, thanked all those who had contributed to the success of the WTSC, in particular the Chairmen of the various Committees. He paid a special tribute to the Chairman of the Conference who, notwithstanding set-backs, had steered the Conference safely to harbour, making the first WTSC an important landmark in the history of worldwide telecommunication standardization.

6.2 The *delegate of Argentina* said that his Administration was working, with what it hoped would be the same efficiency and success as that demonstrated by the ITU Secretariat in preparing and organizing the present Conference, on preparations for the first World Telecommunication Development Conference, which was to be held in Buenos Aires from 21 to 29 March 1994 and to which official invitations would be sent out shortly.

The meeting rose at 1035 hours.

CLOSING CEREMONY

(Minutes approved by the Chairman)

Friday, 12 March 1993, at 1135 hours

1. Address by the Chairman of the Conference
2. Address by the Director of the Telecommunication Standardization Bureau
3. Address by the Secretary-General
4. Address by the delegate of Senegal
5. Address by the delegate of Canada
6. Address by the Minister of Transport and Communications of Finland

1. Address by the Chairman of the Conference

1.1 The *Chairman* delivered the address reproduced in Annex 1.

2. Address by the Director of the Telecommunication Standardization Bureau

2.1 The *Director of the Telecommunication Standardization Bureau* said that the first WTSC, although the first conference of its kind, with a new structure, new procedures and new committees compared with the former Plenary Assemblies, and although held so soon after the Additional Plenipotentiary Conference, had been a great success, thanks largely to the Scandinavian spirit of cooperation, openness and friendship, and to the goodwill of delegates and their readiness to seek consensus to accommodate differing viewpoints. After the Conference a number of colleagues who had worked for a long time in the study groups would be leaving, either for retirement or to take up new professional activities, and he wished them all well, thanking them most warmly for their contributions to the former CCITT over the years. He also expressed gratitude to both those who had assisted with the Conference preparations and those who had helped to ensure that it had run smoothly, especially the Committee Chairmen and Vice-Chairmen and the Chairmen of the Working Groups set up during the Conference. He conveyed special thanks to the Chairman of the Conference itself who, despite suffering from bad health, had provided guidance and leadership to help participants deal with the avalanche of complicated documentation and to steer the Conference to a successful conclusion. The ITU staff in Geneva and Helsinki, both on-stage and behind the scenes, were also to be commended for their willing collaboration and long hours of hard work. Lastly, he warmly thanked the Conference's Finnish hosts for their efficiency and cooperation, and for the excellent facilities and hospitality which had surpassed all expectations.

2.2 Summing up, he said that now that the two weeks of intensive, forward-looking work had been completed, the next task which lay ahead was to implement the Resolutions and the other texts adopted by the Conference as quickly as possible. The new structure and the new tasks represented a challenge for all participants from administrations, organizations and the ITU alike to advance towards efficient, market-oriented, consumer-related global standardization under the auspices of the ITU.

2.3 In conclusion, he wished all those present a safe and pleasant journey home and expressed the hope that he would meet them all again in the very near future.

3. Address by the Secretary-General

3.1 The *Secretary-General* delivered the address reproduced in Annex 2.

3.2 He presented the Minister of Transport and Communications of Finland with the silver medal of the International Telecommunication Union.

(Applause.)

4. Address by the delegate of Senegal

4.1 The *delegate of Senegal* delivered the address reproduced in Annex 3.

5. Address by the delegate of Canada

5.1 The *delegate of Canada* said that he too wished to express the appreciation of the participants for the warm welcome they had received in Finland. At the IXth CCITT Plenary Assembly the Secretary-General had coined the phrase "the spirit of Melbourne", which had been given practical expression at the present Conference. He therefore fully concurred with the previous speaker about "the realism of Helsinki". The realities of change had been faced with considerable courage. Throughout the Conference the participants had benefited not only from the kind hospitality of their Finnish colleagues, but also from the excellent arrangements that had been made. In particular, he wished to express his deep appreciation to the Chairman, Professor Halme, who had guided the Conference through the intricacies and confusion of the discussions with great skill, patience and understanding. He also extended his thanks to the Secretariat for the smooth flow of documentation and sincerely commended the Finnish staff for the strong support they had provided.

6. Address by the Minister of Transport and Communications of Finland

6.1 The *Minister of Transport and Communications of Finland* delivered the address reproduced in Annex 4, and declared closed the first World Telecommunication Standardization Conference.

The meeting rose at 1220 hours.

ANNEX 1

Address by the Chairman of the Conference

It is my task to start the closing ceremony of the World Telecommunication Standardization Conference (ITU WTSC-93). I am pleased to note that all the tasks given to this Conference have been fulfilled, perhaps even more. This has required about half a day less than expected and the costs were also lower than planned. So we should be pleased with ourselves.

The participation in WTSC-93 was perhaps higher than expected. Altogether, the number participating in different ways was 587 on 9 March, although we now have a new list which I have not had time to go through. Of these, 441 belonged to the delegations of different countries, while 10 represented other bodies. The rest belonged to either the ITU staff or the Finnish staff. The biggest delegations came from Japan (53), the United States (43), Finland (31), Korea (21), Germany (19), France (19), the United Kingdom (17) and the Russian Federation (16). Sometimes, but not always, the seats were quite crowded, as they are right now.

The Conference has gone on much as was planned. The work of some Committees took slightly longer than expected, while that of others went rather fast. However, we have been able to get the work done, as a whole, ahead of time. The most important results are the following.

First, the new or modified ITU-T Recommendations (formerly known as CCITT Recommendations) were approved and some of them were also deleted. The table below shows that we had 453 to be approved and 78 to be deleted. As we know, acceptance of some of the Series X.500 Recommendations had to be postponed because of late changes in corresponding ISO standards. Most of the new Recommendations (according to my list, 118) belong to the Q-Series, reflecting the growing emphasis on networks and distributed intelligence. The I- and G-Series also have many contributions: 48 in the I-Series and 45 in the G-Series. Similarly, most deletions of obsolete Recommendations affect the G-Series (40), reflecting the rapid change in transmission technology.

Recommendations approved or deleted

Series	Approved	Deleted
B	1	
C	3	
D	6	3
E	20	7
F	17	2
G	45	40
H	11	
I	48	3
K	6	
L	2	
M	11	
N	8	
O	2	
P	24	
Q	118	14
R	17	
S	11	
T	30	2
U	26	1
V	9	5
X	32	1
Z	6	
Total	453	78

A crucial task of WTSC-93 was to determine the mandates and the new list of Questions for the study groups. Here one Study Group (IX) was removed and its tasks allocated to other Study Groups. Those tasks concerned telex and telegraph services, which were actually the origins of the ITU. However, we know that telegraphy is more vital than ever in its new form, in the new digital networks. An important task here came from the Additional Plenipotentiary Conference, namely, to accept some part of radio services, in close cooperation with the new Radiocommunication Sector. The services of highest actuality were the future public land mobile telecommunication system (FPLMTS) and satellite ISDN, for which Resolutions were passed. A completely new Study Group was created for CMTT. The numbers of the study groups were also updated. The total number of Questions is about 300.

A vitally important result of the Conference was the election of new study group Chairmen and Vice-Chairmen. They will be responsible for the success of the next study period. At the same time, the traditional numbering of the study groups was changed, as those who were in this room earlier this morning will remember.

Much of our time was devoted to discussing rules and procedures, on the basis of Resolutions of previous CCITT Plenary Assemblies, the work of ad hoc Group – Resolution No. 18, and the work of the APP. Many of us thought that after the lengthy January discussions of the Resolution No. 18 Group the work of the WTSC would be "plain sailing". This was not quite true, but after some discussion we were able to find acceptable compromises and to pass the appropriate Resolutions, which will guide our future work.

I wish to thank all the study group Chairmen, working party Chairmen and Rapporteurs for their impressive work on the Recommendations, which we were able to approve here, and on which principles we may develop our network services and industrial products everywhere. Similarly, I should like to thank the ITU professional staff for their excellent work. Personally this had been a wonderful experience in my life.

ANNEX 2

Address by the Secretary-General

Mr. Minister,
Mr. Chairman,
Ladies and Gentlemen,

This first World Telecommunication Standardization Conference, the fruit of structural changes within the ITU which were put in hand after the Nice Plenipotentiary Conference and found expression in the decisions of the Geneva Additional Plenipotentiary Conference, marks the first concrete step towards the renewal of the ITU.

That renewal is reflected in the reform of the Union's standardization activities which has started here in Helsinki.

We have also witnessed reforms in the working methods of the Standardization Sector, a subject which has aroused great interest among delegations and on which the Conference has adroitly achieved a happy outcome.

All the players in the modern telecommunications world will be involved in developing standards which will now be adopted more quickly, and we hope that countries will make their own contribution to ensure that the ITU retains its pre-eminence in this area.

In its activities, the ITU Telecommunication Standardization Sector will cooperate with other standardization agencies in order to take full advantage of human resources and the results of expert work.

The spirit of success, the serious approach taken to the discussions and the high standard of participation have enabled the Conference to achieve its goals well within the time allotted to it.

Ladies and Gentlemen,

It is true, we have achieved our goals, we have successfully done what we were supposed to do. You might have noticed during the Conference, in particular during the first week, that at times I was somewhat concerned, in particular about the thrust, the momentum, the dynamism of our standardization work.

The only way to succeed is to look forward. I am very happy to be able to announce today that the results of this Conference form, at least to my mind, a good platform, together with the APP results, for future action.

It would of course be an exaggeration to claim that the Conference surpassed its goals. A number of innovative initiatives were taken, the results of the last four years were approved, the APP results were implemented and the scheme for the next four years also approved. Those are the facts.

But the work must continue, and it will be task of the new team, the new study groups, and especially the new TSAG with its new Chairman, Mr. Horton, to continue the work and make sure that our strategies and priorities are in good shape.

I have three specific requests. First, please remember the needs of the developing countries – a point which has been emphasized on a number of occasions in the course of this Conference. Second, please coordinate your work with the other ITU Sectors and the other ITU strategic bodies: WTAC, TDAB and GCR. And third, in particular, I look forward to your cooperation in the preparations for the Kyoto Plenipotentiary Conference.

The crucial task and test will concern the participation in the work of the ITU of all the different kinds of players in the global standardization game.

Let me put it this way.

The Nice Plenipotentiary Conference in 1989 led to a major change for the Development Sector.

The Geneva APP in 1992 led to major changes in the Radiocommunication Sector.

The Standardization Sector has taken small steps forward in Melbourne 1988, Nice 1989, Geneva 1992 and now Helsinki 1993. However, these steps do not suffice. In order to be able to live up to our challenges, much more is needed. I am thus looking forward to a lot more work, many more changes, both in Kyoto in 1994 and at the next WTSC in 1996 or 1997.

I should also like to ask you to participate as actively as possible in the other major ITU events between now and Kyoto, and I should like to make some propaganda for Asia Telecom and the Asian Regional Telecommunication Development Conference in May this year in Singapore; that is a really major event, as are the World Radiocommunication Conference and Assembly in November 1993 and the World Telecommunication Development Conference in March 1994 in Buenos Aires.

Your Excellency Mr. Minister,

Finland has made a substantial contribution to the success of this Conference, offering a great deal, including very satisfactory facilities, to the delegates and the Secretariat.

Being a Finn myself, I am of course very modest, and I feel I have several hats, so let me just associate myself with what Theo Irmer said and express our appreciation, through you, to the Government of Finland and as far as you can let the message go. I am sure that we shall all keep warm memories of our stay here despite some people's claims that the climate was rather harsh.

Mr. Minister,

In order that you too may have a souvenir of this Conference, it is my honour to present you with the ITU silver medal, the highest mark of appreciation which the ITU can confer upon anybody. And with that, our wishes of good luck.

Thank you.

ANNEX 3

Address by the delegate of Senegal

Mr. Minister,
Mr. Chairman,
Your Excellencies,
Ladies and Gentlemen,
Dear Colleagues,

It is a great privilege for me to address this august assembly as our work comes to a close.

Dear Friends,

When we left sunny Africa a fortnight ago the temperature stood at 42 °C and we were a little apprehensive about the climate shock, which we thought would probably be the first item on the agenda of this historic Conference.

However, after flying over your beautiful country with its legendary past, the extraordinarily warm welcome we received upon arrival quite dispelled any feeling of strangeness and made us feel quite at home.

Mr. Minister,

The exceptionally cordial atmosphere in this magnificent Helsinki Congress Center, symbol of an intrepid nation steeped in the cardinal virtues of work well done, peace, democracy and the arts, has enabled us to achieve spectacular results at no excessive cost.

We believe that this new milestone in our prestigious Union's 128 long years of existence sets the final seal on the spirit of openness, renewal and revival decided upon by the APP at Geneva in 1992.

Mr. Minister,

This is perhaps the right moment to stress that the advances made during the past study period and the broad thrust of the ambitious programme adopted by our Conference for 1993-1997 are certainly geared to the multifarious and rather complex needs of the international community as a whole, which is taking a very close interest in the outcome of our meeting.

With your permission and on behalf of all participants, I should like to offer our sincere congratulations and warm thanks to Mr. Halme for presiding over this very important Conference with spirit, courtesy, finesse and firmness.

Mr. Minister,

Our congratulations also go to Dr. P. Tarjanne, our creative Secretary-General and son of Finland, to Mr. Th. Irmer, the dynamic Director of the Telecommunication Standardization Bureau, to the Conference Secretariat and to the hidden part of our "iceberg" whose discrete and efficient contribution has paved the way to the remarkable success of our work.

Your Excellency,
Mr. Minister,

We are grateful to you for your wise guidance which has steered us so smoothly through our first World Telecommunication Standardization Conference that we have not needed to resort to any "transitional arrangements".

Lastly, Sir, we would earnestly request you to transmit to the authorities of your magnificent and generous country the expression of our profound gratitude for the exemplary welcome extended to us, for all the facilities that have made our memorable stay so pleasant and, above all, for their untiring efforts on behalf of world peace and development.

The agenda now having been completed, we would call upon the "OURS" Study Group, using the accelerated procedure, to start work immediately on a Recommendation enshrining the "realism of Helsinki", on a par with the "spirit of Melbourne" in 1988.

As we leave your beautiful country we gladly transfer to you, in exchange for your legendary generosity, our own dear continent's unlimited resource of sunshine, which has in fact illuminated our entire stay.

Thank you for your kind attention.

ANNEX 4

Address by the Minister of Transport and Communications of Finland

Mr. Secretary-General,
Ladies and Gentlemen,

I should first like to thank you for the medal, which was a very pleasant surprise for me. I am happy to accept it on behalf of the Finnish staff working for the Conference.

The first World Telecommunication Standardization Conference is drawing to a close. It has been an honour for the Finnish Government and especially for my own ministry, the Ministry of Transport and Communications, to have the opportunity to host this Conference. I understand that the meetings have run smoothly and that arrangements have been satisfactory. I am happy that you feel so. We tried very hard and we were lucky to be able to use this Marina Congress Center as the venue for the Conference. Such a new building, rebuilt originally for the Conference on Security and Cooperation in Europe, gives ideal support to meetings of this size. I want to thank the International Telecommunication Union once more for accepting the invitation to hold this Conference in Helsinki.

What we couldn't help was the time of year. It was a pity that the weather happened to be somewhat grey during these two weeks. This is just very typical of Finland in March and it happens every year. If it is any consolation at all to you, I can tell you that the weather could have been much worse. It would have been radically different had we been able to hold the meeting in May. At that time of year the trees have leaves and the parks are full of flowers. The surroundings would have appeared totally different.

I understand that the Conference has proceeded in the glorious tradition of the former International Telegraph and Telephone Consultative Committee. Some 500 Recommendations on numerous technical sectors were adopted during these two weeks. This is a long step forward in standardizing new networks and applications. The development of the broadband integrated services network will bring new possibilities to working places and homes. Opportunities for new kinds of telematics and broadcasting will expand enormously. The further development of intelligent network techniques will alleviate the problems which we have encountered in Finland while redoing the numbering plan. It is a fascinating thought that everyone could have just one number wherever he or she happens to be.

The telecommunications infrastructure has become indispensable to the modern world. It is the cheapest and most rapid and effective way of reaching persons all over the globe. However, the technical infrastructure is not sufficient alone. Right now, there are wars and disturbances in our world. They render telecommunications useless and tend to destroy the results achieved with patient work. Let us all hope that we can develop and construct the global network in peace and that people are given the freedom to exchange information and thought with their fellow human beings in all countries.

I hope that this short visit to Helsinki has clarified the picture you all have of Finland, its people, its culture, its telecommunication operators and manufacturers. It was very useful for us to be able to make your acquaintance during this Conference. I hope that the contacts now made will improve international understanding and open up new avenues for discussion.

I should like to extend warm thanks for a successful meeting to the Secretary-General, Doctor Tarjanne, and to the Chairman of this meeting, Professor Halme. Especially, I want to thank all the International Telecommunication Union staff, the Finnish Liaison Office staff as well as the Marina Congress Center staff. The work and effort needed outside the meeting rooms to make this Conference an occasion worth remembering were performed by them. Last but not least, I wish to thank the delegates for fruitful and cooperative international working.

I sincerely hope that you have enjoyed your stay here and I wish you all a happy and safe journey back home.

With these words I declare closed the first World Telecommunication Standardization Conference.

3 – SUMMARY RECORDS OF MEETINGS OF THE COMMITTEES

3.1 – COMMITTEE 2 – BUDGET CONTROL COMMITTEE

Chairman: Mr. S. S. AL-BASHEER (Saudi Arabia)

FIRST MEETING OF COMMITTEE 2

(Summary record approved at the second and last meeting of Committee 2)

Thursday, 4 March 1993, at 0900 hours

Subjects discussed:

1. Terms of reference of Committee 2
2. Financial responsibilities of conferences
3. Report on the estimate of the financial needs of the CCITT
4. Budget of the World Telecommunication Standardization Conference
5. Agreement between the Government of Finland and the Secretary-General of the International Telecommunication Union
6. Situation of the accounts of the Conference as at 3 March 1993

1. Terms of reference of Committee 2 (Document DT/1)

1.1 The Committee *noted* its terms of reference as set forth in Document DT/1.

2. Financial responsibilities of conferences (Document 24)

2.1 The *Chairman* drew the Committee's attention to the provisions of Article 34 of the Convention (Geneva, 1992) regarding the financial responsibilities of conferences of the Union.

2.2 The Committee *noted* those provisions.

3. Report on the estimate of the financial needs of the CCITT (Document AP X-4)

3.1 The *representative of the TSB* introduced the estimate of the financial needs of the CCITT contained in Document AP X-4, which had been prepared in collaboration with the Finance Department of the General Secretariat. Annex 1 to Part 1 of the report showed the number of permanent staff, which had declined slightly from 40 in 1989 to 38 in 1992 owing to the freezing or elimination of certain important posts. Part 2 related to expenditure for CCITT meetings and the current Conference under Section 13 of the budget. The table on page 3 of the report indicated that since the Melbourne Plenary Assembly expenditure under both Sections 13 and 17 had remained within the limits that had been set. It should be noted that the surplus of 34 000 Swiss francs for 1993 was authorized under Additional Protocol 1 and in any event would probably not be needed. Part 3 of the report concerned estimates of future needs. As a result of the new working methods of the ITU-T, the number of meeting days would be much more regular than in the past: 310 for 1994, 1995 and 1996 respectively and 220 for 1997, including the next Standardization Conference. It should be noted that the estimated credits referred to on page 6 did not include the cost of the transfer of certain current activities of the former CCIR to the Standardization Sector; the related estimates would be submitted to the Council at a later stage. Two options were presented for the next Standardization Conference, to be held in either 1996 or 1997: it was for the Conference itself to decide.

3.2 The *Chairman* welcomed the fact that the CCITT had remained within the limits of its budget since 1989.

3.3 The *delegate of France* said that his Administration was more interested in the actual cost of the CCITT than in its budget. As he understood it, the budget figures in Document AP X-4 did not include expenditure for the common services of the General Secretariat and did not therefore accurately reflect total costs.

3.4 The *representative of the TSB* pointed out that the table on page 3 of the report showed expenditure under both Sections 13 and 17, but not staff costs. It was for that reason that the total number of permanent staff of the CCITT Specialized Secretariat had been indicated in Annex 1.

3.5 The *Secretary of the Committee* confirmed that the expenditure shown in the table on page 3 covered the direct costs of meetings, excluding common services expenditure. The staff costs of the CCITT Specialized Secretariat and of the permanent staff of the General Secretariat working on activities related to the CCITT were not, however, included; that information could be found in the cost analysis document regularly submitted to the Council. He was ready, of course, to provide the *delegate of France* with any further information he might require.

3.6 The *delegate of the Republic of Korea* requested clarification of the near doubling of the estimated credits for 1994 as compared with 1993 under Section 17 in the two options on page 6 of the report. He also enquired how the supernumerary staff referred to in the footnote to the table in Annex 5 were funded.

3.7 The *Secretary of the Committee*, replying to the first question, said that the sum of 3 218 000 Swiss francs estimated for 1994 under Section 17 related essentially to the translation, typing and reprography of documentation for ITU-T meetings scheduled in that year. The lower figure for 1993 was due to the fact that less documentation was anticipated. As regards the second query, the expenditure shown in the table related solely to expenditure for ITU-T meetings under Section 13, excluding common services costs which appeared in Section 17, funded from the regular budget.

3.8 The *representative of the TSB* said that the reason why estimated credits for 1993 under Section 17 were only approximately half those for 1994 was because the present Conference had originally been scheduled for December 1992. In the course of that year the bulk of the documentation for the Conference had been prepared and dispatched to Administrations. Consequently, Section 17 expenditure in 1993 related mainly to the holding of the Conference itself. Referring to the table in Annex 5, he explained that actual expenditure under Section 13 was shown up to 1992 and estimated expenditure for 1993. Section 17 expenditure could be found in the two options on page 6.

3.9 The *delegate of the Republic of Korea* recalled that the Director of the TSB had stated at the first Plenary Meeting that mailing costs in 1992 had been limited to 800 000 Swiss francs. Between 1993 and 1994 the estimates rose by some 1 600 000 Swiss francs and he would like to know what factors accounted for that increase.

3.10 The *representative of the TSB* said that statistical tables had to be interpreted in the light of the general context. In his introductory statement, the Director of the TSB had been comparing mailing costs in 1992 with those for 1988, the year preceding the Melbourne Plenary Assembly, when costs had amounted to 1.6 million Swiss francs. Since then, working methods had changed and dispatches now followed a different pattern. The figures provided in that particular context could not be used for purposes of comparison in a budgetary context.

3.11 The Committee *took note* of the report in Document AP X-4.

4. Budget of the World Telecommunication Standardization Conference (Document 25)

4.1 The *Secretary of the Committee* introduced the budget of the Conference (Document 25), which was an extract from the budget of the Union for 1993 (Section 13, CCITT) covering direct expenditure. The costs of General Secretariat common services for the Conference would be found in Section 17 of the ordinary ITU budget.

4.2 The *delegate of France* pointed out that costs under Section 17 were in general of the same order as those under Section 13. He therefore proposed that a revised version of Document 25 should be prepared indicating estimated expenditure under both Sections 13 and 17 in order to provide a realistic picture of the total cost of the Conference.

4.3 The *Chairman* said he took it that the Committee wished to adopt the French proposal.

4.4 It was so *agreed.*

5. Agreement between the Government of Finland and the Secretary-General of the International Telecommunication Union (Document 27)

5.1 The *Secretary of the Committee* invited the meeting to consider and endorse the Agreement between the Government of Finland and the Secretary-General (Document 27).

5.2 The *Chairman* expressed his deep appreciation to the Government of Finland for offering to host the Conference.

5.3 The *representative of the TSB*, after associating the Bureau with the Chairman's expression of thanks, pointed out that the first column of figures in the table in Annex B listed the expenditures which would have been occasioned by holding the Conference in Geneva, while the second column showed the additional expenditure to be assumed by the host country. Every effort was being made to reduce that figure to a minimum and a final estimate would be submitted to the Committee at its next meeting.

5.4 The *Chairman* said he took it that the Committee wished to endorse the Agreement, while expressing its gratitude for the excellent facilities made available by the Finnish Government.

5.5 It was so *agreed.*

5.6 The *delegate of Italy*, speaking on behalf of her Administration, extended her thanks to the Finnish Administration, as well as to the TSB staff, for their outstanding efforts to make the Conference a success.

6. Situation of the accounts of the Conference as at 3 March 1993 (Document 26)

6.1 The *Secretary of the Committee* introduced an updated estimate of direct expenditure for the Conference under Section 13 as at 3 March 1993 (Document 26).

6.2 The Committee *took note* of the situation of the accounts as at 3 March 1993.

The meeting rose at 0950 hours.

SECOND AND LAST MEETING OF COMMITTEE 2

(Summary record approved by the Chairman)

Wednesday, 10 March 1993, at 1400 hours

Subjects discussed:

1. Approval of the summary record of the first meeting of Committee 2
2. Budget of the Conference
3. Draft report of the Budget Control Committee to the Plenary Meeting

1. Approval of the summary record of the first meeting of Committee 2 (Document 56)

1.1 The summary record of the first meeting (Document 56) was *approved.*

2. Budget of the Conference [Document 25(Rev.1)]

2.1 Following a brief introduction of Document 25(Rev.1) by the *Chairman,* the *delegate of France* said that the document had been revised exactly as he had requested, and that he was particularly pleased to note that the estimated costs under Section 17 were considerably less than those under Section 13. The document now gave a far better overview of the Conference's overall cost, with a total of approximately 1 million Swiss francs to be paid by the ITU and some 600 000 Swiss francs by the Finnish Administration. The low estimated credits for supernumerary staff – barely 200 000 Swiss francs – implied that the ITU had made the best possible use of its own staff and resources.

2.2 The *delegate of Lebanon,* supporting the previous speaker, said that he was pleased to note that the Conference budget was well within the limits set by the Council. He therefore congratulated the Secretary-General, the Director of the Telecommunication Standardization Bureau and the Chairman of the Committee for their excellent work, and expressed his thanks to the Finnish Administration for its warm welcome and untiring efforts.

2.3 The *Chairman* endorsed those remarks on behalf of the Committee as a whole and thanked the Secretariat for providing the estimates for Section 17.

2.4 Document 25(Rev.1) was *noted.*

3. Draft report of the Budget Control Committee to the Plenary Meeting (Document 75)

3.1 The *Secretary of the Committee* introduced the Committee's draft report in Document 75, commenting briefly on each section in turn. In particular, Section 4 presented overall credit estimates for two options depending on the year in which the following WTSC was held. The Conference budget figure in Section 5, based on Document 25(Rev.1), had been updated as at 9 March 1993, as had the figures in Section 6 and the estimate of expenditure in the annex.

3.2 The *delegate of Lebanon* sought further clarification with regard to the options set out in Section 4, observing that the estimates given were subject to endorsement by the next Plenipotentiary Conference.

3.3 The *representative of the TSB* confirmed that the estimates would be submitted first to the Plenary Meeting, then to the Plenipotentiary Conference for approval; the latter would set the budget ceilings. The two options had been included in the report in order to enable the Committee to choose between them when preparing the ITU general meeting schedule for submission to the Council. The first table in Section 4 showed the same number of meeting days for 1994, 1995 and 1996, an arrangement which was made possible by the fact that Recommendations could be approved by correspondence. Furthermore, although the estimated duration of the next WTSC was given as ten days, eight days might suffice; however, that possibility could not be reflected in the Committee's report at the present stage.

3.4 In reply to comments by the *delegate of the United States*, he explained that the apparent inconsistencies in the tables in Section 4 between the number of meeting days and the corresponding credit estimates were due to the fact that the cost of document processing varied from one year to the next. Also, fewer study group meeting days were scheduled in 1997 than in the preceding years.

3.5 The *delegate of the United States* observed that study groups were experiencing considerable difficulties with regard to the approval of Recommendations because of the abnormally long interval, sometimes exceeding one year, between their final meeting in one study period and their first one in the next.

3.6 The *representative of the TSB* said that the problem mentioned by the previous speaker had been taken into account by the TSB in drawing up the schedules of meetings for the coming years.

3.7 In reply to a further request for clarification from the *delegate of the United States*, the *Secretary-General* confirmed that every effort would be made to ensure that when future WTSCs were held the interval between the final meetings of one study period and the first meetings of the next one would not be excessive. The difficulties mentioned were largely due to the deferral of the WTSC from 1992 to 1993 in order to accommodate the Additional Plenipotentiary Conference. As future Plenipotentiary Conferences would normally be held at regular intervals, the problem should not arise again.

3.8 The draft report of Committee 2 to the Plenary Meeting was *approved.*

3.9 The *Chairman* said that the Secretary-General would be requested to submit the report, along with the Committee's comments, to the next session of the Council.

The meeting rose at 1440 hours.

3.2 – COMMITTEE 3 – WORKING METHODS OF THE ITU TELECOMMUNICATION STANDARDIZATION SECTOR

Chairman: Mr. W. STAUDINGER (Germany)

FIRST MEETING OF COMMITTEE 3

(Summary record approved at the fourth and last meeting of Committee 3)

Tuesday, 2 March 1993, at 0900 hours

Subjects discussed:

1. Introductory remarks by the Chairman
2. Organization of the work of the Committee
3. Recollection of Resolution No. 18 (Melbourne, 1988)
4. Introduction of pertinent sections of the report of ad hoc Group – Resolution No. 18

1. Introductory remarks by the Chairman

1.1 After welcoming participants, the *Chairman* referred briefly to remarks made by the Secretary-General and other speakers in their addresses to the opening meeting of the Conference. He drew particular attention to the need for change in the ITU's standardization activities, where new players were emerging and the role of government changing from operator to regulator. Standardization was becoming increasingly competitive, and the ITU's role was no longer merely formal, but must be adapted to meet potential challenges from other standards bodies. Innovation was required, unconventional methods might even be introduced providing they served a useful purpose, and efforts should be made to eliminate obsolete or ineffective procedures while retaining those which were still worthwhile.

2. Organization of the work of the Committee (DT/7, DT/11, DT/14)

2.1 The *Chairman*, observing that it might be necessary to set up ad hoc groups to discuss items on which agreement could not be reached in full committee, drew attention to Document DT/11 listing Resolutions, Opinions and Recommendations relevant to the Committee's work. Document DT/7 concerning the allocation of documents required some updating, and a revised list appeared on page 2 of the Committee's agenda (Document C3-1). Document DT/14 contained the meetings calendar, which was obviously subject to future modification.

2.2 The *Secretary of the Committee*, drawing attention to the number of meetings scheduled for the Committee in Document DT/14, observed that any drafting group set up by the Committee should submit its output for document processing in time for the Committee's last meeting.

3. Recollection of Resolution No. 18 (Melbourne, 1988)

3.1 The *Chairman*, drawing the Committee's attention to *considering* (e) and (f) and *resolves* (2) of Resolution No. 18, commented that the need for increased efficiency referred to in *considering* (e) bore particular relevance to meeting challenges from other standardization bodies while ensuring that working methods were revised in order to reduce costs. *Considering* (f) should not be misinterpreted: the requirements of developing countries should not be overlooked, but that concern should not discourage developed countries from pursuing new ideas and revolutionary technologies which would ultimately benefit the entire international community.

4. Introduction of pertinent sections of the report of ad hoc Group – Resolution No. 18 [AP X-23(Rev.1)]

4.1 The *Chairman*, after recalling the background to the mandate given to ad hoc Group – Resolution No. 18 by the IXth Plenary Assembly, invited the Chairman of the ad hoc Group to introduce its report.

4.2 The *Chairman of ad hoc Group – Resolution No. 18* said that Document AP X-23(Rev.1), together with the other documents forming the ad hoc Group's report, contained terminology which would have to be reviewed in the light of decisions taken by the Additional Plenipotentiary Conference in December 1992, a task which could be entrusted to the Bureau. The ad hoc Group, which had held four meetings in all, had begun by seeking out those texts which contained instructions on CCITT working methods. It had thus identified twelve Recommendations or Resolutions, which it had consolidated in a single draft Resolution No. Res. 18/X, as contained in Document AP X-23(Rev.1), intended to provide clear and precise instructions and guidelines for the work of the CCITT. Section 1 of the draft Resolution contained relatively little new substance, as it was the consolidation of existing Recommendations or Resolutions. However, part 2 (Committees) would require some redrafting in the light of the new conference structure adopted. The new methods for preparing reports, set out in part 7 of section 2, had to a large extent been followed since the Melbourne Plenary Assembly. Drawing attention to section 3, §1.6, he said that in order to ensure continuity of work, the Group had felt that it was important for any Working Party Chairman appointed to remain in office for the full four years of a given study period. The Group had devoted considerable time to defining the role of Rapporteurs, as reflected in part 4 of section 3. Certain changes had been made to section 4 in the light of decisions taken by the Additional Plenipotentiary Conference. After commenting briefly on sections 5 and 6 concerning, respectively, the duties of the Director and the submission and processing of contributions, and on the two methods of approving Questions outlined in section 7, he said that the Group had discussed section 8 (approval of new and revised Recommendations) at some length and had introduced a new § 3.4 providing for the attachment of a summary statement to all new and revised Recommendations when they reached the approval stage.

4.3 Lastly, he drew attention to draft Resolution No. Res. 18/11 and its annex, contained in Annex 2 to Document AP X-23(Rev.1), observing that its purpose was to continue to develop the electronic document handling (EDH) capabilities of the Bureau as well as to increase the EDH facilities available to members for consultation purposes. He invited those particularly interested in the subject to study the draft Resolution and its annexes carefully.

4.4 The *Chairman* invited the Committee to deal first with issues in Document AP X-23(Rev.1) requiring clarification, before proceeding to address items of substance. The replacement of obsolete terminology and abbreviations in section 1 of draft Resolution No. Res. 18/X was a task which could be left to the Bureau, with assistance from representatives of the ad hoc Group.

4.5 The *delegate of Poland*, referring to section 8 of draft Resolution No. Res. 18/X, said that the procedure for approving new and revised Recommendations should reflect the spirit of Resolution No. 7 (amended), contained in Document DT/8, which brought out the importance of coordination between the CCITT and other standardization organizations. It appeared that none of the X-500-Series Recommendations could be approved by the WTSC because difficulties still subsisted regarding the alignment of CCITT and ISO texts, and similar problems would no doubt be encountered with regard to other important texts. The problem of coordination did not affect only ISO and IEC, referred to in Resolution No. 7, but other regional and national standardization organizations as well; furthermore, consultation for coordination purposes was often lacking at the purely national level. Section 8 of draft Resolution No. Res. 18/X should be amended to reflect that concern, urging all parties including national Administrations to make every effort to effect coordination at all levels.

4.6 The *delegate of Greece* suggested that the word "reviews" in § 3.4 of section 8 of draft Resolution No. Res. 18/X should be replaced by "finalizes", since study groups sometimes discussed new and revised Recommendations several times and the summary statement in question, which would always accompany the text, might require updating more than once.

4.7 The *representative of INTELSAT* said that Document AP X-23(Rev.1) contained numerous references to ROAs and SIOs, but not to organizations such as his own, which were now covered by Article 19 of the Geneva Convention. He requested that due account be taken of that point when the document was revised.

4.8 The *Secretary of the Committee* said that owing to time constraints it had not been possible to include such amendments in the revised version of Document AP X-23. All amendments consequent upon the decisions adopted by the Additional Plenipotentiary Conference would be included in all documents, including Document AP X-23(Rev.1), when they were finalized.

4.9 The *representative of EUTELSAT* supported the comments by the representative of INTELSAT and welcomed the clarification provided by the Secretary of the Committee. Referring briefly to EUTELSAT's contribution in Document 28 and to the fact that organizations like his own were being given greater access to ITU activities, he stressed the need for clarity in all texts dealing with such issues. Not all the provisions of the new Convention and Constitution were entirely clear.

4.10 The *delegate of Mali* commented that the two-month deadline referred to in § 5.1 of section 8 of draft Resolution No. Res. 18/X appeared to be insufficient, since it did not allow for the use of surface mail rather than airmail. He also sought clarification with regard to § 5.3.

4.11 The *Chairman of ad hoc Group – Resolution No. 18* said that the figure of 70% in § 5.3 of section 8 referred to the number of replies received from Members. Nevertheless, it should be borne in mind that very strict requirements existed for the approval of texts, including unanimous agreement within the study group concerned.

4.12 The *delegate of Korea* drew attention to the apparent inconsistency between section 1, § 1.2 of the draft Resolution and certain provisions of the Convention regarding the dispatch of invitations to Conferences by the Secretary-General on the one hand and the Director of the TSB on the other.

4.13 The *Director of the TSB* said that the texts referred to two different kinds of conference. The WTSC replaced the former CCITT Plenary Assembly and was convened by the Director of the TSB in agreement with the Secretary-General. However, it did not have the same attributes as some of the Union's other conferences; for example, it had no Credentials Committee, nor did it produce Final Acts. Referring to comments by previous speakers on provisions of the Convention and the Constitution, he urged the Committee to avoid discussion of legal issues unless absolutely necessary.

4.14 The *delegate of Spain* expressed concern that the editorial revision of texts was to be left entirely up to the Bureau. For example, the pronunciation of certain English acronyms posed problems for Spanish and French speakers. The matter needed to be discussed by representatives of all three languages.

4.15 The *delegate of France*, supported by the *delegate of Mexico*, expressed agreement with the previous speaker and suggested that a small group be set up to discuss the matter informally and report back to the Committee with proposals.

4.16 A brief discussion ensued in which the *Chairman*, the *Director of the TSB* and the *delegate of Spain* participated, following which it was *agreed* to set up an informal group, to be coordinated by the Spanish delegation, to discuss the question of acronyms and report back to the Committee. All delegates interested in the topic were invited to participate in the group.

4.17 Following informal discussions, the *delegate of Spain* informed the Committee that the group had not reached any agreement on abbreviations, among other things because of a certain confusion stemming from Document 6, the status of which was not clear.

4.18 The *Secretary of the Committee* said that the Conference secretariat had not expected the matter to give rise to lengthy discussion. He suggested that delegations wishing to express reservations might do so through the Secretary-General in his capacity as Chairman of the Coordination Committee.

4.19 The *Chairman* suggested that the Committee should consider draft Resolution No. Res. 18/X section by section, postponing discussion of any parts of the text which for any reason, including the submission of proposals by Administrations, could not be quickly approved.

4.20 It was so *agreed.*

Sections 1 to 4

4.21 *Deferred.*

Section 5 – Duties of the Director

4.22 *Approved.*

Section 6 – Submission and processing of contributions

4.23 The *delegate of Spain* proposed that the words "two months" in the first line of § 2.1 should be replaced by "three weeks", and that § 2.3 should be amended to state that contributions received less than three weeks but not less than seven working days before the date set for the opening of a meeting should be published as "Delayed Contributions".

4.24 The *Secretary of the Committee* said that even though recent improvements had speeded up communication, time was still required for tasks such as translation and for the submission of contributions to working party Chairmen as well as their distribution to members at meetings. He would be happy to discuss the matter informally with the *delegate of Spain*, especially in view of the financial implications.

4.25 The *delegate of China* pointed out that the deadline (two months before study group meetings) for submission of contributions to those meetings had given rise to a large number of delayed contributions which could not be translated into the three working languages or distributed to the Administrations unable to attend meetings. His delegation therefore suggested that the TSB provide relevant contributions to Administrations which had not participated in meetings but had requested that delayed contributions be sent to them by mail prior to the meetings.

4.26 The *delegate of Lebanon* said that he preferred the text as it stood, emphasizing that it reflected a consensus achieved after lengthy endeavours during the IXth Plenary Assembly.

4.27 The *delegate of Mali* supported the Secretary's suggestion that an informal discussion should take place.

4.28 The *Chairman of Study Group XVIII*, after observing that experience showed that most contributions were delayed in any case, expressed the view that the existing text should be retained.

4.29 The *Chairman* invited the delegates of Spain and China to discuss the matter informally with the Secretary of the Committee. Subject to any amendment arising from those discussions, he took it that section 6 could be approved and the remaining square brackets removed from the text.

4.30 It was so *agreed.*

Section 7 – Development and approval of Questions

4.31 The *delegate of the Russian Federation* drew attention to his Administration's proposal in Document 10 to insert a new § 3.2 ADD after § 3.2.

4.32 The *Chairman of ad hoc Group – Resolution No. 18* said that the Russian proposal appeared to be acceptable.

4.33 With that amendment, section 7 was *approved.*

Section 8 – Approval of new and revised Recommendations

4.34 *Deferred.*

4.35 The *Chairman* said that the Committee had concluded its section-by-section consideration of draft Resolution No. Res. 18/X for the time being, and invited delegates to turn to the various Administrations' relevant proposals.

4.36 The *delegate of the Russian Federation* said that his Administration's proposals in Document 10 related basically to section 8 of the draft Resolution. In view of the steadily growing number of Recommendations approved during study periods, an annual list of the previous year's submissions, accompanied by brief explanations, would be useful.

4.37 The *Secretary of the Committee* said that the Russian Federation's proposals would involve an addition to section 8 of the draft Resolution. He also recalled that, since the IXth Plenary Assembly, a list updated at half-yearly intervals was published.

4.38 Following a brief discussion in which the *Chairman of ad hoc Group – Resolution No. 18* and the *delegates of Australia* and the *Russian Federation* took part, it was *agreed* that the matter should be noted and taken up when the Committee considered Document AP X-26 relating to the publication of Recommendations.

4.39 At the suggestion of the *Chairman*, it was further *agreed* to postpone consideration of Documents 18 and 20.

4.40 The *delegate of New Zealand* drew attention to Document 21, which contained two draft resolutions. For the moment, his delegation wished to know the Committee's reaction to draft Resolution [NZL-1], particularly with regard to project management techniques, which could perhaps be referred to in section 3 of draft Resolution No. Res. 18/X.

4.41 The *Chairman of ad hoc Group – Resolution No. 18* recalled that there had been some discussion on the subject in the Group. The Committee could perhaps take up the matter when it considered section 4 of draft Resolution No. Res. 18/X.

4.42 The *Chairman* suggested that the Chairman of ad hoc Group – Resolution No. 18 should hold informal consultations on the matter with the delegate of New Zealand, together with the United Kingdom delegation, which had submitted a similar text. Replying to an observation by the *delegate of the United States*, he said that there was no question of setting up a group to propose any textual amendments; he also noted that Document 7, containing proposals by the United States Administration, was available for consideration.

4.43 The *delegate of France* said that his delegation would like to participate in the informal consultations.

4.44 It was *agreed* to hold informal consultations, as suggested by the Chairman.

The meeting rose at 1205 hours.

SECOND MEETING OF COMMITTEE 3

(Summary record approved at the fourth and last meeting of Committee 3)

Wednesday, 3 March 1993, at 0900 hours

Subjects discussed:

1. Consideration of the report of ad hoc Group – Resolution No. 18 and relevant country proposals

1. Consideration of the report of ad hoc Group – Resolution No. 18 and relevant country proposals [Documents AP X-23(Rev.1); 7, 20, 23, 28, 32, 33; DT/18, DT/19,DT/20, DT/21, DT/22]

1.1 The *delegate of Mexico*, introducing Document 23, said that the proposals it contained were aimed at pinpointing certain aspects of Resolution No. 2 (Melbourne, 1988) on the approval of new and revised Recommendations between Plenary Assemblies, particularly in view of the trend, noted during the past study period, towards a fall in participation by Administrations at a time when texts were becoming more complex. The need for increased participation, especially by the developing countries, was acknowledged in APP-92 Resolution 10. The effect of his Administration's proposed amendments, which were self-explanatory, would be to broaden the effective participation of Administrations and thus further legitimize the adoption of Recommendations in conformity with Resolution No. 2, whose basic aims Mexico supported.

1.2 The *delegate of Mali*, introducing Document DT/20, said that his Administration's proposals broadly reflected the concerns voiced by the Mexican delegation in the latter's proposals relating to §§ 3.1 and 3.3 of Resolution No. 2.

1.3 The *delegate of Germany*, introducing Document DT/19, stressed his Administration's strong support for the procedure set forth in Resolution No. 2. For the reasons outlined in Document DT/19, any request for a minimum number of replies would impose a burden on the good results already unanimously approved at study group level. The accelerated procedure was expected to apply to the great majority of future Recommendations; to facilitate their timely approval, all Administrations were invited to expedite their decision-taking.

1.4 The *Chairman*, reporting his experience in Study Group VIII and formerly Study Group X, said that there had been cases in which very important results, e.g. leading to the worldwide telex service had been accomplished by very few active participants. While fully aware that his current office precluded him from participating in the debate, he offered that information for a better understanding of the procedure established by Resolution No. 2 (section 8 of Res. 18/X).

1.5 The *delegate of Canada*, while sympathizing with the concerns which underlay the Mexican delegation's proposals, considered that the latter would not provide the best solution. The accelerated process was inevitable; however, it was clear that countries needed adequate time for study and response, and they must also be able to respond individually, especially since problems of legality and sovereignty could arise with regard to collective replies. Perhaps the ITU, through the BDT, could address the concerns stemming from lack of time and low participation; but solutions should be sought by promoting timely approval, not by lengthening the time allowed.

1.6 The *delegate of Poland* said that his delegation strongly supported the German delegation's proposals in Document DT/19 and had also taken good note of the Chairman's observations. The accelerated procedure decided upon by the IXth Plenary Assembly should be reflected in a single instrument, namely, the final version of Resolution No. Res. 18/X.

1.7 The *delegate of Colombia* said that Resolution No. 2 represented a sound step towards the global standardization of telecommunications, a goal which his Administration supported. At the Additional Plenipotentiary Conference his delegation had been in favour of Resolution 10, on the understanding that it would not conflict with the accelerated procedure. Although he appreciated the Mexican delegation's concerns, he felt that deadlines should be kept as short as possible; with that consideration, a procedure such as that set forth in Resolution 10 should be established.

1.8 The *delegate of Saudi Arabia* said it had been clearly decided at the Additional Plenipotentiary Conference that the current Standardization Conference should review Resolution No. 2, in order to align it more closely with administrations' wishes. Much of the Union's growing membership, including his own Administration, found the accelerated procedure a burden. Therefore, his delegation supported the five-month interval proposed by the Mexican delegation. The question was not one of delaying the application of standards but of broadening participation. The Committee should establish a working group to consider the Mexican delegation's proposals and any others on similar lines, with a view to drafting a text which reflected the various viewpoints.

1.9 The *delegate of the United States* said that his country was among those that had worked hard on procedures to expedite standard-setting and to safeguard the ITU's pre-eminent role in that field. His Administration, conscious of its advanced administrative and industrial infrastructure, fully appreciated the concerns voiced by those of Mexico and Mali; but to turn back the clock would provide no solution. The Additional Plenipotentiary Conference, in Resolution 10, had given the then CCITT the task of reviewing procedures. But that work had already been begun, in response to draft Resolution No. Res. 18/X; one example was the summary statement procedure set forth in section 8, part 4, which helped not only Administrations unable to attend but also the study group itself. Rather than alter a procedure barely four years old, countries having problems in adapting to it should be given assistance through the BDT. To delay standard-setting, or to leave matters to regional procedures, would benefit nobody.

1.10 The *delegate of Japan* said that the establishment of the new Telecommunication Standardization Sector implied the need for timely standardization procedures. To achieve the latter should be the first aim; the second should be to promote the developing countries' participation – a task in which the BDT could help.

1.11 The *delegate of Sweden* said that, as stated in the recently issued brochure on the new ITU, the latter would have to respond dynamically to competition and challenges, and produce Recommendations fast enough to safeguard the benefits of global standards, if it was to retain its pre-eminent role in standardization. That was why Sweden fully supported the proposals contained in Document AP X-23(Rev.1). Perhaps, however, the Secretariat could consider whether the Director could give Members a forewarning of, say, five weeks in order to facilitate timely response. Although the normally small number of replies was taken to imply consent on the part of the majority, the signifying of positive responses should be encouraged.

1.12 The *delegate of Australia* said that a distinction must be made, in regard to decisions adopted by the Additional Plenipotentiary Conference, between the Telecommunication Standardization and Radiocommunication Sectors; for example, there were differences in postal ballot procedures, in intervals and in the nature of activities. The APP had mandated the current Conference to review CCITT Resolution No. 2. The latter, adopted at the IXth CCITT Plenary Assembly, had already undergone considerable modification, as had Resolution No. 18; therefore, if a working group was to be established, it should include persons who were well informed about the work already done on those texts. The problems arising from new procedures were too varied to be considered simply on the basis of a distinction between developing and developed countries; and the work carried out, especially since APP-92, reflected a painstaking effort to reconcile the goals of credibility, quality and speed. For those reasons it was important, at the current Conference, to focus on the whole process rather than on individual parameters such as length of interval or number of replies, looking beyond the stage of voting to that of promulgation and publication. The difficulties caused in the past by the use of summaries had been addressed in Resolution No. 18, with a view to a broader understanding of what the texts implied for all countries, developing and developed.

1.13 The *Chairman*, summarizing the discussion so far, said that it appeared to him that there was a general feeling that certain difficulties had been encountered during the last study period, although opinions differed about the solution, and that concern had been voiced about how to reconcile quality and speed. He invited the Committee to form a Working Group, chaired by the delegate of Canada, to consider the Mexican Administration's proposals in Document 23, together with other relevant comments and contributions.

1.14 It was so *agreed.*

1.15 The *delegate of Mexico* said that the Working Group would provide an opportunity to clarify the points raised by previous speakers about the Mexican proposals. Speed in the issue of standards was important, but would not be enhanced merely by shortening the intervals for approval. As for lack of replies, many Administrations, unable to give due consideration to a matter in the limited time available, had no alternative but to send no answer – a situation which should be analysed. He did not share the disquiet expressed about the effect on national sovereignty of collective

responses and about amending a procedure only a few years old. There were many precedents for that in the ITU; indeed, the Nice Constitution and Convention drawn up in 1989 had already undergone considerable change. In any case, his Administration's proposals were aimed not at changing the process but at removing a source of problems. In that connection, the delegates of Japan and Sweden had raised constructive points which could be taken into account in the Working Group.

1.16 The *delegate of Morocco* welcomed the establishment of the Working Group and called for the consideration of any proposals which would have the effect of changing the status quo with regard to the approval of Recommendations. After drawing attention to the fact that the Recommendations adopted by the former CCIR and CCITT were observed by virtually all the Union's Members, and expressing support for the proposals submitted by Mexico and Mali, he requested the Working Group to take into consideration two points. First, he was unsure whether the same approval system should apply to all Recommendations produced by the Telecommunication Standardization Sector, since they were not all equally important in terms of universal applicability. Second, the Working Group should consider an approach whereby account would only be taken of the views expressed by those countries which had submitted negative replies and which had not participated in the preparation of the Recommendation concerned.

1.17 The *delegate of the United Kingdom*, referring to Figure 1 at the end of section 8 of draft Resolution No. Res. 18/X, pointed out that the Director was called upon to issue notice for application of the approval procedure three months prior to a given study group meeting, thus giving interested parties adequate warning that a text required their consideration. He supported the view that the procedure which had been established should not be altered before sufficient time had been allowed to prove whether or not it was valid.

1.18 Following a discussion on the Working Group's precise terms of reference, in which the *delegates of Morocco, Mexico* and *Saudi Arabia* and the *Chairman* participated, the *Chairman of the Working Group* suggested that the Group should be asked to look at the text prepared in January 1993 by ad hoc Group – Resolution No. 18, which itself had taken account of APP-92 Resolution 10; draft Resolution No. Res. 18/X as it appeared in Document AP X-23(Rev.1) would thus serve as a starting point and the Group would consider whether or not it required modification to accommodate the concerns expressed by delegations.

1.19 It was so *agreed.*

1.20 Following an exchange of views between the *delegates of Spain* and the *United States* and the *Secretary of the Committee* on the order in which the documents on the agenda should be considered, the *Chairman* said that he hoped to consider first those documents which could most readily be referred to the Working Group for discussion, in particular those involving modifications to the text of draft Resolution No. Res. 18/X, before moving on to other documents of a more general bearing. The Working Group's mandate would thus broaden as more documents were referred to it.

1.21 The *delegate of the Republic of Korea*, introducing Document 32 containing proposals relating to section 4 of draft Resolution No. Res. 18/X, said that his country supported the more open membership of the Telecommunication Standardization Advisory Group advocated by the ad hoc Group, but considered that some of the relevant provisions of the draft Resolution needed to be spelt out more clearly.

1.22 The *delegate of Spain*, referring to the Republic of Korea's proposed amendment to § 1 of section 4 of the draft Resolution, said that he agreed with the principle of harmonizing the future regulations of the Telecommunication Standardization Sector with Article 19 of the Geneva Convention. However, the wording in Document AP X-23(Rev.1) was clearer than the proposed amendment and obviated the need to refer to the Geneva Convention.

1.23 The *delegate of the Russian Federation* opposed the Republic of Korea's proposed amendment to § 3 of section 4 on the grounds that it appeared to revert to the earlier text of the draft Resolution in the first version of Document AP X-23.

1.24 The *delegate of the United States*, while having no objection to most of the proposals in Document 32, supported the view expressed by the previous speaker and also considered, with regard to the amendment proposed to § 8 of section 4, that it should not be mandatory for the Telecommunication Standardization Advisory Group to submit a report to the Council; rather, it should be left to the Director of the TSB to inform the Council of anything the latter needed to know.

1.25 At the suggestion of the *Chairman*, it was *agreed* to refer Document 32 to the Working Group for consideration.

1.26 The *delegate of the United States* introduced Document 33, observing that the proposals it contained were editorial rather than substantive in nature.

1.27 The *delegate of the United Kingdom*, expressing general support for Document 33, suggested that in the interests of clarity a reference to No. 239 of the Geneva Convention (1992) should be inserted in the proposed amendment to § 4.2 of section 1 of the draft Resolution.

1.28 The *delegate of Australia* observed that not all the United States amendments were purely editorial. In his view, the liaison statements referred to in § 6.7 of section 2 should be sent to the Special Rapporteur concerned as well as to the parent study group or working party. As for § 3.1 of section 8, the diagram in Figure 1 at the end of that section should be given careful consideration, as should the question of delegation of authority to study group chairmen.

1.29 The *delegate of Mexico* said that the phrase "must be unopposed" in § 4.3 of section 8 and elsewhere in the text was open to interpretation and should be replaced by "must be unanimous", which was unambiguous.

1.30 At the suggestion of the *Chairman*, it was *agreed* to refer both Document 33 and the point raised by the Mexican delegate to the Working Group.

1.31 The *delegate of Spain* introduced Document DT/21 containing a proposal to set an intermediate deadline for the submission and processing of contributions in section 6, § 2.3 of the draft Resolution.

1.32 The *Secretary of the Committee* observed that the proposal, if accepted, would entail considerable additional expense for the Union. He would be happy to provide the Working Group with any information it might require in that connection.

1.33 It was *agreed* to refer Document DT/21 to the Working Group.

1.34 The *delegate of Poland*, introducing Document DT/18, said that it was crucial for the future of the ITU that a satisfactory, effective and speedy procedure should be adopted for the approval of new and revised Recommendations. Unless that was done, the rapid pace of technological development would make other organizations cease to take account of the standards and recommendations produced by the ITU, thus bringing to an end the Union's standardization role at the regional and global levels.

1.35 The *delegate of the United States*, while sympathizing with the underlying intention of Document DT/18, said that his delegation could not agree to the way the proposal was worded, owing to the status of many of his country's standardization organizations.

1.36 The *delegate of Poland* having expressed his willingness to seek a generally acceptable solution, it was *agreed* to refer Document DT/18 to the Working Group.

1.37 The *delegate of the United States*, introducing Document 7, referred to the difficulties encountered in transferring work between the Radiocommunication Sector and the Telecommunication Standardization Sector, and recalled the circumstances of the joint meeting of ad hoc Group – Resolution No. 18 and CCIR ad hoc Advisory Group (Resolution 106) held in January 1993. The United States proposal in Document 7 was intended to facilitate liaison activities between the Radiocommunication Sector and the Telecommunication Standardization Sector on topics of joint interest through the establishment of intersectoral coordination groups.

1.38 The *Chairman of Committee 4* said that that issue might more appropriately be discussed in his Committee, which would be dealing with matters such as study group mandates and coordination activities.

1.39 The *delegate of Greece* expressed full support for the United States proposal. Furthermore, in considering section 8 of draft Resolution No. Res. 18/X, the Working Group should reconsider the precise wording of § 3.4, bearing in mind that summary statements should be updated at all stages of preparation of the Recommendations to which they related and should be available when the study group reviewed the final version of the text.

1.40 The *Chairman of ad hoc Group – Resolution No. 18* endorsed the United States proposal. The Working Group might consider using the text proposed in Document 7 to replace that part of section 3, § 3.5 of the draft Resolution which dealt with joint coordination groups for work carried out in collaboration with the Radiocommunication Sector.

1.41 The *delegate of the United States* welcomed that suggestion but stressed that the intersector coordination groups should not be confused with the joint coordination groups set up within the Telecommunication Standardization Sector itself.

1.42 It was *agreed* to refer Document 7 to both the Working Group and Committee 4, as appropriate.

1.43 The *representative of INTELSAT* informed the meeting that Document 20, submitted jointly by INTELSAT and EUTELSAT, would be introduced in Committee 4.

1.44 The *representative of EUTELSAT* suggested that Document 28, which contained a substantive proposal, should be referred to the Working Group.

1.45 It was so *agreed.*

1.46 The *delegate of Spain,* introducing Document DT/22, expressed dissatisfaction with the decisions taken by the General Secretariat on the new ITU acronyms to be adopted as a consequence of the decisions taken by the Additional Plenipotentiary Conference with regard to the Union's structure. The acronyms shown in Document 6 were not the most suitable and the WTSC should take a stand on the issue. In particular, the insistence on using the English abbreviation TSAG was symptomatic of an attitude which his delegation could only deplore.

1.47 The *Chairman* said that the subject covered by DT/22 did not come within the purview of Committee 3 and should be taken up at a higher level of the ITU hierarchy: the document would therefore be referred to the Plenary for consideration.

The meeting rose at 1240 hours.

THIRD MEETING OF COMMITTEE 3

(Summary record approved by the Chairman)

Monday, 8 March 1993, at 0905 hours

Subjects discussed:

1. Consideration of revised Annex 1 to Document AP X-23(Rev.1)
2. Consideration of Annexes 2, 3 and 4 to Document AP X-23(Rev.1)
3. Consideration of proposals relating to Document AP X-25
4. Consideration of proposals relating to Document AP X-26
5. Introduction and consideration of Annex D to Document AP X-40
6. Data elements and tabular data in ITU standards
7. Resolution, Opinions and Recommendations adopted at the IXth CCITT Plenary Assembly.

1. Consideration of revised Annex 1 to Document AP X-23(Rev.1) (Document 48)

1.1 The *Chairman of the Working Group on draft Resolution No. Res. 18/X* introduced Document 48, emphasizing that the revised text it contained represented a delicate balance which took account of the various amendments proposed and concerns expressed by delegates.

1.2 The *Chairman* invited comments on the revised draft Resolution.

1.3 The *delegate of the Republic of Korea* said that section 1, §§ 1.2 and 1.3 would have to be amended to take account of the fact that, under Article 25 of the Geneva Convention, invitations to attend the WTSC would be sent out by the Secretary-General and not by the Director of the TSB.

1.4 It was so *agreed.*

1.5 Referring to section 6, § 2.3, the *Chairman of the Working Group* said that while it had been sympathetic to the proposal for an intermediate deadline submitted by Spain in Document DT/21, the Working Group had been concerned about the extra cost entailed for the Bureau. The amended text of § 2.3 was a compromise agreed to by the Spanish delegation after informal consultations with the Secretary of the Committee. It had not been discussed by the Working Group, but it appeared to take account of all the concerns which had been expressed.

1.6 Section 6, § 2.3 was *approved.*

1.7 The *Chairman of the Working Group*, referring to section 7, said that new § 1.11 had been drafted further to a proposal by the delegate of Mali to include a text reflecting the spirit of APP Resolution 10. The Working Group had considered it appropriate to insert the paragraph in the part of the text dealing with the development of Questions. New § 3.2 (iv) was based on the Russian Federation's proposal in Document 10.

1.8 Both new paragraphs were *approved.*

1.9 Turning to section 8, the *Chairman of the Working Group* informed the Committee that the addition to § 3.1 took account of the United States proposal in Document 33. The amendments to §§ 3.3 and 3.4 had been included to cater for the need to give study group members information as early as possible in the approval procedure; the wording, which had been carefully chosen, was based on the phraseology used in similar texts. New §§ 3.9 and 3.10 were taken from Document 23 submitted by Mexico. The reference in § 4.3 to a reservation process had been inserted in response to a request made at the Working Group's meeting. The provisions of §§ 5.1 and 5.3 had been treated as a package intended to address both the timing concern and the credibility of the approval process by speeding up the beginning of the process while extending the response period from the two months proposed in the earlier version of the draft Resolution to the three months provided for in Resolution No. 2. In conclusion, he said that the Working Group had endeavoured to draw a clear distinction between the three different phases of the approval procedure: determination that the text of a Recommendation was stable and mature; decision by the study group to request initiation of the approval procedure; and consultation of the Members.

1.10 Responding to a point raised by the *delegate of Brazil*, the *Chairman of the Working Group* said that if the Committee so wished, he would prepare an amendment to § 3.1 of section 8, identifying the WTSC as an acceptable forum for determining that a draft Recommendation was ready for initiation of the approval procedure.

1.11 It was so *agreed.*

1.12 Further to an objection raised by the *delegate of Mexico* with regard to § 4.4 of section 8, and following clarification provided by the *Chairman of the Working Group* and the *delegate of the United States*, it was *agreed* to replace the word "may" in the first sentence of the paragraph by "shall" and to amend the second sentence to read: "Such reservations shall be mentioned in a concise note appended to the text of the Recommendation concerned".

1.13 Referring to the revised draft Resolution as a whole, and section 6, § 1 in particular, the *representative of INTELSAT* said he trusted that the entire text would be amended to reflect the decisions taken by the Additional Plenipotentiary Conference with regard to the rights and obligations of organizations like his own. The *Secretary of the Committee* replied that the necessary changes would be made to the final version of all Conference documents.

1.14 The *delegate of the United States* said that, in making such changes, the Bureau must take good care to distinguish between Members of the Union and other members, having due regard to their respective rights and obligations.

1.15 At the suggestion of the *delegate of Canada*, and following comments by the *delegate of Lebanon* and the *Secretary of the Committee*, it was agreed that the term "Special Rapporteur" should be replaced by "Rapporteur" wherever it appeared in the text of the draft Resolution.

1.16 Subject to further minor editorial amendments and to alignment of the three language versions, draft Resolution No. Res. 18/X as a whole, as amended, was *approved.*

2. Consideration of Annexes 2, 3 and 4 to Document AP-X 23(Rev.1) [Document AP X-23(Rev.1)]

Annex 2: Draft Resolution No. Res. 18/11 (Development of Electronic Document Handling)

2.1 *Approved.*

Annex 3: Draft Resolution No. Res. 18/12 (EDH Group within the TSAG)

2.2 *Approved.*

Annex 4: Draft Resolution No. Res. 18/13 (An Information Bulletin for the Telecommunication Standardization Sector)

2.3 It was *agreed*, on a proposal by the *delegate of Spain* supported by the *delegate of France*, to add the words "in the appropriate languages" after "Information Bulletin" in **instructs** 1.

2.4 Draft Resolution No. Res. 18/13, as amended, was *approved.*

3. Consideration of proposals relating to Document AP X-25 (Documents AP X-25, X-45; 18; DT/6, 8)

3.1 The *Chairman of ad hoc Group – Resolution No. 18*, introducing Document AP X-25, drew attention to draft Recommendation A.[23] and draft Resolution No. Res. 18/14, contained in Annexes 1 and 2 respectively. With regard to the latter, he said that the delegation of Poland had proposed an additional **resolves** paragraph relating to cooperation with other relevant standardization bodies; the text would be circulated shortly as a document of the Conference.

3.2 The *Secretary of the Committee*, referring to paragraph A.3 on page 2 of Document AP X-25, said that the Guide in question was already available.

3.3 The *delegate of France*, introducing Document AP X-45, said that work to enhance cooperation between the new ITU-T and other bodies must take account of the evolving situation. In order to give effect to the proposals stemming from Document AP X-45, the Committee might wish to consider the text of draft Resolution No. 7 (amended) (Document DT/8) on collaboration with ISO and IEC; his delegation wished to propose a new version of **resolves** (3) in that text, the wording of which he would submit to the Secretariat, to the effect that the Director of the TSB and the Telecommunication Standardization Advisory Group would be requested to consider further improvements in the procedure for cooperation between the Standardization Sector, ISO and IEC.

3.4 Subject to the amendment to be submitted by the delegate of France, Resolution No. 7 (amended), as set out in Document DT/8, was *approved.*

3.5 The *delegate of the Republic of Korea* introduced Document 18, drawing the Committee's attention to the draft Resolution it contained on relations with other standardization organizations.

3.6 The *representative of ETSI* observed that the forum for relations between his organization and national standards bodies in Europe was the European Community rather than ITU-T. With regard to indent b) in the second paragraph of Document 18, the entity in question was a Global Standards Collaboration Group, not a Conference.

3.7 The *delegate of Canada*, supported by the *delegate of Spain*, said that while he appreciated the intention behind the draft Resolution in Document 18, he would prefer a revised wording which placed greater emphasis on the ITU's pre-eminent role in global standardization.

3.8 At the proposal of the *delegate of Lebanon*, it was *agreed* that a small drafting group, to be coordinated by the delegation of the Republic of Korea, would prepare a text for consideration by the Plenary Meeting.

3.9 The *Secretary of the Committee* suggested that the drafting group might wish to take account of Resolution No. 17 of the IXth CCITT Plenary Assembly on the ITU's pre-eminent role in standardization.

3.10 The *Chairman* invited the Committee to consider Document DT/6, which contained a draft revised version of CCITT Resolution No. 11 relating to collaboration with the Consultative Council for Postal Studies of the Universal Postal Union, submitted by Study Group I.

3.11 Resolution No. 11 (revised), as set out in Annex 2 to Document DT/6, was *approved.*

3.12 The *Chairman* having invited the Committee to revert to Document AP X-25, draft Recommendation A.[23] set out in Annex 1 to that document was *approved.* Subject to the amendment to be submitted by the delegation of Poland, draft Resolution No. Res. 18/14 set out in Annex 2 was also *approved.*

4. Consideration of proposals relating to Document AP X-26 [Documents AP X-26, X-50; 46; DT/5, 9(Rev.1), 10, 24, 28]

Draft Resolution No. Res. 18/7(Rev.3) (Documents AP X-26; 46; DT/24)

4.1 The *Chairman* invited the Committee to consider draft Resolution No. Res. 18/7(Rev.3) relating to the publication of Recommendations.

4.2 The *delegate of the United States*, introducing Document 46 on behalf of its sponsors, said that the purpose of the proposed additions to draft Resolution No. Res. 18/7 (Rev.3) was to provide a transitional period during which Recommendations developed or revised by the Standardization Sector and published by the ITU would also carry the name "CCITT Recommendation".

4.3 The *Secretary of the Committee* considered that it was not within the Committee's purview to take a decision on that matter, which should be considered at a Plenary Meeting in the presence of the Secretary-General. The *delegate of Spain* concurred, but suggested that the Committee, in reporting to the Plenary, might signify its preference for such a transitional arrangement.

4.4 It was so *agreed.*

4.5 The *Chairman of ad hoc Group – Resolution No. 18*, replying to a question by the *delegate of China*, said that the intention was for the White Book to include all the findings of the present Conference.

4.6 The *delegate of Australia* introduced Document DT/24, observing that the proposed amendments it contained were the result of joint drafting by a number of delegations after discussion in Committee 3 of Document No. 10 submitted by the Russian Federation. The intention was that a list of current Recommendations should be drawn up and distributed periodically, so that users might know exactly which standards were in force at any given time. Annex 1 to the document contained proposed additions to draft Resolution No. Res. 18/7, together with an appropriate cross-reference for insertion in Resolution No. Res. 18/X, Section 8.

4.7 The proposed additions to draft Resolutions Nos. Res. 18/7 and Res. 18/X, as set out in Annex 1 to Document DT/24, were *approved.*

4.8 The *delegate of Australia* said that Annex 2 to Document DT/24 contained a proposal to restore a number of points previously deleted from the Annex to draft Resolution No. Res. 18/7(Rev.3).

4.9 The additional paragraphs proposed in Annex 2 of Document DT/24 were *approved.*

4.10 Draft Resolution No. Res. 18/7(Rev.3), as amended, was *approved.*

Draft Resolution No. Res. 18/8(Rev.3) (Document AP X-26)

4.11 The *Rapporteur of ad hoc Group – Resolution No. 18* drew attention to the fact that draft Resolution No. Res. 18/8 relating to identification and layout of Recommendations contained a cross-reference to Recommendation A.15, the revised draft of which was found in Document DT/9(Rev.1) and which recommended that the rational elaboration, numbering and presentation of the texts of Recommendations should be the responsibility of the Director of the TSB, and that clear and consistent rules for the numbering of series of Recommendations should be published regularly. The *Secretary of the Committee* confirmed that the numbering of Recommendations would in future be published by the Bureau in an authoritative text, if necessary in association with the Telecommunication Standardization Advisory Group.

4.12 Draft Resolution No. Res. 18/8(Rev.3) was *approved.*

Draft Resolution No. Res. 18/10(Rev.1) (Document AP X-26)

4.13 The *Chairman* invited the Committee to consider draft Resolution No. Res. 18/10(Rev.1) relating to Supplements to Recommendations.

4.14 The draft Resolution was *approved,* subject to editorial corrections by the Bureau.

Draft Recommendation A.15 [Document DT/9(Rev.1)]

4.15 The *Rapporteur of ad hoc Group – Resolution No. 18* said that Recommendation A.15 concerning the elaboration and presentation of texts of Recommendations would be included in the White Book, but that its Appendix I containing the guide for the elaboration and presentation of texts would be published separately, in the form of a circular letter to all administrations, as it required constant updating.

4.16 Draft Recommendation A.15 was *approved.*

Proposals relating to vocabulary and terminology (Documents AP X-50; DT/5, 10, 28)

4.17 The *delegate of the United Kingdom,* introducing his Administration's proposals in Document AP X-50, said that they were intended to ensure continued publication of Fascicle I.3 which contained the combined list of vocabulary and terminology from all study groups – an essential document for standardizing terminology.

4.18 The *Chairman* said that Documents DT/5 and DT/28 should also be borne in mind in connection with terminology.

4.19 The *Chairman of the Coordination Committee for Terminology* said that the original intention had been for the CCITT Editing Group to transmit the proposals made by each study group to all the Rapporteurs for terminology. As that had proved to be too onerous, the Editing Group had produced a terminology database, conditions of access to which would have to be defined, so as to ensure homogeneity of terminology. In addition, all draft Recommendations on terminology might perhaps be circulated for information to the Rapporteurs for terminology, and terminology lists

could also be distributed systematically. Document DT/28, issued for information only, contained details of the use of abbreviations, which were increasing in number and sometimes appeared in several languages. Standardized acronyms should be established, in a single language where appropriate.

4.20 The substance of draft Recommendation Res. 18/a.2, set out in Document DT/10, was *approved* on the understanding that the text would be revised in order to take account of the views expressed in Documents AP X-50 and DT/5.

5. Introduction and consideration of Annex D to Document AP X-40 (Document AP X-40)

5.1 The *Chairman of ad hoc Group – Resolution No. 18* introduced Annex D to Document AP X-40, containing a draft Resolution on principles and procedures for the allocation of work to the Radiocommunication and Telecommunication Sectors which was the result of lengthy discussions.

5.2 The *delegate of the United States* suggested postponing any decision on the draft Resolution until Committee 4 had completed its discussions thereon.

5.3 The *Chairman of Committee 4* having confirmed that his Committee would be proposing amendments affecting the form rather than the substance of the draft Resolution, it was *decided* to postpone approval of the text pending the outcome of discussions in Committee 4.

5.4 The *Director of the TSB* presented the Chairman of ad hoc Group – Resolution No. 18 with a medal in recognition of his invaluable contribution to the work of the Conference.

6. Data elements and tabular data in ITU standards (Document DT/27)

6.1 The *delegate of Brazil* introduced his Administration's proposals in Document DT/27, observing that they were aimed at providing a more flexible mechanism for updating information structures.

6.2 The *delegate of the United States* remarked that, from the strictly legal standpoint, the ITU produced recommendations rather than standards. He also expressed reservations concerning the use of the term "Registration Authority", which he would be happy to discuss informally with the delegate of Brazil.

6.3 The *Chairman* suggested that the Committee might wish to approve the proposal in principle, on the understanding that further discussion would be held on the wording and that the text would be annexed to his report to the Telecommunication Standardization Advisory Group.

6.4 It was so *agreed.*

7. Resolutions, Opinions and Recommendations adopted at the IXth CCITT Plenary Assembly (Document DT/11)

7.1 The *Secretary of the Committee* introduced Document DT/11, observing that the Committee was requested in particular to express its opinion with regard to Resolution No. 13 and Recommendation A.30.

7.2 The *delegate of Lebanon* expressed concern that Resolutions Nos. 3, 9, 12, 14 and 18 and Opinion No. 5, all of which covered areas of great interest to developing countries, were qualified as obsolete in Document DT/11. The World Development Conference to be held in March 1994 might take action on the issues they dealt with, but interim arrangements of some kind should perhaps be made.

7.3 The *Secretary of the Committee* observed that the only action which the Conference might be able to take on those texts, if it so wished, was to bring them to the attention of the forthcoming World Development Conference.

7.4 The *delegate of Saudi Arabia* supported the comments by the *delegate of Lebanon.* It was premature to start abandoning areas of work which involved cooperation between the Standardization and Development Sectors.

7.5 The *delegate of Mali* also supported the views expressed by the *delegate of Lebanon* and proposed that Resolutions Nos. 3, 9 and 12 and Opinion No. 5 should be maintained.

7.6 Following further comments by the *delegate of Lebanon*, especially with regard to the negative connotation of the word "obsolete", the *Secretary of the Committee* urged that the Resolutions should not be republished. However, he would be happy to hold informal discussions with the delegate of Lebanon and any other interested parties with a view to finding a more positive term to qualify the texts in question.

7.7 It was so *agreed.*

7.8 The *delegate of Spain*, referring to the different services covered by Resolution No. 13 and Recommendation A.30, urged that both texts should be maintained.

7.9 Following a brief exchange of views in which the *delegates of Australia* and *Spain* and the *Secretary of the Committee* participated, it was *agreed* that the Resolutions, Opinions and Recommendations in Document 79 which had not been deleted should be published again in the White Book. Thereafter, the information they contained might appear in a different form, but the present Conference did not need to settle that issue; the study groups concerned could reflect on the matter and submit their suggestions to the Bureau during the coming study period.

The meeting rose at 1240 hours.

FOURTH AND LAST MEETING OF COMMITTEE 3

(Summary record approved by the Chairman)

Tuesday, 9 March 1993, at 0905 hours

Subjects discussed:

1. Texts for transmission to the Plenary Meeting
2. Draft Resolutions Nos. [NZL-1] – Working methods for the Telcommunication Standardization Sector and [NZL-2] – Documentation and meeting arrangements
3. Resolutions, Opinions and Recommendations adopted at the IXth CCITT Plenary Assembly
4. Modifications to the proposed revisions to draft Resolution No. Res. 18/X
5. Documents being considered by the Editorial Committee
6. Approval of the summary records of the first and second meetings of Committee 3
7. Publication and distribution of Recommendations

1. Texts for transmission to the Plenary Meeting (Documents 60, 62, 63, 65, 66, 67, 71, 72, 73, 74)

1.1 The *Chairman* invited the members of the Committee to approve, for transmission to the Plenary Meeting, the texts now before them which had been produced on the basis of earlier discussions.

Resolution No. 7 (amended) – Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) (Document 62)

1.2 *Approved.*

Draft Recommendation A.[23] – Collaboration with other international organizations on information technology, telematic services and data transmission (Document 63)

1.3 *Approved.*

Draft Resolution No. Res. 18/14 – Relations with other standardization organizations (Document 60)

1.4 The *delegate of the Republic of Korea*, referring to **resolves** 3) of the draft Resolution, said it had been the general understanding in the informal drafting group that the square brackets would be deleted from the text to be transmitted.

1.5 The *Secretary of the Committee*, responding to comments by the *delegates of the United States*, *Japan* and *Spain* and the *representative of ETSI*, said that the text transmitted to the Plenary Meeting would omit any mention of delegations by name, and thus would imply no source of sponsorship.

1.6 The *delegate of Mexico* said that the text ought to be worded so as to reflect more clearly the ITU's pre-eminent role in standardization.

1.7 The *delegate of Canada* felt that the point raised by the previous speaker, important though it was, had been amply covered elsewhere, and that there was no time to redraft the text.

1.8 At the suggestion of the *Chairman*, it was *agreed* not to redraft the text for that purpose, on the understanding that a future WTSC might consider adopting more suitable wording.

1.9 The *delegate of Spain*, referring to **considering** c), proposed that the phrase "and if appropriate national," should be deleted, since the involvement of national organizations was a domestic matter. The *delegate of Mexico* supported the proposal.

1.10 The *representative of ETSI* said that national organizations played a particularly important role in some regions, and the drafting group had felt that they should be mentioned. The *delegate of the United States* agreed, adding that, in any case, the words "if appropriate" allowed enough flexibility.

1.11 The *delegate of the Russian Federation* suggested that the Spanish proposal should be adopted, on the understanding that the phrase could be reinstated if a future forum saw fit to do so. The *delegate of Poland* strongly urged that the words should be retained. The *delegate of Germany* proposed that discussion of the matter should be closed and the text retained as it stood.

1.12 On a proposal by the *Chairman*, supported by the *delegate of Brazil*, it was *agreed* to leave the text of **considering** c) as it stood, subject to possible review at the end of the next study period.

1.13 The *delegate of Japan*, referring to **resolves 3)**, said that it was not clear precisely what action the ITU could take to encourage cooperation among organizations involved in relevant studies.

1.14 The *delegate of Australia* said that one forum for that purpose was the Global Standards Collaboration Group, referred to by the ETSI representative at a previous meeting, whose activities involved private and public bodies at the pre-standardizing stage and thus improved the possibilities for agreement.

1.15 The *delegate of the United States* suggested that, in order to make the **resolves 3)** paragraph more broadly acceptable, the words "to take any appropriate actions, inter alia through TSAG" should be deleted.

1.16 It was so *agreed.*

1.17 Draft Resolution No. Res. 18/14, as amended, was *approved.*

Draft Resolution No. Res. 18/7(Rev.3) – Publication of [CCITT] Recommendations (Document 65)

1.18 *Approved*, subject to the deletion of the words "sub-section 2" from the end of **noting further** (h).

Draft Resolution No. Res. 18/8(Rev.3) – Identification and layout of Recommendations (Document 66)

1.19 *Approved.*

Draft Resolution No. Res. 18/10(Rev.1) – Supplements to the [CCITT] Recommendations (Document 67)

1.20 *Approved.*

Draft Recommendation A.15 – Elaboration and presentation of texts for Recommendations of the ITU Telecommunication Standardization Sector (Document 71)

1.21 The *Chairman of the Working Group on draft Resolution No. Res. 18/X* said that an amended version of the title of the draft Recommendation would be submitted to the Plenary Meeting, to take into account some minor inconsistencies in Document DT/11(Rev.1), which would be annexed to it.

1.22 Draft Recommendation A.15 was *approved* on that understanding.

Draft Resolution No. Res. 18/11 – Development of Electronic Document Handling (Document 72)

1.23 *Approved.*

Draft Resolution No. Res. 18/12 – EDH Group within the TSAG (Document 73)

1.24 The *delegate of France* proposed that the acronyms "EDH" and "TSAG" in the title of the draft Resolution should be written out in full.

1.25 Draft Resolution No. Res. 18/12 was *approved*, subject to that editorial amendment.

Draft Resolution No. Res. 18/13 – An Information Bulletin for the Telecommunication Standardization Sector (Document 74)

1.26 Following clarifications by the *Secretary of the Committee*, the *delegate of Spain* said it should be clearly understood that from the purely legal standpoint it was the Secretary-General who had the authority to produce and distribute documentation, although in the case of the Information Bulletin referred to in **instructs** 1 that task could be delegated to the Director of the TSB in order to expedite distribution to members. He also drew attention to a minor editorial correction to the Spanish text.

1.27 The *delegate of Japan* said that his Administration, while supporting the draft Resolution, wished to stress the importance of exercising economy in its implementation, which should not involve the ITU in substantial additional expenditure.

1.28 With those comments, draft Resolution No. Res. 18/13 was *approved*.

2. Draft Resolutions Nos. [NZL-1] – Working methods for the Telecommunication Standardization Sector, and [NZL-2] – Documentation and meeting arrangements (Document 21)

2.1 The *delegate of New Zealand* said that the first **instructs** paragraph of draft Resolution No. [NZL-2] was intended to cater for the need to ensure the speedy receipt of documentation by participating bodies lacking ready access to EDH facilities.

2.2 Draft Resolutions Nos. [NZL-1] and [NZL-2] were *approved*, subject to an editorial amendment to the preambular heading in both texts.

3. Resolutions, Opinions and Recommendations adopted at the IXth CCITT Plenary Assembly (Document DT/11(Rev.1))

3.1 The *Secretary of the Committee* said that Document DT/11(Rev.1) was the outcome of informal discussions held following the Committee's previous meeting.

3.2 On a proposal by the *delegate of the United States*, supported by the *delegate of Spain*, it was *agreed* that the texts of Recommendations A.20, A.21, A.22 and A.30 would in fact be republished and, therefore, that the asterisks against the corresponding entries, together with the footnote, would be deleted from page 3 of Document DT/11(Rev.1).

3.3 The Committee *took note* of Document DT/11(Rev.1).

4. Modifications to the proposed revisions to draft Resolution No. Res. 18/X (Documents 48/ Corrigendum 1; DT/24)

4.1 The *Chairman* drew the Committee's attention to the modifications to §§ 3.1 and 4.4 of section 8 of draft Resolution No. Res. 18/X, as shown in Corrigendum 1 to Document 48. Replying to a question by the *delegate of the Russian Federation*, he said that a suitable cross-reference to Resolution No. Res. 18/7 would be added to section 8, as § 6.5, in accordance with the agreement reached on the addition proposed in Annex 1 to Document DT/24.

4.2 The *Chairman of the Working Group on Resolution No. Res. 18/X*, replying to a question by the *delegate of Spain* in respect of § 3.1, said that the underlined words should not appear at the end of the sentence but immediately after the words "or Working Party meeting". At the suggestion of the *Secretary of the Committee*, it was *agreed* that Corrigendum 1 to Document 48 should be transmitted directly to the Editorial Committee.

5. Documents being considered by the Editorial Committee (Document DT/10)

5.1 After a short discussion in which the *delegates of Senegal, France* and *Mexico* took part, it was *decided,* in the interests of consistency with other texts, to delete the word "**unanimously**" from before the word "**recommends**" in draft Recommendation Res. 18/a.2 (Document DT/10).

5.2 The *Secretary of the Committee,* replying to a request by the *delegate of the United States,* said that before the end of the Conference delegates would receive a complete list of all Resolutions and Recommendations in the A-Series, with their officially assigned numbers.

6. Approval of the summary records of the first and second meetings of Committee 3 (Documents 39, 52)

6.1 The summary records of the first and second meetings of Committee 3 were *approved,* subject to corrections submitted by the *delegate of China* to § 4.25 of Document 39 and the *delegate of Spain* to §§ 1.46 and 1.47 of Document 52.

6.2 The *Secretary of the Committee* said that the remaining summary records would be dispatched to delegations and corrigenda issued as required.

7. Publication and distribution of Recommendations

7.1 The *delegate of Greece* observed that three groups of Recommendations now existed: new and revised Recommendations approved during the study period under the Resolution No. 2 procedure and published in separate booklets; new and revised Recommendations approved at WTSC-93, which would also be printed in booklet form; and unrevised but still valid Recommendations contained in the Blue Book. Did the TSB intend to adopt a procedure whereby administrations could order all the booklets globally?

7.2 The *Secretary of the Committee* replied that all new or revised Recommendations were published in booklets, of which a complete catalogue had been prepared. The WTSC-93 Recommendations would be listed at the end of the relevant Committees' reports, in the "White Book" containing the records and decisions of the Conference, and in information catalogues. If necessary, a list could also be published of the Recommendations in the Blue Book which were no longer valid. The *delegates of France* and the *United States* requested the publication of such a list.

The *Chairman,* after thanking all those concerned, declared that Committee 3 had completed its work.

The meeting rose at 1120 hours.

3.3 – COMMITTEE 4 – STRUCTURE AND WORK PROGRAMME OF THE STUDY GROUPS

Chairman: Mr. M. ISRAEL (Canada)

FIRST MEETING OF COMMITTEE 4

(Summary record approved by the Chairman)

Wednesday, 3 March 1993, at 1400 hours

Subjects discussed:

1. Opening remarks by the Chairman
2. Study group structure and mandates and joint coordination groups (JCG)
   - Report of the ad hoc Group – Resolution No. 18 – Resolution No. Res. 18/9: study group responsibility and mandates (including JCGs)
   - Proposals by Administrations on study group structure and mandates (including JCGs)
3. Consideration of proposals submitted by Administrations for amendments to study programmes
4. Transfer of work from the Radiocommunication Sector

1. Opening remarks by the Chairman (Document DT/14)

The *Chairman*, drawing participants' attention to the Conference timetable contained in DT/14, said that the Committee would be called upon to discuss two extremely important subjects, namely, the possible establishment of coordination groups or machinery designed to secure proper coordination between the study groups, and the transfer of Questions from the Radiocommunication Sector (ex-CCIR) to the Telecommunication Standardization Sector.

2. Study group structure and mandates and joint coordination groups (JCG) (Documents AP X-23(Rev.1), X-24(Rev.1), X-44; 7, 8, 9, 12, 20, 21)

Report of the ad hoc Group – Resolution No. 18 – Res. 18/9: study group responsibility and mandates (including JCGs) [Document AP X-24(Rev.1)]

2.1 The *Chairman of the ad hoc Group – Resolution No. 18* introduced Document AP X-24(Rev.1), which reflected the result of several years' work on the duties and terms of reference of the study groups. He drew particular attention to draft Resolution No. Res. 18/9 put forward by the Group and Appendix 1 containing new text on joint coordination activities, stressing that the subjects included were not exhaustive.

2.2 The *Chairman* said that Appendix 1 was intended for Committee 4 alone, to assist it in its work, whereas the three annexes would form an integral part of the Group's report.

2.3. The *Chairman of Study Group IX* said that, after having worked on the development of worldwide standards which had played a significant role in the establishment of a global infrastructure of telex services, Study Group IX had accepted the principle of its dissolution in the spirit of Melbourne, in order not to impede the planned restructuring. He urged participants to see in this approach the first signs of the new spirit of Helsinki.

Proposals by Administrations on study group structure and mandates (including JCGs) (Documents AP X-23(Rev.1), X-44; 7, 8, 9, 12, 20 and 21)

2.4 The *delegate of France*, introducing Document AP X-44, emphasized the potential benefits of rapid harmonization in view of the large number of study groups involved in certain areas of common concern. He saw a very urgent need to set up a Joint Coordination Group for the UPT service, which was of interest to several study groups.

2.5 It was *decided* that Document AP X-44 would be discussed in due course.

2.6 The *delegate of the United States*, introducing Document 7, pointed out that the concept of intersector coordination group (ICG) put forward by his delegation differed significantly from the notion of joint coordination group (JCG). He stressed that ICGs, whose number would depend on circumstances, would not be empowered to prepare Recommendations, but rather to guide and coordinate work between the two Sectors. Documents 8 and 9 were fully consistent with that proposal.

2.7 Replying to a question by the *Chairman* on the relationship between such ICGs and the Advisory Groups in each Sector (TSAG and RAG), he said that the role of the Advisory Groups would be to set up ICGs as required and not to absorb them, since the TSAG and RAG were permanent bodies, whereas the ICGs would be disbanded once they had completed the specific task for which they had been established.

2.8 The *Chairman* pointed out that, in Resolution No. Res. 18/X, as in Document 7, it was stated that the coordination groups would not prepare Recommendations; to his mind, however, it would be better to spell out their precise duties. In his opinion, a coordination group should be set up at the beginning of a study period, not with a view to replacing a study group, but to ensure that all the parties involved in a Question thoroughly understood all its implications.

2.9 The *delegate of the United States* said that Document 8 clearly defined the possible activities of an ICG. If his delegation's proposal were accepted, a more precise wording might be developed on the basis of that idea.

2.10 The *delegate of Denmark* said that it would be useful to know precisely how a JCG differed from an ICG. Both were designed to coordinate activities among different study groups, the former within one and the same Sector and the latter between the two Sectors. He wondered whether the underlying aim of the proposal was not to prevent one Sector from dominating the other in particular technical fields.

2.11 The *delegate of Tunisia* drew the attention of the United States delegate to the fact that one Sector normally had no say in matters which fell within the purview of another Sector, and asked who would be responsible for defining the terms of reference of each ICG.

2.12 The *delegate of the United Kingdom* said he had difficulty in understanding the difference between a JCG and an ICG, apart from the fact that one belonged to the Telecommunication Standardization Sector, whereas the other spanned both Sectors. This was surprising, since his understanding had been that a JCG should in fact cover both Sectors; if that was not the case, then the terms of reference of the JCGs should be amended, rather than introducing another type of group. Furthermore, it would not be the ICG's role to assess the Recommendations of the two Sectors, as intimated in Document 8.

2.13 The *delegate of Japan* asked what machinery would be used to convene joint meetings of the Advisory Groups of the two Sectors and what criteria would be employed for disbanding an ICG.

2.14 The *representative of INTELSAT* said that Document 20 was fully consistent with the framework described by the United States delegate, since the comprehensive incorporation of satellite transmissions in public digital networks was not a matter for the Telecommunication Standardization Sector alone. He therefore proposed that the draft Resolution set out in the Annex to Document 20 should be approved by the Conference and by the Radiocommunication Assembly to be held in November 1993. In the past, there had already been extremely close cooperation between the CCIR and CCITT study groups on satellite matters, and the proposed joint group would not only allow work of common interest to be pursued but also promote active participation by all countries. The group would be responsible for monitoring work on the preparation of Recommendations and, in the event of any outstanding divergences, reporting to the Directors or to the World Standardization Conference and the Radiocommunication Assembly.

2.15 Replying to the questions raised, the *delegate of the United States* said that the termination of an ICG's work would be a matter for the Directors, the Chairman of the ICG and its participants to decide. Since the Telecommunication Standardization Sector and the Radiocommunication Sector were not engaged in the same type of technical studies, there was every justification for establishing an ICG. However, it would be for the Advisory Groups of the two Sectors to decide when such a group was required and to define its terms of reference.

2.16 The *delegate of Morocco* said he endorsed the United States proposal as set out in Document 7, subject to certain amendments. In the restructuring of the ITU, it had been decided to establish budgets for specific tasks within the two Sectors; that situation would have to be taken into account when establishing an ICG. The need for such groups was undeniable, but a decision had to be reached on the appropriate procedure. If the ITU's new structure was to be wholly efficient, situations should be avoided whereby one Sector dealt with an important matter without the other Sectors being kept informed. It would be up to the Director of a Sector to inform his counterpart in the other Sector of new Questions which were discussed whenever he considered them to be of common interest and of equal importance for both Sectors. The terms of reference of ICGs should not encroach on those of the study groups in each Sector. Finally, the adoption of Recommendations was not a matter for the ICGs but for the study groups concerned.

2.17 The *Chairman of Study Group II* said that the key issue was the terms of reference adopted for the ICGs. In his opinion, such groups should deal primarily with the management and planning of activities. Nevertheless, he was not opposed to the idea that, where appropriate, an ICG might also discuss technical problems and express an opinion on the validity of existing Recommendations. For that reason, the amendment of chapter 3, section 3 of draft Resolution No. Res. 18/X on joint coordination groups would have to be contemplated.

2.18 The *Chairman of Study Group XVIII* expressed some reservations concerning the need for an ICG whose activities might duplicate the work of existing groups. To his mind, the proposals set out in the ad hoc Group's report [Document AP X-23(Rev.1)], § 3.6 of section 3 and § 1 of section 5 of draft Resolution No. Res. 18/X, already provided for adequate machinery which would obviate the need for a new kind of coordination group.

2.19 The *Chairman of the ad hoc Group – Resolution No. 18*, referring to Document AP X-40, recalled that the participants in the joint meeting of the CCIR ad hoc Advisory Group (Resolution 106) and the CCITT ad hoc Group – Resolution No. 18 had decided to establish a Joint Coordination Group (JCG) within the Telecommunication Standardization Sector. The two Directors had thus been instructed to set up the Group. It would be unfortunate to reverse decisions which had already been adopted, which was why due care had to be exercised in studying the advisability of creating a new kind of coordination group.

2.20 The *delegate of Australia* warned participants of the administrative and bureaucratic burden which the creation of a new group would entail, when it would be sufficient to amend the wording of section 3 of draft Resolution No. Res. 18/X to cover both intra- and inter-Sector coordination needs. Also, it was important not to create a definitive cleavage between the Telecommunication Standardization and Radiocommunication Sectors.

2.21 The *delegate of China* believed that, for optimum efficiency, JCGs and ICGs should be created, with clearly defined tasks and mandates.

2.22 The *Chairman* recalled that all participants approved the principle of coordination between the two Sectors, since it had already been decided to set up a Joint Coordination Group. The question was now whether an additional coordination body was required between the two Sectors to respond to exceptional needs. With that in mind, one would have to determine clearly the terms of reference and composition of an ICG, decide who would manage it and the body to which it should report. To settle those points, he proposed that a select group be set up, chaired by the delegate of Morocco, to produce a text for inclusion in draft Resolution No. Res. 18/X.

2.23 The *Chairman of Study Group XVIII* recalled that § 3.5, section 3 of draft Resolution No. Res. 18/X stipulated that a JCG should also coordinate with bodies outside the ITU-T. He proposed that a sentence be added in that paragraph providing for the establishment of an ICG when specific requirements arose for coordination between the two Sectors. The new text could also indicate that the ICG's terms of reference would be determined jointly by the Advisory Groups of the two Sectors.

2.24 The *delegate of the United States* considered that his country's proposal to add provisions in an appropriate section of the revised text of draft Resolution No. Res. 18/X of the Standardization Sector and Resolution No. 1 of the Radiocommunication Sector was still the best solution, since it would enable the terms of reference of inter-Sector

coordination groups to be clearly defined. Furthermore, the text proposed in Document 7 answered the questions raised concerning the composition of the Group, by stating that participation in ICGs would be open to all Members and other entities as defined in Article 19 of the Convention and that the Chairmen of affected study groups in both Sectors as well as representatives of relevant intra-Sector coordination groups were strongly encouraged to participate in the work of the ICGs. It was all the more important to coordinate the work of the two Sectors at the present time, when the ITU was undergoing a period of transition to a new era.

2.25 The *delegate of Denmark* requested that the select group should also examine the question of the Sector to which the inter-Sector groups would belong.

2.26 The *delegate of the United States* observed that it had been agreed with the CCIR that the proposed inter-Sector groups would be within the Standardization Sector.

2.27 The *delegate of Japan* approved the principle of creating ICGs, but drew attention to the need to keep the cost of meetings down.

2.28 The *Chairman* said that the select group chaired by the *delegate of Morocco* would endeavour to define the terms of reference of the ICGs very precisely. The next step would be to decide on the advisability of establishing ICGs or JCGs.

2.29 It was so *agreed.*

2.30 The *delegate of the Russian Federation,* introducing Document 12, said that his delegation proposed that matters relating to terminals be excluded from the terms of reference of Study Group VII, that switching and signalling in telegraph and data transmission networks be removed from the terms of reference of Study Group XI and that telegraph and telematic services be included in the designation of Study Group XVII.

2.31 The *Chairman of Study Group XI* considered it unnecessary to modify the terms of reference of Study Group XI, since the sharing of switching and signalling questions with Study Group VII had not posed any problems.

2.32 The *delegate of the United Kingdom* supported by the *delegate of Denmark,* while approving the proposed terms of reference of Study Group VII, wished the sentence concerning collaboration with ISO/IEC as contained in Document AP X-24(Rev.1) to be kept. Like the Chairman of Study Group XI, he felt it unnecessary to exclude telegraph and data transmission networks from its terms of reference, but approved the proposal concerning the name of Study Group XVII.

2.33 Following a question by the *Chairman* concerning the responsibility of Study Group VII with regard to collaboration with ISO and IEC, the *delegate of the Russian Federation* expressed approval for the principle of such collaboration and said that his proposal was intended solely to exclude aspects relating to terminals.

2.34 The *Chairman* proposed, in line with the United Kingdom's suggestion, that the last sentence concerning the terms of reference of Study Group VII as set out in Document AP X-24(Rev.1) be added at the end of the text proposed by the delegation of Russia in Document 12.

2.35 It was so *agreed.*

2.36 There being no support for the proposal by the Russian delegation concerning the terms of reference of Study Group XI, it was *decided* to maintain the terms of reference as worded in Document AP X-24(Rev.1).

2.37 The *Chairman of Study Group XVII* having stated that he was in favour of including telegraph services in the designation of his study group, the change to the name of Study Group XVII proposed by the delegation of Russia was *approved.*

2.38 The *delegate of New Zealand* introduced Document 21, which endorsed the approach adopted by the ad hoc Group – Resolution No. 18, described in Document AP X-24(Rev.1).

2.39 Document 21 was *noted.*

3. Consideration of proposals for amendments to study programmes submitted by Administrations (Documents AP X-41; X-43; X-51; 35)

3.1 The *delegate of Australia*, introducing Document AP X-41, explained that the proposed amendments had in fact been agreed at the October meeting of Study Group I Working Parties. Following the standard practice, his Administration was introducing those amendments on behalf of the Working Parties.

3.2 The *delegate of Denmark* requested clarification of the meaning of specification of generic service elements, which was an extremely important concept from a technical standpoint, and asked whether the Australian proposal was intended to associate those elements with the services. The *delegate of Australia* said that the minimalist approach aimed to secure a coherent identification of services for the benefit of users, rather than to standardize generic service elements in a precise manner.

3.3 Subject to those explanations, Document AP X-41 was *approved.*

3.4 The *delegate of Australia*, introducing Document AP X-43, said that once again the amendments proposed aimed to produce a coherent text of Question T/III and to frame a uniform tariff and accounting policy for services based on the intelligent network.

3.5 The *Chairman of Study Group III* supported the proposal. His study group would be giving more thought to charging procedures, which involved both economic and regulatory aspects, since it was keen to provide a fundamental input for study of the Question.

3.6 Document AP X-43 was *approved.*

3.7 The *delegate of the United States* introduced Document AP X-51, which in fact covered the same ground as Document 35, but in more detail. The aim was to align the text of certain Questions with that of Document AP X-24(Rev.1) concerning study group responsibilities and mandates. It was not a matter of transferring Questions, but of introducing clarifications in the light of the information contained in Document AP X-24(Rev.1).

3.8 The *delegate of Finland* shared the view expressed by the previous speaker, pointing out that according to Annex B to Document AP X-24(Rev.1), numerous studies linked with network operation were distributed among several study groups. He was in favour of consolidating studies which dealt with the same subject.

3.9 The *Chairman* pointed out that Annex B to Document AP X-24(Rev.1) was merely intended to provide a few pointers; it was not final, and was open to modification and improvement.

3.10 Document AP X-51 and Document 35 were *approved.*

4. Transfer of work from the Radiocommunication Sector (Document DT/13)

4.1 The *Chairman* said that Document DT/13 had been drawn up by the Directors of the Bureaux of the two Sectors following the joint meeting of the ad hoc Group – Resolution No. 18 and the CCIR ad hoc Advisory Group (Resolution 106). He proposed that a select group be set up, comprising experts and study group Chairmen, presided over by the Vice-Chairman of Committee 4, to examine the list of Questions and provide the Conference with more specific details. The text of the Questions would then be transmitted to the study groups for incorporation in their work programmes.

4.2 The *delegate of the United Kingdom* expressed surprise at the proposal. The allocation of work should have been considered at the outset by the CCITT and CCIR Secretariats before being examined by a Group of Experts and by the Telecommunication Standardization Advisory Group, for subsequent discussion at a joint meeting in June. Quite apart from the fact that the necessary experts were not available in his delegation, the question arose as to the status that the list of Questions prepared by the select group would enjoy. In his opinion, Document DT/13 should not have been submitted to Committee 4.

4.3 The *Chairman*, while acknowledging that the Conference might confine itself to taking note of the document, said that it could provide more detail on the subject in the form of a revised version of the document to be transmitted to the Telecommunication Standardization Advisory Group.

4.4 The *delegate of the United Kingdom*, supported by the *delegate of the United States*, requested that the document prepared by the select group of experts should not be considered as an official Conference document.

4.5 The *Chairman* confirmed that the revised document to be drawn up by the select group, would be submitted to the Committee before being referred to the two Sectors, which would then take a decision.

4.6 It was so *agreed.*

The meeting rose at 1705 hours.

SECOND MEETING OF COMMITTEE 4

(Summary record approved by the Chairman)

Friday, 5 March 1993, at 0900 hours

Subjects discussed:

1. Area of responsibility of Study Group XV
2. Work programme of the study groups
3. Intersector coordination groups
4. Areas for establishment of joint coordination groups

1. Area of responsibility of Study Group XV [Document AP X-24(Rev.1)]

1.1 The *delegate of France*, referring to the mandate of Study Group XV as given in Annex A to Document AP X-24(Rev.1), said that he saw no justification for excluding logic and signalling for connection and call control from the study group's work.

1.2 Following comments by the *delegate of the United Kingdom* and the *Chairman of ad hoc Group – Resolution No. 18*, both of whom observed that the proposed mandate was the result of fairly lengthy discussions at the January meeting of the ad hoc Group, the *Chairman* suggested that the issue be discussed informally and, if necessary, taken up again by the Committee at a later stage.

1.3 It was so *agreed.*

2. Work programme of the study groups (Documents 2 + Corrigendum 1, 11)

2.1 The *delegate of the United Kingdom* introduced Document 2 and its Corrigendum, explaining that his delegation no longer considered it necessary to alter the mandates of Study Groups VI and XV but merely wished to propose certain improvements to the texts of Questions W/XV, X/XV and 11/VI, in order to avoid any duplication of studies. He drew attention to minor editorial corrections to be made to some of the amendments proposed in the Corrigendum.

2.2 Following comments by the *representative of the TSB*, the *Chairman* suggested that the matter be discussed informally by the various parties concerned and taken up again by the Committee at a later stage.

2.3 It was so *agreed.*

2.4 The *delegate of the Russian Federation* introduced his Administration's proposals in Document 11, which were intended to improve the clarity of certain Questions and, in some cases, avoid duplication of effort on the part of study groups.

2.5 Following comments by the *Chairman* and the *delegates of Australia* and *the Russian Federation*, it was *agreed* that the proposals in paragraphs 2.1 to 2.6 of Document 11 should be discussed informally by a small group of interested parties, to be coordinated by the *delegate of the United Kingdom*, and considered further by the Committee at a later stage.

2.6 Referring to the proposal in paragraph 2.7, the *Chairman* suggested that instead of adding a new Question to the work programme of all the study groups, a general statement might be included in the Committee's report to the effect that the work programme had been adopted on the understanding that each Question would implicitly encompass the idea of supporting existing Recommendations not covered by other Questions. On the other hand, the proposal in paragraph 2.8 might raise problems in view of the fact that draft Resolution No. Res. 18/X, to be submitted to the Plenary Meeting for adoption, set out a new mechanism for the ongoing review of Questions.

2.7 The *delegate of the Russian Federation* agreed with the comments by the *Chairman*. The attention of all study group Chairmen should nevertheless be drawn to the need to work along the lines indicated in paragraphs 2.7 and 2.8 of Document 11.

2.8 The *delegate of Australia* considered that the content of **decides** 2 of draft Resolution No. Res. 18/9, set forth in Annex 1 to Document 42, covered the proposal in paragraph 2.7 of Document 11. As for the proposal in paragraph 2.8, account should be taken of the conclusions reached by ad hoc Group – Resolution No. 18 and in particular of draft Resolution No. Res. 18/X, which referred to the development of Questions on an ongoing basis and which, if adopted, would give that responsibility to all study groups.

3. Intersector coordination groups [Documents AP X-23(Rev.1), AP X-40, 7, 42, DT/31]

3.1 The *Chairman* reminded the Committee that a small group chaired by the delegate of Morocco had been requested to consider the concept and terms of reference of intersector coordination groups (ICG).

3.2 The *delegate of Morocco*, after describing the discussions which had taken place and the difficulties which had been encountered in preparing the draft Resolution in Document DT/31, said that informal discussions had continued after the document had been processed. A compromise agreement had subsequently been reached on the basis of which he was preparing a revised version of the draft Resolution for submission to the Committee. The new text would be based on the draft Resolution in Annex D to Document AP X-40, to which would be added a further annex containing, in essence, the substance of the text of Document DT/31 not already covered by that draft Resolution. Speaking on behalf of his delegation, he said that he had no objection to that approach, although he would have some editorial amendments to propose. However, it should be noted that the Geneva Convention contained no provision for the type of joint group referred to in **resolves** 3 b) of the draft Resolution in Annex D to Document AP X-40. Furthermore, Annex C to the same document contained a text advising the Directors of the CCIR and the CCITT that the CMTT "should continue as a single entity and as a joint study group"; that approach too was inconsistent with the Geneva Convention, which contained no provision for joint study groups. The matter should perhaps be referred to the Radiocommunication Assembly to be held in November 1993.

3.3 The *Chairman* invited the Directors of the TSB and the BR to provide further information on discussions which had taken place in connection with the coordination of studies between the two Sectors, with particular reference to joint groups and joint meetings.

3.4 The *Director of the TSB* said that the term "joint study group" had been used during the joint CCIR/CCITT meeting held on 22 January 1993 because work on the concept had started long before the APP and the view had been that it should be maintained. The two Directors had submitted a joint contribution to the APP but the latter, in adopting the new Convention, had relinquished the concept of joint study groups. It had been agreed at the joint meeting to set up a joint coordination group to report to the Telecommunication Standardization Sector on FLMPTS; the concept of such a group had stemmed from CCITT ad hoc Group – Resolution No. 18. It had also been agreed to keep the number of joint groups to the minimum, while recognizing that in certain areas close coordination might at times be necessary. Finally, it had been agreed that the two Secretariats should submit proposals on the allocation of the subject matter hitherto dealt with by CCIR Study Groups 4, 8, 9, 10 and 11, and a list had been drawn up for analysis by the various study group experts concerned. For the time being, his only comment on the more recent concept of intersector coordination groups was that the organization and financing of their meetings ought to be the task of one Sector alone; that might create administrative problems, although he foresaw none of a practical nature. There had been no disagreement about transferring the CMTT to the Standardization Sector or about setting up two joint coordination groups under the latter's responsibility, to deal with FPLMTS, UPT, ISDN and satellite matters.

3.5 The *Director of the BR* fully agreed with the Director of the TSB on the question of joint study groups; the APP had not discussed the document submitted to it jointly by the two Directors. The tasks involved could be continued perfectly well in any case, but a long tradition existed of joint groups in respect of broadcasting, for example. The CMTT had originally been established to enable network operators to participate in the CCIR's work without having to pay a double contribution. The Convention seemingly did not sanction the establishment of intersector coordination groups; however, coordination would continue to be necessary, and he could see nothing wrong with the term itself. The allocation of the relevant work to one Sector alone was intended simply to clarify management responsibilities. With regard to CCIR Study Groups 4, 8 and 9, their Chairmen had supported the outcome of the joint meeting held on 22 January 1993.

3.6 The *Chairman of ad hoc Group – Resolution No. 18* said that the draft Resolution on principles and procedures for the allocation of work to the two Sectors (Document AP X-40) had led to considerable discussion. With regard to the **resolves** part, there had been general agreement that a joint working group should be established, and that a joint coordination group would be an ideal arrangement; under Annex 2 to the draft Resolution, there would in each case be a lead Sector which would ask the other Sector to indicate its requirements. The ad hoc Group had also stressed the need for joint meetings of both Sectors' Advisory Groups to discuss topics of mutual interest, advocate the establishment of joint coordination groups as required, and determine the lead Sector in each case.

3.7 The *Chairman* invited the Committee to consider, in the light of the background information provided by the previous speakers, whether the relevant ITU instruments made provision for intersectoral coordination or whether the current Conference should put forward proposals in that connection, bearing in mind that the term "joint study group" would no longer exist unless the Plenipotentiary Conference (Kyoto, 1994) were to be requested to reinstate it.

3.8 The *delegate of Morocco* suggested that the Committee might consider a compromise approach consisting of incorporating the substance of the **resolves** part of Document DT/31 in the annex to the draft Resolution in Document AP X-40. Replying to a question by the *Chairman of ad hoc Group – Resolution No. 18*, he said that the underlined sentence in section 3, paragraph 3.5 of draft Resolution No. Res. 18/X would become unnecessary, and that the point could perhaps be covered by means of an appropriate cross-reference.

3.9 The *delegate of the United Kingdom* considered that the sentence in question should be retained in Resolution No. Res. 18/X, possibly with the addition of the words "But see also Resolution No. XXX".

3.10 Following a brief discussion in which the *Chairman* and the *delegates of Australia* and *Morocco* took part, it was *agreed* not to pursue, for the time being, the question of cross-referencing.

3.11 The *delegate of Morocco* suggested, on the assumption that the substance of Annex 2 to the draft Resolution in Document AP X-40 was acceptable, that the Committee should consider **resolves** 3 of draft Resolution No. XXX (Document DT/31). Replying to questions by the *delegates of France* and *Australia* in respect of that paragraph, he stressed that the immediate point at issue was the substance, namely, whether the establishment of an intersector coordination group should be contemplated in certain circumstances.

3.12 It was *agreed* in principle that, in exceptional circumstances, an intersector coordination group should be set up.

3.13 The *Chairman* invited the Committee to consider the substance of **resolves** 4 to 10 of the draft Resolution in Document DT/31.

3.14 With regard to **resolves** 4, a discussion took place as to whether a precise mandate for each ICG and target dates for completion of its work should be defined by the joint meeting of advisory groups of the two Sectors. The *delegate of the United Kingdom* and the *Director of the TSB* supported the proposal for a clear mandate and target date. The *delegate of the United States*, while in favour of a clear mandate, considered the setting of a target date to be impractical, as the termination of an ICG's work would depend on that of the relevant study groups. The *Chairman* observed that a deadline might be required in order to avoid ICGs becoming permanent bodies.

3.15 The *delegate of Morocco*, replying to a question by the *delegate of Denmark* concerning the titles of such groups, which were placed in square brackets in **resolves** 5, said that his ad hoc Group would propose alternative wording which would eliminate any specific designation.

3.16 The *delegate of Australia* raised the question of whether ICGs would report to one Sector or to both, and at what level. The *delegate of Germany*, pointing out that advisory groups had no formal decision-making authority, suggested avoiding any use of the word "decides" in that connection in the draft Resolution. The *delegate of Morocco* observed that, under **resolves** 8, an ICG would report to the Director of a Sector, not to the advisory groups. The *delegate of Hungary* considered that over-formalization of the work of ICGs might disrupt the existing flexible links between the Sectors. The *delegate of the United Kingdom* stressed the importance of not losing sight of the ICGs' main function, namely, intersectoral coordination to facilitate the work of the study groups. The *delegate of Australia* was in favour of reporting to one Director only, according to the subject of study.

3.17 A discussion followed on who should appoint the *Chairman* and Vice-Chairmen of an ICG and from which Sector they should come. The *delegate of the United States* considered that they should be appointed by the members of the ICG on the basis of their technical expertise in the subject studied and that the chairmanship should not be tied to either Sector. The *delegate of Morocco* suggested that, in that case, the draft Resolution should stipulate that the joint meeting of the advisory groups should indicate the lead Sector when it set up an ICG. The *delegate of the United States* supported that suggestion. He also supported **resolves** 9, which would allow ICGs to be set up at short notice during a World Standardization Conference or a Radiocommunication Assembly.

3.18 The substance of draft Resolution No. XXX (Document DT/31) was *approved*, on the understanding that the delegate of Morocco, in association with all interested delegations, would draft a revised text reflecting the views expressed in the discussion.

3.19 The *Chairman* said that in his report to the Plenary Meeting he would indicate that the establishment of such ICGs might be at variance with the Convention.

4. Areas for establishment of Joint coordination groups [Document AP X-24(Rev.1)]

4.1 The *Chairman* invited the Committee to consider Attachment 1 of Document AP X-24(Rev.1) concerning areas qualifying for joint coordination.

4.2 The *Chairman of ad hoc Group – Resolution No. 18* recalled that two of the subject areas – FPLMTS and ISDN/satellite – had already been discussed by the Committee. The remaining five items had been considered by the ad hoc Group as being subject areas that could benefit from coordination, in accordance with the relevant provisions of draft Resolution No. Res. 18/X. It was proposed that the JCGs would be set up in consultation with the advisory groups of the Sectors concerned.

4.3 The *delegate of Australia* said that such an approach was in line with the principle set out in **resolves** 9 of Document DT/31, which the Committee had just approved.

4.4 The *delegate of the United States* agreed that items 3.1 through 3.5 were subjects that might be considered by JCGs. However, he questioned the need to draw up a full list at the present juncture and suggested that the Telecommunication Standardization Advisory Group might be the appropriate body to decide on subject areas.

4.5 The *delegate of Hungary* observed that the coordination which had already been initiated for Telecommunications Management Networks (TMN) and Audiovisual/Multimedia Services might not be regarded as valid if the Telecommunication Standardization Advisory Group was the only body authorized to take such decisions. The study group Chairmen for the coming period were to be appointed before the end of the Conference, and coordination activities should start immediately rather than after the first meeting of the Telecommunication Standardization Advisory Group. He also expressed concern that the proposed amalgamation of FPLMTS and UPT might result in less effective coordination than existed at present.

4.6 The *delegate of the United Kingdom* proposed that the formal establishment of JCGs should be left to the Telecommunication Standardization Advisory Group, on the basis of proposals submitted to it by the study groups.

4.7 The *Chairman* invited the Committee to reflect on the views expressed and to resume discussion of the item at its next meeting.

The meeting rose at 1210 hours.

THIRD MEETING OF COMMITTEE 4

(Summary record approved by the Chairman)

Monday, 8 March 1993, at 1405 hours

Subjects discussed:

1. Work programme of the study groups (*continued*)
2. Intersector coordination groups (*continued*)
3. Areas for the establishment of joint coordination groups (*continued*)
4. Transfer of work from the Radiocommunication Sector
5. Title and work of CMTT
6. Regional tariff groups
7. Revision of the collection and publication of official service documents

1. Work programme of the study groups (*continued*) [Corrigendum 2 to Document 2; DT/23(Rev.1), 34, 36]

1.1 The *delegate of the United Kingdom* introduced Corrigendum 2 to Document 2, which differed from previous versions in a proposed modification to Question 11/VI.

1.2 Corrigendum 2 to Document 2 was *approved.*

1.3 The *Chairman of Study Group II* introduced Document DT/23(Rev.1), which proposed a minor modification to Question 5/II making it clear that it referred explicitly to further studies in UPT numbering.

1.4 Document DT/23(Rev.1) was *approved.*

1.5 The *delegate of the United Kingdom* introduced Document DT/34, which contained the results of the work of the ad hoc Group on Document 11.

1.6 The *delegate of Japan* pointed out that the words "Audio transmission of WRU signal" in section 4 of Annex 4 should read "Auto transmission ...".

1.7 The *delegate of the United States* indicated that the opening phrase of section 2 of Annex 4 should read: "The international telex service is a subscriber communication service ...".

1.8 In reply to a comment by the *delegate of the Russian Federation*, the *delegate of the United Kingdom* drew attention to the reference to both telegraph and other networks in section 3 of Annex 5.

1.9 Document 34, as corrected, was *approved.*

1.10 The *delegate of the United States* introduced the amendments to Questions 4/I, 8/I and 19/I proposed by the Editing Group in Document DT/36.

1.11 The *delegate of Australia* proposed the addition of the word "International" in front of "Telecommunication Services" in § 2.10.

1.12 Document DT/36, as amended, was *approved.*

2. Intersector coordination groups (*continued*) (Document DT/35)

2.1 The *Chairman* drew the Committee's attention to Document DT/35, prepared by the *delegate of Morocco* after broad consultations, which replaced Document DT/31.

2.2 The *delegate of the United States* congratulated the author of the document, which he endorsed.

2.3 After an exchange of views between the *delegates of France* and the *United States* and the *Chairman* on the wording of § d) in Annex 3, it was *agreed* that the intent of the subparagraph was to have the Chairman from one Sector and the Vice-Chairman from the other.

2.4 The *Director of the TSB* pointed out that strict limiting conditions were placed on the establishment of both ICGs ("... in exceptional cases ...") and JCGs ("... only a limited number ..."). In those circumstances, he wondered whether there was any real necessity for establishing two different categories of group, since most of the issues involved would in any event tend to overlap from one Sector to another. In posing that question, he in no way intended to challenge the decision to create Intersector Coordination Groups.

2.5 The *delegate of Canada* recalled that it had been recognized at the joint meeting held in January 1993 that there was an obvious need for coordination between the two Sectors as well as with other bodies. The procedures for ICGs laid down in Document DT/35 and those for JCGs in Resolution No. Res. 18/X showed some degree of overlapping, which prompted him to pose the same sort of question as the previous speaker. As he saw it, the issue remained open.

2.6 The *delegate of the United States* said he was perturbed by the fact that the very concept of ICGs, which had already been agreed upon in two particular cases, was now being challenged.

2.7 The *delegate of China* recalled that there had been a great deal of discussion on the subject of ICGs and JCGs and their respective terms of reference. It now appeared that there was still confusion about which issues were to be taken up by JCGs and which by ICGs; in other words, about how "exceptional cases" were to be decided.

2.8 The *delegate of the United Kingdom* pointed out that while, generally speaking, the two groups had much in common, there were significant differences between them in points of detail. Consequently, since it had already been agreed to set up both kinds of group, he considered that the Conference should proceed to do so, on the understanding that the decision could be reviewed at a later stage, for example by the Telecommunication Standardization Advisory Group, in the light of experience.

2.9 The *delegate of Poland* said that the decision to establish coordination groups was among the most important to be taken by the Conference. However, the situation as it had emerged from the joint meeting and as it was reflected in the documents before the Committee was not clear. Unless a single group was set up, the coordination problem would never be solved. He therefore suggested the creation of a working party to discuss the whole issue and report back to the Committee.

2.10 The *delegate of Lebanon* endorsed the proposals in Document DT/35 and considered that the Committee should proceed to approve the principle of establishing ICGs.

2.11 In the course of a debate on the wording of § g) in Annex 3, the *delegate of Australia*, responding to a query by the *delegate of France*, said that the intention was to appoint the Chairman of the ICG from the Sector having responsibility for the study group concerned. Thus in each case there would be a lead Sector. The *delegate of France* agreed that the ICG should submit its report to the Advisory Groups of both Sectors for their opinion and subsequently to the responsible Sector, which would already have been designated. The *delegate of the Russian Federation* drew attention to the importance of submitting ICG reports to both Sectors, while the *Chairman of Study Group II* suggested that some means of coordination other than reporting should be considered, such as the establishment of direct contact with the study groups concerned. The *delegate of the United States* proposed the addition of the words "to be presented to each Sector's Advisory Group" after the word "activities" in § g).

2.12 Document 35, as amended, was *approved.*

3. Areas for the establishment of joint coordination groups *(continued)* [Document AP X-24(Rev.1)]

3.1 The *Chairman* drew the Committee's attention to the seven areas listed in Attachment 1 of Document AP X-24(Rev.1) that could benefit from the establishment of JCGs. He invited participants to decide whether the present Conference should consider those areas and agree to establish groups, or whether the matter should be referred to the Telecommunication Standardization Advisory Group, with some guidance from the Conference.

3.2 The *delegate of the United Kingdom* opposed the idea of setting up the groups at the present stage. Prior to the first meeting of the Telecommunication Standardization Advisory Group in June, the study groups could consider the various areas that might benefit from joint coordination and submit written proposals to the Telecommunication Standardization Advisory Group, which would then be able to take an informed decision. In response to a comment by the *delegate of France*, he suggested that the Chairmen of those study groups that were not scheduled to meet before June could be invited to contact key members of their groups and submit a report to the Telecommunication Standardization Advisory Group.

3.3 The *delegate of the United States* agreed that subject areas 3.1 to 3.5 should be referred to the Telecommunication Standardization Advisory Group for decision. However, in the case of FPLMTS and ISDN/satellite, it had been agreed at the joint meeting that there was an immediate need to establish Intersector Coordination Groups and he had prepared two draft Resolutions to that effect, setting out simple terms of reference. After noting that the relevant decisions had already been taken, the draft Resolutions stated in their **resolves** paragraphs that intersector groups were established "to coordinate the review of Recommendations being developed in both Sectors" and that the Telecommunication Standardization Sector should be the leading Sector for that coordination activity.

3.4 The *delegate of Switzerland* agreed with the United Kingdom delegate that the Telecommunication Standardization Advisory Group should take the matter up at its first meeting in June. With regard to the United States proposal, while agreeing that it had already been decided that coordination was needed in the case of FPLMTS and ISDN/satellite, he wondered whether a single group would not suffice.

3.5 The *delegate of Australia* supported the idea of taking up the issue immediately in order to make an early start on the work. At its June meeting, the Telecommunication Standardization Advisory Group would then be in a position to review progress and suggest adjustments if necessary.

3.6 The *delegates of France* and *Lebanon* supported the United States proposal for two draft Resolutions, the former suggesting that a provision be included calling upon the Telecommunication Standardization Advisory Group to spell out the Groups' terms of reference in greater detail.

3.7 The *delegate of Denmark* suggested that the draft Resolutions should contain a provision calling for coordination at the planning stage of studies.

3.8 The *delegate of Germany* strongly supported the idea of taking a decision on FPLMTS at the present Conference.

3.9 The *delegate of Canada* pointed out that the JCGs for satellite matters and for FPLMTS would of course be the responsibility of the Telecommunication Standardization Sector, and that the same basic wording was used for each in the report of the joint meeting (Document AP X-40).

3.10 Responding to requests for clarification from the *delegate of the United Kingdom*, the *Chairman* said that the areas in question, setting aside the two referred to by the *delegate of the United States*, had already been identified by ad hoc Group – Resolution No. 18, and that in order not to have to wait until the Telecommunication Standardization Advisory Group meeting, one option he had proposed was to have one Resolution covering those five areas and to request the Director to involve the study groups immediately in looking at those areas so that they could come to the Telecommunication Standardization Advisory Group with proposals and recommendations already formulated. He agreed with the delegate of the United Kingdom that decisions on such matters as lead study groups should be left to the Telecommunication Standardization Advisory Group.

3.11 Following an exchange of views between the *delegates of the United States* and *the United Kingdom* on the Resolutions announced by the United States, it was *agreed* that two different Resolutions should be prepared, one on ICGs and one on JCGs.

4. Transfer of work from the Radiocommunication Sector

4.1 The *Vice-Chairman of the Committee*, who had, together with a small ad hoc Group, been considering the transfer to the Telecommunication Standardization Sector of the CCIR work listed in Document DT/13, outlined the contents of the Group's report, shortly to be issued as a conference document, at the same time emphasizing that the Conference was not required to finalize a work allocation. He noted that the bulk of the work had to date been done by the CCIR, and that it was now time for clear decisions to be taken and for the Standardization Sector to bring the task to completion.

4.2 The *Chairman* said that at the Committee's following meeting, at which the report of the ad hoc Group would be available, he would, without further introduction, but subject to any discussion, seek approval to proceed as recommended by the ad hoc Group.

5. Title and work of CMTT (Documents AP X-40; DT/29)

5.1 The *Chairman* said that in view of the obsolescence of joint study groups as a result of the new structural arrangements, it would be necessary to change the name of CMTT, which was now clearly under the leadership of the Telecommunication Standardization Sector. In that connection, he referred the Committee to Document DT/29, noting that the last three words of its single paragraph, "over long distances", should be deleted. Given that the Group would have extensive liaison with the Radiocommunication Sector and might thus be attended by representatives from both Sectors, and given that the relevant Resolutions and other instruments made provision for "joint meetings", he felt that it was necessary to capture the notion of a group that allowed for joint meetings of experts to deal with television and sound transmission. It might be necessary to make only a minor change in the name of CMTT, and perhaps to add a Roman numeral.

5.2 Following a lengthy discussion between the *delegates of France, Lebanon, Germany* and *the United States*, the *Director of the TSB*, the *representative of the BR*, the *Chairman of CMTT* and the *representative of the TSB* on the renaming of CMTT including the possible use of a Roman or Arabic numeral, on whether CMTT would henceforth be a joint meeting or a joint study group, and on the extent to which it would be open to members of both the former CCITT and the former CCIR, the *Chairman* said that a suggestion by the delegate of France, supported by the delegate of Lebanon, to the effect that CMTT be retained as the abbreviation for the Group, with a minor change being made to the actual wording of its title, seemed a logical one. It was clear that the study group would come under the Standardization Sector, that it would be open to participation from both Sectors, in which connection Administrative Council Resolution No. 246 had been cited in order to show that the Radiocommunication Sector would not be expected to pay dues in respect of such participation. At a subsequent meeting of the Committee, the Vice-Chairman would indicate how the remaining questions on that matter were to be tackled.

5.3 The *Director of the TSB* was concerned that continued use of the abbreviation "CMTT" might give rise to confusion.

5.4 The *representative of the BR* reiterated the importance of the CMTT's work to broadcasters, whose position was very well reflected in the document reproduced on page 9 of Document AP X-40, particularly its § 3.

5.5 The *delegate of Australia* said that § 1.7 of Section 2 of draft Resolution No. Res. 18/X in Document AP X-23(Rev.1) stated that one Sector should appoint the Chairman and that the other Sector should appoint the Vice-Chairman. That was something which would have to be taken into account before the Heads of delegation could consider the matter at the present Conference. The text of § 1.7 had been inserted the previous January, and although that may have been done on the basis of wrong advice, it had at that stage been thought appropriate. It was now perhaps necessary to take further advice, with reference to the Geneva Convention and Constitution, to find out whether that was in fact the case. If not, it might be necessary to modify that section of Resolution No. Res. 18/X. In short, there appeared to be a conflict between what had been accepted and the matter now under discussion.

5.6 The *Chairman* said that in the interests of avoiding any possible conflict with the Convention in relation to the context within which CMTT was to operate, delegations should reflect on those matters until the following meeting. He also requested the representative of the BR, the representative of the TSB and other experts to meet with the delegate of Australia with a view to proposing appropriate corrections to Resolution No. Res. 18/X. Furthermore, delegations should reflect on whether to continue to use the abbreviation "CMTT", in the light of the concern expressed by the Director of the TSB as to possible confusion.

6. Regional tariff groups

6.1 The *Chairman of Study Group III* said that a number of concerns had been expressed to him by the Chairmen of the TEUREM and TAF Groups. In the case of the TEUREM Group, those concerns related to its working methods and mandate in the light of the changes foreseen in the European commercial environment. More specifically, the Group would in future find it increasingly difficult to identify standard tariffs. It was therefore to be expected that the existing model, based on regional lines, would no longer be applicable in future, and that the TEUREM Group would have to develop a methodological tool and a number of general principles which would be incorporated into the general working methods of Study Group III.

6.2 In the case of the TAF Group, the African countries on the whole had neither the human nor the financial resources to enable them to carry out in full the cost studies normally stemming from Questions M/III and N/III which were proposed for study in the new period. The TAF Group therefore wanted the WTSC to take a stand on a number of guidelines regarding the way in which it could in future pursue its activities. To that end, it would need the skills and expertise of the Standardization Sector to enable it to continue its work on methodological aspects, as well as those of the Development Sector where subregional aspects were concerned. The idea was to define a methodological framework at continent level, but to pursue a number of more specific studies at subregional level.

6.3 Clearly, then, the mandates of the regional tariff groups needed to be revised so as to enable them to operate on an ad hoc basis, subject to periodic review of their results. The Conference should therefore mandate Study Group III at its forthcoming full meeting in June to redefine the circumstances or conditions in which the regional tariff groups could pursue their work.

6.4 The *Director of the TSB*, noting that similar serious problems affected all four Regional Tariff Groups, added that a great deal of tariff work was now being done outside the ITU Groups, and that it would be most judicious to attempt to gain access to it. He therefore strongly supported the ideas expressed by the Chairman of Study Group III, agreeing that the present Conference should serve as a springboard for the rejuvenation of the Group's activities, for which the keywords should be flexibility, openness and rapid reaction.

6.5 The *delegate of Mali* thanked the Chairman of Study Group III for reflecting so accurately the concerns of the African administrations at the February meeting in Addis Ababa. Those concerns had now been brought before the WTSC, and it would be appropriate to mandate Study Group III to take them in hand.

6.6 The *delegate of Lebanon*, while understanding the concerns expressed by the Chairman of Study Group III, nevertheless wished to recall that the four Tariff Groups had been set up with North-South cooperation in mind. Their importance should therefore be fully recognized and no attempt made to abolish them. At the same time, another Group should be set up under the auspices of the Standardization Sector to collaborate fully with the Development Sector, to encourage the developing countries to create fellowships and to keep a close watch on tariff policy and the work of Study Group III.

6.7 The *delegate of Poland*, expressing support for the continued existence of the regional tariff groups, said that if TEUREM could not deal with the problem of the increasingly cost-oriented tariffs in the European Community it would cease to exist. Also, there were some very serious intercontinental tariff difficulties, especially between the United States and Europe, which needed to be resolved. Finally, he wished to know how the new Chairmen and Vice-Chairmen of the regional tariff groups would be elected.

6.8 The *delegate of Lebanon* said that the Chairmen of the regional tariff groups had traditionally been appointed at the Plenary Assemblies of the CCITT. Regarding the question of possible changes in the mandate of those Groups, he considered that certain assurances should be given during the present Conference regarding the chairmanship of the TEUREM and TAF Groups, whose Chairmen had expressed a wish to continue to exercise that function.

6.9 The *Vice-Chairman of TAF* said that care was necessary when applying standardization in the area of tariffs, since any attempt to standardize working methods among tariff groups entailed the risk that some of them could fall behind, or even give up altogether. He therefore welcomed the assurances given by the Director of the TSB in that regard.

6.10 The *delegate of New Zealand* said that his country had for some time played a leading role in the reform of accounting rates, and wished to see the continued existence of the TAS Group, for whose chairmanship it had a potential nominee.

6.11 The *delegate of Lebanon* considered that the matter of the chairmanship and vice-chairmanship of the regional tariff groups should be dealt with prior to the meeting of Heads of delegation the following day. The Development Sector, together with Study Group III, should be in charge of those Groups, and should provide financial support to enable developing countries to participate effectively in them.

6.12 The *delegate of Senegal* said that he shared the concerns expressed by the delegate of Poland and supported the view by the Chairman of Study Group III that the regional tariff groups should be maintained.

6.13 The *Director of the TSB*, responding to concerns expressed by certain delegates, said that cooperation with the BDT was already under way – for example, fellowships had been obtained for the meeting in Addis Ababa. Wishing to dispel any possible misunderstanding, he emphasized that the intention was not to abandon the regional tariff groups, but rather to restructure and modernize them.

6.14 The *delegate of Australia* observed that the TAS Group had functioned satisfactorily in the past, even under the more formal procedures which had to date applied. He was, however, interested to learn in greater detail how the ad hoc approach would function.

6.15 Responding to concerns expressed by the *delegate of Senegal* over the designation of Chairmen and Vice-Chairmen for the regional tariff groups, the *Director of the TSB* said that he had not yet made any proposals in that regard to the Heads of delegations since he had wanted first to know the outcome of the present discussion. Now that it was reasonably clear that those groups would continue to exist, the corresponding proposals would be put forward in the appropriate way.

6.16 Summing up the discussion, the *Chairman* said there was a strong feeling that the work of the regional tariff groups should continue, although there was clearly room for reconsidering their mandate, structure and methods of work. It was now necessary not only to designate Chairmen and Vice-Chairmen, but also to communicate to the Plenary Meeting the Committee's strong desire to see some very clear directions emerging, rather than just another Resolution.

7. Revision of the collection and publication of official service documents (Document DT/12)

7.1 The *Director of the TSB*, introducing Document DT/12, said that it contained two annexes, the first listing service documents proposed for possible discontinuation, and the second those to be reviewed for updating, possible discontinuation or alternative means of publication. An appropriate draft Resolution was attached.

7.2 The *delegate of Australia*, after recalling that Study Group I had failed in its attempt to rationalize service information, welcomed the proposed draft Resolution. In view of the prevailing apathy with regard to service documents, he proposed the addition of a further **resolves** paragraph containing the idea that the failure of an Administration to respond to requests for information could be taken as a sign that it was not interested in the document in question.

7.3 The draft Resolution, modified along the lines suggested, was *approved.*

The meeting rose at 1735 hours.

FOURTH AND LAST MEETING OF COMMITTEE 4

(Summary record approved by the Chairman)

Wednesday, 10 March 1993, at 0905 hours

Subjects discussed:

1. Work programme of the study groups (*continued*)
2. Allocation of country and network codes
3. Intersector coordination groups (*continued*)
4. Initiation of joint coordination groups
5. Transfer of work from the Radiocommunication Sector (*continued*)
6. Title and work of CMTT (*continued*)
7. Allocation of country and network codes (*resumed*)
8. Resolution on collection and dissemination of operational and service information

1. Work programme of the study groups (*continued*) (Documents 58(Rev.1); DT/43)

1.1 The *delegate of the United Kingdom* introduced Document 58(Rev.1) containing amendments to Questions E/VIII and 10/I.

1.2 Document 58(Rev.1) was *approved.*

1.3 The *Chairman of Study Group II* introduced Document DT/43 containing amendments to Questions 5/II and 6/II and to Annex C of Document AP X-24(Rev.1)

1.4 The *delegate of Australia,* supported by the *delegate of the United Kingdom,* said he had no difficulty with the changes proposed in §§ 1-4 of Document DT/43, but foresaw complications in relation to Recommendation F.69, which was not purely a numbering plan and was closely linked to other F-series Recommendations, in particular with regard to the allocation of network identification codes. He would therefore prefer to leave that Recommendation under the primary responsibility of Study Group I, while numbering principles remained with Study Group II. Telex expertise was becoming increasingly rare and was probably only to be found in Study Groups I and XVII.

1.5 The *delegate of the United States* endorsed Document DT/43 but suggested that in § 1 the words "are required" should be replaced by "may be required".

1.6 The *Chairman of Study Group II* said he was willing to accept the United States amendment, but would like to hold further consultations on the subject of Recommendation F.69.

1.7 The *Chairman* said he took it that the Committee wished to approve §§ 1-4 of Document DT/43, as amended, and that an agreed text for paragraph 5 would appear later.

1.8 It was so *agreed.*

2. Allocation of country and network codes (Document 70)

2.1 The *delegate of Australia,* introducing the draft Resolution in Document 70, recalled that Committee 6 had discussed the allocation of certain codes and had concluded that the Conference was merely required to note any changes. How to keep an up-to-date record of code allocations was another matter. Speaking as a member of Study Group I, he recalled that some implementation difficulties had arisen at the October 1992 meeting of the study group's working parties. The time had now come to think in terms of the future. Telex was a complicated issue because its destination codes had implications for other identification codes and it had always been designed around multi-carrier

operations, with links to the telegram service. It was therefore imperative to specify precisely when any changes came into effect. In that connection, it should be borne in mind that it was the fundamental duty of the Telecommunication Standardization Sector to ensure that existing services operated efficiently, particularly telex, which was an essential service for business purposes in the developing countries.

2.2 In the light of recent difficulties, it had been concluded that there was a need to review the principles for implementing the allocation of new codes. In that respect, the former allocation of codes, the design of numbering plans and the political aspects of the matter were entirely separate issues. The draft Resolution made provision for such a study of allocation procedures in the **requests** clauses. The aim was for the new system to enter into effect by mid-1994, which could only happen if Members were informed of the results of the study in good time. Meanwhile, to avoid any recurrence of difficulties, the technical expertise of the study group Chairmen or their representatives should be called upon in the event of new allocations.

2.3 In reply to a question by the *delegate of Poland*, the *representative of the TSB* said that country telephone, telex and data transmission codes were published as annexes to the relevant Recommendations. Modifications to those codes were published in the form of notifications in the ITU Operational Bulletin, where complete lists also appeared regularly. Referring to the draft Resolution in Document 70, he recalled that the question of the allocation of country codes following recent changes in Eastern Europe had come up in Committee 6. New allocations had been made in conformity with the relevant Recommendations. In the case of telephone and data transmission, no difficulties had arisen, whereas a delicate problem had been encountered in Study Group I with regard to telex codes. A code number listed as free had been allocated to a new request, but regrettably it had later been discovered that it was being used for another purpose, i.e. a group of countries had ignored CCITT Recommendations. On behalf of the Director of the CCITT, he had given the necessary explanations to the body concerned and had subsequently contacted the countries in question in order to delay the entry into effect of the code and to determine a precise date for it. So far, in order to allow the countries concerned time to conform to CCITT Recommendations, the code had not yet officially entered into service. That had been the only difficulty encountered so far and, while he understood the reason behind the proposed draft Resolution, he considered that the study groups could review the provisions of the relevant Recommendations without any need for such a resolution. He therefore suggested that the sponsors be invited to withdraw the draft Resolution and that the Chairman propose to the Plenary a review of the application procedures for Recommendations X.121, F.69 and E.164 during the next study period.

2.4 The *delegates of the Russian Federation* and *Mali* supported the suggestion that the draft Resolution should be withdrawn.

2.5 The *delegate of Lebanon*, after recalling that the codes had previously been decided by the World Plan Committee, suggested that an information document should in future be submitted to World Development Conferences and Regional Conferences.

2.6 The *delegate of China* proposed that, if the draft Resolution was not withdrawn, it should be amended by the addition of the words "Procedures for " to the title and "the Administrations concerned" after the phrase in brackets in **instructs** 4.

2.7 The *Chairman of Study Group II* considered that, with a view to the future, the time had come for a major revision of numbering principles to provide capacity for new services. The draft Resolution provided a safeguard for the transitional period and he strongly supported it, as did the *delegate of the United Kingdom*.

2.8 The *Chairman* invited the sponsors of the draft Resolution to consult with interested delegations with a view to producing an agreed text.

3. Intersector coordination groups (*continued*) (Documents DT/38, 39)

3.1 The *delegate of the United States* introduced the draft Resolutions establishing intersector coordination groups relating to FPLMTS and satellite matters respectively (Documents DT/38 and 39).

3.2 The *delegate of France* proposed that the word "decision" in **considering** b) of both draft Resolutions should be replaced by "proposal" and pointed out that reference could not be made to a temporary document in a document intended for submission to the Plenary Meeting, as was the case in the **instructs** paragraph of both texts.

3.3 The *delegate of Germany*, after endorsing the French observations, pointed out that the **instructs** paragraph should refer to the Directors of the two Bureaux, not the Sectors, and wondered whether it was correct for the WTSC to give instructions to the Director of the Radiocommunication Bureau. He therefore suggested that the **instructs** paragraphs should read: "**instructs** the Director of the Telecommunication Standardization Bureau to establish in cooperation with the Director of the Radiocommunication Bureau...".

3.4 In reply to a comment by the *Chairman of Study Group II*, the *Chairman* said that it had proved necessary to prepare two Resolutions, despite the previous decision of the Committee to produce only one, because the wording of **resolves 1** differed slightly between the two texts. He took it that the Committee wished to approve the two draft Resolutions amended along the lines suggested by the *delegates of France* and *Germany*.

3.5 It was so *agreed.*

4. Initiation of Joint Coordination Groups (Document DT/41)

4.1 The *delegate of the United States* introduced the draft Resolution in Document DT/41.

4.2 The *Chairman*, replying to a question by the *delegate of Canada*, said that as he understood it, studies relating to UPT would be enhanced by the activity on FPLMTS, but that in any case it would be for the TSAG to determine the boundaries. The *delegate of Germany* agreed.

4.3 The *representative of the TSB* said that the French text of Document DT/41 required some editorial amendments. He also felt the need for editorial additions, wherever necessary, to stress that work should be carried out in cooperation with the Director of the TSB.

4.4 It was so *agreed.*

4.5 The *delegate of Greece* proposed that, in the fifth indent under **instructs the relevant study group Chairmen**, the words "reports of" should be deleted.

4.6 It was so *agreed.*

4.7 Document DT/41, as amended, was *approved.*

5. Transfer of work from the Radiocommunication Sector (*continued*) (Documents 55; DT/42)

5.1 The *Vice-Chairman of Committee 4* said that the purpose of the draft Resolution in Document DT/42 was to give effect to the programme set forth in Document 55 for the transfer of work from the Radiocommunication Sector to the Telecommunication Standardization Sector. Responding to an observation by the *Chairman of Study Group XI*, he acknowledged that the work of that study group should have been reflected in Document 55, and suggested that suitable amendments to the text could be agreed upon informally.

5.2 The *delegate of Poland* proposed that, in paragraph 1 of **instructs the Director of the TSB**, the words "in cooperation with the Director of the Radiocommunication Bureau" should be added after "CCIR Questions".

5.3 The *delegate of the United Kingdom* said that his delegation was in favour of the proposed procedure, but felt that the importance of involving administrations should be reflected in the draft Resolution. He therefore proposed the addition of a **noting** f), to read:

"that, in addition, Administrations may wish to examine the work proposed for transfer, in conjunction with their colleagues in the Radiocommunication Sector, and propose appropriate Questions for the relevant study groups."

5.4 The *Chairman* said he took it that the amendment proposed by the United Kingdom delegation was acceptable and that the Secretariat would take note accordingly. Replying to a question by the *Chairman of Study Group II*, he expressed the view that the TSAG was the proper forum for considering possible new ways of transferring studies and for handling Questions which remained relevant to both Sectors during the transitional period.

5.5 The *delegate of Germany* stressed that the question of transfer was of great concern to the Radiocommunication Sector. Indeed, the task would not be as smooth as the first paragraph on page 2 of Document 55 seemed to imply. In that connection, the wording of the timetable entry regarding November 1993 in Annex 1 to that document should be modified, to the effect that the Radiocommunication Assembly might wish to consider the Telecommunication Standardization Sector proposals and to eliminate items from the Radiocommunication Sector work programme; the WTSC had no mandate to declare what that Assembly should do. He also wished to know what the precise status of Document 55 was.

5.6 The *Chairman* said that Document 55 would be attached to the draft Resolution proposed in Document DT/42, to serve as a preliminary working document for the use of ITU-T study groups. Replying to questions by the *delegate of Poland*, he said that the Polish delegation's concerns with regard to the Radiocommunication Sector would be reflected in the report of Committee 4, and that all the texts approved by the Committee would be amended as agreed before they were transmitted to the Plenary Meeting. Replying to questions by the *delegate of the United Kingdom*, he said that the allocation of leading roles to study groups was not immutable, that Administrations' observations would be welcome, and that nothing was finalized pending the outcome of TSAG meetings and joint meetings with the Radiocommunication Sector.

5.7 Following further observations by the *delegate of the United States* and the *Vice-Chairman of Committee 4*, it was *agreed* that the texts of Documents 55 and DT/42 would be amended as proposed by the delegates of Poland, Germany and the United Kingdom, as well as to reflect, in SG 8 Table 2 (CCIR Question No. 39-3/8 in regard to FPLMTS), that Study Group XI would have the leading role. It was also *noted* that a number of consequential editorial amendments and corrections would be made to both documents.

5.8 On that understanding, Documents 55 and DT/42 were *approved.*

6. Title and work of CMTT (*continued*) (Documents 42/Addendum 2; DT/40)

6.1 The *delegate of Australia*, introducing Document DT/40, said that the text outlined the optional approaches considered in respect of the reconstituted CMTT, summarized the option finally recommended and suggested a text to replace the existing § 1.7 in Section 2 of Resolution No. Res. 18/X. The Secretariat had pointed out, in that regard, that the Council should be requested to confirm the suggested procedure.

6.2 The *Chairman* invited the Committee to comment on the text in Document DT/40.

6.3 The *Chairman of CMTT*, acknowledging the need for changes in the working methods of CMTT – a group in which initial mutual suspicion had over the years given way to trust and in which the cooperation of the broadcasters was particularly vital – said that those changes must not be carried out in such a way as to cause unnecessary disruption. To that end, he proposed that the Questions concerned should not be rewritten in haste, but rather over the period leading up to the next Conference. He wished at that point to request formally the Group's transfer, ideally as a joint study group. Its meetings should be scheduled to overlap with those of Study Groups 10 and 11. At the same time, he saw the need for a more definite statement on the future activities of CMTT, in particular codifying its close relationship with those study groups. Document DT/40 dealt only with generalities.

6.4 The *Chairman* said that Document DT/40 was restricted to generalities in order to avoid conflict with the Convention. More definite statements on CMTT would be set out in an annex to the Committee's report to the Plenary on study group mandates.

6.5 The *delegate of Canada* wondered whether the suggested new text for § 1.7 of Section 2 of Resolution No. Res. 18/X correctly reflected the manner in which the CMTT Chairman and Vice-Chairman were to be appointed, given that those appointments had traditionally been shared between the CCITT and the CCIR, one providing the Chairman and the other the Vice-Chairman. In the light of an explanation by the *delegate of Australia* as to the intention of Document DT/40, the *Chairman* said that that Committee could perhaps accept the suggested text of § 1.7 as a general paragraph covering groups in general, while also proposing to the Plenary that, in the case of CMTT, the Vice-Chairman should be appointed by the Radiocommunication Sector. The *delegate of Canada*, supported by the *delegates of Australia* and the *United States*, suggested that a footnote – which he would be willing to draft – should be added to the new § 1.7 to the effect that, in special cases, a Chairman and a Vice-Chairman might be appointed from either Sector, thereby extending the same possibility to other groups also.

6.6 It was so *agreed.*

6.7 Concerning the possible allocation of a Roman numeral to the new CMTT study group, the *representative of the TSB* said it was the Director's intention to propose that a number in the Standardization Sector study group series be allocated to CMTT, but that in order to enable members to become accustomed to the change that number would provisionally be followed by "(formerly CMTT)". He asked whether the whole of Document DT/40 or only new § 1.7 was to appear in the Committee's report. The *Chairman* replied that only the second paragraph following the heading "Recommended Approach" would be included in the report as the Committee's recommendation to the Plenary, together with words to the effect that the Vice-Chairman should come from the Radiocommunication Sector.

6.8 The *Director of the BR* said that Document DT/40 provided a good option for dealing with the joint study group problem. There was no intention of establishing a matching study group in the Radiocommunication Sector, so all the available resources would be concentrated on the Standardization Sector Study Group.

6.9 A suggestion by the *representative of the TSB* that it might be appropriate for the Conference to instruct the Director to request the Council to confirm the present provisions of its Resolution No. 246 was *noted.*

6.10 The Committee *approved* for submission to the Plenary Meeting the proposed title and area of responsibility of CMTT as contained in Annex 4 to Addendum 2 to Document 42, together with the proposal that the study group be allocated a Roman numeral followed provisionally by the qualification "(formerly CMTT)".

7. Allocation of country and network codes (*resumed*) (Document 70)

7.1 The *Chairman* invited the delegate of Australia to report on the consultations held between the sponsors of the draft Resolution in Document 70 and interested delegations with a view to producing an agreed text.

7.2 The *delegate of Australia* expressed the hope that the consultations on that contentious matter had produced a formula which, in a spirit of consensus, could be accepted by the Committee. The *delegate of the Russian Federation* continued to feel that the draft Resolution should be withdrawn, while other delegations continued to support it, so a compromise had had to be found. On the basis of proposals by the *delegates of China* and *the Russian Federation*, the words "Future procedures for" should be added to the title of the draft Resolution. The **in view of** clause should be deleted. Editorial changes should be made to the **considering** paragraph in such a way as to make appropriate mention of the new telex destination and other codes. A **considering** b) paragraph reading "that the principles concerning future numbering plans to deal with emerging services will be studied under specific Questions approved by this Conference" should be added so as to make clear that only procedural aspects were being addressed. A new **recognizing** paragraph should then be added with the wording "that the allocation of future country and network codes is a responsibility of the ITU Secretariats and the relevant Administrations in accordance with the appropriate Recommendations". In **requests** 1a) the word "only" should be inserted after the word "aspects"; and in 1c) the word "publication" should be inserted to give the wording ". . . concerning promulgation, publication and the date of entry. . .". In **requests** 3 the word "seek" in the first line should be replaced by "initiate". Finally, in the single **instructs** paragraph, the words "and the Administrations concerned" should be inserted immediately after the words in parentheses, and the words "the current range of" should be replaced by the word "new".

7.3 The *representative of the TSB* said that under the new ITU structure there was only one General Secretariat and Sector Bureaux. The responsibility for code allocation lay with the Director of the Standardization Bureau, and a corresponding change in the wording of the new **recognizing** paragraph should therefore be made.

7.4 The *delegate of Australia* said that he could agree to such a change. He also agreed to a proposal by the *delegate of Hungary* for the inclusion of the abbreviation "ISDN" after the word "telephone" in the first **considering** paragraph and in the fourth line of **instructs**.

7.5 The *delegate of the Russian Federation* proposed that the **recognizing** clause, as thus far proposed, should be worded ". . . is a responsibility of the ITU Secretariat, the TSB Director and the relevant administrations . . .".

7.6 Responding to concerns expressed by the *delegate of the Slovak Republic* as to the treatment of country names and the allocation of codes when those names changed, the *Chairman* said that allocations were effected in a manner designed to ensure the harmonious development of the international network. That was in the interests of all concerned, and the draft Resolution was in no way intended to interfere with the sovereignty of any country.

7.7 The *Chairman of Committee 6* added that the matter had been discussed in his Committee, which had taken note of the new assignments of country codes and telex destination codes, including those for the new Czech and Slovak Republics. However, a number of procedural matters had been referred to Committee 4.

7.8 The *representative of the TSB* explained that any change in a country name was duly reflected in the corresponding ITU documents in the form indicated by the country in question.

7.9 The Committee, having noted the concerns expressed by the delegate of the Slovak Republic, *approved* the draft Resolution in Document 70, as orally amended during the course of the discussion.

8. Resolution on collection and dissemination of operational and service information (Addendum 2 to Document 42)

8.1 The *Chairman* invited comments on the draft Resolution set out in Annex 5 to Addendum 2 to Document 42.

8.2 The *delegate of Poland* said that under **instructs** there was no clear directive concerning the dissemination of the very important information concerned. The *representative of the TSB* replied that the information, together with the Resolution, would be distributed to Administrations in the form of a questionnaire, to which it was earnestly to be hoped that they would reply, given the poor response obtained the last time that had been done.

8.3 The draft Resolution was *approved*, subject to amendments of a largely editorial nature proposed by the *delegates of Senegal* and *Spain*.

The meeting rose at 1215 hours.

3.4 – COMMITTEE 5 – TECHNOLOGY OF TELECOMMUNICATION NETWORKS

Chairman: Mr. H. K. PFYFFER (Switzerland)

FIRST MEETING OF COMMITTEE 5

(Summary record approved by the Chairman)

Tuesday, 2 March 1993, at 1405 hours

Subjects discussed:

1. Opening remarks by the Chairman
2. Organization of the work of the Committee
3. Report of Study Group IV
4. Report of Study Group V
5. Report of Study Group VI
6. Report of Study Group XVII

1. Opening remarks by the Chairman

1.1 The *Chairman* drew attention to the terms of reference of Committee 5 set out in Document DT/1, namely, to examine the reports of a number of study groups, particularly those concerned with the technology of telecommunication networks, as well as the report of the CMTT. The list of Questions proposed by the study groups, however, would be discussed in another Committee. The Committee would be requested to approve the reports and make recommendations thereon to the Plenary Meeting.

2. Organization of the work of the Committee (Document DT/7)

2.1 The *Chairman* suggested that the Committee should start its work by discussing the reports of Study Groups IV, V and VI, as well as XVII, in place of the report of Study Group X whose Chairman would not be arriving in Helsinki until later. The Committee might discuss the reports of Study Groups X, XI, XII and XVIII at its next meeting on 4 March, and the reports of Study Group XV and the CMTT, as well as its own final report to the Plenary Meeting, on 5 March.

2.2 It was so *agreed.*

2.3 The Committee *noted* Document DT/7 containing a list of documents allocated to it for discussion.

3. Report of Study Group IV (Document AP X-33 and corrigendum)

3.1 The *Chairman of Study Group IV* introduced Document AP X-33, which concerned the work of Study Group IV on maintenance. A number of working parties had been set up to discuss different aspects of maintenance of telecommunication circuits, measuring equipment, systems and networks, sound and television circuits, as well as management problems. Special Rapporteurs in various countries had worked with the Study Group by correspondence. As a result of its work in the 1989-1992 study period, the Study Group had produced 18 new Recommendations and 29 revised Recommendations.

3.2 The nature of the Study Group's work was changing as the increasing complexity of networks and systems created extended maintenance needs, now covering the management of networks and systems in order to provide a high quality of service to users. The development of Recommendations concerning the interfaces between network elements and operating systems called for close coordination with Study Groups VII, XI, XV and others. Part II of Study Group IV's report contained a synopsis of the replies to the Questions allocated to it during the past study period and indicated that 19 Questions, the details of which were set out in Document AP X-34, were being proposed for discussion during the 1993-1996 study period. A number of Questions would be discontinued, either due to lack of contributions or in order to avoid overlapping.

3.3 The *delegate of France* pointed out that whereas most of the Recommendations were to be found in Report COM IV-R 35, six of them had been issued only as white documents, which were not received by all services in the administrations. He suggested that those Recommendations either be republished in the R-Series or that priority should be given for their reproduction in fascicles. He also expressed concern at the delays in publishing Recommendations.

3.4 The *Chairman* confirmed that all Recommendations would be issued as a separate fascicle and said that the concern expressed would be noted and an appropriate solution sought which could be applied to all study groups.

3.5 The Recommendations listed in section I.5 of Document AP X-33 were *approved.*

3.6 It was *decided* that approval of the remainder of the report would be deferred pending circulation of a complete list of the Recommendations proposed for deletion.

3.7 The *Chairman*, speaking on behalf of the Committee as a whole, thanked the Chairman and members of Study Group IV for all their efforts.

4. Report of Study Group V (Document AP X-11)

4.1 The *Chairman of Study Group V*, illustrating his introduction of Document AP X-11 by means of transparencies, outlined the work covered by his Study Group in the 1989-1992 period. The main studies concerned protection of staff and users against electrical hazards; protection of telecommunication installations against damage caused by electromagnetic impact; protection of telecommunication systems against impairment of transmission, decreasing quality of service and other malfunctions; protection of the electromagnetic environment against adverse emissions from telecommunication installations. He summarized the work of the Study Group's four working parties, indicating in particular that the Directives studied by Working Party V/4 concerned the protection of telecommunication lines against adverse effects from electric power and electrified railway lines, an area which required cooperation with other organizations. Much effort had been made to define new limit values for induced voltages in cooperation with UIC, for future insertion in the directives. Owing to divergent risk assessment practices, no agreement had been reached on a proposal by CIGRE concerning the limit values for short-term induction, and further study on that question would be required. He gave details of the various sources of electromagnetic fields – atmospheric discharges, electric power lines, electrified railway systems, radio-frequency transmitting equipment – which had been studied in liaison with other organizations such as CIGRE, UIC, IEC and CISCR.

4.2 The results achieved during the 1989-1992 study period were set out in section 4.4 of Document AP X-11. They included five new Recommendations in the K-Series, six revised Recommendations and four new sections for existing manuals. Replying to a question by the *delegate of China*, he said that Question 11/V had been omitted from the table because no contribution on it had been received; it should perhaps have been indicated in the report that that Question had been terminated.

4.3 In conclusion, he requested the Committee to approve the report and, in particular, new Recommendations K.30 and K.31 and the amendments to Recommendations K.10, K.11, K.20 and K.28.

4.4 The *delegate of Poland*, speaking on behalf of the Polish Administration and the organizers of the Wroclaw Conference on Electromagnetic Compatibility, congratulated the Chairman of Study Group V on his most important contribution to EMC technology, and emphasized that, with the advent of electronic switching systems and fibre optic transmissions, the protection of telecommunication installations faced many new problems.

4.5 The *delegate of the Russian Federation* commended Study Group V very highly for the great quantity and variety of work which it had completed.

4.6 The new and amended Recommendations proposed for approval in section 4.3 of Document AP X-11, together with the report as a whole, were *approved.*

5. Report of Study Group VI (Document AP X-13)

5.1 The *Chairman of Study Group VI* said that the information supplied by the Director of the CCITT in Documents AP X-1 and 2 gave a good overview of his Study Group's activities during the past study period, and observed that its ability to remain flexible had enabled it to make optimum use of its expert resources. Particularly noteworthy had been the preparation of the new Manual entitled "Application of computers and microprocessors to the construction, installation and protection of telecommunication cables" and the complete revision of the Manual entitled "Construction, installation, jointing and protection of optical fibre cables", which had been supplemented with previously unpublished material. He emphasized, however, that where such documents were concerned, every effort must henceforth be made to ensure their early publication, since delays – which in the past had amounted to as long as three years – were unacceptable in today's climate of rapid technological progress. So far as any shortcomings in the activities of his Study Group were concerned, he had taken note of the guidance justifiably provided by ad hoc Group – Resolution No. 18 in Annex B to Document AP X-24(Rev.1), to the effect that the Study Group should review its Questions to place emphasis on standardization activities; it should, however, be pointed out that, for the most part, the manuals prepared by Study Group VI contained material which could, without excessive difficulty, be converted into standards.

5.2 Expressing his deep gratitude to all who had contributed to the work of the Study Group, especially its Special Rapporteurs and the Director and Secretariat of the CCITT, he concluded by requesting the Committee to approve the report and proposals in Document AP X-13.

5.3 Following clarification provided by the *Chairman of Study Group VI* and the *Chairman of Study Group V* in response to questions of an economic and technical nature from the *delegate of the United Kingdom* concerning § 7 of Recommendation L.16, and in the light of a subsequent request by the *delegate of the United Kingdom* for further study on that matter, the *Chairman* suggested that, in the absence of the relevant documents at the present meeting, the matter be reverted to at a later stage.

5.4 It was so *agreed.*

5.5 The *Chairman* noted with satisfaction the Study Group's successful completion of the new Manual, at the same time noting the request that the secretariat ensure its early publication. He thanked the Chairman of Study Group VI for the excellent work done under his chairmanship.

5.6 Subject to further discussion on § 7 of Recommendation L.16, Recommendation L.15, together with the complete report of Study Group VI, was *approved.*

6. Report of Study Group XVII (Documents AP X-35; DT/17)

6.1 The *Chairman of Study Group XVII* said that the main task of Study Group XVII continued to be the study of modems for the transmission of data over the public telephone network, since although considerable progress had been made on network digitization, subscriber access was for the most part still analogue. Modern technologies coupled with the improving state of the network had made it possible to use higher data signalling rates, which, in the case of modems, had been raised to 14.4 kbit/s during the study period. Still higher rates – up to double the one mentioned – were under discussion. In addition, the data compression procedure described in new Recommendation V.42*bis* had made it possible to increase the data rates at the DTE/DCE interface by up to a factor of 4 over the line rate, depending on the structure of the data. Regarding the future, various new techniques for modems, involving data rates of up to 28.8 kbit/s over a 3-kHz channel, were currently under consideration, with a view to increasing the throughput of data over an ordinary telephone channel, thereby reducing the cost of data transmissions. Existing Recommendations had been improved, expanded and adapted to the new requirements, that being particularly true in the case of those describing methods for adapting V-Series terminals to the ISDN.

6.2 On the basis of the proposal by ad hoc Group – Resolution No. 18, Study Group XVII would take over all tasks relating to telex transmission aspects from Study Group IX, and since the two study groups had already liaised in the past, he foresaw no major difficulties in that area. His Study Group would thus deal with 13 Questions, namely, the ten it had proposed and the three it would receive from Study Group IX.

6.3 In conclusion, he expressed appreciation to the Study Group's Vice-Chairmen and Special Rapporteurs and to the CCITT secretariat for their support.

6.4 The Recommendations proposed for approval in section 4.3 of Document AP X-35 were *approved*, as was the deletion of the five Recommendations listed on page 5 of Document DT/17 and the report of Study Group XVII as a whole.

6.5 In response to a request by the *delegate of Poland* that whenever a study group was referred to on the cover page of a document its title should be shown in parentheses, the *representative of the TSB* said that that would be done on subsequent documents.

The meeting rose at 1645 hours.

SECOND MEETING OF COMMITTEE 5

(Summary record approved by the Chairman)

Thursday, 4 March 1993, at 0910 hours

Subjects discussed:

1. Report of Study Group X and related documents
2. Report of Study Group XI and related documents
3. Report of Study Group XII and related documents
4. Report of Study Group XVIII and related documents

1. Report of Study Group X and related documents (Documents AP X-31; DT/16, 17)

1.1 The *Vice-Chairman of Study Group X*, introducing the report of the Study Group in the absence of its Chairman, summarized the results of the work of the four working parties set up to deal, respectively, with human-machine interface for telecommunication networks; support environment and software quality for telecommunication systems; formal description techniques, specification and description languages; and CCITT high-level language (CHILL). During the whole study period there had been very strong coordination between Study Groups X and IV in the TMN field. There had also been a certain degree of overlapping, but that problem was now thought to have been solved. With regard to CHILL, he stressed how important it was for the users to know that there was a body taking care of the maintenance side, given the major financial implications involved. In terms of the promotion of the Group's results, papers had been presented at the 5th CHILL Conference at Rio de Janeiro in March 1990, at Telecom-91 in Geneva, and at the Software Engineering for Telecommunication Systems and Services Conference in Florence and the International Switching Symposium in Japan in 1992, the corresponding material now being available in published form. In addition, there had been regular SDL Forums, the next of which was due to take place in September 1993 in Germany.

1.2 In conclusion, he expressed his thanks to the Chairmen of the Working Parties, the Special Rapporteurs, the CCITT Director and Secretariat, as well as to all other bodies and individuals who had supported Study Group X in its work.

1.3 The *delegate of Sweden*, emphasizing the importance of Question 10/X, announced in that connection that, in early October 1993, JTC 1 would be holding the second in a series of workshops at which discussion would continue on verification systems at the level of mutual recognition of test reports and certificates, the aim being to develop a system whereby test reports could be mutually recognized not only within individual countries, but also between countries and continents.

1.4 In response to a question by the *delegate of Denmark* concerning the status of cooperation under Question 10/X with regional standardization organizations such as ETSI or the T1 Technical Committee, the *Vice-Chairman of Study Group X* replied that an SDL Forum was held almost annually, and that the topic referred to was being dealt with very thoroughly by many European members. He was therefore confident that there were some very close cooperative links in that area.

1.5 The *Chairman of Study Group XI*, by way of a further illustration of the cooperation that existed on such matters, said that in 1992 Study Groups X and XI had, together with ETSI, the T1 Committee from the United States and TTC of Japan, mounted a very successful operation which had resulted in the adoption of a commonly acceptable software system for the storage and exchange in diskette form of otherwise voluminous and time-consuming SDL material.

1.6 The *Chairman* took note of an observation by the *delegate of China* that there was a typographical error on page 7 of the English version of Document AP X-31.

1.7 The Committee *approved* the draft Recommendations submitted by Study Group X in Document DT/16, the deletion of Annexes B, C, D and E to Recommendation Z.100, as shown in Document DT/17, and the report of Study Group X as a whole.

1.8 The *Chairman* expressed the Conference's appreciation and thanks to the Chairman of Study Group X, who had unfortunately been unable to attend, to the Vice-Chairman of Study Group X who had presented the report, and to all those who had actively supported the Study Group in its very complex work.

2. Report of Study Group XI and related documents (Document AP X-17; DT/16, 17)

2.1 The *Chairman of Study Group XI*, introducing the report in Document AP X-17, said that the 25 Questions assigned to his Group had been dealt with by seven working parties, the activities of which he briefly described. During a study period which had seen some organizational experimentation by Study Group XI aimed at avoiding discrepancies between signalling systems, the Working Party Chairmen had formed, and successfully functioned as, a management team. That experimentation would in all likelihood continue into the next study period in an effort to arrive at a situation in which consistent results would be produced without unduly overloading any of the working parties.

2.2 The Study Group had made every effort to use the Resolution No. 2 procedure to speed up its work. However, it was clear that the Bureau, faced with the huge volume of paperwork to which that new procedure had given rise, had become unable to process it with sufficient speed, and that the resulting bottleneck situation would have somehow to be resolved.

2.3 A major achievement of Study Group XI had been the production of Recommendations for Capability Set No. 1 of the Intelligent Network, and work was well under way on a Capability Set No. 2. Also very satisfying was the fact that, after much hard cooperative work, there were now conformance tests which could be accepted in at least Europe and North America and which were consistent. At the request of an ad hoc meeting of administrations and carriers held in Geneva during Telecom-91, the Study Group had initiated procedures for the monitoring and studying of signalling network failures, following a series of major failures in the United States which had made world headlines and which had, in some cases, been traced to System No. 7. It had been felt desirable to establish a forum for the sharing of outage information to be monitored by Study Group XI in order to determine both the root causes of, and common factors between, such failures. His Group had accepted that task, a Rapporteur had been appointed, and there would be a corresponding new Question in the next study period. The severe failures thus far analysed had not shown evidence of faults in the specifications themselves, but rather in their implementation. Major outages could also be caused by prolonged power failures within cities. A number of countries had already volunteered to share relevant information, which would be rendered fully anonymous in all respects prior to analysis, and he invited any other administrations which might be interested in participating to request the corresponding details from the Director of the TSB.

2.4 Finally, thanking the very many individuals who had contributed to the successful work of Study Group XI, he informed the Committee that he was now stepping down as the Group's Chairman. His deep gratitude went to all those who had placed their trust in him during the many years he had had the privilege to exercise that function.

(Applause.)

2.5 In response to concern expressed by the *delegate of Poland* that the ITU Council's attempts to make savings could, if taken too far, lead to a worsening of the already regrettable Resolution No. 2 bottleneck described by the Chairman of Study Group XI, at a time when vital work such as coordinating the various versions of Signalling System No. 7 needed to be done, the *Chairman* assured him that such concerns had in the past already given rise to lengthy debates, for example at a Chairmen's meeting on how to ensure the speedy adoption of Recommendations as they emerged from the study groups. It had also to be borne in mind that the Bureau and Common Services had recently had a huge volume of work to deal with, including preparation not only of the WTSC, but also of the APP. However, the Committee would take note of the comments by the delegate of Poland and reflect them in its report.

2.6 The *Chairman of Study Group XI* stressed that he had in no way wished to imply that the Bureau was doing a poor job – far from it. It was simply that the new procedures it was having to deal with had presented it with new problems, which, as it had always done in the past, it was certain to overcome.

2.7 The *delegate of Lebanon* expressed the hope that the Chairman of Study Group XI would, following his retirement, nevertheless continue to make available his valuable experience and advice, particularly where preparation of the various switching manuals was concerned. He also voiced his own concern that the Bureau should be strengthened in the interests of the work of all the study groups.

2.8 The Committee *approved* the draft Recommendations listed in the relevant part of Document DT/16, the deletion of the Recommendations shown in the relevant part of Document DT/17, and the report of Study Group XI as a whole.

2.9 The *Chairman* joined other speakers in thanking the outgoing Chairman of Study Group XI for all the work he had done during his long years of service in that office.

3. Report of Study Group XII and related documents (Documents AP X-7; DT/16, 17)

3.1 The *Chairman of Study Group XII*, illustrating his introduction of Document AP X-7 by means of transparencies, stated that the Study Group's work during the 1989-1992 study period had concerned mainly the transmission performance of telephone networks and terminals in relation to the user and to speech quality. Thirty-two Questions had been studied, including two new Questions (31/XII and 32/XII) relating to speech quality in multimedia terminals and the possibility of measuring the quality of transmission using signal processing techniques. He outlined the work of the four working parties, assisted by Special Rapporteurs from a number of countries, which had been set up to examine aspects of telephonometry and electroacoustics, telephone terminals, transmission performance and modelling, and transmission planning. Working Parties XII/1 and XII/4 had also been responsible for updating the Handbooks on Telephonometry and Transmission Planning, respectively. Two Questions (1/XII and 3/XII) had been examined not by the working parties, but by Special Rapporteurs reporting directly to the Study Group. A Speech Quality Expert's Group (SQEG), a small but flexible and dynamic group working in close collaboration with Study Group XV, had made subjective tests on coding algorithms at 16 kbit/s, an objective evaluation of codecs at 16 kbit/s, and tests to select a future codec at 8 kbit/s. It had also participated in the revision of existing Recommendations and in the preparation of new Recommendations P.80, P.83 and P.84.

3.2 The results achieved during the 1989-1992 period were summarized in the synoptic tables in Document AP X-7. They included 20 revised Recommendations in the P-Series, seven revised Recommendations in the G-Series, the drafting of six supplements and the deletion of five others, as well as four new Recommendations in the P-Series and two new Recommendations in the G-Series. A list of 25 Questions proposed for the 1993-1996 study period was set out in section 4 of Document AP X-7.

3.3 The *Chairman of Working Party XII/4*, speaking at the request of the Chairman in reply to a question by the *delegate of Lebanon*, provided further information on the Transmission Planning Handbook which had required updating to reflect changes in the last four to five years, such as references to loudness rating, digital systems and talker echo. The Handbook was an updated version of Chapter V of the GAS 3 General Network Planning Handbook and, at the same time, replaced the old SG XVI Transmission Planning Handbook. The *delegate of Lebanon* said that such updated versions were of particular interest to developing countries.

3.4 The *Chairman of Study Group XII*, replying to a request for clarification by the *delegate of Greece*, confirmed that the new draft Recommendations and amendments to existing Recommendations were to be found in Reports COM XII-R 28 and R 29. The revised and new Supplements to the P- and G-Series were published in Reports COM XII-R 30 and R 31, respectively.

3.5 The *Chairman*, noting that there were no Recommendations proposed for deletion concerning Study Group XII in Document DT/17, invited the Committee to approve the report and in particular the proposed new and revised Recommendations set out in Document DT/16.

3.6 The new and revised Recommendations on pages 9 and 10 of Document DT/16, together with the report as a whole, were *approved.*

Mr. M. Asfaw (Ethiopia) (Vice-Chairman) took the Chair.

4. Report of Study Group XVIII and related documents (Documents AP X-37; DT/17, 17)

4.1 The *Chairman of Study Group XVIII*, illustrating his report on the activities of Study Group XVIII during the 1989-1992 study period by means of transparencies, referred the Committee to Document AP X-37 for more detailed information on its structure, meetings and publications. Eight working parties had been set up to deal with the wide range of complex issues assigned to the Study Group. Thirty-three Special Rapporteurs had been entrusted with Questions relating to their fields of specialization throughout the study period; they had been assisted by editors for the drafting of Recommendations. Expert groups had also been set up to interact with other CCITT working parties, and liaison officers had been appointed to other CCITT and CCIR study groups as well as to ISO and IEC committees studying topics of common interest. Furthermore, in view of the complexity and volume of work to be handled by the working parties, up to 15 subgroups were meeting simultaneously during any meeting period of SG XVIII and its Working Parties. The main emphasis of activities had been on B-ISDN issues and by the end of the study period several working parties had been involved in the study of such issues, in many instances coming up with unique solutions which would greatly facilitate the future interoperability of networks worldwide.

4.2 Meetings had been held at headquarters in Geneva as well as elsewhere in the world in order to ease the burden of travel costs for regular participants from the Americas and Asia, and to encourage the participation of members from other regions. The bulk of the Study Group's work had been carried out at working party and Special Rapporteur level, thereby reducing the total number of full Study Group meetings to only 12 days. The meetings had been characterized by a high level of participation, and by the huge volume of delayed contributions processed, and temporary documents and reports produced. Both the CCITT Secretariat and the host administrations had, however, coped extremely well with the burden thus imposed on them. The main challenges faced during the study period had been the need for timely results, unique solutions and enhanced cooperation. Despite the Study Group's particular difficulties, diversified interests and the highly complex nature of the topics assigned for study, it had achieved remarkably good results, producing a large number of new and revised Recommendations which are listed in Document AP X-37. Its successes were due in large measure to its clearly identified broad objectives, the spirit of international cooperation which had prevailed in its work and the good liaison which had been maintained with other CCITT study groups.

4.3 The Study Group was currently in the process of developing 12 new Recommendations, and there were also plans to improve or add to a number of existing ones. The 28 new Questions proposed for study in the coming period anticipated possible changes to the Study Group's mandate. A plan for the timely development of stable standards was under preparation and would require the close cooperation of the other study groups concerned. Study Group XVIII would have an ongoing important role to play both within and outside the immediate ITU community by attending to general network aspects and providing advice on the impact of new technologies with far-reaching consequences.

4.4 He concluded by paying tribute to all those who had contributed to the work of the Study Group, and also expressed gratitude to the CCITT Secretariat for assistance provided. In view of his imminent retirement as Chairman of Study Group XVIII, he thanked all those with whom he had been associated over the years in the CCITT, wishing them every success in their future work.

(Applause.)

4.5 The *delegate of Poland* commended the Chairman of Study Group XVIII on the excellent results achieved during the 1989-1992 study period, above all in the area of SDH. Special mention should be made of the unified solution found, which provided a good example of international cooperation and willingness to compromise. In view of the high demand for traffic at current bit rate levels, he asked the Chairman of Study Group XVIII about the prospects for standardizing higher bit rates, namely above 622 Mbit/s.

4.6 The *Chairman of Study Group XVIII* said that the matter was currently under study. On condition that the Study Group's current objectives were maintained with regard to a unique worldwide solution for SDH, and subject to the approval of the Questions submitted to the present Conference, he was confident that the standardization of higher bit rates was feasible.

4.7 The *delegate of France* observed that the problem of standardization for bit rates higher than those currently used for SDH also came within the purview of Study Group XV.

4.8 The *delegate of Lebanon* said that Study Group XVIII was possibly the most important group working in the ITU, at least as far as standardization matters were concerned. In particular, its ISDN Field Trial Guidelines Handbook would complement the GAS 9 Handbook on the gradual introduction of ISDN in national networks. He looked forward to benefiting from the advice and expertise of the Chairman of Study Group XVIII in future when updating existing ITU handbooks for the BDT. However, he was slightly puzzled by the fact that no mention had been made of Study Group XVIII's cooperation with Study Group XV, which dealt with some major transmission problems.

4.9 The *Chairman of Study Group XVIII* said that Study Group XVIII would certainly continue to cooperate with the BDT in providing information which met the specific requirements of developing countries. Although he had not specifically mentioned cooperation with Study Group XV, his report had stressed the importance of interaction with almost all of the CCITT study groups and the designation of a number of experts and liaison officers for that purpose. However, what was absolutely essential was coordination among experts at the national level so that their positions were aligned prior to CCITT study group meetings.

4.10 The *delegate of the Russian Federation* said that his Administration, which was very interested in intelligent network systems and the possibility of setting them up on any public telecommunication network, greatly appreciated the work of Study Group XVIII. The good progress made in that area was attributable to the members and, above all, to the Chairman of Study Group XVIII to whom he wished every success in future.

4.11 The new and revised Recommendations proposed for approval on pages 13 and 14 of Document DT/16 were *approved*. The list of Recommendations proposed for deletion on page 6 of Document DT/17 was also *approved*, together with the report in Document AP X-37.

4.12 The *Chairman* thanked the members and Chairman of Study Group XVIII for their excellent work during the previous study period.

The meeting rose at 1210 hours.

THIRD AND LAST MEETING OF COMMITTEE 5

(Summary record approved by the Chairman)

Friday, 5 March 1993, at 1435 hours

Subjects discussed:

1. Approval of draft Recommendation L.16
2. Report of Study Group IV (*continued*)
3. Report of Study Group XV
4. Report of the CMTT
5. List of Recommendations proposed for approval and deletion
6. Draft report of Committee 5
7. Summary record of the first meeting of Committee 5
8. Conclusion of the work of Committee 5

1. Approval of draft Recommendation L.16 (Document 38)

1.1 The *Chairman of Study Group VI* said that, after consultation with the Chairman of Study Group V concerning the formula used in § 7 of draft Recommendation L.16, it was found preferable to refer to the Manual entitled: "The protection of telecommunication lines and equipment against lightning discharges". Since unanimous agreement was reached on that solution, it merely remained to align Recommendation K.29, which had already been *approved* by means of the accelerated procedure under Resolution No. 2, with the new provision of Recommendation L.16. Once the alignment had been made, the matter could be regarded as settled.

1.2 The *Chairman of Study Group V* expressed his support for the proposed amendment to Recommendation L.16, but considered that further study would be required in Study Group V in order to determine whether the amendment would have implications for Recommendation K.29.

1.3 The corrigendum to draft new Recommendation L.16 contained in Document 38 was *approved.*

1.4 The *Chairman* said that, following the adoption of the new § 7, draft Recommendation L.16 was *approved* as a whole.

2. Report of Study Group IV (*continued*) (Addendum 1 to Document DT/17)

2.1 The list of Study Group IV Recommendations proposed for deletion in Addendum 1 to Document DT/17 was *approved.*

3. Report of Study Group XV (Documents AP X-29, DT/16, DT/17)

3.1 One of the *Vice-Chairmen of Study Group XV* explained, with the aid of transparencies, that this Study Group had approved 22 Recommendations under the accelerated procedure during the study period and that it was submitting 14 new Recommendations and 20 modified Recommendations to the Conference. He referred to the various Recommendations prepared or revised in the various fields by the eight working parties of Study Group XV and expressed his thanks to all those who had taken part in the Study Group's activities.

3.2 The *delegate of France* expressed his particular thanks to the ATT representative, who had aligned the French and Spanish texts.

3.3 The Study Group XV Recommendations proposed for approval in Document DT/16 (pages 10 and 11) were *approved.*

3.4 The list of Study Group XV Recommendations proposed for deletion in Document DT/17 (pages 3 to 5) was *approved.*

3.5 The report of Study Group XV contained in Document AP X-29, was *approved* as a whole.

4. Report of the CMTT (Documents 19 + Addendum 1)

4.1 The *Chairman of the CMTT*, after describing the structure of his Study Group, stated that it had always worked in close conjunction with the CCIR and that it was important to continue with that arrangement, since the collaboration of broadcasters in CMTT activities was essential. He requested the Conference to endorse the transfer of the CMTT to the Telecommunication Standardization Sector, on the understanding that it would continue to operate as a joint radiocommunication and telecommunication standardization study group. He likewise requested that the meetings of the CMTT, its working parties and task groups should take place concurrently with those of Study Groups 10 and 11 in the Radiocommunication Sector.

4.2 The *Chairman* pointed out that the arrangements for the transfer of the CMTT to the Telecommunication Standardization Sector came outside the terms of reference of Committee 5.

4.3 In the light of those explanations, the report of the CMTT contained in Document 19 and its Addendum 1 were *approved.*

5. List of Recommendations proposed for approval and deletion (Documents DT/16, DT/17 + Addendum 1)

5.1 The complete list of Recommendations proposed by Committee 5 for approval (Document DT/16) was *approved.*

5.2 The complete list of Recommendations proposed by Committee 5 for deletion (Document DT/17 and Addendum 1) was *approved.*

6. Draft report of Committee 5 (Document 40)

6.1 The *Chairman* proposed that participants should consider the document section by section.

6.2 Sections 1, 2 and 3 were *approved.*

6.3 With regard to section 4, the *Chairman* confirmed that the Secretary and the Chairman of Study Group V would produce a text indicating that the Study Group would take the necessary steps to amend Recommendation K.29 as required in the light of new Recommendation L.16.

6.4 Following that explanation, section 4 was *approved.*

6.5 Sections 5, 6 and 7 were *approved.*

6.6 With regard to section 7, the *Chairman of Study Group XII* requested that the words: "an extra meeting in Brasilia" in the fourth paragraph should be replaced by "another meeting in Brasilia".

6.7 Subject to that amendment, section 7 was *approved.*

6.8 Sections 8, 9, 10, 11 and 12 were *approved.*

6.9 In reply to a question from the *delegate of Portugal*, the *Chairman* said that the text to be drawn up by the Secretary together with the Chairman of Study Group V would constitute an addendum to Document 40 with two annexes reproducing the content of Documents DT/16 and DT/17 + Addendum 1 respectively.

6.10 Following those explanations, Document 40 was *approved* as a whole.

7. Summary record of the first meeting of Committee 5 (Document 44)

7.1 The *Chairman* observed that the official findings of Committee 5 would be set out in Document 40 and its Addendum, to be submitted to the Plenary. He therefore considered formal approval of the summary record of the first meeting to be unnecessary.

7.2 The Committee *took note* of Document 44.

8. Conclusion of the work of Committee 5

8.1 The *Chairman* extended his thanks to the Vice-Chairman of Committee 5, the study group Chairmen and Vice-Chairmen, their collaborators and the members of the Bureau for their hard work and expressed satisfaction at the speed with which the Committee had been able to complete its tasks.

The meeting rose at 1545 hours.

3.5 – COMMITTEE 6 – TELECOMMUNICATION SERVICES

Chairman: Mr. J. S. RYAN (United States)

FIRST MEETING OF COMMITTEE 6

(Summary record approved by the Chairman)

Tuesday, 2 March 1993, at 1405 hours

Subjects discussed:

1. Organization of the work of the Committee
2. Report of Study Group I and related documents
3. Report of Study Group II and related documents
4. Report on the activities of GAS 7, 9 and 12
5. Report of Study Group III and related documents

1. Organization of the work of the Committee

1.1 The *Chairman* reminded the participants that Committee 6 had only two scheduled meetings in which to complete a heavy workload. He therefore suggested that, after a short report by the Chairmen of the various study groups followed by the presentation of any related documents, the Committee should confine itself to discussing those items on which there was no agreement.

1.2 It was so *agreed.*

2. Report of Study Group I and related documents (Documents AP X-15 and Addendum, 48; 13, 22; DT/6)

2.1 The *Chairman of Study Group I* introduced the Study Group's report in Document AP X-15 and its Addendum, drawing particular attention to the two points on which a decision was required of the Conference: namely, the date of entry into effect of the revised "Instructions for operators on the operator-assisted international telephone service" and the revised text of CCITT Resolution No. 11. He also drew attention to the emphasis placed by Study Group I on integrating human factors, such as the special needs of the disabled, into the drafting of Recommendations. A Recommendation on access to public telephones and other telecommunication terminals by people with special needs was at present being prepared. In addition, particular attention was being given to integrating the standardization activities of the CCIR relating to telecommunication services into the Telecommunication Standardization Sector.

2.2 The *Chairman* invited the Committee to consider the proposal that the revised "Instructions for operators on the operator-assisted international telephone service" contained in Recommendation E.141 should enter into effect on 1 January 1994.

2.3 The *delegate of Senegal* asked whether, in the light of the postponement of the Xth Plenary Assembly, there were any major drawbacks, in particular for the developing countries, in maintaining the proposed deadline, or whether it should be set back by six months.

2.4 The *delegate of Lebanon* said he understood that the Study Group had suggested 1 July 1994 as the latest date by which the revised Instructions should enter into effect, but that they could be adopted earlier if any country so wished.

2.5 The *Chairman of Study Group I* said that the revisions made to the Instructions were minor in nature and he knew of no drawback to adopting the proposed date of 1 January 1994. The important point was to set a precise date so that all countries acted together.

2.6 The *Chairman* said he took it that the Committee recommended that the Conference endorse the proposed date of 1 January 1994.

2.7 It was so *agreed.*

2.8 The *Chairman* invited the Committee to consider the proposed revision of CCITT Resolution No. 11 contained in Document DT/6. In response to a comment by the *delegate of Sweden,* he confirmed that the text would be edited to bring it into line with the new structure of the ITU.

2.9 The *representative of the Universal Postal Union* said that UPU greatly appreciated the joint activities it had carried out with Study Group I and others and hoped they would continue. Since the work had progressed so well, it no longer seemed necessary to convene regular meetings of the Contact Committee, but only as and when necessary. Therefore, he fully agreed with the revised text of Resolution No. 11.

2.10 In response to a comment by the *delegate of Lebanon* concerning the square brackets in § 2.3 of the Resolution, the *Chairman of Study Group I* said he would look into the matter and report back.

2.11 The *Chairman* said he understood that the Committee recommended that the Conference approve Resolution No. 11 (Revised).

2.12 It was so *agreed.*

2.13 The *delegate of Canada,* introducing his Administration's amendments to Study Group I's draft revision of Recommendation E.161 (Document AP X-48), explained that Canada was not in favour of the provision of two options for the assignment of the letters Q and Z in the mapping of the 26 Latin alphabetic characters to the numeric telephone keys. The rationale for that position was that a single solution would allow for easy access to services across national boundaries. A human factor was also involved in that studies conducted in the United States and Canada had revealed a clear preference for the solution that mapped Q and Z on the 7 and 9 keys respectively, following their natural alphabetic order. Furthermore, ISO/IEC JTC 1 favoured the solution proposed by Canada, which would allow for economies of scale in the manufacture of telephones and other devices. Of course, there were implications for the banking community, but the obsolescence of equipment was now such that there were no grounds for preserving an inconsistent standard process simply because of the existence of equipment that would be replaced in due course. He was nevertheless ready to discuss solutions to any particular problems that might arise.

2.14 The *delegate of Australia,* introducing his Administration's proposal (Document 13), recalled that the allocation of letters to digits on keypads had given rise to contention within Study Group I. In his view, the question was not so much one of human factors as of the existence of an American standard to which many countries were shackled by history. While he agreed that a single standard would be preferable, a large number of countries had adopted the American standard not only for telephones, but also for such devices as automatic teller machines in the banking industry. In that connection, he was not at all convinced that any economy of scale would ensue for the manufacturing industry, since only the actual keypads were involved. It was an application issue as much as a network issue, and account should be taken of customer convenience. In Study Group I careful consideration had been given to a solution based on a single standard in individual countries which made interworking between two very similar standards a practical possibility. In addition, the ability to map letters to nine rather than eight digits was vital in such areas as codenames, where security was involved. Finally, the preferences revealed by the American and Canadian studies reflected conditions peculiar to North America and did not apply in the rest of the world. For all those reasons he would prefer to continue with the compromise solution worked out in Study Group I: it might be imperfect, but it was still the best available.

2.15 The *delegate of Sweden* said he could not agree with the previous speaker: the push-button system proposed for the telephone was based on a structure starting at the top left-hand corner, which was the opposite to numerical keyboards on computers, thereby causing difficulties for those who had to handle both systems. He hoped that another mistake of that kind could be avoided. In his view, it was essential to proceed logically, by placing the letters in

alphabetical order as in the Canadian proposal. Furthermore, people who travelled round the world needed to find Q and Z in the same place everywhere. One solution would be to eliminate letters altogether and use only numbers. Otherwise, he strongly supported the Canadian proposal.

2.16 The *delegate of New Zealand*, introducing his Administration's proposal (Document 22), said he shared the concerns expressed by the delegate of Australia. New Zealand supported the allocation of Q and Z to the digit 1 because it was a standard already adopted in many countries, it was consistent with ANSI X3.118-1984 and mapping on nine digits rather than eight was clearer.

2.17 The *Chairman* pointed out that banking equipment was usually built to ISO standards and wondered whether ANSI now intended to change to the new ISO standard.

2.18 The *delegate of Canada* said that ISO/IEC JTC 1 had two Subcommittees – SC 17 and SC 18 – dealing with banking and computer terminal applications respectively. It was SC 18 which had adopted Q and Z on 7 and 9. Subcommittee 17 had stated that, for security reasons, it did not intend to use alphabetic letters for passwords. Moreover, it was common in the banking industry to change machines at three- or six-monthly intervals. If a single solution were to be adopted, ISO would follow it.

2.19 The *delegate of Brazil* recalled that ISO/IEC 9995 had not yet been adopted and some delegations might prefer, as a compromise solution, to wait until it became an ISO standard.

2.20 The *delegate of the United States* pointed out that a footnote to Recommendation E.161 advised Administrations that they might wish to refer to the decision of ISO before allocating Q and Z. So it appeared that there was a trend towards a single solution.

2.21 The *Chairman of Study Group I* said he understood that ISO was looking to the ITU for guidance before it took a final decision. At the same time, he realized how difficult it was for national Administrations to change to a completely new standard. As a compromise, he suggested that, first, the new Telecommunication Standardization Sector, as the preeminent body in the field, should provide leadership to ISO in a telecommunications-related application; second, it should be agreed that a single standard was preferable to two; and third, the particular situation of countries like Australia and New Zealand should be respected, possibly by setting a date for implementation of the single standard that would allow them sufficient time to study its impact.

2.22 The *delegate of Finland*, while supporting a single standard, asked whether consideration had been given to the possibility of allocating O and Q to zero, which they closely resembled. The practice was widespread in Europe for commercial purposes.

2.23 The *Chairman of Study Group I* said the suggestion seemed a good one but it had come a little too late to be taken up.

2.24 The *Chairman* recalled that the whole issue had been discussed in the 1960s, but the allocation of O was no longer a problem at the present stage. From the debate he concluded that all were agreed that a single standard was to be preferred. It also appeared that a preference was emerging for a particular arrangement. He therefore suggested that the Committee might recommend a single arrangement, with a clause recognizing the existence of a different arrangement and allowing the equipment associated with that arrangement a reasonable lifetime before the single standard was introduced.

2.25 The *delegate of Senegal*, speaking as a consumer rather than a producer of technology, supported the wise suggestion made by the Chairman. In his view, the best solution would be to recommend the introduction of a single standard as soon as possible, without setting a date.

2.26 The *delegate of Australia* considered the Chairman's proposal a wise compromise. While there was merit in setting a date for the introduction of a single standard, he would like a little time to consider his country's position and to consult with other delegations.

2.27 The *delegate of Lebanon* supported the Chairman's suggestion.

2.28 The *Chairman* suggested that a final decision on the matter be deferred to allow time for consultation.

2.29 It was so *agreed*.

3. Report of Study Group II and related documents (Documents AP X-5 and Corrigendum 1, 42; 15 and Corrigendum 1, 16, 17)

3.1 The *Chairman of Study Group II* presented the report of the Study Group (Document AP X-5 and Corrigendum 1) with the help of a series of transparencies. The work had been divided among four working parties, which had received invaluable assistance from the CCITT Secretariat, and had mainly been carried out by Rapporteur Groups. More meeting days had been spent away from Geneva than in Geneva and 74 per cent of all Recommendations had been accepted by the Resolution No. 2 procedure, leaving only 16 to be approved by the Conference. After highlighting the main topics that had been dealt with, he referred to the vitally important work that had been performed by the two Development Groups at no expense to the CCITT. Other results had included the new Handbook on Quality of service, spare-time tutorials and popularization meetings. After outlining the problems that had still to be solved, he pointed out that the Study Group had tried to work in a spirit of transparency, flexibility and responsiveness. A "road map" was available to guide the reader through the complexities of the Group's work. Finally, a matrix would be found on page 3 of Document AP X-6 summarizing the future work programme.

3.2 The *delegate of Australia*, introducing his Administration's proposal in Document AP X-42, said that universal personal telecommunication (UPT) would revolutionize telecommunications and have implications for the work of Study Groups I, II, III, VIII and XI. Numbering was fundamental to UPT but, in his view, the numbering plan proposed in draft Recommendation E.168 was not a viable basis for implementing the new service. Australia's proposal brought out its concern regarding the need for the swift but harmonious execution of activities relating to UPT, preferably by means of a Joint Coordination Group (JCG) set up for that purpose. While recognizing draft Recommendation E.168 as a useful framework for ongoing activities, further study of certain aspects of the Recommendation would be required, in particular those listed in Annex A. In his view, the draft Recommendation was not yet ready to be proposed for approval by correspondence.

3.3 A further cause of concern had been the study programme related to the draft Recommendation. However, the Australian delegation had been provided with some clarification on the more difficult issues during recent informal discussions with the Chairman of Study Group II. As a consequence, it would be willing to withdraw its objection to the draft Recommendation subject to approval of the following two-part proposal. First, Question 5/II should be expanded to allow for further improvements to draft Recommendation E.168 and, more importantly, the need for complementary Recommendations should be stressed. Second, an additional paragraph should be inserted in section 1 of draft Recommendation E.168 to acknowledge that UPT was evolving and that there were items, including those listed in Annex A, which required further study. The intention of the Recommendation would therefore be to provide the basis for a common understanding of the underlying issues and hence to facilitate early implementation of UPT within a common framework.

3.4 The *Chairman* took it that the Committee could agree in principle to the Australian delegation's proposal to insert an additional paragraph in draft Recommendation E.168, together with any further minor amendments that might be necessary. It was understood that Committee 4 should examine the question of UPT so as to ascertain which aspects required further study. Consideration of draft Recommendation E.168 should therefore be deferred pending circulation of a finalized text incorporating the Australian delegation's proposal.

3.5 It was so *agreed.*

3.6 The *Chairman of Study Group II*, introducing Document 15 and its Corrigendum 1, said that the allocation of country codes was the responsibility of the Telecommunication Standardization Bureau. The newly allocated codes listed in the document and its corrigendum should be added to the list of existing country codes in Annex A to Recommendation E.164.

3.7 The *delegate of the United Kingdom*, drawing the Committee's attention to Documents 16 and 17 in connection with Recommendations F.69 and X.121 respectively, sought clarification regarding the procedure for the allocation of new codes. In his view, to allocate such codes was tantamount to amending existing Recommendations without referring the amendments in question to the relevant study groups. He therefore suggested that the Committee should merely take note of the proposed amendments, which should then be submitted to the study groups concerned for approval under the Resolution No. 2 procedure.

3.8 The *Chairman of Study Group II* replied that it had been customary practice for the CCITT Secretariat to allocate free country codes, after consulting the Administrations concerned, without necessarily seeking approval by the relevant study group. However, the latter were always advised when new codes were allocated.

3.9 The *Director of the TSB* explained that the allocation of country codes had formerly been the responsibility of the Director of the CCITT and would henceforth devolve to the Director of the TSB, who would of course have to comply strictly with the provisions of Recommendation E.164 in performing the task. After explaining the procedures followed in the past in that connection, he stressed that the allocation of codes did not entail the amendment of Recommendations, although naturally the Director of the TSB enjoyed a certain degree of latitude within the framework of the relevant Recommendations in the exercise of his duties. Following a further query from the *delegate of the United Kingdom*, he confirmed that the procedure for the allocation of country codes was the same as that for telex destination codes.

3.10 The *delegate of the United States* enquired whether the procedure for code allocation differed when specific advice was in fact provided by study groups to the Bureau, as in the case of Recommendation F.69.

3.11 The *delegate of the Slovak Republic*, referring to Document 15, requested that Annex A to Recommendation E.164 be amended to take into account the separation of the Czech and Slovak Republics as of 1 January 1993. She pointed out that for the time being both countries would retain the same country code. Documents 16 and 17, referring to Recommendations F.69 and X.121 respectively, should be amended along the same lines.

3.12 The *delegate of Brazil*, referring to the United Kingdom delegate's remarks, said that another important issue which must be addressed was the procedure for updating data contained in Recommendations, such as tables, in such a way as to obviate the need to submit the entire Recommendation to the appropriate study group for examination and approval. Committee 3 might perhaps be requested to take up that matter.

3.13 The *Chairman of Study Group IX* said that his Study Group was responsible for Recommendation F.69. However, it had not had the opportunity to hold formal discussions on the codes to be added to Annex A of that Recommendation, because its final meeting had taken place in April 1992.

3.14 The *Director of the TSB* assured the Committee that the Bureau always consulted the relevant study groups when allocating codes. He had taken note of the request by the delegate of the Slovak Republic, which would be attended to following that country's imminent accession to the ITU Convention. As to the question raised by the delegate of Brazil, he said that the matter required further consideration and should perhaps be the subject of informal consultations, although it might also be taken up in another Committee. Referring to the comments by the Chairman of Study Group IX, he confirmed that the problem relating to Recommendation F.69 had arisen after that Study Group's final meeting had taken place. However, the situation had not been as critical as that obtaining with regard to telephone codes, which were currently in very short supply.

3.15 With those comments, Document 15 and its Corrigendum 1 were *approved.*

4. Report on the activities of GAS 7, 9 and 12 (Document DT/4)

4.1 The *Coordinator of GAS activities* introduced Document DT/4 summarizing the activities carried out during the previous study period by the GAS Groups, whose purpose was to draft handbooks covering a wide range of technical, operational, management and financial issues, and whose members were experts with a thorough knowledge of the study groups and relevant Resolutions and Recommendations of both former ITU Consultative Committees. Although the handbooks were principally intended for developing countries, they could also be found useful by industrialized nations. The three Groups in question had fulfilled their mandate for the previous study period, and relevant details of their new and forthcoming handbooks would be found in Document DT/4. After briefly reviewing the activities and publications of former GAS Groups 1, 2, 3, 4, 5, 6, 8 and 11, he drew attention to the two new handbooks compiled by GAS 9, emphasizing that the scope of the studies undertaken in connection with their preparation was in keeping with No. 211 of the new ITU Convention (Geneva, 1992). He then outlined the contents of the new handbooks prepared by GAS 7 and GAS 12 respectively, pointing out that the latter would serve as an invaluable guide on non-voice services for the developing countries. Finally, it was important to note that since 1988 the cost of producing GAS handbooks had been more than halved through the efforts of the Director and Secretariat of the CCITT.

4.2 In conclusion, he thanked the officers of the three GAS Groups as well as all those who had contributed to the Groups' work. Referring to the two Resolutions of the Additional Plenipotentiary Conference relating to GAS activities, he said he was confident that the newly elected Director of the BDT would ensure that the important work started by those Groups for the benefit of the developing countries would be continued within the framework of the Development Sector. Replying to a query from the *delegate of Greece*, he confirmed that whereas GAS 12 had completed its work, GAS 7 and 9 would pursue their activities in the Development Sector where, it was hoped, more funds would be available to enable representatives of developing countries to participate in international meetings and conferences.

4.3 The *Director of the BDT* commended the Telecommunication Standardization Bureau on the excellent transitional arrangements it had made for the takeover of GAS activities by the BDT. Referring to H.L.C. Recommendation 5, he stressed the importance of cooperation between the Directors of the three Bureaux as well as with the Coordinator of GAS activities in order to ensure the successful transfer of those activities to the Development Sector, as endorsed by the Additional Plenipotentiary Conference in Resolution 7. Following consultations held with the Directors of the two other Bureaux and the Coordinator of GAS activities, a number of initial measures had been adopted. Firstly, it had been agreed that the results already achieved by the GAS Groups should be consolidated through wider circulation of their handbooks and closer cooperation at Telecommunication Development Sector seminars, meetings and conferences. Planned publications included one by GAS 7 on power supply and broadcasting technology for rural areas, and another by GAS 9 on the building of operating systems. Preparations were already under way for the World Development Conference to be held in March 1994, for which a task force would draft a consolidated programme covering a wide variety of topics, in accordance with APP-92 Resolution 7.

4.4 The number of development study groups would be limited to three or four but each of them would deal with several different topics during the 1994-1998 study period, under the supervision of the Coordinator of GAS activities. The participation of entities other than Administrations would be promoted in line with the relevant provisions of the ITU Convention. In the meantime, the BDT intended to encourage the participation of such entities through a more flexible and provisional arrangement based on Article 26 of the Convention, relating to classes of contribution. A similar arrangement had already functioned successfully for participants in CCIR and CCITT study group meetings. The first organization to apply for membership of the new Telecommunication Development Sector affiliate system at the present Conference had been INTELSAT. He invited other organizations to follow suit in order to benefit from the Sector facilities and services, including the possibility of attending development conferences at no additional cost. In conclusion, he expressed his gratitude to the Telecommunication Standardization Bureau and to the Chairmen and members of the GAS Groups for their contribution to development, and said that he looked forward to the transfer of GAS activities to the Telecommunication Development Sector.

4.5 The *delegate of Senegal* recalled that APP-92 Resolution 10 required the present Conference to promote the participation of developing countries in the Standardization Sector. In the light of the emphasis placed by the Additional Plenipotentiary Conference on the need for standardization activities to be adapted to the requirements of developing countries, the present Conference should adopt a resolution requesting the BDT to take the necessary steps to encourage participation by those countries in the work of the Standardization Sector.

4.6 The *delegate of Saudi Arabia* commended the Coordinator of GAS activities on his work during the previous study period and fully endorsed the comments by the Director of the BDT regarding the need for coordination with other ITU sectors. He also expressed the hope that greater emphasis would be placed in future on GAS activities in view of their importance to the developing countries.

5. Report of Study Group III and related documents (Document AP X-9)

5.1 The *Chairman of Study Group III*, introducing the report in Document AP X-9, observed that the work of Study Group III differed considerably from that of other study groups since the questions it dealt with raised economic, financial, regulatory and sometimes political issues. It had to consider not only the improvement of traditional services but also the development of new services with due regard for the technical, commercial and regulatory aspects of the tariff and accounting methods applicable to them. During the previous study period, the Study Group's seven working parties and six Special Rapporteurs had developed 50 new Recommendations, revised almost 30 existing Recommendations as well as Supplement No. 3 to Fascicle II.1 of the *Blue Book*, and deleted three other Recommendations. All the draft new Recommendations as well as most of the revised ones had been approved by correspondence.

5.2 After providing a detailed account of the results of individual groups and Rapporteurs, as set out in the report, he underlined the invaluable contribution of users to the development of Recommendation D.7 on the concept and implementation of one-stop shopping. He also drew particular attention to draft Recommendation D.140, which was the product of the spirit of compromise prevailing in Working Party III/4 and would form the basis for the gradual development of international accounting mechanisms taking into account changing costs and the introduction of new technologies. During the forthcoming study period two annexes to that Recommendation would be produced, which would prove useful in bilateral negotiations on telephone accounting rates. Moreover, the Recommendation provided developing countries with a reasonable time-frame for the implementation of such policies. Working Party III/7 had had the difficult task of studying Question 29/III on methods for determining costs and establishing national tariffs. Unfortunately, it had not received the necessary support from experts but had nonetheless made some improvements and additions to Supplement No. 3 of the D-Series Recommendations. It had also endeavoured to develop a sound methodology for future use in determining costs and establishing national tariffs for leased circuits and public data services. However, in view of the circumstances, it was considered advisable to transfer the study of Question 29/III to the Telecommunication Development Sector with a view to achieving more effective results.

5.3 The results of the four Regional Tariff Groups attached to Study Group III were also set out in the report and were worthy of note. Their work would clearly need to be reviewed during the forthcoming study period in the light of the regulatory changes introduced which required Administrations and operators to review the conditions in which their cost studies were carried out, while allowing operators greater flexibility in negotiating accounting rates. On the other hand, the problems facing developing countries were quite different, arising mainly from a shortage of resources. In his view, those matters needed to be addressed by Committee 4. He concluded by thanking all those who had contributed to the activities of Study Group III during the 1989-1992 study period.

5.4 The *Chairman* said that the documents relating to the report of Study Group III would be considered at the Committee's next meeting.

The meeting rose at 1725 hours.

SECOND MEETING OF COMMITTEE 6

(Summary record approved by the Chairman)

Friday, 5 March 1993, at 1430 hours

Subjects discussed:

1. Report of Study Group III and related documents (*continued*)
2. Report of Study Group I and related documents (*continued*)
3. Report of Study Group II and related documents (*continued*)
4. Report of Study Group VII and related documents
5. Report of Study Group IX and related documents
6. Report of Study Group VIII and related documents

1. Report of Study Group III and related documents (*continued*) (Document AP X-9)

1.1 The *Chairman* recalled that the Chairman of Study Group III had already presented its report and invited comments thereon.

1.2 The *delegate of Greece* welcomed new Recommendation D.140 as a first step in the right direction.

1.3 The *delegates of Senegal* and *Lebanon* raised the question of changing the 50/50 system of apportionment with a view to helping the developing countries to improve their telecommunication networks. In particular, the latter asked whether Study Group III had taken into account Resolution No. 3 of the World Administrative Telegraph and Telephone Conference (Melbourne, 1988) and suggested that the BDT should be entrusted with the task of implementing it.

1.4 The *Chairman of Study Group III* recalled that Recommendation D.140, which had been adopted by the accelerated procedure, contained certain accounting rate principles that would have to be negotiated on a bilateral basis before they could be applied. During the new study period, Study Group III would be preparing annexes to that Recommendation, of which Annex 3 was bound to bring up the principle of a 50/50 distribution. So basic a principle could not be changed without some proper justification, such as costs at either end, quality of service, increase in traffic and a reform of structures in the developing countries to promote the financing of investment. The matter would be taken up by the end of the year and throughout 1994.

1.5 It should also be noted that revised Recommendation D.150 provided for some flexibility in the apportionment of rates. However, the introduction of a general model on a basis other than 50/50 seemed to him to involve political and structural problems that went beyond the technical mandate of Study Group III. He also drew attention to the problem of the future of the regional tariff groups, in particular the TEUREM and TAF Groups, which would be taken up in Committee 4.

1.6 The *Chairman* noted that there were no further comments on the report of Study Group III.

2. Report of Study Group I and related documents (*continued*) (Document 45)

2.1 The *delegate of New Zealand*, introducing the joint proposal by Australia and his own country (Document 45), said that it accepted the principle of a single standard, emphasized the practical concerns of the two sponsors, brought up such issues as obsolescence and mobile services, and presented a position for consideration. Some basic points still required urgent attention by Study Group I.

2.2 The *delegate of Singapore* supported the joint proposal, in particular the urgency of solving the problem of keypad standardization, which would have an impact on GSM applications. His own country was about to introduce a GSM system, with Q and Z on 1.

2.3 The *delegate of the United States* said he was surprised and disappointed by the joint proposal, which did not seem to reflect the consensus reached at the first meeting of the Committee. In particular, he did not agree that the issue should be referred back to Study Group I. In that connection, he recalled that the representative of ISO had stated in Plenary that his organization looked forward to leadership from the Standardization Sector regarding a single standard. Consequently, he was in favour of adopting immediately a recommendation stating that the 7 and 9 configuration should be used by countries introducing alphanumeric keypads, while Q and Z on 1 should be phased out by a certain date. He therefore suggested that the joint proposal should stop at the second indent at the bottom of page 1. The question of the date could, if necessary, be referred to Study Group I.

2.4 The *Chairman* and the *delegates of the United Kingdom* and *Canada* confirmed the previous speaker's recollection of the consensus.

2.5 The *delegate of Australia* said he was in favour of a single solution and hoped that the mobile community would go along with it, thus avoiding the sort of situation now springing up in New Zealand and Australia where GSM units were using three different alphanumeric formats. The reassurance he sought – and the support of the United Kingdom and Canada for a single standard went some way to provide it – was that the GSM and FPLMTS communities would rally behind such a standard. On that basis, he could accept the consensus.

2.6 The *Chairman of Study Group I* considered it of great importance for the future development of GSM and FPLMTS that the existence of consensus on a single universal standard should be brought to the attention of the Plenary.

2.7 The *delegate of New Zealand* said he would like the date to remain in square brackets and to be referred to Study Group I for a solution.

2.8 The *delegate of Lebanon* suggested that the words "in collaboration with ISO" should be added to the text.

2.9 The *delegate of China* said that his delegation favoured a single standard with the gradual phasing out of the outdated system.

2.10 The *Chairman* invited the delegates of Australia and Canada to prepare a formula reflecting the consensus.

2.11 The *delegate of Australia*, presenting the formula, proposed the addition of a footnote to Recommendation E.161 consisting of the paragraph beginning "In the interests of . . ." from Document 45 and the two following indents, removing the square brackets from the date and adding in round brackets the words: "(provisional date – for further study)". The Committee's report should also include the following wording: "In accepting this compromise, this Conference has received the assurance that the adoption of a single universal standard is to be implemented by all ITU Members, including developments in GSM and FPLMTS.".

2.12 The *Chairman of Study Group I* pointed out that there might be a consequential amendment to one of the Questions before Study Group I, which he would present to Committee 4.

2.13 The *Chairman* said he took it that the Committee wished to submit Recommendation E.161, as amended, to the Plenary for adoption.

2.14 It was so *agreed.*

2.15 The *Chairman* noted that there were no further comments on the report of Study Group I.

3. Report of Study Group II and related documents (*continued*) (Documents 43; DT/23(Rev.1))

3.1 The *delegate of Australia*, introducing the Drafting Group's proposed text relating to Recommendation E.168 (Document DT/23(Rev.1)), said it simply made clear that the Recommendation was "immature" and that further study would be needed. A modification to the new study programme reflected that need.

3.2 The *delegate of the United States* supported the proposed text, which was *approved.*

3.3 The *Chairman* drew the Committee's attention to the proposed new country codes for the Slovak and Czech Republics in Document 43.

3.4 The *representative of the TSB* explained the procedure for assigning country codes, which the Bureau kept up to date as a matter of routine. A problem had arisen following the creation of the two new States, since the same code could not be assigned to both. He understood that contact had been made with the representative of the Slovak Republic and that the issue would be resolved without delay.

3.5 The *Chairman of Study Group II* said that once changes in the country codes had been negotiated by the Bureau, the task of the Committee was to note them for subsequent inclusion in the relevant texts. However, the question still remained whether the procedure used was effective for identifying deeper technical problems in the assignment of such codes – a matter which deserved further study.

3.6 The *Chairman of Committee 4* agreed that further study was needed and observed that the whole question of numbering was to be included in the work programme for the coming period.

3.7 The *Chairman* said he took it that the Committee's duty was limited to noting the new telephone country codes for the Czech and the Slovak Republics.

4. Report of Study Group VII and related documents (Documents AP X-22, X-49; 43; DT/3)

4.1 The *Chairman of Study Group VII*, introducing the report in Document AP X-22, said that the continued high level of interest in the work of the Study Group showed the value which Administrations accorded to it. However, the general world economic downturn had resulted in an increasing number of Special Rapporteurs and delegates being unable to continue to work in the Group owing to cutbacks in their national organizations, and it was therefore important that due recognition be given to the contribution made by those bodies which had maintained their commitment to that work. In an effort to improve clarity and efficiency, the Group had adopted action plans with a view to enabling delegates to prepare better for meetings and their sponsoring bodies to monitor progress. The continuation of that practice for work management in the Standardization Sector was to be recommended. A major feature of the Group's work was that it had progressed in close collaboration with ISO and IEC. In that connection, a draft "Guide for CCITT and ISO/IEC JTC 1 Cooperation" had been produced for consideration as an annex to Recommendation A.23.

4.2 Outlining the work of the five Working Parties during the study period, he pointed out that some changes were being proposed to the list of X.500 Recommendations which was to have been presented to the Conference for approval, owing to a number of significant divergences from the corresponding ISO/IEC standards. Those changes were detailed in Document DT/3, while Document AP X-49 submitted by the United Kingdom drew attention to the problem and proposed a solution.

4.3 As to the future, the Group had prepared some 25 Questions for the forthcoming study period. They were contained in Document AP X-21 and had been *approved* by Committee 4. In conclusion, he paid tribute to all those who had supported Study Group VII in its work, and announced that he was now stepping down as its Chairman.

(Applause.)

4.4 The *Chairman*, expressing appreciation to the Chairman of Study Group VII for his work and spirit of cooperation, said that it would of course be inappropriate for the ITU-T to publish Recommendations which diverged from the corresponding ISO/IEC standards, and that by using the Resolution No. 2 procedure it would take only a few months to remedy that situation.

4.5 Responding to a request for clarification by the *delegate of Brazil* as to the acceptability under Resolution No. 18 of reviewing the Recommendations listed in Document DT/3 at the first meeting of Study Group VII with a view to applying the Resolution No. 2 procedure, the *Chairman of Study Group VII* said that notification at a WTSC should permit the first meeting of any study group to consider Recommendations for approval under the accelerated procedure.

4.6 The *Chairman* said that, as he understood it, the Director could at any time give notification of a Resolution No. 2 procedure upon receipt of a corresponding request from a study group Chairman, and that it was not necessary to have a study group meeting in order for the Chairman to make that request, which he could do on the basis of a working party meeting or a Rapporteurs' meeting if he was fully satisfied that the work was mature enough to warrant such action.

4.7 The *Chairman of Study Group I* said that the present Conference had all the powers to proceed as it saw fit. However, it should be borne in mind that the Chairman of a study group must have the unanimous approval of his group before the Resolution No. 2 procedure could be brought into play. Therefore, although a technicality, it was nevertheless important in the present case that the Chairman of Study Group VII should have such approval.

4.8 The *Chairman of Study Group VII*, in order to dispel any possible confusion, said that all that was now required was to give notification that the first meeting of the Study Group in the next period would have before it a text which would only then require unanimous approval. So, as had rightly been indicated by the *delegate of Brazil*, all that was now necessary was to give prior notification of the intention to apply the Resolution No. 2 procedure.

4.9 In the light of the foregoing discussion, the Committee *approved* both the Recommendations proposed by Study Group VII in Document AP X-22, with the exception of those listed in Document DT/3, and the report of Study Group VII as a whole.

4.10 With regard to the question of the new country codes for the data transmission service for the Czech and the Slovak Republics (Document 43), the *Chairman of Study Group VII* explained that once the framework of the relevant Recommendation – in the present case, X.121 – had been laid down by the Study Group, the Bureau undertook the day-to-day allocation work. That procedure had proved entirely successful, and he requested the Committee merely to note the new allocation, which happened to have arisen at that time.

4.11 The Committee *noted* the new country codes for the data transmission service for the Czech and the Slovak Republics.

4.12 The *Chairman of Study Group II* wished to place on record his great appreciation to the Chairman of Study Group VII for his Group's excellent cooperation.

4.13 The *Chairman of Study Group VII* in turn thanked the Chairmen of Study Groups XI and II for their harmonious collaboration throughout the study period.

5. Report of Study Group IX and related documents (Document AP X-27)

5.1 The *Chairman of Study Group IX*, introducing the report of Study Group IX (Document AP X-27) with the aid of transparencies, said that four Working Parties had dealt with 22 Questions during the study period, and that the system of Special Rapporteurs had worked very well, especially where Questions called for liaison with other Study Groups. The work carried out during the study period had led to the submission, through the Committee, of 17 new and 39 modified draft Recommendations for approval by the Plenary Assembly, while two Recommendations were proposed for deletion.

5.2 In view of the proposed dissolution, within the context of the ITU's current major organizational changes, of Study Group IX, whose long history – which he briefly outlined – went right back to the establishment of the International Telegraph Union, the Group had limited the number of Questions to be submitted for the next study period to five. In that connection, while acknowledging the appropriateness of dissolving the one Study Group which still contained the word "Telegraph" in its title, he emphasized that the telex network was now the fundamental infrastructure for worldwide telecommunications, and therefore strongly recommended that Study Group IX's experts should not be dispersed and that the Questions proposed for the next study period should be allocated to Study Groups I and XVII.

5.3 In conclusion, he thanked all those who had worked to further the aims of Study Group IX, including his predecessors and those Administrations, recognized operating agencies and scientific or industrial organizations which had hosted meetings outside Geneva.

5.4 The *Chairman* noted that there were no comments on the report of Study Group IX, and, in view of the dissolution of the Group, wished its Chairman all the very best in his future activities.

(Applause.)

6. Report of Study Group VIII and related documents (Documents AP X-19, X-46(Rev.1), X-47; 36 and Addendum 1; DT/33)

6.1 The *Chairman of Study Group VIII*, illustrating his introduction of Document AP X-19 by means of means of transparencies, outlined the activities of his Study Group during the 1989-1992 study period. The work of Study Group VIII covered four main areas and had been distributed among four Working Parties accordingly; more specialized topics had been assigned to Special Rapporteurs for study. After detailing the main areas of responsibility of each Working Party and drawing special attention to Question 17/VIII on terminal characteristics and protocols for telematic services on ISDN, which had been entrusted to a Special Rapporteur, he said that only 12 of the 27 Questions examined during the 1989-1992 study period would be carried over into the next study period, many of them with substantial modifications. Six Questions had been merged to avoid any duplication of effort with other study groups and the remaining nine would be discontinued, some because their subject matter was already being dealt with by other study groups and others because the current level of interest in them no longer justified their retention. Work on other Questions had been completed, resulting in a number of new or revised Recommendations almost half of which had been approved under the Resolution No. 2 procedure.

6.2 Information relating to the 22 new Questions proposed for the forthcoming study period would be found in Document AP X-20. Besides the Questions relating to ongoing activities, some additional Questions had been developed to address new subjects. In conclusion he thanked all those who had contributed to the work of his Study Group throughout the previous study period.

6.3 The report of Study Group VIII in Document AP-X 19 was *approved.*

6.4 The *delegate of Japan*, introducing Document AP X-46(Rev.1), explained why its sponsors objected to the adoption of Annex C to Recommendation T.30 relating to a 64 kbit/s option in the G3 facsimile service. After outlining the background to the G4 and G3 facsimile services and related Recommendations, he stressed that the four sponsors would prefer the G4 facsimile service to be the only one applied on ISDN; it was therefore regrettable that improvements to the G4 protocol were no longer possible under Question 17/VIII. While a single standard would certainly be desirable, it could not be denied that one of the conditions specified for the G3C option by Study Group I in its liaison statement was that direct interworking should be ensured with the G4 facsimile service. However, it had since been discovered that such direct interworking was not only impossible but could also give rise to the problems outlined in section 2 of Document AP X-46(Rev.1). The major cause of concern for the document's sponsors were the problems relating to charging aspects, of which he gave a detailed explanation. Last but not least, it was considered that the approval of a G3C option would not be in keeping with the principle of facilitating global interconnection and interoperability of telecommunication facilities laid down in Article 1 of the International Telecommunication Regulations.

6.5 The *delegate of the United States*, introducing Document 36 on behalf of the sponsors, all of whom were in favour of adopting Annex C to Recommendation T.30, regretted that it had not been possible to reach a compromise despite lengthy informal discussions on the subject. Referring to the liaison statement to Study Group I annexed to Document 36, he observed that while there had been general agreement on the need for further study of interoperability issues, there had been no suggestion that the approval of Recommendation T.30 should be postponed, as was borne out by the announcement in Circular No. 175 of the application of the Resolution No. 2 procedure for that Recommendation.

6.6 The *delegate of Japan* said that a distinction should be drawn between the approval of a draft Recommendation for submission to a world conference and the approval of a draft Recommendation as an international standard. Furthermore, although Document 36 referred to COM VIII-R 38, it omitted the very pertinent statement in that report to the effect that both Annex C to Recommendation T.30 and Annex Y to Recommendation T.4 were to be deferred to the Xth Plenary Assembly. It also failed to mention the conclusion of the two interim meetings on interoperability, namely, that direct interworking between the two facsimile services was impossible. The Japanese delegation had not objected to the adoption of Annex C at the final meeting of Study Group VIII in the spring of 1992, since it had expected the interoperability issue to be resolved by the two interim meetings held, respectively, in June and October 1992.

6.7 The *delegate of Germany* said that his Administration, which had initially objected to the adoption of Annex C to Recommendation T.30, now realised that most delegations at the present Conference were in favour of adopting it. Informal discussions with a view to seeking a suitable solution had therefore been held between the delegations of Austria, Denmark, the United States, France, Japan and the United Kingdom. A compromise had finally

been reached and a text drafted which had met with the approval of all the participants except Japan. He read out the compromise text, which highlighted the fact that the development of international standards was a step-by-step process. The countries concerned were willing to agree to the adoption of Annex C to Recommendation T.30, not as a definitive standard, but as a basis for future work on the definition of interworking between the two facsimile services. Furthermore, their agreement was conditional upon the amendment of draft Question E/VIII and the inclusion of clear guidelines to Study Group VIII, in either draft Annex C to Recommendation T.30 or Recommendation T.4, to the effect that the issue of direct interworking between G4 and G3C terminals required urgent study.

6.8 In the ensuing discussion, the *delegate of Portugal* expressed support for the compromise solution. The *delegate of Japan* said he doubted that his concern regarding the charging problems stemming from the adoption of Annex C would be met by the compromise proposed. The *delegate of the United Kingdom* welcomed the compromise solution, observing that there had been ample discussion of the issue in Study Group VIII; the concerns of the Japanese delegate, together with other aspects of charging for calls in which communication was not established, might best be dealt with in Study Group III, for which an appropriate Question should be perhaps prepared.

6.9 The *delegate of Canada* said that G3C terminals would have to be accepted as a fact of life, since their manufacture could not now be halted. The Committee's failure to achieve consensus on the issue might result in the development of standards which were applicable only in certain parts of the world. He was therefore in favour of adopting the Annex so as to have some kind of universal standard, even if it was not a definitive one. Moreover, Recommendation T.30 was not mandatory, since it provided an option. It was true that the adoption of Annex C raised charging problems, but he was confident that Study Group III would be able to find a solution that would not penalize users. The interoperability issues were complex and required proper study, which would take considerable time. Stressing the need for swift action in order to produce a single standard without further delay, he urged the Committee to agree to the adoption of Annex C while clearly stating its intention to address the two problem issues as a matter of priority immediately after the Conference.

6.10 In the ensuing discussion, the *delegate of Brazil*, while generally endorsing the Canadian delegate's remarks, considered that the issues raised by the adoption of Annex C should be dealt with by Study Group VIII only. The *Chairman of Study Group III* said that his Study Group would not by itself be able to resolve the charging problems raised by the Japanese delegation, but would certainly require the support of other Study Groups or Technical Committees. The *delegate of Japan* said that in the light of the discussion, and since there appeared to be a majority in favour of the compromise proposed by the delegate of Germany, his delegation would withdraw its objection and support the adoption of Annex C to Recommendation T.30 provided that urgent studies were carried out to resolve outstanding difficulties with the necessary support of other Study Groups.

6.11 Following further discussion in which the *Secretary of the Committee*, and the *delegates of Germany, Poland* and *the United Kingdom* took part, the *Chairman* said that if he heard no objection he would take it that the Committee could agree to the adoption of Annex C to Recommendation T.30, on the basis of the compromise proposal by the delegate of Germany. A drafting group would be set up to make any amendments required to reflect the views expressed during the meeting and the text would be circulated in due course.

6.12 It was so *agreed.*

6.13 The *delegate of Greece*, introducing Document AP X-47 which contained comments and proposed amendments relating to draft Recommendation T.52, said that there were now two schools of thought on the coding of character sets for telematic services. His Administration was in favour of the existing common Latin-Greek supplementary set appearing in Recommendation T.61 (*Blue Book*, 1988) which could be extended to cover scripts as well. It objected to the use of the new Greek supplementary set proposed in draft Recommendation T.52, since it would be quite incompatible with the above-mentioned common supplementary set of Recommendation T.61 used for existing telematic networks and services in Greece, for which investments had already been made. However, if that approach was not accepted by the TSB, the Greek Administration would be prepared to ask for the replacement of the proposed new Greek supplementary set by another one better suited to its requirements. In any case, should the Committee approve the adoption of Recommendation T.52, his delegation would request the insertion, in that Recommendation (page 72), of the footnote set out in Document DT/33.

6.14 Turning to the editorial amendments proposed in sections 3 and 4 of Document AP X-47, he explained why his Administration objected to the use of language names in certain Cyrillic characters and also drew attention to the need to rectify the omission of the Greek small letter final sigma, in the Greek character sets contained in the Chinese and the Japanese-Kanji sets.

6.15 The *Chairman of Study Group VIII* said that the Greek delegation's proposal for the adoption of a common supplementary set would need to be considered by experts and would therefore have to be referred to Study Group VIII. On the other hand, he could see no difficulty in the alternative proposal to adopt draft Recommendation T.52 subject to insertion of the footnote in Document DT/33. Likewise, he considered that the proposed editorial amendments would be entirely acceptable to Study Group VIII.

6.16 During the discussion which ensued, the *delegate of the Russian Federation* said that his Administration, which urgently required an internationally applicable character set for telematic services, was in favour of adopting draft Recommendation T.52. With regard to the other proposals by the Greek delegation, he could only agree to editorial amendments at the present juncture. The *delegate of China* said that he had no difficulty in agreeing to the proposed editorial amendments pertaining to the Chinese character sets. The *delegate of Japan* regretted that for the time being he was unable to adopt a position on the proposed editorial amendments pertaining to the Japanese character sets. The *delegate of France*, supported by the *Chairman of Study Group VIII*, observed that the Greek delegation's proposals relating to Asian character sets might have considerable implications, in particular for the Japanese language; in his view, it would be more appropriate for such technical matters to be taken up by Study Group VIII, in close cooperation with ISO. The *representative of the TSB* explained that the Greek small letter final sigma was already included in Chinese character sets and, to his knowledge, was in line with national standards. The *delegate of Greece* said that the substance of the footnote in Document DT/33 should also apply to revised Recommendation T.101, to the extent that recent developments in the telematic environment might affect Greek videotex services.

6.17 The *Chairman* said that if he heard no objection he would take it that the Committee could agree to the adoption of draft Recommendation T.52, subject to the insertion of the footnote in Document DT/33 and that it could also accept the proposed editorial amendments which would be provided to the Secretariat by Greece.

6.18 It was so *agreed.*

The meeting rose at 1755 hours.

THIRD AND LAST MEETING OF COMMITTEE 6

(Summary record approved by the Chairman)

Monday, 8 March 1993, at 1600 hours

Subjects discussed:

1. Draft report of Committee 6

2. Country codes for the data transmission service

1. Draft report of Committee 6 (Documents 41, 51, 53, 58; DT/15, 23(Rev.1), 33, 37)

1.1 The *Chairman* introduced Document 41 which contained the first part of the Committee's draft report. Referring to § 1.2.3, he drew attention to Document DT/37 which summarized the final agreement reached on the revision of Recommendation E.161, and observed that a similar document had been drafted by Committee 4, as agreed. Referring to § 2.2.1, he said that the document containing the agreed text to be inserted in draft new Recommendation E.168 relating to UPT numbering was Document DT/23(Rev.1).

1.2 The *delegate of the Czech Republic* drew attention to a typographical error in § 2.2.2, where the country names should read "Czech and Slovak Republics".

1.3 The *delegate of the Slovak Republic*, referring to § 2.2.2, drew attention to Corrigendum 1 to Document 43, containing a compromise proposal submitted jointly by the Czech and Slovak Republics concerning the allocation of country codes for their data transmission services. She sought the Committee's approval of those new allocations.

1.4 The *Chairman* recalled that the Committee was not empowered to approve the allocation of such codes, but could merely take note of such information. The Director of the TSB had sole responsibility for such matters; accordingly, any proposals for changes to allocations should be submitted to the Director.

1.5 The *representative of the TSB* endorsed those comments. Although the Bureau had taken note of the request by the Czech and Slovak Republics, it had not been reflected in the reports and such matters did not come within the purview of Committee 6. The information would, however, be published in the relevant ITU documents such as the Operational Bulletin.

1.6 The *delegate of the Slovak Republic* said that a written proposal had already been submitted to the TSB in that connection.

1.7 The *Chairman* confirmed that that was the correct procedure. The information might perhaps be reproduced in a temporary document and forwarded to a forthcoming Plenary Meeting.

1.8 With those comments and editorial amendments, the first part of the draft report (Document 41) was *approved.*

1.9 The *Chairman* invited the Committee to take up Document 53, which contained the second part of the draft report.

1.10 The *delegate of Australia* suggested, for the sake of clarity, that the note in Document DT/37 should be inserted under section 1.2.3.

1.11 The *Chairman* said that the text in Document DT/37 had given rise to some confusion regarding GSM and FPLMTS; the intention was that the latter would use the same configuration of letters on the push-button dials in their systems, and some further amendment of the text might therefore be necessary.

1.12 In response to a query by the *delegate of Poland* regarding the regional tariff groups, the *Chairman* drew attention to § 3.2.2 and said that, as indicated by the Chairman of Study Group III, the activities of those groups would be reviewed at the first Study Group III meeting in the forthcoming study period.

1.13 The *delegate of New Zealand* pointed out that the regional tariff groups were to be discussed by Committee 4 that afternoon.

1.14 The *delegate of the United States*, referring to section 4.2, suggested that, for the sake of clarity, the figure 10 should be inserted before "draft Recommendations" and "revised texts" respectively.

1.15 The *Chairman*, referring to § 5.2.1, drew attention to Documents 51 and 58 relating to the compromise solution on Annex C to Recommendation T.30.

1.16 The *delegate of Germany*, introducing Document 58, said that as a result of the agreement on Annex C to Recommendation T.30 at the Committee's second meeting, he together with the delegates of Japan and the United Kingdom had prepared the text in Document 58 on the basis of the original compromise proposed in Document 51. The consequential amendments to Recommendation T.4, Question E/VIII and Question J/I were also given in Document 58.

1.17 The *delegate of the United Kingdom*, commenting on Document 58, said that the last line of the main operative paragraph in section 1 should read "directly with G4 class 1/G3F". He also drew attention to editorial corrections to be made in section 3.

1.18 The *delegate of Japan* requested the insertion of the word "urgent" in the last sentence of the note in section 1, so that the text would read: "*the capability of ... is the subject of urgent study under Question E/VIII*". He then read out a statement which his delegation wished to see included in the final version of the Committee's report.

1.19 The *delegate of the United States* sought confirmation that the statement read out by the previous speaker reflected the views of the Japanese delegation and not of the meeting as a whole. The *delegate of Japan* confirmed that the statement represented the views of his delegation alone.

1.20 The *delegate of the United Kingdom*, while acknowledging the right of any delegation to ask for a statement to be included in the report, requested the Secretariat to make it quite clear that the statement had not been endorsed by the meeting.

1.21 Subject to those comments and amendments, Document 58 was *approved.*

1.22 The *delegate of Greece* suggested a number of amendments to section 5.2.2 of Document 53, and also drew attention to the French-language version of Document DT/33, requesting that the words "jeu primaire" be replaced by "jeu supplémentaire" in both paragraphs.

1.23 Subject to those comments and amendments, the second part of the draft report (Document 53) was *approved.*

1.24 The list of recommendations proposed in Document DT/15 for approval and for deletion, as amended during the course of the Committee's deliberations, was *approved* for transmittal to the Plenary Meeting in an annex to the report.

2. Country codes for the data transmission service (Corrigendum 1 to Document 43)

2.1 The Committee *noted* Corrigendum 1 to Document 43 indicating the Slovak Republic's new country code for its data transmission service.

The meeting rose at 1700 hours.

4 – REPORTS

4.1 – REPORT BY THE DIRECTOR ON THE ACTIVITY OF THE CCITT BETWEEN THE IXth PLENARY ASSEMBLY (MELBOURNE, 1988) AND THE WORLD TELECOMMUNICATION STANDARDIZATION CONFERENCE (HELSINKI, 1993) AND REPORT ON THE CCITT SPECIALIZED SECRETARIAT

1. Report by the Director on the activity of the CCITT between the IXth Plenary Assembly (Melbourne, 1988) and the World Telecommunication Standardization Conference (Helsinki, 1993)

PART I

General statistical information on CCITT activities between the IXth and Xth Plenary Assemblies

1. List of meetings

1.1 Part II of this report contains the list of the meetings held by the various Study Groups (and their Working Parties) and the Special Autonomous Groups from January 1989 to the end of June 1992. These meetings are listed in chronological order for each Committee. The list of interim meetings held from July 1992 to the end of January 1993 is given in Appendix 1.

1.2 *Table 1 – Number of meetings and their duration*

Table 1 below, which is based on the general list of meetings, provides a more concise presentation of both the number of meetings and their duration (working days).

It should be pointed out that the Study Groups hold "restricted" meetings of groups of rapporteurs frequently working without the participation of a member of the CCITT Secretariat. Information on these meetings is given in the relevant reports of the different Study Groups.

2. Participation in meetings

Annex 1 to this report lists the Member countries, represented by an Administration or a recognized private operating agency, which participated in Study Group meetings. It will be seen that, in this period, the number of countries represented in most of the Study Groups is similar to that in the past period. Participation in Study Groups II, XI and, in particular, III continues to stand at more than 40 countries. All in all, 108 countries attended meetings of at least one Study Group, the corresponding figure for the previous period being 113.

TABLE 1

Number of meetings and their duration

(see also Graph 1 which illustrates this Table)

Study Group or Working Party	Number of meetings	Number of working days of meeting		
		In Geneva	Outside Geneva	Total
I	6	45	9	54
II	13	44	45	89
III	11	77	5	82
IV	9	85	–	85
V	8	25	16	41
VI	6	20	8	28
VII	5	48	–	48
VIII	6	38	8	46
IX	4	20	5	25
X	7	34	18	52
XI	13	85	39	124
XII	5	33	6	39
XV	9	78	–	78
XVII	7	42	–	42
XVIII	11 *)	68 *)	30	98
Plan AF	2	–	9	9
Plan AL	1	–	6	6
Plan AS	2	–	9	9
GAS 7	3	12	–	12
GAS 9	7	40	–	40
GAS 12	3	15	–	15
TAF	1	–	6	6
TAS	1	–	5	5
TEUREM	3	16	–	16
Ad hoc Group – Res. 18	4	23	–	23
Chairmen's meeting	2	4	4	8
Total	149	852	228	1080

*) Including 3 joint meetings involving Study Groups XVIII, I and XV.

3. Table 2 – Registered members of Study Groups

3.1 Table 2 shows the number of registered members of Study Groups, i.e., the number of addresses to which reports, contributions, collective letters relating to Study Group meetings and circulars are dispatched.

The meaning of the columns is as follows:

A: Administrations of Member countries;

B: Recognized private operating agencies authorized to participate in the work of the CCITT (No. 88 of the 1982 Nairobi Convention);

C: Scientific or industrial organizations admitted to participate, in an advisory capacity, in Study Group meetings (No. 400 of the 1982 Nairobi Convention);

D: International and regional telecommunication organizations admitted to participate, in an advisory capacity, in the work of the CCITT (No. 398 of the 1982 Nairobi Convention).

TABLE 2

Number of registered members of Study Groups

Study Group	A		B		C	D	Total	
I	113	(124)	56	(58)	106	21	296	(309)
II	114	(126)	52	(54)	95	14	275	(289)
III	116	(128)	57	(59)	81	23	277	(291)
IV	113	(125)	55	(57)	97	15	280	(294)
V	110	(122)	49	(50)	99	14	272	(285)
VI	107	(119)	47	(48)	93	12	259	(272)
VII	110	(122)	58	(60)	126	24	318	(332)
VIII	106	(118)	53	(55)	119	17	295	(309)
IX	107	(119)	50	(52)	84	11	252	(266)
X	104	(116)	49	(51)	95	14	262	(276)
XI	113	(125)	49	(51)	108	16	286	(300)
XII	110	(122)	50	(52)	98	14	272	(286)
XV	114	(126)	54	(56)	125	18	311	(325)
XVII	112	(123)	54	(56)	121	18	305	(318)
XVIII	111	(123)	57	(59)	132	25	325	(339)
World Plan	158	(170)	54	(56)	67	18	297	(311)
Plan AF	73	(78)	32	(34)	39	12	156	(163)
Plan AL	51	(57)	39	(41)	35	11	136	(144)
Plan AS	66	(74)	37	(39)	36	12	151	(161)
Plan EU	54	(59)	39	(41)	52	12	157	(164)
TAF	70	(75)	31	(33)	19	9	129	(136)
TAL	51	(58)	35	(37)	18	8	112	(121)
TAS	62	(70)	36	(38)	17	8	123	(133)
TEUREM	57	(63)	42	(44)	26	10	135	(143)
GAS 7	105	(116)	43	(45)	73	12	233	(246)
GAS 9	107	(118)	46	(48)	81	13	247	(260)
GAS 12	107	(118)	48	(50)	74	13	242	(255)
Ad hoc Gr. – Res. 18	90	(99)	40	(41)	52	1	183	(193)

Note: The figures in brackets indicate the total number of addresses (per Study Group) to which CCITT contributions and reports are dispatched.

3.2 Attention is drawn to the increasing participation by industrial organizations; they are displaying a growing interest in the work of the CCITT and particularly of Study Groups VII, XI, XV and XVIII. In view of the restructuring of the Study Groups and work programme adopted at the last Plenary Assembly, participation by such organizations in the work of Study Groups II, IX and XVII has decreased slightly. There has also been a small drop in the total number of scientific or industrial organizations members of the CCITT, owing in particular to company mergers.

Furthermore, as a consequence of privatization in the operating sector, participation by independent "operators" has increased with the changes made to telecommunication legislation in the different ITU Member countries. The result has been lower participation by Administrations in some CCITT meetings.

3.3 Under the provisions of Article 68 of the International Telecommunication Convention (Nairobi, 1982), further admissions were authorized by the Administrations of the Member countries in the study period 1989-1992.

At 1 October 1992*), the following participated in the work of the CCITT:

76 recognized private operating agencies;

155 scientific or industrial organizations;

39 international organizations concerned with telecommunications (not including the specialized agencies of the United Nations).

Graph 2 shows the movement in the number of recognized private operating agencies and scientific or industrial organizations participating in the work of the CCITT since 1957.

4. Table 3 – Contributions, reports and temporary documents published

4.1 Table 3 provides statistical data on the number of documents processed during the study period for the work of the Study Groups. Temporary documents published for meetings at which the CCITT Secretariat was not represented (in particular meetings of rapporteurs) are not included in these figures.

Graph 3 shows the growth in the number of reports and contributions since 1957.

4.2 *Contributions received*

It should be emphasized that most of the contributions submitted to Study Groups in the course of this study period were "delayed contributions", in other words contributions received between two months and seven days before the meeting of the Study Group in question. This holds good for Study Groups I, VII, VIII, XI, XV and XVIII in particular. Certain conclusions may be drawn with regard to the future submission of contributions to the work of the Study Groups.

4.3 *Reports*

Although the number of reports remained practically the same, their volume increased. Pursuant to Resolution No. 1, arrangements were made to publish reports in several parts in order to speed up their circulation, particularly in respect of draft Recommendations. The texts of draft new or revised Recommendations are published in the reports of the relevant meetings in order to be brought to the attention of Members with a view to the implementation of Resolution No. 2.

4.4 *Temporary documents*

Coordination in respect of temporary documents is required between the CCITT Secretariat and the Department of Common Services during Study Group meetings, since these documents frequently arrive unexpectedly and are growing in both number and volume.

While it is true that draft new or revised Recommendations account for some of the temporary documents submitted by rapporteurs, suitable arrangements need to be made in the future in order to avoid an excessive workload both immediately before and during meetings.

So far as possible the CCITT Secretariat, for reasons of economy and in order to avoid duplication, distributed temporary documents and delayed contributions only to the Working Party concerned, rather than to all participants in the meeting. For the future, the intention is to follow this course in all cases without exception. Furthermore, because of their volume, temporary documents are available in the original language only.

4.5 Finally, attention is drawn to the cost of postage for the dispatch of reports, circulars and collective letters, in spite of concerted efforts on the part of the CCITT Secretariat and the Department of Common Services to reduce these costs. The electronic dissemination of CCITT documents (Teledoc) might well generate savings in this area.

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*) These figures were:
57, 146 and 36 in 1984 (VIIIth Plenary Assembly), and
65, 164 and 36 in 1988 (IXth Plenary Assembly).

TABLE 3

Contributions, reports and temporary documents published

(up to and including 26 June 1992)

Study Group	Number of contributions received and their mode of publication			Number of Reports	Number of temporary documents *)
	Normal	Delayed	Total		
I	130	614	744	50	2079
II	90	107	197	35	1273
III	109	87	196	30	632
IV	97	106	203	36	940
V	40	104	144	12	257
VI	63	44	107	13	174
VII	247	511	758	61	2045
VIII	213	398	611	55	1204
IX	53	34	87	9	320
X	28	116	144	36	488
XI	40	1990	2030	261	2963
XII	127	146	273	31	613
XV	195	456	651	104	1645
XVII	34	205	239	11	476
XVIII	107	2465	2572	122	1814
World Plan	1	–	1	1	8
Plan AF	15	13	28	3	53
Plan AL	–	23	23	2	49
Plan AS	21	12	33	3	95
Plan EU	–	–	–	1	12
TAF	–	–	–	1	20
TAL	–	–	–	–	–
TAS	2	–	2	1	4
TEUREM	1	9	10	3	55
GAS 7	–	–	–	3	162
GAS 9	–	–	–	9	297
GAS 12	–	–	–	5	81
Ad hoc Gr. – Res. 18	30	69	99	8	156
Total	1643	7509	9152	906	17915

*) Temporary documents for Study Group or Working Party meetings only.

At 1 October 1992, the number of collective-letters and circulars published was:

Number of collective letters: 196

Number of circulars: 166

5. Table 4 – Questions and Recommendations

5.1 Table 4 shows the number of Questions assigned to each Study Group.

5.2 New and revised Recommendations have been divided into two groups in order to show the number of texts approved pursuant to Resolution No. 2.

TABLE 4

Questions and Recommendations

Study Group	Number of Questions		Number of Recommendations				
				New		Revised	
	Studied 1989-1992	For study 1993-1996	Series	Approved (Res. No. 2)	Submitted Xth PA	Approved (Res. No. 2)	Submitted Xth PA
I	35	24	E, F, I	30	11	38	18
II	20	12	E	21	10	28	7
III	33	22	D	15	–	29	7
IV	21	19	M, N, O	18	3	29	18
V	17	13	K	3	2	2	4
VI	13	13	L	3	2	–	–
VII	35	25	X	49	5	17	24
VIII	27	22	T	6	10	21	17
IX	22	5	R, S, U	–	17	–	39
X	11	10	Z	–	4	–	2
XI	26	28	Q	20	71	5	73
XII	32	25	P, G	–	6	–	25
XV	31	31	G, H, J	18	14	4	20
XVII	16	10	V	3	1	2	8
XVIII	22	28	G, I	18	19	10	37
TOTAL	361	287		204	175	185	299

The table below shows the number of Recommendations adopted during the different CCITT study periods.

	1969-1972	1973-1976	1977-1980	1981-1984	1985-1988	1989-1992		
						Res. 2	Xth PA	Total
New Recommendations	67	127	204	206	368	204	175 *)	379
Revised Recommendations	199	225	187	373	388	185	299 *)	484

*) Subject to approval of all the Recommendations by the Plenary Assembly.

It will be noted in particular that the total number of Recommendations adopted in this study period (Res. No. 2 or Xth PA) far exceeds the number adopted in previous study periods. One of the main reasons is the adoption, under Resolution No. 2, of 389 Recommendations in all, including 185 substantially revised texts and 204 new ones, as well as the submission to the Xth Plenary Assembly of a total of 474 Recommendations, including 299 substantially revised texts and 175 new ones.

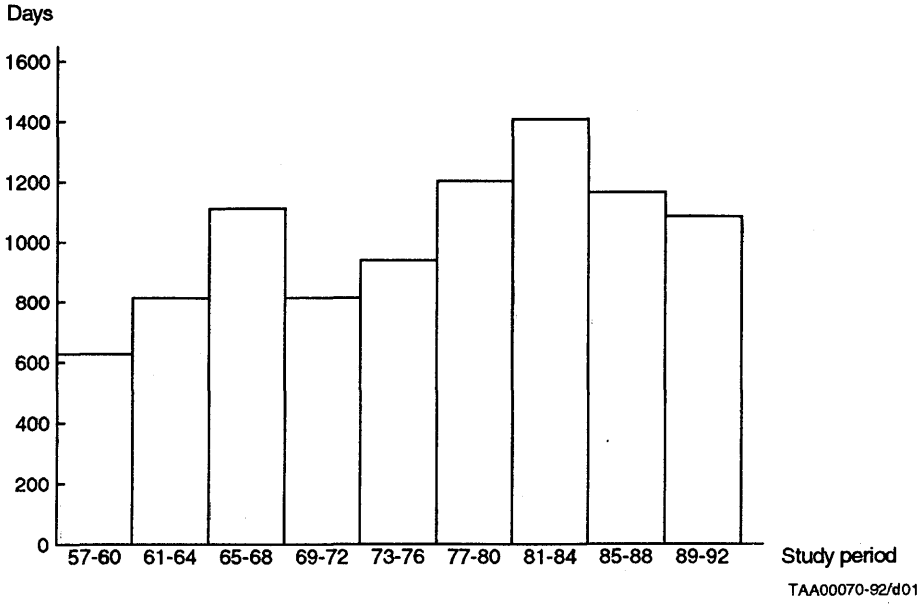
6. Overall view of CCITT activities

6.1 Work statistics (excluding meetings of the Plenary Assembly)
(see also Graphs 1 and 3)

	1st period (1957-1960)	2nd period (1961-1964)	3rd period (1965-1968)	4th period (1969-1972)	5th period (1973-1976)	6th period (1977-1980)	7th period (1981-1984)	8th period (1985-1988)	9th period (1989-1992)
Number of meeting days	628	808	1107	810	943	1206	1411	1161	1080
Contributions published	1000	1500	2015	2625	4335	6054	8127 (+ 462 reports)	9563 (+ 778 reports)	9152 (+ 906 reports)
Circulars issued	120	140	160	200	211	186	71	74	166

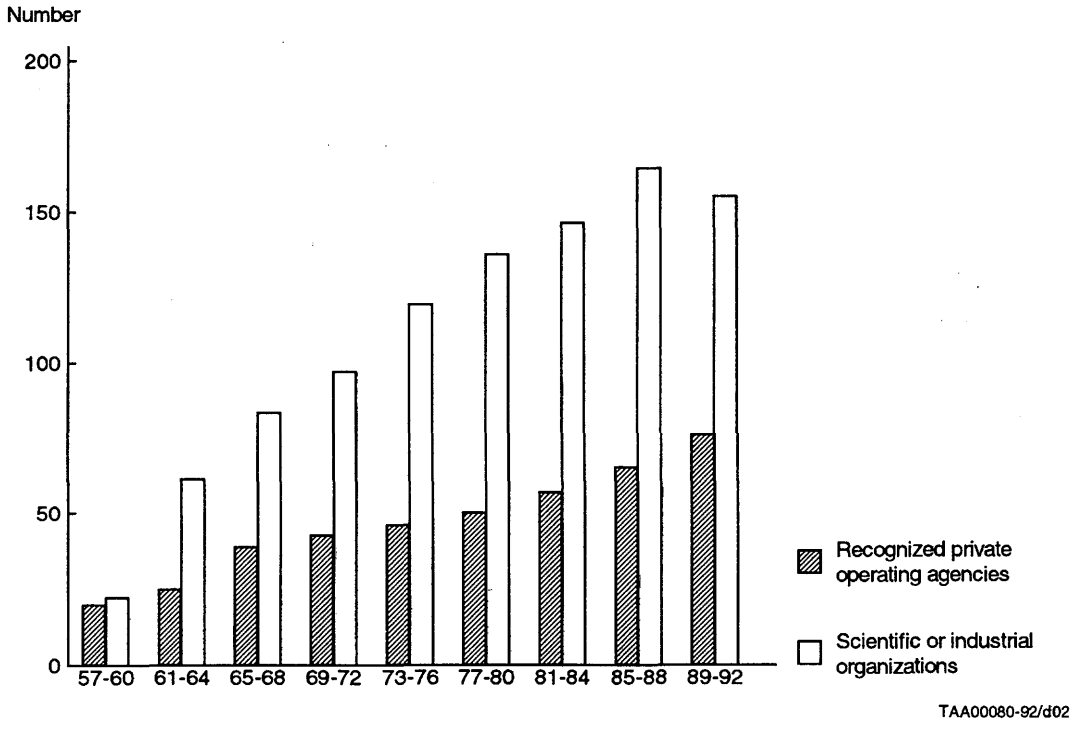
6.2 Participation (see also Graph 2)

	1st period (1957-1960)	2nd period (1961-1964)	3rd period (1965-1968)	4th period (1969-1972)	5th period (1973-1976)	6th period (1977-1980)	7th period (1981-1984)	8th period (1985-1988)	9th period (1989-1992)
Registered members of Study Groups	2615	4496	about 8000	9946	9833	7969	410 *)	455 *)	463 *)
Private operating agencies taking part	20	25	39	43	46	50	57	65	76
Scientific organizations taking part	22	61	83	97	119	136	146	164	155
International organizations in liaison with the CCITT	–	–	–	–	–	–	36	36	39



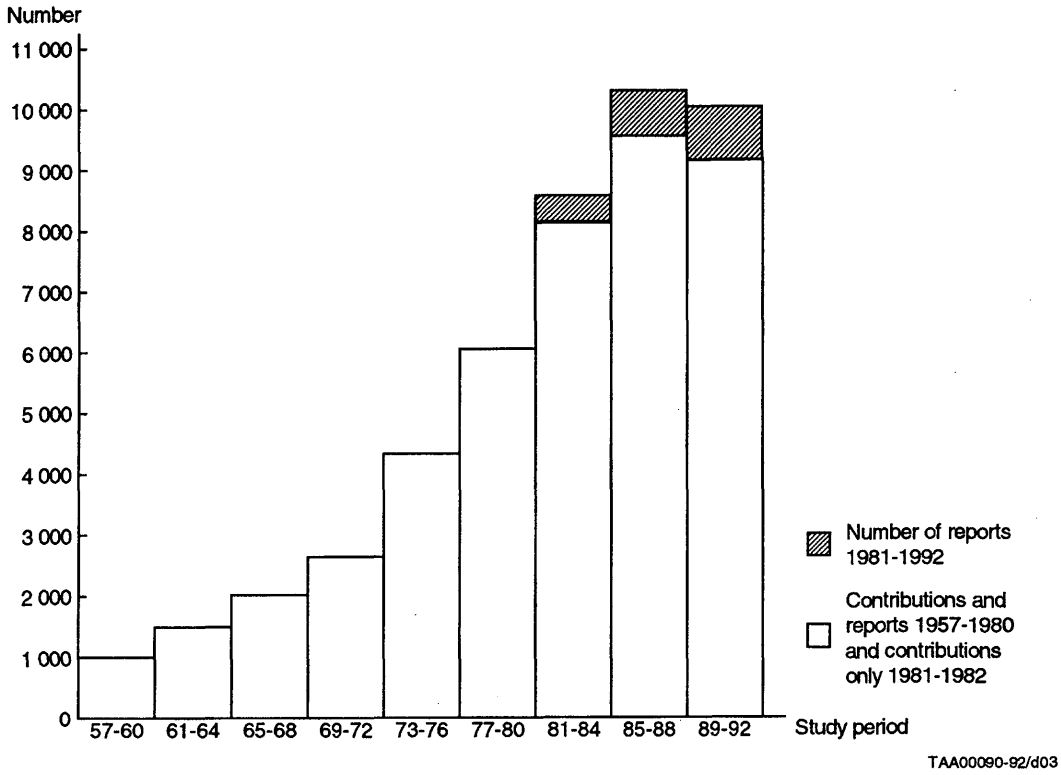
GRAPH 1

Number of CCITT meeting days



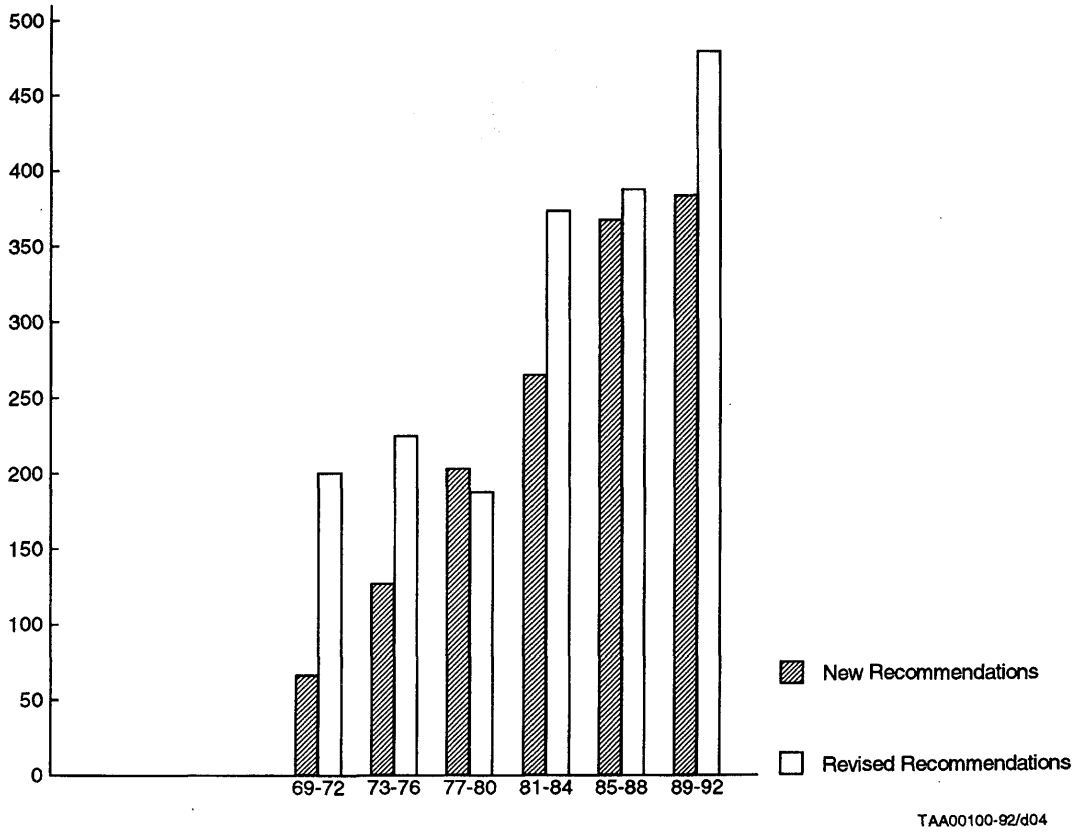
GRAPH 2

Number of recognized private operating agencies and scientific or industrial organizations participating in the work of the CCITT 1957-1992



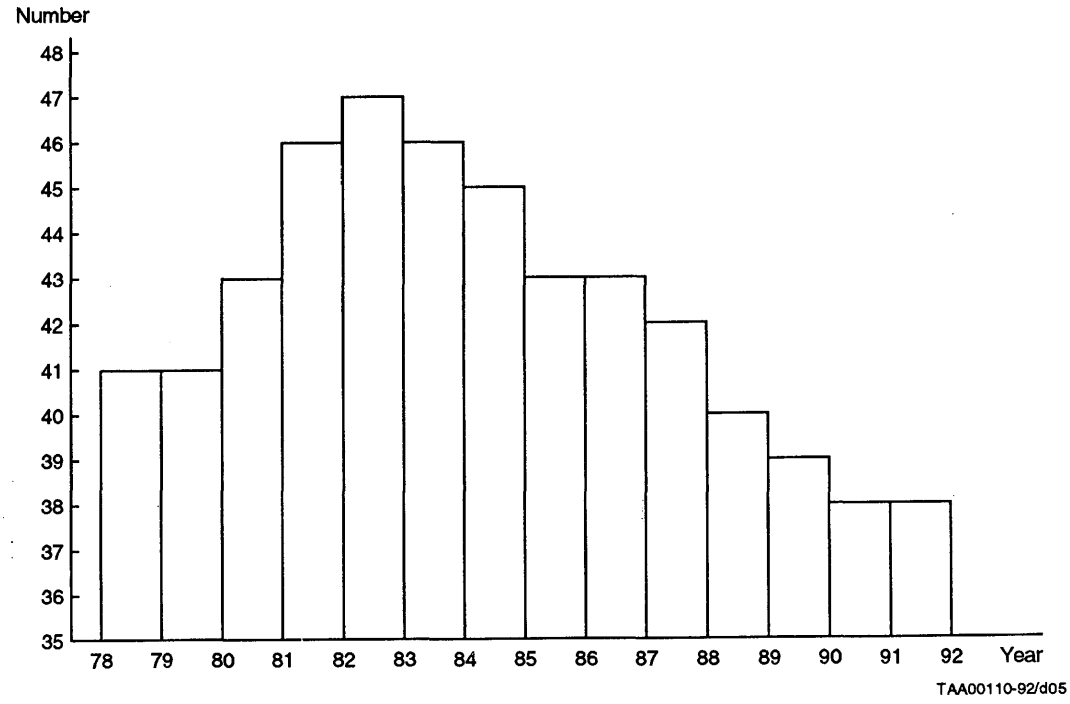
GRAPH 3

Number of reports and contributions 1957-1992



GRAPH 4

New Recommendations and revised Recommendations by study period



GRAPH 5

Number of officials in the CCITT Specialized Secretariat 1978-1992

PART II

List of CCITT meetings held during the 1989-1992 study period

I – Study Groups

Study Group I – Services

9 - 13 January 1989	Joint experts meeting of Study Groups I and XVIII on the definition and description of services and on organizational matters
2 - 12 May 1989	Meeting of the Study Group
20 Feb. - 2 March 1990	Meeting of the Study Group and its Working Parties
30 Oct. - 9 Nov. 1990	Meeting of the Study Group and its Working Parties
28 May - 7 June 1991	Meeting of the Study Group and its Working Parties
14 - 26 November 1991	Meeting of the Working Parties
24 March - 3 April 1992	Meeting of the Study Group

Study Group II – Network Operation

21 Feb. - 1 March 1989	Meeting of the Study Group
29 August - 7 Sept. 1989	Network Management Development Group (NMDG) and Quality of Service Development Group (QSDG)
18 - 20 October 1989	Working Party II/4 (Handbook on Network Performance)
24 Oct. - 3 Nov. 1989	Working Parties II/1 (Numbering and Routing), II/2 (Network Assessment) and II/3 (Traffic Engineering)
2 - 12 April 1990	Network Management Development Group (NMDG) and Quality of Service Development Group (QSDG)
12 - 22 June 1990	Meeting of the Study Group and its Working Parties
12 - 22 March 1991	Meeting of the Study Group and its Working Parties
29 May - 11 June 1991	Network Management Development Group (NMDG) and Quality of Service Development Group (QSDG)
27 June - 3 July 1991	Working Party II/3 (Traffic Engineering)
4 - 14 February 1992	Meeting of the Study Group
26 March - 1 April 1992	Network Management Development Group (NMDG)
30 March - 3 April 1992	Quality of Service Development Group (QSDG)
26 June 1992	Meeting of the Study Group

Study Group III – Tariff and Accounting Principles

24 - 28 April 1989	Meeting of the Study Group
10 - 20 October 1989	Working Parties III/1 (Lease of international circuits and networks for private use), III/2 (Tariffs for leased and dedicated circuits provided by digital techniques and via satellite), III/3 (Tariffs and accounting for telex and telegraph services and data transmission services on public data networks), III/5 (Tariffs and accounting for maritime, land and aeronautical mobile services) and III/6 (Tariffs and accounting for services offered on ISDN)
12 - 23 February 1990	Working Parties III/3 (Tariffs and accounting for telex and telegraph services and data transmission services on public data networks), III/4 (Tariffs and accounting for the international telephone service and radio and television transmissions service) and Special Rapporteur's Groups on Questions 20/III, 26/III, 30/III, 13/III, 14/III, 15/III and 31/III
15 - 30 May 1990	Working Parties III/1 (Lease of international circuits and networks for private use), III/2 (Tariffs for leased and dedicated circuits provided by digital techniques and via satellite), III/5 (Tariffs and accounting for maritime, land and aeronautical mobile services), III/6 (Tariffs and accounting for services offered on ISDN) and III/7 (Methodology for the determination of costs and establishment of national tariffs)
13 - 21 November 1990	Meeting of the Study Group
6 - 15 March 1991	Meeting of the Study Group and its Working Party III/3 (Tariffs and accounting for telex and telegraph services and data transmission services on public data networks)
18 - 22 March 1991	Working Parties III/4 (Tariffs and accounting for the international telephone service and radio and television transmissions service) and III/5 (Tariffs and accounting for maritime, land and aeronautical mobile services)
26 Aug. - 12 Sept. 1991	Meeting of the Study Group and its Working Parties III/1 (Lease of international circuits and networks for private use), III/2 (Tariffs for leased and dedicated circuits provided by digital techniques and via satellite), III/3 (Tariffs and accounting for telex and telegraph services and data transmission services on public data networks), III/4 (Tariffs and accounting for the international telephone service and radio and television transmissions service), III/6 (Tariffs and accounting for services offered on ISDN) and III/7 (Methodology for the determination of costs and establishment of national tariffs)
21 - 23 January 1992	Working Party III/4 (Tariffs and accounting for the international telephone service and radio and television transmissions service)
2 - 6 March 1992	Meeting of the Study Group
22 - 25 June 1992	Meeting of the Study Group and its Working Party III/4 (Tariffs and accounting for the international telephone service and radio and television transmissions service)

Study Group IV – Maintenance

3 - 11 April 1989	Working Parties IV/1 (Maintenance of telephone-type, leased and special circuits), IV/2 (Measuring equipment) and IV/5 (Maintenance of systems and networks)
3 - 11 July 1989	Working Parties IV/3 (Management networks and interfaces) and IV/4 (Maintenance strategy and principles)
15 - 26 January 1990	Meeting of the Study Group and its Working Parties IV/1 (Maintenance of telephone-type, leased and special circuits) IV/2 (Measuring equipment) and IV/6 (Maintenance of sound-programme TV and videoconference circuits)
26 March - 6 April 1990	Working Parties IV/3 (Management networks and interfaces), IV/4 (Maintenance strategy and principles) and IV/5 (Maintenance of systems and networks)
25 Sept. - 3 Oct. 1990	Working Parties IV/1 (Maintenance of telephone-type, leased and special circuits), IV/2 (Measuring equipment) and IV/6 (Maintenance of sound-programme TV and videoconference circuits)
14 - 30 January 1991	Meeting of the Study Group and its Working Parties IV/3 (Management networks and interfaces), IV/4 (Maintenance strategy and principles) and IV/5 (Maintenance of systems and networks)
30 April - 8 May 1991	Working Parties IV/1 (Maintenance of telephone-type, leased and special circuits), IV/2 (Measuring equipment) and IV/6 (Maintenance of sound-programme TV and video-conference circuits)
22 Oct. - 8 Nov. 1991	Working Parties IV/4 (Maintenance strategy and principles), IV/5 (Maintenance of systems and networks) and IV/3 (Management networks and interfaces)
25 May - 5 June 1992	Meeting of the Study Group and its Working Parties

Study Group V – Protection against Electromagnetic Effects

29 May - 2 June 1989	Meeting of the Study Group
11 - 15 September 1989	Working Parties V/1 (Equipment resistibility and associated electrical problems) and V/2 (Radio frequency and fast transient interference)
6 - 13 June 1990	Working Parties V/1 (Equipment resistibility and associated electrical safety problems), V/2 (Radio frequency and fast transient interference) and V/3 (Earthing and protection against lightning)
5 - 9 November 1990	Working Party V/4 (Directives and related Questions)
12 - 16 November 1990	Meeting of the Study Group and its Working Parties V/1 (Equipment resistibility and associated electrical safety problems), V/2 (Radio frequency and fast transient interference) and V/3 (Earthing and protection against lightning)
15 - 19 April 1991	Meeting of the Working Parties
23 - 27 September 1991	Meeting of the Study Group and its Working Parties
9 - 13 March 1992	Meeting of the Study Group

Study Group VI – Outside Plant

5-9 June 1989	Meeting of the Study Group
3-6 April 1990	Meeting of the Working Party (Optical fibre plant and technology)
19-23 November 1990	Meeting of the Study Group
4-7 June 1991	Meeting of the Working Party (Optical fibre plant and technology)
30 Sept.-4 Oct. 1991	Meeting of the Study Group
16-20 March 1992	Meeting of the Study Group

Study Group VII – Data Communications Networks

3-13 July 1989	Meeting of the Study Group
5-16 February 1990	Meeting of the Study Group and its Working Parties
12-23 November 1990	Meeting of the Study Group and its Working Parties
2-13 September 1991	Meeting of the Study Group and its Working Parties
6-16 April 1992	Meeting of the Study Group

Study Group VIII – Terminals for Telematics Services

12-20 April 1989	Meeting of the Study Group
26 March-4 April 1990	Meeting of the Working Parties
5-14 September 1990	Meeting of the Study Group
18-27 March 1991	Meeting of the Study Group
16-25 October 1991	Meeting of the Study Group and its Working Parties
22-30 April 1992	Meeting of the Study Group

Study Group IX – Telegraph Networks and Telegraph Terminal Equipment

24-28 April 1989	Meeting of the Study Group
28 May-1 June 1990	Meeting of the Study Group
19-28 February 1991	Meeting of the Working Parties
7-15 April 1992	Meeting of the Study Group

Study Group X – Languages for Telecommunications Applications

22-26 May 1989	Meeting of the Study Group
6-15 November 1989	Meeting of the Working Parties
4-15 June 1990	Meeting of the Working Parties
6-13 February 1991	Meeting of the Study Group

20 - 28 November 1991	Working Parties X/1 (Human-machine interface for telecommunication networks), X/2 (Support environment and software quality for telecommunication systems) and X/4 (CHILL)
4 - 13 December 1991	Working Party X/3 (Formal description techniques, specification and description languages)
18 - 27 May 1992	Meeting of the Study Group

Study Group XI – Switching and Signalling

5 - 12 January 1989	Meeting of Experts in Signalling System No. 7
29 March - 11 April 1989	Meeting of the Study Group
2 - 6 October 1989	Working Party XI/2 (Common protocols)
3 - 12 October 1989	Working Party XI/5 (Information flows)
9 - 13 October 1989	Working Party XI/1 (Interworking and mobile)
9 - 13 October 1989	Working Party XI/3 (Handbook on Signalling System No. 7 implementation)
16 - 27 October 1989	Working Party XI/6 (User-to-user control)
4 - 15 December 1989	Working Parties XI/4 (New techniques) and XI/7 (Operation, Administration and Management (OAM))
5 - 23 March 1990	Meeting of the Working Parties
1 - 12 October 1990	Meeting of the Study Group
8 - 26 April 1991	Meeting of the Study Group and its Working Parties
16 Sept. - 4 Oct. 1991	Meeting of the Study Group and its Working Parties
9 - 20 March 1992	Meeting of the Study Group

Study Group XII – Transmission Performance of Telephone Networks and Terminals

9 - 17 March 1989	Meeting of the Study Group and its Working Parties
7 - 16 February 1990	Meeting of the Study Group and its Working Parties
24 Oct. - 2 Nov. 1990	Meeting of the Study Group and its Working Parties
6 - 13 September 1991	Meeting of the Working Parties
24 Feb. - 6 March 1992	Meeting of the Study Group and its Working Parties

Study Group XV – Transmission Systems and Equipment

13 - 22 March 1989	Meeting of the Study Group
26 - 27 June 1989	Joint meeting of Experts of Study Groups XV and XVIII
28 - 30 June 1989	Special Rapporteurs Group on Questions 10/XV and 29/XV
14 - 22 September 1989	Special Rapporteurs Group on SDH overhead aspects, Rapporteurs Group on Questions 9/XV, 19/XV and 29/XV, Joint meeting of Special Rapporteurs on Questions 9/XV and 19/XV and on SDH overhead aspects and Joint meeting of Special Rapporteurs on Questions 29/XV and 19/XV and on SDH overhead aspects
20 Nov. - 1 Dec. 1989	Meeting of the Working Parties

23 November 1989	Working Parties XV/3 (Multiplexing), XV/5 (Optical transmission) and XVIII/7 (Digital hierarchies)
16 - 27 July 1990	Meeting of the Study Group and its Working Parties
18 Feb. - 1 March 1991	Meeting of the Working Parties
8 - 19 July 1991	Working Parties XV/4 (Local network guide) and XV/2 (Signal processing)
11 - 22 November 1991	Meeting of the Working Parties
4 - 15 May 1992	Meeting of the Study Group

Study Group XVII – Data Transmission over the Telephone Network

13 - 21 March 1989	Meeting of the Study Group
26 - 29 September 1989	Meeting of the Study Group and its Working Parties
19 - 27 April 1990	Meeting of the Study Group and its Working Parties
15 - 23 October 1990	Meeting of the Study Group and its Working Parties
29 April - 3 May 1991	Meeting of the Working Parties
29 Oct. - 6 Nov. 1991	Meeting of the Working Parties
8 - 12 June 1992	Meeting of the Study Group

Study Group XVIII – ISDN

9 - 13 January 1989	Joint experts meeting of Study Groups I and XVIII on the definition and description of services and on organizational matters
23 Jan. - 3 Feb. 1989	Meeting of ISDN Experts
19 - 30 June 1989	Meeting of the Study Group
26 - 27 June 1989	Joint meeting of Experts of Study Groups XV and XVIII
20 - 24 November 1989	Working Party XVIII/7 (Digital hierarchies)
8 - 19 January 1990	Meeting of the Working Parties
9 - 25 May 1990	Meeting of the Study Group and its Working Parties
26 Nov. - 7 Dec. 1990	Meeting of the Working Parties
11 - 28 June 1991	Meeting of the Study Group and its Working Parties
2 - 13 December 1991	Meeting of the Working Parties
9 - 19 June 1992	Meeting of the Study Group

II – Plan Committees

WORLD PLAN – General Plan for the development of the International Telecommunication Network

20-22 March 1991	Meeting of the Working Party

PLAN FOR AFRICA – General Plan for the development of the Regional Telecommunication Network in Africa

27-29 March 1990	Meeting of the Coordination Committee
6-13 March 1991	Meeting of the Committee

PLAN FOR LATIN AMERICA – General Plan for the development of the Regional Telecommunication Network in Latin America

30 August-6 Sept. 1989	Meeting of the Committee

PLAN FOR ASIA AND OCEANIA – General Plan for the development of the Regional Telecommunication Network in Asia and Oceania

15-17 February 1989	Meeting of the Coordination Committee
31 Oct.-7 Nov. 1990	Meeting of the Committee

PLAN FOR EUROPE – General Plan for the development of the Regional Telecommunication Network in Europe and the Mediterranean Basin

25-27 September 1990	Meeting of the Coordination Committee

III – Special Autonomous Groups

GAS 7 - Rural telecommunications

5-8 September 1989	Plenary meeting
3-6 September 1990	Plenary meeting
17-20 September 1991	Plenary meeting

GAS 9 – Economic and technical aspects of transition from an analogue to a digital network (Case study of a global network)

16-20 October 1989	Plenary meeting
24 Jan.-2 Feb. 1990	Working Parties GAS 9/1 (Progressive introduction of ISDN in a national network) and GAS 9/2 (Regional networking)
5-9 June 1990	Working Parties GAS 9/1 (Progressive introduction of ISDN in a national network) and GAS 9/2 (Regional networking)
17-25 September 1990	Plenary meeting and meeting of the Working Parties
14-18 January 1991	Meeting of the Working Parties
22-26 April 1991	Meeting of the Working Parties
4-8 November 1991	Plenary meeting

GAS 12 – Strategy for the introduction of new non-voice telecommunication services in developing countries

18-22 September 1989	Plenary meeting
25-29 June 1990	Plenary meeting
10-14 June 1991	Plenary meeting

IV – Regional Tariff Groups of Study Group III

GR TAF – Tariffs (Africa)

5-12 April 1989	Meeting

GR TAS – Tariffs (Asia and Oceania)

19-23 March 1990	Meeting

GR TEUREM – Tariffs (Europe and the Mediterranean Basin)

13-16 June 1989	Meeting
17-26 October 1990	Meeting
24-27 September 1991	Meeting

V – Ad hoc Group – Resolution No. 18

Ad hoc Group – Resolution No. 18 – CCITT working methods and structure

26 Feb.-2 March 1990	Meeting of the Ad hoc Group
10-14 September 1990	Meeting of the Working Parties
29 Jan.-7 Feb. 1991	Meeting of the Ad hoc Group and meeting of the Working Parties
28 Oct.-1 Nov. 1991	Meeting of the Ad hoc Group

VI – Chairmen's meetings

2-7 March 1989	Meeting of CCITT Study Group Chairmen
24-25 October and 4-5 November 1991	Meeting of CCITT Study Group Chairmen

Appendix 1 to Part II

List of meetings held from July 1992 to the end of January 1993

(In view of their dates, these meetings are not included in the statistics)

Date	*Meeting*
29 July - 4 August 1992	TAS Group (Tariffs (Asia and Oceania)) (Study Group III)
15 - 18 September 1992	Rapporteurs' Groups of Working Parties II/1 (Numbering and Routing) and II/3 (Traffic Engineering)
16 - 18 September 1992	TEUREM Group (Tariffs (Europe and the Mediterranean Basin)) (Study Group III)
21 Sept. - 2 Oct. 1992	Working Parties XI/1 (Interworking and mobile), XI/2 (Common protocols), XI/4 (New techniques) and XI/6 (User-to-user control)
28 Sept. - 2 Oct. 1992	Working Parties III/3 (Tariffs and accounting for telex and telegraph services and data transmission services on public data networks) and III/6 (Tariffs and accounting for services offered on ISDN)
28 Sept. - 2 Oct. 1992	Working Parties of Study Group XII (Transmission Performance of Telephone Networks and Terminals)
6 - 9 October 1992	Working Parties of Study Group V (Protection against Electromagnetic Effects)
12 - 16 October 1992	Working Parties of Study Group I (Services)
19 - 23 October 1992	Working Parties XI/5 (Information flows) and XI/7 (Operation, Administration and Management (OAM))
20 - 22 October 1992	Meeting of CCITT Study Group Chairmen
20 - 23 October 1992	Working Parties of Study Group VI (Outside Plant)
26 - 30 October 1992	Working Parties of Study Group VII (Data Communications Networks)
2 - 10 November 1992	Working Parties of Study Group XV (Transmission Systems and Equipment)
16 - 20 November 1992	Working Parties X/2 (Support environment and software quality for telecommunication systems), X/3 (Formal description techniques, specification and description languages) and X/4 (CHILL)
12 - 15 January 1993	Working Parties of Study Group XVII (Data Transmission over the Telephone Network)
19 - 29 January 1993	Working Parties of Study Group XVIII (ISDN)
20 - 26 January 1993	Ad hoc Group – Resolution No. 18 (CCITT Structure and Working Methods)
21 - 29 January 1993	Working Parties of Study Group IV (Maintenance)

ANNEX 1

Participation of Member countries in CCITT meetings

COUNTRIES (Administrations or Recognized private operating agencies)	Study Groups and their Working Parties															Plan Committees					Regional Tariff Groups			Special Autonomous Groups			Ad Hoc Group Res. 18	TO-TAL
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XV	XVII	XVIII	AF	AL	AS	EU CC	W WP	TAF	TAS	TEU-REM	GAS 7	GAS 9	GAS 12		
Algeria		x	x													x							x		x	x		6
Germany	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x												x	16
Angola			x									x																2
Saudi Arabia	x	x	x				x				x		x		x			x		x				x		x	x	12
Argentina			x																									1
Australia	x	x	x	x	x		x		x		x		x		x										x		x	12
Austria	x		x	x		x	x	x	x		x	x	x	x	x								x					13
Bahrain			x															x				x						3
Belgium	x	x	x	x	x	x	x	x		x	x		x	x	x								x					14
Benin																x					x							2
Bolivia			x																									1
Brazil	x	x	x	x	x		x	x		x	x	x	x	x	x													13
Brunei Darussalam																						x						1
Bulgaria																									x			1
Burkina Faso																x					x			x				3
Burundi			x																		x							2
Cameroon			x		x											x					x			x	x	x		7
Canada	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x							x	x	x	x	20
Central African Rep.			x													x					x				x			4

COUNTRIES (Administrations or Recognized private operating agencies)	Study Groups and their Working Parties															Plan Committees					Regional Tariff Groups			Special Autonomous Groups			Ad Hoc Group Res. 18	TO-TAL
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XV	XVII	XVIII	AF	AL	AS	EU CC	W WP	TAF	TAS	TEU-REM	GAS 7	GAS 9	GAS 12		
Chile			x								x						x											3
China	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x									x	17
Cyprus	x	x	x								x												x		x	x		7
Colombia			x														x											2
Congo																x												1
Korea (Rep. of)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x		x					x	x	x	20
Costa Rica																	x											1
Côte d'Ivoire																x					x					x		3
Cuba																	x											1
Denmark	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x								x					16
Djibouti																x												1
El Salvador																	x											1
United Arab Emirates			x																									1
Ecuador			x																									1
Spain	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	25
United States	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x				x	x	x	x	23
Ethiopia		x														x					x							3
Finland	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				x				x					17
France	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	25
Gabon							x									x					x							3
Gambia			x								x					x					x							4
Ghana																					x				x			2
Greece	x		x	x	x	x	x	x	x		x	x	x	x	x								x	x	x		x	17

COUNTRIES (Administrations or Recognized private operating agencies)	Study Groups and their Working Parties															Plan Committees					Regional Tariff Groups			Special Autonomous Groups			Ad Hoc Group Res. 18	TO-TAL
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XV	XVII	XVIII	AF	AL	AS	EU CC	W WP	TAF	TAS	TEU-REM	GAS 7	GAS 9	GAS 12		
Guatemala			x																									1
Guinea																x												1
Haiti																	x											1
Honduras					x												x											2
Hungary	x	x	x	x	x		x				x	x	x	x	x					x			x		x	x	x	16
India	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x				x			x	x		19
Indonesia	x		x	x	x		x	x	x		x		x		x			x		x		x		x	x	x		16
Iran (Isl. Rep. of)	x	x	x	x	x	x	x	x	x	x	x		x	x	x			x						x	x	x	x	19
Ireland	x	x					x	x	x		x	x		x	x								x				x	11
Israel	x		x					x					x		x													5
Italy	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x		x	x			x	x	x	x	x	23
Jamaica										x																		1
Japan	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x			x	x	x	x	x	24
Kenya	x	x	x								x				x										x			6
Kuwait		x	x	x						x	x							x							x			7
Lebanon			x															x					x	x	x	x		6
Liberia																					x							1
Libya																								x	x			2
Madagascar			x																									1
Malaysia		x	x															x				x						4
Mali			x													x								x	x	x		5
Malta			x																									1
Morocco																									x	x		2

COUNTRIES (Administrations or Recognized private operating agencies)	Study Groups and their Working Parties															Plan Committees					Regional Tariff Groups			Special Autonomous Groups			Ad Hoc Group Res. 18	TO-TAL
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XV	XVII	XVIII	AF	AL	AS	EU CC	W WP	TAF	TAS	TEU-REM	GAS 7	GAS 9	GAS 12		
Mexico		x	x								x		x	x	x		x								x		x	9
Monaco								x																				1
Namibia			x																									1
Nepal																						x						1
Nicaragua			x														x											2
Niger																x					x							2
Norway	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				x	x			x				x	19
New Zealand	x	x	x	x							x		x		x													7
Oman			x										x												x			3
Uganda																					x							1
Pakistan			x																									1
Panama			x																									1
Netherlands	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x					x	x			x	20
Peru			x														x											2
Philippines		x	x		x										x			x				x		x				7
Poland			x										x										x					3
Portugal	x	x	x	x			x	x	x	x	x	x	x	x	x								x		x	x	x	17
Qatar	x	x	x															x										4
Syria			x																				x					2
Romania			x																									1
United Kingdom	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x		x	x			x	x	23
Russia	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x					x							x	17
Senegal							x									x									x	x		4

COUNTRIES (Administrations or Recognized private operating agencies)	Study Groups and their Working Parties															Plan Committees					Regional Tariff Groups			Special Autonomous Groups			Ad Hoc Group Res. 18	TO-TAL
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XV	XVII	XVIII	AF	AL	AS	EU CC	W WP	TAF	TAS	TEU-REM	GAS 7	GAS 9	GAS 12		
Singapore	x	x	x	x			x	x	x		x		x		x			x				x						12
Sudan																					x							1
Sri Lanka																						x						1
Sweden	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				x	x			x				x	19
Switzerland	x	x	x	x	x	x	x	x		x	x	x	x	x	x								x				x	16
Suriname																	x											1
Tanzania			x																		x							2
Chad																x												1
Czech and Slov. F. R.	x	x	x				x	x	x	x			x	x	x								x					11
Thailand	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x		x		x			x	x		20
Togo																					x					x		2
Trinidad and Tobago		x																										1
Tunisia					x			x			x		x			x												5
Turkey	x		x								x				x													4
Ukraine								x	x																			2
Uruguay																	x											1
Venezuela			x														x											2
Yugoslavia	x	x		x			x	x	x		x	x	x	x	x				x					x	x			14
Zambia			x																									1
Zimbabwe							x																		x			2
TOTAL	39	41	71	32	30	23	36	34	29	26	41	27	38	30	39	21	21	20	8	14	16	11	23	18	32	24	23	

ANNEX 2

Participation in CCITT meetings and contributions received

		Study Groups and their Working Parties															Plan Committees					Regional Tariff Groups			Special Autonomous Groups			Ad Hoc Group Res. 18
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XV	XVII	XVIII	AF	AL	AS	EU CC	W WP	TAF	TAS	TEU-REM	GAS 7	GAS 9	GAS 12	
Administrations		37	37	69	28	27	20	34	31	24	24	38	25	36	26	38	19	16	17	5	11	16	10	17	13	29	20	20
Recognized private operating agencies		31	30	38	25	13	11	24	18	16	13	29	16	22	18	32	4	11	15	4	6	–	3	16	9	8	5	16
Scientific or industrial organizations		35	19	2	39	25	20	46	39	7	30	57	16	79	39	79	4	7	7	–	–	–	–	–	12	4	4	6
International organizations		9	3	10	1	3	1	8	4	–	1	4	2	6	1	7	5	3	5	–	–	1	1	1	–	–	2	–
Contributions	normal	130	90	109	97	40	63	247	213	53	28	40	127	195	34	107	15	–	21	–	1	–	2	1	–	–	–	30
	delayed	614	107	87	106	104	44	511	398	34	116	1990	146	456	205	2465	13	23	12	–	–	–	–	9	–	–	–	69
Reports		50	35	30	36	12	13	61	55	9	36	261	31	104	11	122	3	2	3	1	1	1	1	3	3	9	5	8

2. Report on the CCITT Specialized Secretariat

In accordance with the provisions of the Nairobi Convention (1982), the Director of the CCITT was re-elected by the Plenipotentiary Conference (Nice, 1989). He is assisted in his work by a Specialized Secretariat.

1. *Structure of the CCITT Specialized Secretariat*

The Specialized Secretariat comprises the departments listed below:

Department A:	General affairs
Department B:	Telecommunication networks and network components
Department C:	Telecommunication services and tariffs
Technical Services Department:	Technical editing and terminology

Each Department, except the Technical Services Department, is responsible, within its area of activity, for circulating contributions submitted by members, preparing work programmes for meetings, assisting Study Group Chairmen, providing the secretariat for meetings and preparing meeting reports. The Specialized Secretariat lends its assistance to Chairmen and participants at meetings. It handles liaison with other organizations and with the CCIR, reviews the technical characteristics of projects and reports prepared by experts recruited by the Telecommunications Development Bureau (BDT) and, when required, provides lecturers for BDT seminars.

Department A also coordinates relations with the General Secretariat (Finance, Conferences and Common Services, Personnel, Information Services, etc. Departments). It includes an administrative service and a documents service which handle the organization of and documentation for meetings, in cooperation with the relevant services of the General Secretariat.

In addition, Department A handles the organization of the Plenary Assembly and assists the Director in matters pertaining to the Administrative Council and internal committees within the ITU.

2. The manning table of permanent staff in the CCITT Specialized Secretariat is given in Annex 1.

3. *Officials who took retirement during the 1989-1992 study period*

- Mr. R. Baillod, (Switzerland), Counsellor
- Mr. Z. Bobilewicz, (Poland), Head of the Laboratory
- Mrs. L. Fernandez del Pino, (Spain), Assistant
- Mrs. M. E. Galeras Roy, (Switzerland), Assistant
- Mr. M. Geromel (France), Draughtsman
- Mr. C. Moussac (France), Engineer/Editor
- Mr. S. Novikov, (USSR), Senior Counsellor
- Mr. E. Pierre (Haiti), Counsellor
- Mrs. C. Vigneulle, (France), Assistant

Death:

- Mr. A. Lefort, (Belgium), Engineer, 12 November 1990

ANNEX 1

Permanent staff of the CCITT Specialized Secretariat as approved by the Administrative Council

(actual strength *)

Grade	Number			
	1989	1990	1991	1992
D1	3	2	2	2
P5	7	6	5	5
P4	3	4	4	6
P3	2	2	2	1
P2	2	2	2	1
P1	–	–	–	–
G7	2	2	2	2
G6	17	16	18	18
G5	1	3	1	1
G4	3	2	2	2
Total	40	39	38	38

*) In line with the decisions of the Plenipotentiary Conference (Nice, 1989), a number of posts have been frozen; these are not included in this table.

4.2 – REPORT BY COMMITTEE 2

(as approved by the Conference)

BUDGET CONTROL COMMITTEE

During the Conference, the Budget Control Committee held two meetings and considered the various items of its terms of reference.

In accordance with the relevant provisions of the Convention of the International Telecommunication Union (Geneva, 1992), the terms of reference of the Budget Control Committee are to determine the organization and the facilities available to the delegates, to examine and approve the accounts for expenditure incurred throughout the duration of the Conference and to estimate the costs that may be entailed by the execution of the decisions taken by the Conference.

1. Agreement concluded between the Government of Finland and the Secretary-General of the ITU

Pursuant to Resolution No. 83 (amended) of the ITU Council relating to the organization, financing and liquidation of the accounts of ITU conferences and meetings, the Finnish Government and the ITU Secretary-General concluded an agreement concerning the organization and financing of the World Telecommunication Standardization Conference.

The Budget Control Committee took note of the agreement concluded between the Finnish Government and the Secretary-General of the Union.

2. Organization and facilities available to delegates

The Budget Control Committee reviewed the organization of the Conference and the facilities made available to delegates. The Committee wishes to extend its sincere thanks to the Government of Finland for all the arrangements made to ensure the smooth running of the work of the Conference. It also expressed its satisfaction at the efforts made by the staff of the Finnish Administration and the Union staff assigned to the Conference.

3. Expenditure incurred since the IXth Plenary Assembly

The Budget Control Committee took note of the information provided by the Secretary-General and the Director of the Telecommunication Standardization Bureau concerning expenditure on CCITT meetings for the years 1989 to 1991 and the budgets for 1992 and 1993.

The Committee noted that the expenditure for 1989 to 1991 was lower than foreseen in the budgets. The Committee further observed that, thanks to measures taken to cut the cost of dispatching documents for study group meetings, expenditure in that connection had been reduced and kept within the authorized credits.

4. Financial needs of the ITU Telecommunication Standardization Sector until the next Conference

The Budget Control Committee considered the report by the Director of the Telecommunication Standardization Bureau setting out the Sector's financial needs for meetings until the next World Telecommunication Standardization Conference, and took note of the estimated credits included in the report (see Document AP X-4, Part 3).

To sum up, these expenditure estimates are based on the following programme of meetings:

Year	Days of meetings
1994	310
1995	310
1996	310
1997	220 (210 + WTSC)

It is understood that this programme might be modified.

On this basis, and assuming that all study group meetings will be held in Geneva, the overall credit estimates are as follows:

OPTION 1

(In Swiss francs)

Year	Section 13	Section 17	Total
1993	3,420,000	1,686,000	5,106,000
1994	3,070,000	3,218,000	6,288,000
1995	3,105,000	3,043,000	6,148,000
1996 *)	3,780,000	2,674,000	6,454,000
1997	3,105,000	3,043,000	6,148,000
	16,480,000	13,664,000	30,144,000

*) Including credits for the second WTSC.

OPTION 2

(In Swiss francs)

Year	Section 13	Section 17	Total
1993	3,420,000	1,686,000	5,106,000
1994	3,070,000	3,218,000	6,288,000
1995	3,105,000	3,043,000	6,148,000
1996	3,105,000	3,043,000	6,148,000
1997 *)	3,780,000	2,674,000	6,454,000
	16,480,000	13,664,000	30,144,000

*) Including credits for the second WTSC if held in 1997.

All these figures are based on the conditions of service prevailing at 1 January 1992, and will of course have to be revised when preparing annual budgets to take account of changes in conditions of service.

5. Budget of the Conference

The Budget Control Committee considered the budget of the Conference, as approved by the Council at its June 1992 session, amounting to 813,000 Swiss francs, and noted the budget for expenditure incurred by the Conference for supernumerary staff in the Common Services of the ITU General Secretariat, estimated at 190,000 Swiss francs. Accordingly, the total budget for the Conference was estimated at 1,003,000 Swiss francs.

The Committee noted that the Conference Budget had been adjusted to take account of changes in the common system of salaries and allowances of the United Nations and specialized agencies. After those adjustments, the Conference budget at 9 March 1993 stood at 1,011,400 Swiss francs, representing an increase of 8,400 Swiss francs.

6. Situation of the accounts of the Conference

Pursuant to the relevant provisions of the Convention of the International Telecommunication Union (Geneva, 1992) the Budget Control Committee is required to submit a report to the Plenary Meeting showing as accurately as possible the estimated total expenditure of the Conference.

Accordingly, the Annex to this document shows the position of the Conference budget as approved by the Council and adjusted in accordance with Council Resolution 647, giving a breakdown of credits by sub-head and item and actual expenditure as at 9 March 1993. This statement also provides an indication of expenditure committed as at that date and estimated expenditure until the end of the Conference.

It emerges from the aforementioned statement that the total expenditure charged to the ordinary budget for the World Telecommunication Standardization Conference is estimated at 971,000 Swiss francs, i.e. 40,400 Swiss francs less than the credit adjusted at 9 March 1993.

The Plenary Meeting is requested to consider and approve this report, which, together with the observations of the Plenary Meeting, shall then be transmitted to the Secretary-General for submission to the Council at its next session scheduled for June 1993.

ANNEX

Estimate of expenditure for the World Telecommunication Standardization Conference

Recapitulation	Budget value 1/1/92	Budget value 9/3/93	Actual expenditure 9/3/93	Committed and estimated expenditure	Total expenditure charged to ord. budget	Total expenditure charged to Host Administration
Section 13	(In Swiss francs)					
Salaries and related expenses						
– Meeting staff	360,000	361,400		320,000	320,000	–56,000
– Travel expenses (recruitment)	86,000	86,000		86,000	86,000	–84,000
– Insurance	3,000	3,000		3,000	3,000	–1,000
Sub-total I	449,000	450,400		409,000	409,000	–141,000
Cost of travel outside Geneva						
– Subsistance allowance						460,000
– Travel expenses						226,000
– Transport and dispatch cost						20,000
Sub-total II						706,000
Premises and equipment						
– Premises, furniture, machines	15,000	15,000		15,000	15,000	–15,000
– Document production	16,000	16,000	1,000	26,000	27,000	
– Supplies and office expenses	30,000	30,000		20,000	20,000	
– PTT	300,000	300,000	2,000	298,000	300,000	
– Sundry and unforeseen	3,000	3,000		3,000	3,000	90,000
Sub-total III	364,000	364,000	3,000	362,000	365,000	75,000
Less: Staff available to the Conference						–56,000
Total Section 13	813,000	814,000	3,000	771,000	774,000	584,000
Section 17 (estimate)	190,000	197,000		197,000	197,000	
Total Sections 13 and 17	1,003,000	1,011,400	3,000	968,000	971,000	584,000

4.3 – REPORT BY COMMITTEE 3

(as approved by the Conference)

WORKING METHODS OF THE ITU TELECOMMUNICATION STANDARDIZATION SECTOR

1. Committee 3, set up to consider the working methods of the ITU Telecommunication Standardization Sector, held four meetings during the World Telecommunication Standardization Conference (Helsinki, 1993).

Its discussions focussed on the following documents from the ad hoc Group – Resolution No. 18:

AP X-23(Rev.1)
AP X-25
AP X-26
AP X-40

and on documents submitted by Members, often containing proposals relating to the basic documents listed above.

2. At its first meeting, after taking note of the provisions of Resolution No. 18 (Melbourne, 1988), the Committee reviewed the various documents which were introduced by the Chairman of the ad hoc Group – Resolution No. 18 and by the Members which had submitted contributions.

As a result of the discussions which took place during its meetings, the Committee adopted, for approval by the Conference, the documents listed below containing draft Resolutions or Recommendations on the future work of the ITU Telecommunication Standardization Sector.

Details of the debates may be found in the summary records of the meetings (Documents 39, 52, 88 and 94).

3. Draft Resolutions or Recommendations submitted to the Plenary Meeting[1)]

- Draft Resolution No. 1 – Rules of procedure and working methods of the ITU Telecommunication Standardization Sector (ITU-T)
  (Document 69)
  - conferences
  - study groups
  - study group management
  - Telecommunication Standardization Advisory Group
  - Director and Bureau (TSB)
  - submission and processing of contributions
  - development and approval of Questions
  - approval of Recommendations
- Draft Resolution No. 9 – Development of electronic document handling
  (Document 72)
- Draft Resolution No. 10 – Electronic Document Handling Group within the Telecommunication Standardization Advisory Group
  (Document 73)

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1) *Note by the TSB* – The Resolutions and Recommendations, as adopted by the WTSC (Helsinki, 1993), are contained in *Book No. 1* the World Telecommunication Standardization Conference (Helsinki, 1993).

- Draft Resolution No. 12 – An information bulletin for the Telecommunication Standardization Sector
(Document 74)
- Draft Recommendation A.23 – Collaboration with other international organizations on information technology, telematic services and data transmission
(Document 83 + Corr.)
- Draft Resolution No. 6 – Relations with other standardization organizations
(Document 83 + Corr.)
- Draft Resolution No. 3 – Publication of ITU-T Recommendations
(Document 83 + Corr.)
- Draft Resolution No. 4 – Identification and layout of Recommendations
(Document 83 + Corr.)
- Draft Resolution No. 5 – Supplements to the ITU-T Recommendations
(Document 83 + Corr.)
- Draft Resolution No. 18 – Principles and procedures for the allocation of work to, and coordination between, the Radiocommunication and Telecommunication Standardization Sectors
(Document 85)
- Resolution No. 7 *(amended)* – Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Committee (IEC)
(Document 83 + Corr.)
- Draft Recommendation A.15 – Elaboration and presentation of texts for Recommendations of the ITU Telecommunication Standardization Sector
(Document 71)
- Resolution No. 11 *(revised)* – Collaboration with the Consultative Council for Postal Studies (CCPS) of the Universal Postal Union (UPU) in the study of new services concerning both the postal and the telecommunication Sectors
(Document 78)
- Draft Recommendation A.14 – Production, maintenance and publication of ITU-T terminology
(Document 81)

Under consideration within the Editorial Committee.

4. Committee 3 reviewed the status of Recommendations, Resolutions and Opinions adopted at Melbourne (1988) (see Document 79).

5. The Committee proposed that a comprehensive and up-to-date list of the Recommendations in force in the Telecommunication Standardization Sector be published. The list should be periodically updated for the benefit of the membership.

6. The Committee strongly encourages the TSB to disseminate Recommendations by electronic media (CD ROM, access to the database, ITUDOC), in addition to publishing Recommendations on paper.

7. Finally the Committee took note of a document entitled "Data elements and tabular data in ITU Recommendations" for transmission to the Telecommunication Standardization Advisory Group (see Document 77).

4.4 – REPORT BY COMMITTEE 4

(as approved by the Conference)

STRUCTURE AND WORK PROGRAMME OF THE STUDY GROUPS

General

1. In accordance with decision of the first Plenary session concerning the structure of the World Telecommunication Standardization Conference (Document 29) the terms of reference of Committee 4 "Structure and work programme of the study groups", were defined as follows:

- to examine the structure and work programme of the study groups and to draw up a list of Questions for the study groups;
- to examine the pertinent sections of the report of the ad hoc Group – Resolution No. 18 and documents submitted by countries;
- to examine the Questions proposed by the study groups.

2. The Chairman and Vice-Chairman of Committee 4 were designated as follows:

Chairman: Mr. M. Israel (Canada)

Vice-Chairman: Mr. J. Haydon (Australia).

3. The report of Committee 4 to the WTSC will be structured in accordance with main issues considered by the Committee, viz:

I. Study group structure and mandates.

II. Work programme of the study groups.

III. Joint Coordination Groups (JCG).

IV. Intersector Coordination Group (ICG).

V. Transfer of work from the Radiocommunication Sector to the Telecommunication Standardization Sector.

4. The results of the four sessions of the Committee are as follows:

Results of the work of Committee 4

I. Study group structure and mandates (Resolution No. 2)

1. Documents

AP X-24(Rev.1), AP X-44
WTSC 7, 8, 9, 12, 20, 21

2. Results

2.1 The Committee endorsed the report from the Ad Hoc Group Resolution No. 18 on study group responsibility and mandates, together with amendments and additions made during the meetings.

II. Work Programme of the study groups

1. Documents

1.1 *Study programmes proposed by the study groups*

Source/Study Group	
I	AP X-16 + (Corr., E only)
II	AP X-6
III	AP X-10
IV	AP X-34
V	AP X-12
VI	AP X-14
VII	AP X-21
VIII	AP X-20
IX	AP X-28
X	AP X-32
XI	AP X-18
XII	AP X-8 (and AP X-7 for Synoptic List)
XV	AP X-30
XVII	AP X-36
XVIII	AP X-38
... (formerly CMTT)	WTSC-19+(Add.1) WTSC-86, Annex 2, Part A

1.2 *Proposals for amendments to study programme*

AP X-41, 43, 51
WTSC-2+(Corr.2), 3, 11, 35, 42, 58 (Rev.1)

2. Results

2.1 The Committee accepted the work programmes submitted by the study groups, as contained in the documents listed in § 1.1 above.

2.2 In view of the amendments agreed to Questions L, M, N and P/XVIII (as proposed in Document 35 and recorded in Annex 2 to Document 42), the United Kingdom advised that it was withdrawing Document 3, since the proposals in this document were now satisfied by the amended Study Group XVIII Questions.

2.3 Mr. A. Pugh (United Kingdom), kindly volunteered to lead a small Ad Hoc Group to consider the amendments proposed in document 11 in a number of Questions of Study Groups I, VIII, IX and XVIII.

The proposals of this Ad Hoc Group were contained in a Temporary Document.

2.4 Committee 4 also agreed with the suggestion made in Document 11, paras. 2.7 and 2.8 that:

a) existing Recommendations not covered by Questions on the work programme should be maintained and supported by the respective study groups.

b) that is was necessary for each study group to develop its respective work programme for the next study period.

The attention of all study groups is drawn to the requirement mentioned in para. a) above.

With respect to para. b) above, this requirement is already covered in Resolution No. 1.

2.5 The proposals for amendments to the work programme approved by the Committee are contained in Annex 1, as follows:

Annex 1, Part A:	Amendments to Study Group 1 Questions
Annex 1, Part B:	Amendments to Study Group 2 Questions
Annex 1, Part C:	Amendments to a Study Group 3 Question
Annex 1, Part D:	Amendments to a Study Group 6 Question
Annex 1, Part E:	Amendments to Study Group 8 Questions
Annex 1, Part F:	Amendments to Study Group 13 Questions
Annex 1, Part G:	Amendments to Study Group 15 Questions
Annex 1, Part H:	Texts of new Study Group 9 (former CMTT) – Questions developed jointly by the Chairmen of Radiocommunication Sector Study Group 11 and of Study Group 9.

III. Joint Coordination Groups (JCGs)

1. Documents

AP X-24(Rev.1), APX-40, Annex A, AP X-44
WTSC 42

2. Results

2.1 The Committee approved a new draft Resolution (Draft Resolution No. 16) relating to the "Initiation of joint coordination groups to deal with matters of concern to multiple study groups in the Telecommunication Standardization Sector in accordance with Resolution No. 1".

2.2 The Committee agreed that it would be the responsibility of the study groups and study group Chairmen to propose the specific terms of reference, the mandates and the subject areas requiring JCGs and that such proposals would be forwarded to the first meeting of the Telecommunication Standardization Advisory Group in June 1993.

IV. Intersector Coordination Groups (ICG)

1. Documents

AP X-24(Rev.1), AP x-40 (Annex D)
WTSC 7, 8, 9, 42

2. Results

2.1 The Committee approved a draft new Resolution (Draft Resolution No. 18) on the "Principles and procedures for the allocation of work to, and coordination between, the Radiocommunication and Telecommunication Standardization Sectors". In particular, a new Annex C prepared by an Ad Hoc Group chaired by Mr. A. Berrada (Morocco) was approved, which outlines the procedures to be applied for establishing ICGs.

2.2 The Directors of the TSB and BR and the Chairman of Ad Hoc Group Resolution No. 18 were requested to give their opinions on how they viewed the mechanisms and functioning of work requiring inter-sector coordination.

Following the replies by Messrs. Irmer, Kirby and Hoffman and the subsequent discussions, a number of issues were raised, viz:

i) The joint meeting of the CCIR Ad Hoc Advisory Group (Resolution 106) and the CCITT Ad Hoc Group (Resolution No. 18), report in Document AP X-40, agreed that:

   a) Future Public Land Mobile Telecommunication Systems (FPLMTS) and Universal Personal Telecommunications (UPT) were recognized as being areas of common interest to the two Sectors. It was agreed that a JCG should be formed for these two areas, reporting to the Telecommunication Standardization Sector.

   b) The CMTT would be transferred under the responsibility of the Standardization Sector.

   c) That the Bureaux of the two Sectors would, as a first step, prepare a provisional list of Questions, or parts thereof, which would be transferred to the Standardization Sector, or which are of common interest to the two Sectors.

This was done (see DT/13).

ii) It was pointed out that maintaining CMTT as a joint Study Group, was not allowed for under the new Convention (APP-92). The Director of the BR explained that CMTT had traditionally been a joint Study Group for over 30 years, since it allowed participation by broadcasting interests, who would not be obliged to pay dual contributions to both the old CCIR and CCITT.

   One way of maintaining CMTT is not to call it a Joint Study Group, but to refer to it as a "Joint meeting". This would avoid apparent conflict with the Convention.

   It may however be necessary to prepare a Resolution to the 1994 Plenipotentiary Conference to regularize the status of CMTT.

2.3 The Committee also approved two draft Resolutions requiring intersector coordination, viz.

- Draft Resolution No. 15: Establishment of an intersector coordination group (ICG) to deal with activities relating to the FPLMTS in the Telecommunication Standardization and Radiocommunication Sectors
- Draft Resolution No. 14 Establishment of an intersector coordination group (ICG) to deal with satellite matters of common interest to the Telecommunication Standardization and Radiocommunication Sectors

V. Radiocommunication Sector Coordination

1. Documents

AP X-40
WTSC 1, 19 + (Add.), 42

2. Results

2.1 Based on document DT/13 prepared by the Bureaux of the two Sectors, Mr. J. Haydon (Australia), Vice-Chairman of Committee 4 headed an Ad Hoc Group which prepared a working document on the transfer of work from the Radiocommunication Sector to the Standardization Sector [see Document 55(Rev.1)].

This document is intended to be a working document for use by administrations, study groups, study group Chairmen, delegates and experts, with the aim of preparing more definitive proposals to the June 1993 meeting of the Telecommunication Standardization Advisory Group.

2.2 The Committee approved a new draft Resolution (Draft Resolution No. 19) entitled:

- Inclusion of appropriate work from the Radiocommunication Sector into the programme of the Telecommunication Standardization Sector.

2.3 i) The Committee also discussed the status of Study Group 9 (former CMTT), and agreed that it would be given a Roman Number in the Standardization Sector study group series.

ii) The new CMTT would be established as "a study group carrying out a common study" which, according to ITU Council Resolution 246, does not imply that the Radiocommunication Sector participants defray the expenses of the Telecommunication Standardization Sector. In accordance with the Resolution from the joint Res. 18/Res. 106 meeting, "arrangements should be made to ensure that meetings are coordinated with the Broadcasting study groups of the Radiocommunication Sector so as to facilitate participation by members of these study groups".

The World Telecommunications Standardization Conference may request the Director of the TSB to confirm with the ITU Council the financial arrangements for Radiocommunication Sector members participating in these joint studies.

If this proposal is approved the existing Paragraph 1.7 of Section 2 of Resolution No. 1 should be deleted, and a new, simpler, Paragraph added:

"1.7 A study group may be set up by the WTSC in order to carry out joint studies with the Radiocommunication Sector and prepare draft Recommendations on questions of common interest. The Telecommunication Standardization Sector shall be responsible for the management of this Study Group and approval of its Recommendations. The WTSC shall appoint the Chairman and Vice-Chairman of the study group[1)], in consultation with the Radiocommunication Assembly as appropriate, and will receive the formal report of the work of the study group. A report for information may also be prepared for the Radiocommunication Assembly."

2.4 The Chairman of SG 9 (former CMTT) made a statement at the meeting, giving some historical background on its special status, as a guide for its future activities. This statement is reproduced in Annex 2.

VI. Collection and publication of official service documents

1. Document

DT/2.

2. Results

The Committee approved a draft new Resolution (Draft Resolution No. 21) entitled:

- Collection and dissemination of operational and service information by the Telecommunication Standardization Bureau.

VII. Allocation of country codes

1. Document

WTSC 70.

2. Results

The Committee approved a draft new Resolution (Draft Resolution No. 20) entitled:

- Procedures for allocation of country and network codes

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1) In special cases the WTSC may appoint the Chairman and request the Radiocommunication Assembly to appoint a Vice-Chairman.

VIII. Regional Tariff Groups

1. At the request of Mr. Rouxeville, Chairman of Study Group III, Committee 4 carried out a wide discussion on the question of the regional tariff groups. In their activities, these groups should include the evaluation of the commercial and regulatory environment, as well as more specific tariff problems arising in their respective regions. For example, the TAF Group would have to overcome a number of obstacles in conducting the cost studies required for any modernization of tariff structures (lack of resources and expertise, absence of any analytical accounting system in the African countries, insufficient input of macro-economic and commercial data for purposes of establishing tariffs). It would therefore seem advisable to review the terms of reference and the working methods of these Groups in order to introduce the necessary changes and flexibility.

2. Following a broad discussion, a consensus emerged on the following points:

a) The regional tariff groups continue to play a highly useful back-up role at the regional level for the activities of Study Group III. Hence there can be no question of disbanding them.

b) Nevertheless, it is desirable to modify their terms of reference and working methods in accordance with the changing international environment, with the initiatives taken by other international organizations and also with the problems or constraints specific to each region.

In particular, the groups should in the future operate as ad hoc or project team groups, with precise terms of reference and objectives.

c) In order to carry out their tasks, these groups, particularly the TAF, TAL and TAS Groups, require the support of the ITU, and especially of the TSB and BDT.

ANNEX 1, Part A

AMENDMENTS TO STUDY GROUP 1 QUESTIONS

1. Question 2/1 – The international telex service

1.2 *Identification of the requirement*

The international telex service is the only subscriber communication service available throughout the world. It has been established for many years with a perceived Quality of Service. It is necessary to safeguard this Quality of Service whenever new applications or facilities are developed, when interworking with other services, or when carrying the international telex service on networks other than the traditional international telex network, e.g. ISDN. While some emerging new services are eroding the subscriber base of the international telex service, it will continue to be an important service for the foreseeable future, especially in countries where the telecommunications infrastructure is still developing. Therefore, the continuation of study of the international telex service as defined in the F-, S- and U-Series Recommendations should primarily be directed towards safeguarding the unique characteristics and operational provisions of the international telex service as contained in Recommendations F.59 and F.60.

1.3 *Text of the Question*

The following points should specifically be studied:

1.3.1 What will be the effect on the quality of service if the international telex service is carried by networks which use packetizing processes? In particular, what should be the appropriate procedures to be applied in order to ensure that the conversational mode is maintained?

1.3.2 Can the international telex service incorporate, where appropriate, some of the characteristics of other services with which it may be interworking without degrading its universal quality of service? The study should examine, but be not limited to, whether the international telex service can incorporate the benefits contained in PAD service signals in accordance with Recommendation X.28 (and other types of PAD) without placing a burden on subscribers of the international telex service.

1.3.3 Given the position of the international telex service within its "service" life cycle, what new facilities or applications are appropriate to be developed, for example:

- What protocols should be used to escape from the Latin alphabet into another alphabet (e.g. Greek) where bi/multi-lingual terminals are used on both sides of telex connections?

- What are the service and technical implications for the quality of service if WRU signals are included in automatically transmitted text and what procedures should be developed to permit this?

- Interworking with appropriate emerging new services, both fixed and mobile, including the study of the conversion from ITA2 characters to character-coded facsimile when the conversion is carried out in the network and not the terminal.

1.3.4 Development of any service and technical criteria to be applied to the allocation of non-zonal telex destination codes to private networks.

1.3.5 What are the service and technical implications within the international telex service of single network access code (SNAC) operation to the mobile satellite provided by Inmarsat systems.

1.4 *Expected results and anticipated target dates*

Subject area	*Approach agreed*	*Draft Recommendation* (new/rev) (where justified)
Telex Quality of Service when "packetizing" processes are used in the supporting network	mid-1993	mid-1994
Bi/multi-lingual terminals on both sides of telex connections (service aspects, user protocols)	mid-1993	end 1994
Any effect on UPT on telex	end 1993	end 1994
Non-zonal telex destination codes	jointly with other study groups	
SNAC operation	end 1994	1996
Maintenance of the relevant F-, S-, U-Series Recommendations	ongoing	
Possible use of X.28 PAD service signals in international telex service	mid-1993	1995
Audio transmission of WRU signal	mid-1993	mid-1994
Code conversion between ITA2 and character-coded facsimile	1994	1996

1.5 *Liaison activities*

Collaboration with SGs 3, and possibly 2, 7: also with any Questions within SG 1 where interworking with international telex service may be considered, in order to protect against degradation of the availability and Quality of Service as perceived by users.

2. Question 3/1 – Further evolution of the INTEX* service

2.1 *Identification of the requirement*

Study Group I has developed the service and operational provisions in respect of the INTEX* service, as defined in Recommendation F.150.

Study Group IX has defined the technical requirements in respect of the INTEX* service in Recommendations U.101, S.33 and S.35. This is a circuit switched text communication service which provides concepts of Quality of Service and security of delivery similar to those of the international telex service with which it is designed to interwork on a real-time basis (cf. Recommendations F.82, S.34 and U.210). It is desirable to study the evolution of this service and similar new services. Consequently, there is a need to develop and maintain the F-, S- and U-Series Recommendations relevant to this service.

2.2 *Text of the Question*

The following topics should specifically be studied:

2.2.1 What further development of the service and technical features and facilities of the INTEX* service are necessary taking into account both telegraph and other networks?

2.2.2 What new Recommendations, or revisions to the existing Recommendations, are necessary to allow information transfer rates of 600 bits/sec, 1200 bits/sec, or 2400 bits/sec within the INTEX* service, taking into account both telegraph and other networks? (Draft Recommendations U.102 and S.jkl are attached as the basis for further study in this area – cf. COM IX-R 4, Annex 18, and COM IX-17, Annex 9 to Part II respectively.)

2.2.3 What technical guidance or signalling procedures are necessary to permit interworking between INTEX and services other than the international telex service?

2.3 *Expected results and anticipated target dates*

Subject area	*Approach agreed*	*Draft Recommendation* (new/rev) (where justified)
Enhanced features (e.g. auto call set-up)	1993	1994
Incorporation of higher information transfer rates (incl. "speed" negotiation)	1993	1995
General technical principles of interworking	1993	1994

2.4 *Liaison activities*

Collaboration with Study Group 3 (on tariff and accounting aspects), possibly with Study Group 8 (on coding schemes); also with any Questions within Study Group 1 where intercommunication with the INTEX* service may be required.

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* Provisional name (see Recommendation F.150).

3. Question 4/1 – Development of PSTN-based telecommunication services

3.1 *Identification of the requirement*

While the transition to the ISDN and its services has begun, this transition is likely to take many years. During this time, residential and business customers are likely to want new international telecommunications services to satisfy their new and/or changing requirements. In addition, increased awareness of customers' needs by administrations and the emergence of competition is likely to increase the pace of new service development. In order to ensure the wide-spread availability of these new services, timely development of Recommendations will be necessary, taking into account the ultimate merger of these services with the ISDN. It is likely that a permanent study Question to address new PSTN-based telecommunications services will be necessary until the ISDN is fully realized.

3.1.1 The transition to ISDN will take some time, and PSTN-based customers will exist throughout the transition.

3.1.2 Some users may have a continuing need to operate in both the ISDN and PSTN environments in order to derive the maximum benefits from both.

3.1.3 Customer requirements and/or expectations may not be fully met by the currently recommended services, and new PSTN-based services may be needed.

3.1.4 Increased awareness of customer needs, and competition, will cause new services to be developed more rapidly.

3.1.5 In order to become widely accepted and available, new services should be standardized in a timely manner.

3.1.6 Some existing services (for example, the Country Direct service and international virtual private networks) are not yet fully described in the Recommendations.

3.1.7 The development of new PSTN-based services should take into account future market demands and network capabilities.

3.1.8 Since many customers will ultimately migrate to the ISDN, new PSTN-based services and supplementary services should conform, to the greatest extent practicable, to the ISDN services.

3.1.9 Throughout this long transition, close attention needs to be given to maintaining the continued availability and quality of the traditional international public telephone service, focusing on the customer perception of the service (rather than on the network specific issues and network quality issues handled in Study Group 2).

3.1.10 Recognizing that evolving network capabilities will support new services across the PSTN and ISDN, early attention should be given to defining services in a consistent manner, e.g. specification of generic service elements.

3.1.11 Close attention should be paid to the impact of the decision taken by WTSC-93 concerning the placement of letters on telephone keysets, (in Recommendation E.161), on PSTN-based International Telecommunications Services, including determination of the date after which there will be a single standard for the allocation of letters to telephone keysets.

3.2 *Text of the Question*

What new Recommendations and changes to existing Recommendations are required for PSTN-based services, and for more general services which operate across both ISDN and PSTN networks, and what new services of these types should be specified for international application?

Note 1 – Study of this Question will require close coordination with other Questions which have been assigned responsibility for specific new service areas, and with other study groups.

Note 2 – Recognizing that the format for the stage 1 service description was developed specifically for the ISDN services, a new format should be developed to provide a general description of the intended new service from the user's point of view, irrespective of a particular network implementation. Stage 1 service descriptions would then be developed for the ISDN segment of the service description, together with other network descriptions as may be appropriate.

Note 3 – Identification of new services should take account of current and future user needs and the capabilities of the networks.

Note 4 – This Question should be used as a focus to identify service elements that are common to a range of services (existing and new) and to encourage a consistent approach to their definitions where feasible.

3.3 *Expected results and anticipated target dates*

The work under this Question is seen as an ongoing service management function. New or revised Recommendations will be developed as the need is identified. Unusual difficulties are not anticipated, and the work will be submitted for approval as soon as complete. First Recommendations should be ready for approval by mid-1993.

One issue is to investigate and amend the draft replacement for Recommendation E.117, and to investigate related issues. Expected timetables for completion are:

- agree on revision of Recommendation E.117 — mid-1993;
- assessment of whether guidelines for calling devices accessing the PSTN are required — mid-1994.

Another issue is to identify common service elements for new and existing services. This work is not expected to lead to new Recommendations as such, but could result in additions to new or existing Recommendations as appropriate. – Ongoing.

3.4 *Liaison activities*

Liaison will be necessary with Study Groups 2 and 3, and to a lesser extent with SG 11. No unusual or difficult liaison activity is foreseen, and liaison needs can be met through correspondence or the appointment of liaison officers.

4. Question 8/1 – Mobile/personal telephone, telegraph, telematic, data and audiovisual services

(This Question should take into account the as yet to be determined transfer from the Radiocommunication Sector.)

4.1 *Identification of the requirement*

The new Question should address the service and operational requirements of different mobile systems with a view to standardizing access and operational procedures from the user's viewpoint. These requirements would include but not be limited to:

the existence and expansion of worldwide mobile satellite systems which provide land, maritime and aeronautical communications;

introduction of new land mobile satellite systems and personal telecommunication systems which may exist in a regional or global environment providing transborder services;

the desirability of maintaining compatibility and user friendliness between the selection and operational procedures used to access either the various mobile services or the terrestrial networks;

specialist safety requirements as in the case of the maritime environment with the introduction of Global Maritime Distress and Safety System (GMDSS) during 1992;

further development of the mobile-satellite data transmission service following recent technical progress in this field;

further development of the aeronautical passenger communications services;

the results of studies, carried out by other competent ITU-T Study Groups, the ITU-R, etc., which require collaboration with Study Group 1;

the desire to provide and monitor an adequate Quality of Service which from the user's viewpoint is unaffected when mobile/personal systems interconnect with terrestrial networks;

the need to review and amend where applicable the operational and selection procedures for mobile/personal telecommunication services which are affected as a result of decisions reached on the revisions of Radio Regulations at WARC-92;

relations with the continued development and implementation of Integrated Services Digital Network (ISDN) and implications associated with Intelligent Networks (IN).

4.2 *Text of the Question*

What new Recommendations or what additions to or modifications of existing Recommendations are needed relating to:

4.2.1 new or revised mobile telephone services;

4.2.2 the radio telegram, radiotelexogram, and radiotelex services defined in Recommendation F.110;

4.2.3 new or updated data services including data messaging;

4.2.4 new personal telecommunication services;

4.2.5 other possible international public correspondence services analogous to the terrestrial, audiovisual, telegraph, Telematic and data services and supplementary services defined or to be defined by Study Group 1;

4.2.6 provision of the services mentioned in 4.2.1 and 4.2.2 not only in the maritime mobile service and the maritime mobile-satellite services but also in international personal, land mobile and aeronautical mobile and mobile-satellite services to the extent that procedures for handling telecommunications traffic are concerned;

4.2.7 international access to or from the various mobile/personal services to the terrestrial services, such as telex international service;

4.2.8 possible service provisions to take account of charging differentials, off-peak charging, discrimination between services provided and between service providers, the use of multiple station and accounting identities and for the access of the various mobile telegraph and data services to or from the corresponding international service;

4.2.9 operational procedures for the mobile-satellite data transmission service;

4.2.10 further progress towards automatic service operation;

4.2.11 Quality of Service as perceived by the user;

4.2.12 interworking of mobile services with UPT;

4.2.13 The impact of the decision taken by WTSC-93 concerning the placement of letters on telephone keysets, (in Recommendation E.161) on the services mentioned in 4.2.1 through 4.2.4.

4.3 *Expected results and anticipated target dates*

New Recommendation F.115	– first quarter 1993.
Revised Recommendations for Inmarsat M/B	– first quarter 1993.
New Recommendation for Global Paging	– third quarter 1994.
Possible new Recommendation for Personal Communications	– to be determined.
Revised Recommendation F.113	– third quarter 1995.
Revised Recommendations F.125 and F.126	– first quarter 1993.

4.4 *Liaison activities*

Collaboration with ITU-T Study Groups 2, 3, 4, 11, 12, 13 and 15.

In general, ITU-T is responsible for the traffic handling, tariff and accounting aspects within the mobile services, whereas the ITU-R is responsible for the technical transmission aspects. Various technical interworking arrangements between the mobile/personal systems and terrestrial networks will require increased liaison in this area.

5. Question 10/1 – Telefax services

Amend paragraph 3.5 to read:

5.1 "3.5 Currently the Telefax services are predominantly on the public switched telephone network. However, as the ISDN becomes more widespread, and other networks are used for facsimile communication, it will be necessary to study the operation of these services over the different networks. It will be necessary to also study requirements for interworking between the different networks. It will be necessary to also study interworking between services. Particularly the capability of terminals in the Telefax 3 Service using the protocol defined in Recommendation T.30, Annex C to interwork directly with terminals in the Telefax 4 Service."

6. Question 19/1 – Human factors in telecommunications not specifically related to new services

6.1 *Identification of the requirement*

A variety of issues have arisen for which the human factors group in Study Group 1 is the only group in the ITU-T logically competent to study. These issues include such matters as symbols and pictograms to assist users of telecommunications services, and various issues related to ISDN. While new issues like this might be dealt with on an ad hoc basis, certain work currently in progress is likely to need to be completed after the end of the current study period. The purpose of this Question is to assure that these activities have a home and continuity.

6.1.1 Human factors issues arise from time to time that are not directly related to specific new services under development.

6.1.2 These issues include aspects of symbols and pictograms to assist telecommunications users.

6.1.3 These issues also include aspects of network capabilities such as ISDN.

6.1.4 These issues may involve aspects of terminal equipment (such as the assignment of letters of the latin alphabet to the digits on the telephone dial), notwithstanding the normal reluctance of the ITU-T to establish standards related to the user interface to terminal equipment.

6.1.5 These issues may also include general questions on human factors aspects of telecommunications.

6.2 *Text of the Question*

What Recommendations are needed concerning human factors issues in telecommunications not related to specific telecommunications services?

6.3 *Expected results and anticipated target dates*

Symbols/pictograms for functions (ongoing)	– end 1994.
ISDN dialling plan (revised E.331)	– 1995.
Methodology for the design of symbols, pictograms and icons (draft Recommendation F.910)	– 1996.

6.4 *Liaison activities*

ETSI – HF (regarding symbols/pictograms)

SG 13 (ISDN dialling)

SG 2 (ISDN dialling).

7. Question 24/1 – New services for the ISDN

7.1 *Identification of the requirement*

7.1.1 ISDN brings new capabilities for services that are not possible in existing non-ISDN networks.

7.1.2 There is a requirement to define new services that are made possible by the ISDN capabilities.

7.1.3 These new services may be voice, non-voice, multimedia or supplementary.

7.2 *Text of the Question*

What new services should be defined to be offered to take advantage of the capabilities inherent in the ISDN? Examples of such services are as follows:

- audiovisual services;
- teleaction services;
- additional packet mode bearer services;
- intelligent network services;
- maintenance and management services;
- multimedia applications.

The services provided by intelligent networks should be taken into account.

7.3 *Expected results and anticipated target dates*

New service Recommendations. Expected target date – ongoing subject to approval under Resolution No. 1.

7.4 *Liaison activities*

Close cooperation will be required with other service Questions, and with Study Groups 2, 3, 7, 11 and 13.

ANNEX 1, Part B

AMENDMENTS TO STUDY GROUP 2 QUESTIONS

1. Question 5/2 – Applications of numbering and addressing plans for fixed and mobile services

1.1 *Identification of the requirement*

a) The study should be continued.

b) This Question requires urgent attention to provide numbering capacity for new applications and means to accommodate multiple carriers within a country when this affects international relationships. Means to facilitate code assignments when national boundaries change should also be a topic calling for urgent attention.

1.2 *Text of the Question*

considering

(a) that zonal significance in country code assignments tends to limit freedom of such code assignments;

(b) that spare codes are no longer available in some zones;

(c) that spare country code "0", now an "escape code", may be a candidate for alternative usages;

(d) that terminology (e.g., NPI/TON and NPI/TOA) is in need of clarification;

(e) that UPT numbering presents new problems to be resolved (see Note 3);

(f) that "country code" redefinition may be justified for applications that differ from conventional usage;

(g) that preparation for Time T (year-end 1996) should proceed to completion in the 1993-1996 study period;

(h) that an umbrella document relating the various numbering Recommendations and representative dialling support would be useful;

(j) that clear criteria are needed to establish eligibility for country codes;

(k) that broadband ISDN should be accommodated;

(l) that mobile and non-voice applications of numbering are of major significance and may need new support;

(m) that multiple carriers within countries offering diverse services may have E.164 number requirements (see Note 1);

(n) that the comprehensive definition of E.164 numbers, in contrast to special national numbers, would assist technical discussion of new numbering applications (see Note 2);

(o) that other new services may have numbering and addressing implications (e.g., GVNS, Global Virtual Network Services);

(p) that both INMARSAT and the ITU Telecommunication Standardization Sector (ITU-T) are studying the feasibility of single network code access (see Note 4);

(q) that a set of general numbering principles (e.g. for the allocation of codes) applicable for telex, PSTN/ISDN and data networks may be required,

what new or revised Recommendations are required to ensure that numbering and addressing needs can be met in a timely manner?

1.3 *Expected results and anticipated target dates*

Questions relating to immediate applications of codes to countries newly qualified will be subject to prompt review in support of internal ITU-T administrative practices. Among issues subject to comprehensive study, with study results to precede any effort at implementation, is a general review of Recommendation E.164 and country code length variations. In terms of expedited results, UPT and ISDN matters offer potential for early output, particularly in the area of refinements to Recommendation E.168 and the possible development of companion Recommendations resolving items included in Annex A to Recommendation E.168. This should be consistent with a work plan for UPT studies as advised by coordination activities.

The development of general numbering principles and the network identification are a need included in the considerata. The complexity of this work and its integrated character preclude target dates prior to assessment of contributions having definitive content.

1.4 *Liaison activities*

Numbering matters have traditionally required close liaison with SGs 1, 3, 7, 11 and 13. Internal liaison, especially in connection with routing, is essential.

Note 1 – Retain D.80, D.98

Note 2 – Retain D.77

Note 3 – Retain TD 760, TD 783(Rev.1) and add D.81, D.82

Note 4 – Retain TD 767(Rev.1)

These documents will be retained by the Telecommunication Standardization Bureau (TSB) and made available in the next study period

2. Question 6/2 – Routing and interworking plans for fixed and mobile networks

2.1 *Identification of the requirement*

The ongoing introduction of new services and the network technology and functionality required to support them will require that routing, mobile and interworking Recommendations be developed and maintained.

2.2 *Text of the Question*

Work will continue on keeping the existing standards up to date as well as creating new standards in the following areas:

- Routing planning and strategies, including principles applicable for all types of networks
- ISDN packet services routing (E.172)
- ISDN broadband services routing (E.172)
- Network interworking routing requirements (new)
- UPT routing plan (E.174)
- Satellite based mobile network (new or E.173)
- SS No. 7 message routing plan (E.176)
- IN routing (new)
- Non-voice applications (E.301)
- Interconnection of mobile networks (E.202, E.220)
- Routing impact of Future Mobile Networks and Services (e.g. FPLMTS)
- New services requirements (e.g. GVNS, etc.).

2.3 *Expected results and target dates*

The following provides a synopsis of the status and plans for the Recommendations for which Q.6/2 is responsible in the 1993-1996 study period.

Rec. No.	*Title*	*Status*
E.170	Traffic Routing	Update as required
E.171	Telephone Routing Plan	Update as required
E.172	ISDN Routing	Update as required
I.335	ISDN Routing Principles	Superseded by Rec. E.172; I.335 to be deleted
E.173	Mobile Routing	Update as required
E.174	UPT Routing Plan	3rd draft 1993
E.176	SS No. 7 Message Routing Plan	2nd draft 1993
E.301	Impact of non-voice applications on the telephone network	Update as required
E.220	Interconnection of Public Land Mobile Networks (PLMN)	Update as required
E.202	Network operational Principles for Future Mobile Systems and Services	Update as required

2.4 *Liaison activities*

1) *Within Study Group 2*

Close interworking will be required with Groups studying the following topics in Study Group 2:

- Numbering and Addressing Plans
- Network Management
- Network Performance
- Traffic Engineering.

2) *Outside Study Group 2*

Close liaison with the following Study Groups will be required:

– Study Group 1	Service Definitions, Telex Routing and Interworking
– Study Group 3	Tariffs
– Study Group 4	Network Maintenance (TMN)
– Study Group 7	Packet Network Routing and Interworking
– Study Group 11	Switching and Transmission
– Study Group 13	B-ISDN
– ITU Radiocommunication Sector	Future Mobile Requirements

ANNEX 1, Part C

AMENDMENTS TO A STUDY GROUP 3 QUESTION

1. Question T/3 – General charging and accounting principles for services supported by the Intelligent Network

1.1 *Identification of the requirements*

1.1.1 Intelligence added to the network infrastructure may be used to provide a range of sophisticated services.

1.1.2 It would be beneficial to have a common approach to the charging and accounting principles applied to this network intelligence in order to obtain consistency in the principles that are applied to services making use of these capabilities.

1.2 *Text of Question*

What are the general principles to be applied to services supported by IN?

What are the accounting (and possible charging) implications of the use of common resources in the IN?

1.3 *Expected results*

Guiding principles for the charging and accounting implications of the Intelligent Network as related to development and enhancement of services studied by SG 3 and for shared network resources.

1.4 *Liaison activities*

This Question is to be studied in conjunction with Study Groups 1, 11 and 13, as necessary.

ANNEX 1, Part D

AMENDMENTS TO A STUDY GROUP 6 QUESTION

1. Question 11/6 – Optical fibre cable for shallow water submarine systems without submerged repeaters (new Question)

Compared with copper cables greater distances between repeaters can be achieved using optical cables. The low attenuation of optical fibres makes these cables suitable for shallow water submarine applications without the need for submerged repeaters.

The requirements of these cables are different from those for normal terrestrial and submarine cables and therefore the following points need to be studied:

1) environmental conditions of cables for submarine systems;

2) cable construction for these applications;

3) cable installation, jointing and termination techniques specific for these applications;

4) cable restoration technique;

5) protection, fault location and maintenance criteria.

Note – This Question should be studied in cooperation with the study of related Questions in Study Group 15.

ANNEX 1, Part E

AMENDMENTS TO STUDY GROUP 8 QUESTIONS

1. Question D/8 – Colour models for Telematic Applications

1.1 *Identification of the requirements*

The use of colour in the interchange of information using Telematic Services is increasing. Several Questions which are the responsibility of Study Group 8 intend to use or are using colour representation in their Recommendations. These Questions include Q.4, Group 4 Facsimile, Q.18, Group 3 Facsimile, Q.6 Teletex (Mixed Mode and Processable Mode), Q.9, AVIS, and Q.15, Videotex Syntax. It is desirable that the future development of colour usage in Telematic applications be guided by the existence of a common colour model.

It is a requirement that work done in colour models be done cooperatively with the Study Group 8 Question on Common Components for Image communications as well as application specific Questions involving colour.

1.2 *Text of the Question*

Study a model for the transfer of colour information as well as models for the representation of the transferred colour information in the presentation media used by Telematic applications. This model will include a selection of colour spaces for the intended presentation media such as:

CIELAB = Commission Internationale d'Eclairage lightness – hue – chroma
CIE 1976 L* a* b* colour space

CIELUV = Commission Internationale d'Eclairage lightness – hue – chroma
CIE 1976 L* u* v* colour space

CMY(K) = cyan – magenta – yellow – (black) colour space

RGB = red – green – blue colour space

This Question will also study the selection of suitable compression methods and their attributes from those standardized in ITU-T Recommendations as well as other relevant aspects of the transfer of colour and grey scale information in the Telematic Services. This work will be done cooperatively with other Questions in Study Group 8 that use colour and grey scale representation in their Recommendations.

1.3 *Expected results*

Recommendations covering the above-mentioned items.

1.4 *Liaison*

Close liaison should be maintained with ISO/IEC JTC 1/SC 18, which is engaged in a similar effort in conjunction with the CIE (Commission Internationale d'Eclairage). Liaison with Study Group 11 of the Radiocommunication Sector is also required, except if the Question of colour is deferred to the ITU-T from the Radiocommunication Sector.

2. Question E/8 – Group 3 facsimile

2.1 *Identification of the requirements*

Enhancement of G3 facsimile, in order to offer a wider range of services and in order to increase the quality of service.

2.2 *Text of the Question*

The following points should be studied:

- aspects arising from the implementation of G3 apparatus;
- aspects arising from the interaction between G3 apparatus and network equipments (echo control devices, DCME, PCME, ...);
- extensions to Recommendation T.30 to allow additional optional modes including – but not limited to – higher speed modulation/demodulation systems, extension of character sets, processable mode, access to MHS and databases, the capability of Group 3 apparatus using the protocol defined in Recommendation T.30, Annex C to interwork directly with Group 4 apparatus.
- simplex operation, e.g. for broadcast type operation;
- extensions to Recommendations T.4 and T.30 to include new service features defined by SG 1;
- aspects arising from the use of Group 3 apparatus on networks other than PSTN (mobiles ...);
- possible refinement of Recommendations T.4 and T.30 to allow for improved performances with various bit error rates;
- Programming Communication Interfaces (PCI);
- extensions of coding schemes, including – but not limited to – colour, grey scales and dithered (Note 2).

Note 1 – These extensions will be studied in conjunction with the other relevant Questions.

Note 2 – For colour extensions, the study will include:

1) Coding schemes for grey scale and colour, including continuous tone and discrete colours;
2) Resolution, data precision and method of subsampling the colour components;
3) Method of component interleaving, such as block interleaving, or pixel, line or component interleaving.

2.3 *Expected results and anticipated target dates*

Selection of terminal	end of 1993
PCI	end of 1993
Mobile fax	1994
Resolution of Problems with Echo Control Devices	1995
Introduction of V.fast Modem	1994
Access to MHS and Data Bases	1994
Simplex Operation	1994
Colour extension for hardcopy facsimile	1994
Colour extension for enhanced facsimile including softcopy	1996

2.4 *Liaison activities*

ISO/IEC JTAG 2 (Joint Technical Advisory Group on Image Technology)

ISO/IEC JTC 1/SC 18.

3. Question I/8 – Group 4 Facsimile

3.1 *Identification of the requirements*

1) The colour G4 Facsimile has been studied under Q.4/VIII and will be still studied during the next study period. The colour G4 Facsimile should be standardized taking into account the commonality and interconnectability with G4 Facsimile.

2) The soft copy communication has become more popular in office automation. The soft copy facsimile whose images are presented to a display device such as CRT should be discussed.

3) The requirement of the use of grey scale images has increased. For example, the dither method is used for representation of grey scale. The redundancy reduction algorithm for grey scale images should be standardized.

3.2 *Text of the Question*

1) Colour Facsimile

The following items should be studied, taking into account the commonality with G4 Facsimile:

- Terminal Characteristics;
- Protocol Requirement;
- Document Application Profile for Colour Facsimile;
- Redundancy Reduction Algorithm with Colour Extension for Facsimile;
- Coding schemes for grey scale and colour, including continuous tone and discrete colours;
- Resolution, data precision and method of subsampling the colour components;
- Method of component interleaving, such as block interleaving, or pixel, line or component interleaving;
- Colour extension for hardcopy facsimile (1994);
- Colour extension for enhanced facsimile including softcopy (1996).

2) Soft Copy

- Terminal Characteristics;
- Redundancy Reduction, Algorithm with Progressive Build-up Mode;
- Protocol Requirements.

3) Grey Scale Images

- Redundancy Reduction Algorithm.

4) Colour Test Chart

- Both paper Based and Electromagnetic Medium Test Chart.

5) Other relevant Requirements to Group 4 Facsimile

i) Document Application Profile including Raster DAP

ii) High Resolution

iii) Service Reliability (including Delivery Confirmation) and Security

iv) Interfacing with ISDN

v) File Transfer Issue.

3.3 *Expected results and anticipated target dates*

- Recommendations for Colour G4 Facsimile (basic) in 1994
- Recommendations for Colour G4 Facsimile (Extension) in 1996
- Recommendations for Colour Test Chart in 1994

Revised and new Recommendations covering the above items 3.2 2), 3) and 5).

3.4 *Liaison activities*

T.81 and T.82 coding scheme with Q.16/8.

Colour Facsimile Issue with Colour Extensions for Facsimile Group.

4. Question T/8 – Choice of standardized modulation technique to be used with Telematic Services connected to the PSTN

4.1 *Identification of the requirement*

The Telematic Services require a wide range of standardized modulation techniques. This question is responsible for the study of the standardized modulation techniques for these services when connected to PSTN circuits.

4.2 *Text of the Question*

This study should take into account the following requirements:

- that the Telematic services are to be provided both on national and international networks;
- that the services, when connected to PSTN circuits, should have the ability to interwork directly;
- that speed higher than 2.4 kbit/s could be the basis for certain Telematic services; and
- interworking with other services on the PSTN such as Group 3 facsimile and Teletex may be required (i.e. direct interworking or by a conversion facility).

This study should also consider the performance of such standardized modulation techniques, particularly in respect of their susceptibility to transmission errors.

In particular, this study should consider the suitability of the V. fast standardized modulation technique with regard to performance an implementation.

4.3 *Expected results*

Specific revisions to current Recommendations for their enhancement and improvement and technical information to new Recommendations for efficient and reliable use of the Telematic communications.

4.4 *Liaisons*

Close liaison with various groups concerned with this technical area including Study Group 14 on the development of new standardized modulation techniques and maintenance of existing standardized modulation techniques, and Study Group 15 regarding the operation of the Telematic Services on PCME and DCME equipment.

ANNEX 1, Part F

AMENDMENTS TO STUDY GROUP 13 QUESTIONS

1. Question J/13 – Interworking of 64k-ISDNs with other networks

1.1 *Type of Question*

Specific Recommendations

1.2 *Motivation*

In addition to interworking cases already covered by ITU-T Recommendations, the need has arisen to address interworking issues with further networks, currently being planned and implemented.

1.3 *Text*

What additional and/or new network functions need to be recommended to enable 64k-ISDNs to interwork with other networks e.g.:

- private networks, including LANs and VPNs;
- PSDNs (Public Switched Data Networks);
- PSTNs, including e.g. PSTN services by modems;
- satellite networks (e.g. VSAT-networks);
- mobile networks;
- compatibility aspects between networks, services supported by these networks and terminals;
- service interworking;
- networks with bit rates other than 64 kbit/s.

Note – Interworking with B-ISDNs is covered under Q.I/13.

1.4 *Objective*

Recommendations by 1994

1.5 *Relations*

Cooperation is needed with:

- SG 1 on services;
- SG 2 on addressing and numbering aspects;
- SG 7 on data network aspects;
- SG 8 on terminals and Telematic services;
- SG 11 on signalling capabilities and protocol compatibilities;
- Radiocommunication Sector SG 4 on satellite aspects;
- Radiocommunication Sector SG 8 on mobile communication aspects;
- ISO/IEC JTC 1 on private network issues.

2. Question L/13 – Refinements and enhancements to Layer 1 64 kbit/s-based ISDN Recommendations

Note – It is recognized that Study Group 15 has the responsibility to define the transmission techniques, associated implementation topologies, and the signal characteristics for systems in the local loop and access environment.

2.1 *Type of Question*

Specific Recommendations

2.2 *Motivation*

For the support of 64 kbit/s-based ISDN services including mobile environments, what further refinements and enhancements are needed, based on the experience gained from present and forthcoming ISDN operation and implementations?

2.3 *Text*

1) What refinements and enhancements are needed:

   a) to achieve flexible passive bus configuration and application;

   b) to the existing basic rate ISDN user-network interface Recommendation (I.430), access digital section Recommendation (G.960) and digital section Recommendation (G.961);

   c) to the existing primary rate ISDN user-network interface Recommendation (I.431) or to the primary rate access digital section Recommendation G.96y and G.96z;

   d) to the existing ISDN Layer 1 access Recommendations to cater for mobile communications;

   e) to the existing ISDN Layer 1 access Recommendations to cater for wireless access to the ISDN (e.g. at "S" and "T" reference points and the network side of the NT1)?

2) What are the physical characteristics and impairments of an S/T bus?

2.4 *Objectives*

Recommendations by 1995-1996

2.5 *Relations*

- SG 4 on maintenance specifications;
- SG 15 on optical fibre systems;
- ISO and IEC on connector specifications for UNI;
- Radiocommunication Sector 8 on wireless access;
- Radiocommunication Sector 9 on fixed radio systems.

3. Question M/13 – Refinements and enhancements to B-ISDN customer access Recommendations

Note – It is recognized that Study Group 15 has the responsibility to define the transmission techniques, associated implementation topologies, and the signal characteristics for systems in the local loop and access environment.

3.1 *Type of Question*

Specific Recommendations

3.2 *Motivation*

For the successful introduction of B-ISDN services, maturity of Layer 1 specifications is needed. Also, to provide a lower cost interface at reference point S_B and respond to market pressures, a UNI greater than the primary rate and less than STM-1 is needed (e.g. for LAN interconnect, compressed video).

3.3 *Text*

1) What refinements and enhancements are needed to the existing broadband ISDN user-network interface Recommendation (I.413 and I.432)?

2) What network capabilities should be recommended for the digital section for B-ISDN customer access (Recommendation G.96x)?

3) An interface at reference point S_B at a bit rate less than 155 Mbit/s and the need for an interface at reference point T_B at less than 155 Mbit/s should be studied.

3.4 *Objectives*

Recommendations by 1993-1994

3.5 *Relations*

- SG 4 on maintenance specifications;
- SG 15 on digital transmission system Recommendations (new Questions U/XV and X/XV);
- ISO and IEC on connector specifications for UNI;
- Radiocommunication Sector SG 4 for satellite connections.

4. Question N/13 – Functional characteristics of interfaces in access networks

Note – It is recognized that Study Group 15 has the responsibility to define the transmission techniques, associated implementation topologies, and the signal characteristics for systems in the local loop and access environment.

4.1 *Type of Question*

Specific Recommendations

4.2 *Motivation*

Different types of local access networks using, for example, metallic pairs, optical fibres, radio systems or satellite, raises the need to define possible interfaces in the access area to support a flexible mix of different access types and services.

4.3 *Text*

The following points need to be studied:

1) What reference architectures and configurations need to be developed or modified?

2) What interfaces need to be defined based on the reference configuration?

3) What Layer 1 interworking requirements need to be defined with existing Layer 1 64 kbit/s-based ISDN?

4) Define a new concept for interfaces at reference point V covering the connection of access networks to the local exchange which support flexible mix of different access types and services to the customer.

   a) Define the reference configuration, the architecture and the service profile at the user side of the access network and at the new interface at reference point V at the local exchange defined under item 4).

   b) Define the necessary interworking with and integration of implementations according to Recommendations G.960, G.961, I.430 and I.431.

   c) Define the necessary control protocol principles according to item 4) b).

4.4 *Objectives*

Recommendations by 1994-1996

4.5 *Relations*

- SG 11 on new interface specifications at reference point V;
- SG 15 on local access transmission system configuration;
- Radiocommunication Sector SG 4 on satellite systems;
- Radiocommunication Sector SG 8 on wireless access;
- Radiocommunication Sector SG 9 on fixed radio systems.

5. Question P/13 – General performance issues

5.1 *Type of Question*

General study

5.2 *Motivation*

General principles for performance are required to provide guidance and a framework for all aspects of performance studies, and extension to new areas such as B-ISDN.

5.3 *Text*

1) What performance parameters should be recommended and how should they be structured?
2) What general principles for performance specification should be recommended and how should they relate to the specific performance studies?
3) What modifications, if any, to existing general performance Recommendations (I.350, I.351, I.353) are necessary?

5.4 *Objectives*

Continued coordination of performance studies; initial recommendations on B-ISDN performance.

5.5 *Relations*

- SG 1 on services;
- SG 2 on network operations;
- SG 7 on public data networks;
- SG 12 on transmission performance;
- Radiocommunication Sector SG 4 on satellite systems;
- Radiocommunication Sector SG 9 on radio systems.

ANNEX 1, Part G

AMENDMENTS TO STUDY GROUP 15 QUESTIONS

1. Question W/15 – Characteristics and test methods of optical fibres and cables (Continuation of Questions 11, 12 and 14/XV, 1989-1992)

1.1 *Background and justification*

Single-mode optical fibre cables are now being used in all segments of the public network and Recommendations G.650, G.652, G.653 and G.654 have previously been developed to describe their geometrical and optical parameters, and transmission characteristics. Certain issues related to 1310 and 1550 nm-optimized single-mode fibres are still open for further study. For example, particular applications (e.g., local access networks, inter-office and long-distance networks, submarine cable networks) may impose special requirements on the types and parameters of fibres used, and additional types of single-mode fibres (e.g. dispersion-compensating fibres, polarization-maintaining fibres, dispersion-flattened fibres, etc.) may be of interest for public network applications in the future. The use of optical amplifiers in long-distance networks may influence the fibre power handling and dispersion characteristics. New test procedures may have to be developed to address these issues (e.g., polarization mode dispersion).

While multimode fibres covered under Recommendation G.651 continue to be of interest, further Recommendations relating to multimode fibres are no longer studied in the ITU-T and are expected to be considered in other standards bodies, such as IEC.

1.2 *Questions*

1. How should Recommendations G.650, G.652, G.653 and G.654 on optical fibres and cables be amended and/or completed, and how should Recommendation G.651 be maintained in order to take into account evolving requirements of the public network; and what additional Reference and/or Alternative Test Methods need to be established?

2. What new Recommendations should be prepared for other types of single-mode fibres? (e.g. dispersion-compensating, dispersion-flattened or polarization-maintaining fibres, etc)?

1.3 *Items for study include:*

1. Geometrical and certain physical characteristics of optical fibres (including relevant parameter tolerances, fibres designated for ribbon cables, coating diameters, coating stripability, optical and certain mechanical properties of fibre coatings, etc).

2. Optical and transmission characteristics of different types of single-mode optical fibres and the inter-relationship between fibre parameters and transmission characteristics (including spectral loss modeling; chromatic dispersion; polarization mode dispersion; longitudinal uniformity, etc.).

3. The transmission characteristics of dispersion-compensating fibres.

4. The interrelationship between the transmission properties of cable factory lengths, elementary cable lengths, short jumper/interconnect-cable lengths and uncabled fibres (especially regarding cut-off wavelength behaviour and polarization mode dispersion).

5. The extent to which transmission characteristics may be affected by the design of cables and by installation methods in particular mechanical aspects of fibres, cables and splices (e.g., bend-loss characteristics at the long-wavelength edge of the 1550nm wavelength region).

6. Reliability and stability of performance characteristics under different environmental conditions (e.g., temperature, humidity, hydrogen in-diffusion and other aging effects).

7. Fibre characteristics for operation with wavelength-division-multiplexed systems, with bidirectional transmission, with coherent systems and with systems containing optical amplifiers.

8. The need for additional Reference Test Methods or Alternative Test Methods for the measurement/ confirmation of performance characteristics in a factory or field environment.

9. Measurement of reflections in optical fibre cables containing splices and/or components (incl. optical amplifiers and optical isolators).

10. The study of non-linear optical effects.

1.4 *Specific tasks*

Amend and/or complete existing Recommendations G.650, G.652, G.653 and G.654 on optical fibres and cables, maintain existing Recommendation G.651, and develop new Recommendation(s) and additional Reference and/or Alternative Test Methods, as applicable, by 1996.

1.5 *Relationships*

1. The study of optical fibres for optical fibre submarine cable systems should be coordinated with the study of Question AA/15. It should be noted that submarine cable systems may use fibres which may not be covered under the present Recommendations.

2. The study of this Question should be coordinated with the study of Questions X, Y, Z and AB/15.

3. The study of this Question should be coordinated with work in SG 6, Questions 10/6 and 12/6.

4. The study of this Question should be coordinated with work in IEC TC86.

2. Question X/15 – Characteristics of optical systems for use in Local Access Networks (Continuation of Q.16/XV, 1989-1992)

2.1 *Background and justification*

There is an increasing need for the local distribution and access networks to cost-effectively provide different types of services, including narrow-band voice, data and video, and distributed and interactive broadband services such as high-speed data, full-motion video/HDTV and multimedia services.

Consequently, after several years of trials, optical fibre systems are now considered for use in the Local Access Network both in the loop-feeder portion and increasingly also to curb-site locations and as customer drops. While early implementations of fibre-based distribution networks may provide only voice and narrow-band data and video services in order to achieve lowest-cost systems implementations, maximum flexibility for later upgrades to broadband services should be an important systems design consideration. Possible transmission technologies include Passive Optical Network (PON) techniques, digital and analogue (video) transmission, and "Fibre plus Radio" techniques. The provisioning of electrical power to customer locations is another important aspect of fibre-based local access networks (e.g., for life-line service). Several proposals for draft Recommendations have been developed in the 1989 to 1992 study period in response to some of the issues under consideration.

It is recognized that the functional characteristics, reference configurations and Layer-1 aspects for narrow-band and broadband ISDN as specified in the I.400-Series of Recommendations are being considered in Study Group 13; and that digital line sections corresponding to plesiochronous systems and the Synchronous Digital Hierarchy which are considered for use in local access networks are specified in the G.900-Series of Recommendations.

2.2 *Questions*

1. What new Recommendations should be established for optical systems in the Local Access Networks and what characteristics should be recommended for digital line systems on optical fibre cables to be used in local access networks to support multiple services, including narrow-band and broadband ISDN (incl. ATM) access?

2. What are potential applications of SDH and/or PDH systems in local access networks, and if optical interfaces are required in local access networks, what characteristics should be recommended for such interfaces?

3. What are the requirements for providing both digital and/or analogue (e.g., for TV) transmission over the local access network?

4. What are preferred implementations of passive optical networks with accompanying need for optical components and sub-systems, and what are potential applications of multiple wavelengths in local access networks (e.g., for service or customer segregation, for systems upgrades or for maintenance)?

5. What is the impact of the use of optical amplifiers in the outside plant on the optical transparency of the local access network?

6. What are requirements for providing electrical power in fibre-based subscriber loop networks?

2.3 *Items for study include:*

1. Applications of fibres in local access networks.

2. Different architectures (physical and logical) and their associated systems characteristics for local access networks (including star, double-star and ring networks, etc.).

3. Characteristics of local access systems based on the SDH and/or PDH hierarchies.

4. Modeling of local access networks to support multiple services.

5. Characteristics of local access network systems employing Asynchronous Transfer Mode (ATM) access.

6. Transmission and component characteristics for passive optical networks.

7. Simplex versus duplex transmission on single fibres.

8. Use of multiple wavelengths in local access networks, and wavelength allocation.

9. Use of optical amplifiers in local access networks, including measuring techniques.

10. Appropriate systems performance parameters (e.g., for analogue and digital transmission).

11. Special measurement techniques to confirm the performance characteristics of the network elements of the local access network (incl. Reference and Alternative Test Methods).

12. Availability and reliability aspects, including survivable network features.

13. Impact of wireless communication on local access systems.

14. Jitter and error performance.

15. Impact of extreme environmental conditions.

16. Operations, Administration, Maintenance and Provisioning (OAM&P) aspects.

17. Implications of IEC studies of Electro-Magnetic Compatibility (EMC).

18. Privacy aspects of switched distribution systems.

2.4 *Specific tasks*

Further development of proposed Draft Recommendations and development of new Recommendation(s) relating to optical systems for the Local Access Network by 1996.

2.5 *Relationships*

1. The study of this Question should be coordinated with the study of Questions W, Y, Z and AB/15, and with multiplex-related aspects under Questions Q, R, S, U and V/15.

2. The study of this Question should be coordinated with work under Question (20)/13.

3. The study of this Question must be coordinated with work in Study Group 6, and particularly with new Questions 12/6 and 13/6.

4. Work on OAM&P/TMN aspects should be coordinated with studies carried out under Questions AC and AD/15 with the objective of achieving seamless network management systems, and with relevant Recommendations.

5. Work on V-interfaces for providing flexible services, including SDH or other bit rates and/or characteristics that may be recommended for local access (incl. ISDN and B-ISDN access) is being considered in Study Groups 11 and 13.

6. Study Group 5 is responsible for the study of EMC issues.

7. Study Group 11 is responsible for V interface characteristics for B-ISDN access.

8. IEC TC76 is currently revising its Laser Safety Standard IEC-825, and has prepared a draft international standard for the safe use of optical transmission systems.

ANNEX 1, Part H

TEXTS OF NEW STUDY GROUP 9 (FORMER CMTT) QUESTIONS DEVELOPED JOINTLY BY THE CHAIRMEN OF RADIOCOMMUNICATION SECTOR STUDY GROUP 11 AND OF STUDY GROUP 9 (FORMER CMTT)

1. Question A/9 – Subjective assessment of sound quality in broadcasting

(1993)

The ITU-T,

considering

a) that subjective methods of testing are frequently necessary to assess the relative quality of programme sound and the effect of interference and other impairments upon it;

b) that many different methods of subjective testing are possible;

c) that the results of subjective tests depend on the conditions under which they are carried out;

d) that the results of subjective tests can be interpreted in many ways;

e) that it is highly desirable to standardize the methods of subjective testing and the interpretation of the results, so that true comparisons may be made between results obtained at different times;

f) that it is highly desirable that the grading scales which are used to describe the subjective quality of sound, should permit more consistent statistical processing methods, independent from the language expressing the opinions;

g) that it is highly desirable that the grading scales should be identical to those used for vision;

h) that Recommendation 562 of Study Group 10 has established some methods of assessing the subjective quality of sound;

j) that the introduction of new sound broadcasting systems may require advanced development of the existing methods of subjective assessments;

k) that there is a common core of assessment methodology for sound and vision;

l) that the introduction of new kinds of television signal processing such as digital coding and bit-rate reduction, new kinds of television signals using time-multiplexed components and new services such as enhanced television and HDTV, may require changes in the methods of making subjective assessments;

m) that the sound accompanying television signals that have been digitally processed may need new methods of subjective assessment,

decides that the following Question should be studied

1) What methods of subjective testing and what analyses and presentation of the results obtained should be recommended for use during international transmissions (Note 1) should be used?

Note 1 – Study is to be carried out in cooperation with Study Group 10 of the Radiocommunication Sector.

Note 2 – This Question has been derived from a part of Question 80/10 of the Radiocommunication Sector.

References

OIRT [1985] – Monograph No. 3: Terms and definitions for the assessment of sound events by means of subjective evaluation of the quality of listening events (in German and Russian language only).

2. Question B/9 – Parameters and tolerance limits for the technical quality of programmes intended for international exchange

(1993)

The ITU-T,

considering

a) that Recommendation 644 specifies the audio quality parameters for the performance of a high quality sound-programme transmission chain;

b) that further work is necessary to determine the subjective limits and the attainable and/or desirable objective global values at the end of the transmission chain;

c) that by means of addition laws, the limits for the different transmission links can be derived from such global values;

d) that it is necessary to standardize measuring methods for special parameters,

decides that the following Question should be studied

1) What are the parameters and tolerances to characterize high quality sound programmes for international exchange, for both analogue and digital techniques?

2) What are the attainable and/or desirable values for the whole transmission chain, especially with regard to the relationship between objective and subjective values?

3) What are the measuring methods, additional to those given by IEC, ISO, etc., that are especially appropriate to broadcasting use?

Note 1 – See Radiocommunication Sector Recommendations 468, 644 and Report 292 (Geneva, 1982).

Note 2 – This Question was previously Question 82/10 of the Radiocommunication Sector.

further decides that

1) the results of the above studies should be addressed to:

- update and complement Recommendation 644;
- prepare new Recommendation(s);

2) the above studies should be completed within the study period 1990-1994 or 1994-1998 at the latest.

3. Question C/9 – Subjective assessment of sound quality in broadcasting using digital techniques

(1993)

The ITU-T,

considering

a) that the introduction of digital techniques in the studio (including tape recording), in transmission circuits and at the transmitter should allow an improvement in quality and simplified operational use;

b) that these techniques entail their own specific signal impairments;

c) that it is desirable to ensure high quality performance throughout the broadcasting chain without unnecessary expense,

decides that the following Question should be studied

1) What is the relation between subjective assessment and objective measurements for digital systems?

2) What are the tolerable values of subjective impairment in the whole broadcasting chain;

3) What is the subjective influence of the conversion processes in the transmission chains;

4) What is the maximum number of times that processing of any kind may be applied to the signal on the transmission circuits and the associated subjective effects;

5) What are the subjectively acceptable values of impairment (expressed in objective terms):

– in transmission circuits;

Note 1 – Digital signals used in the studio may differ from those used for transmission.

Note 2 – See in particular, Decision 18 and Reports 647 and 799.

Note 3 – The studies should also include a comparison with the best analogue techniques.

Note 4 – decides 1 and 2 will only be studied by Study Group 10 of the Radiocommunication Sector.

Note 5 – This Question has been derived from a part of Question 85/10 of the Radiocommunication Sector. Close cooperation between Study Group 10 and the CMTT will be required in this study.

further decides that

1) the results of the above studies should be included in a Recommendation(s);

2) the above studies should be completed within the study period 1990-1994.

4. Question D/9 – Digital audio coding standards

(1993)

The ITU-T,

considering

a) that although the use of digital sound signals in studios should lead to an improvement in quality, digital techniques entail their own specific impairments;

b) that impairments to broadcast sound signals will be minimized, and the cost of transcoding equipment may be reduced, if there is a simple relationship between the coding standards used for production, transmission links and broadcasting;

c) that sound studio equipment may need coding parameters different from those required for the emission of high quality broadcast signals, for example, they may need higher numbers of bits/sample to allow processing "headroom";

d) that there may be other factors affecting the choice of coding parameters in certain equipment used in broadcasting studios. For example, there might be constraints due to video-recording on the same recorder;

e) that Study Group 11 is currently studying the coding parameters needed to meet different production requirements for video signals in television studios;

f) that a number of different sets of coding parameters are currently being proposed for digital audio equipment;

g) that recent progress in digital audio coding techniques allows for a very considerable degree of bit-rate reduction to be achieved while maintaining high quality.

h) that applications exist for low bit-rate audio coding systems for digital audio broadcasting, television sound (especially accompanying HDTV and EDTV) and for storage of signals,

decides that the following Question should be studied

1) What coding standards (each relating to a particular process-capability) can be recommended for transmission links for the various broadcasting applications;

2) What are the best coding parameters for each of these standards, taking account of the need for simple transcoding;

3) What are the bit-rate reduction techniques that would satisfy the quality level and other requirements for each of the applications in § 2 while making efficient use of transmission media.

Note – This Question has been derived from part of Question 86/10 of the Radiocommunication Sector and should be studied in close cooperation with Study Group 10.

5. Question E/9 – Determination of the subjective loudness of a broadcasting programme

(1993)

The ITU-T,

considering

a) that existing specifications and techniques for the determination of sound modulation levels in broadcasting are generally based on peak or quasi-peak programme levels;

b) that neither true peak nor quasi-peak programme levels are necessarily indicative of subjective loudness;

c) that it may be advantageous to take subjective loudness into account in the determination of programme levels;

d) that the dynamic range of sound programmes and its measurement and control are of importance,

decides that the following Question should be studied

What are the effects of amplitude, frequency range, signal duration, strident delivery and the psychological and physiological reaction of a representative cross-section of listeners to these and other factors in subjective loudness; and in particular:

- the parameters which are essential or desirable to check upon during transmission to establish the subjective loudness of different types of programmes;
- the methods to be used to determine the effect of these parameters on subjective loudness;

– the results to be obtained from the use of these methods, and how they are expressed;

– in television transmission, the effect of the associated picture?

Note 1 – See Report 465.

Note 2 – This Question was previously Question 103/10 of the Radiocommunication Sector.

6. Question F/9 – Measurement and control of subjective loudness in broadcasting

(1993)

The ITU-T,

considering

a) that the problems of measurement, indication and control of the subjective loudness of a broadcasting programme require thorough investigation and study, especially with regard to the parameters to be found in the relationship between music and voice announcements;

b) that existing specifications and techniques for the determination of programme levels in broadcasting are generally based on peak or quasi-peak reading;

c) that neither true peak nor quasi-peak programme levels are necessarily indicative of subjective loudness;

d) that it is considered advantageous to take subjective loudness into account in the determination of modulation levels,

decides that the following Question should be studied

1. how should subjective loudness on an instantaneous and continuous basis be indicated and to what extent does it depend on:

1.1 the techniques or instrumentation which may be used to measure the subjective loudness of programme material in broadcasting;

1.2 the degree of accuracy obtainable with each;

1.3 if a meter is used, the characteristics it should possess to measure subjective loudness;

1.4 the point in the transmission chain where the measuring instrument should be connected;

2. What non-automated method for the control of loudness for optimum balance of subjective characteristics of different types of programmes should be recommended and what is/are:

2.1 the elements in the transmission chain which may affect the control of subjective loudness;

2.2 the point in the transmission chain where the loudness control should be connected;

2.3 the element(s) which should be varied to balance the subjective loudness of different programmes.

Note 1 – As an aid in comparing the results of studies it is suggested that administrations should state programme levels in terms of peak values measured with one of the peak meters described in Report 292. The type used should be specified.

Note 2 – This Question was derived from Question 104/10 of the Radiocommunication Sector.

ANNEX 2

STATEMENT BY THE CHAIRMAN OF STUDY GROUP 9, FORMER CMTT

CMTT has always been a Joint Group between the Telecommunication Standardization Sector and the Radiocommunication Sector. It is essential that we retain the full cooperation of the Broadcasters which is vital for the proper functioning of the CMTT. The members of CMTT will have to adapt to the working methods of the Telecommunication Standardization Sector which in detail are somewhat different to those of the Radiocommunication Sector and we must ensure that these changes do not cause an unnecessary disruption to the work of the Group.

The members of Study Groups 10 and 11 of the Radiocommunication Sector used to be very suspicious of the CMTT as leaning towards the Standardization Sector and it has take many years to build up a state of trust between the CCITT and the Broadcasters study groups and it is essential that this change of Administration does not sabotage this trust.

In the light of the decisions of the APP and the Report of the Joint meeting of the CCIR Ad-Hoc Advisory Group and the CCITT Ad-Hoc Group (Res. 18) (Doc. AP X-40) the Chairman of the CMTT asks the WTSC to formally agree to transfer the CMTT to the Administration of the TSB, whilst maintaining its nature as a single entity and as a joint Radiocommunication/Telecommunication Standardization Study Group. Also, in the light of the report of the Joint meeting of Ad-Hoc Groups, he request that arrangements are made to continue to schedule CMTT Study Group, Working Party and Task Group meeting to overlap meetings of Radiocommunication Sector Study Groups 10 and 11, other than in exceptional circumstances.

4.5 – REPORT BY COMMITTEE 5

(as approved by the Conference)

TECHNOLOGY OF TELECOMMUNICATION NETWORKS

1. General

Committee 5 (Technology of Telecommunication Networks) met on 2 (afternoon session), 4 (morning session) and 5 (afternoon session), March 1993, under the chairmanship of Mr. H.K. Pfyffer (Switzerland), assisted by the Vice-Chairman Mr. M. Asfaw (Ethiopia). Committee 5 examined the reports of Study Groups IV, V, VI, X, XI, XII, XV, XVII, XVIII and CMTT, (with the exception of the list of Questions) and the documents submitted by countries relating to the activities of these Study Groups.

Part of the session on 4 March 1993 has been chaired by the Vice-Chairman.

In sections 2 to 11 are briefly outlined the results obtained by the various study groups.

2. Study Group IV (Document AP X-33 + Corr.) – Maintenance

2.1 The Chairman of Study Group IV, Mr. J. Shrimpton (United States), summarized the activities of the Study Group and its Working Parties as follows:

Study Group IV was given responsibility for 21 Questions, involving the following areas of maintenance:

- maintenance of telephone, leased and special circuits, and data transmission systems;
- measuring equipment;
- man-machine language;
- standardized information exchange;
- telecommunication management networks;
- maintenance philosophy, principles and strategy;
- network performance and exchange of information;
- maintenance organization;
- designations;
- maintenance of mobile telecommunication systems;
- restoration;
- maintenance of digital blocks, sections, paths, etc.;
- maintenance of ISDNs;
- maintenance of sound programme, television and videoconference circuits;
- maintenance terminology and structure of maintenance Recommendations.

Six working parties were organized to study the Questions and develop Recommendations in these areas. Information concerning these working parties, together with other highlights of Study Group IV activities during the previous study period, is given in Document AP X-33. The working parties in turn appointed a number of Special Rapporteurs, who worked either through correspondence or by organizing groups of experts.

The results of this effort include a significant number of new and revised Recommendations, some of which were approved using procedures specified in CCITT Resolution No. 2, and others which are submitted for approval by this Standardization Conference.

Forty-seven Recommendations (18 new and 29 revised) were approved under Resolution No. 2. The titles of these Recommendations are given in Document AP X-1. The 18 new Recommendations represent important progress in the work on telecommunication management networks, with six new Recommendations, and in the areas of maintenance of leased circuits, maintenance of mobile telecommunications systems, maintenance of digital blocks, sections and paths, maintenance of ISDNs, standardized information exchange, maintenance organization, and measuring equipment.

Twenty-one Recommendations (three new and 18 revised) are submitted for approval by this Standardization Conference. These latter Recommendations address the areas of leased circuits and data transmission systems, Common Channel Signalling System No. 7; test and measurement equipment; television links; videoconference systems; sound programme links; and terminology.

Study Group IV has developed CCITT Recommendations concerning maintenance of networks and systems for a number of years. As network elements, e.g., switch, signalling and transport systems, have grown more complex, their maintenance needs have evolved. Where formerly maintenance largely dealt with detecting, locating and repairing faults, the emphasis now is on managing networks and systems to provide high quality services to users, through a combination of operations systems, and maintenance capabilities provided as part of the network elements. The Recommendations specifying these capabilities, and the interfaces between network elements and operations systems, define Telecommunications Management Networks. The development of these Recommendations requires close coordination among Study Groups IV, VII, XI, XV and others. During the previous study period this coordination was accomplished through an ad hoc Group (JRM-TMN) comprising TMN Rapporteurs from each of the study groups involved in TMN work. It is the intent of this Group to continue its activity in the new study period as a Joint Coordination Group on TMN (JCG-TMN).

Study Group IV has put forward proposals for 19 Questions as the basis for its work programme during 1993-1996 study period. These Questions are presented in Document AP X-34, in the new recommended format which identifies expected study results and schedules for completing studies, to support a project-oriented approach towards developing Recommendations.

This summary report would not be complete without recognizing the efforts of the Study Group IV Vice-Chairmen, Working Party Chairmen and Rapporteurs, and the contribution of the CCITT Secretariat, without whom the accomplishments noted here could not have been achieved.

2.2 In approving the report of Study Group IV it was pointed out that Recommendations submitted to the approval of the Standardization Conference should be published in a unified manner (i.e. in the report of the final meeting of the Study Group concerned).

3. Study Group V (Document AP X-11) – Protection against electromagnetic effects

The Chairman of Study Group V, Mr. H. Lorke (Germany), summarized the activities of the Study Group and its Working Parties as follows:

Study Group V is responsible for studies related to electromagnetic compatibility (EMC) of telecommunication systems. According to the definition of EMC those studies cover the protection of telecommunications installations against any kind of possible adverse effects from the electromagnetic environment as well as the protection of that environment against emissions from telecommunication systems. It includes also measures and precautions that provides electrical safety to telecommunication staff and users of telecommunication facilities.

The main study items were:

- protection of telecommunication staff and users against electrical hazard;
- protection of telecommunication installations against damages caused by overvoltages or overcurrents;

- protection of telecommunication systems against impairment of transmission, worsening quality of service and against malfunction, due to induced voltages;
- protection of the electromagnetic environment against adverse effects generated by unintended emissions from telecommunication equipment.

The work programme contained 17 Questions. Sixteen of them were allocated to the four Working Parties:

- WP V/1 Equipment resistibility and associated electrical safety problems
- WP V/2 Radio frequency and fast transients interference
- WP V/3 Earthing and protection against lightning
- WP V/4 Directives and associated Questions

Thirteen Study Group V members acted as Special Rapporteurs appointed for each Question and for Terminology.

Cooperation to 11 bodies of CIGRE, UIC, IEC and CISPR has been performed through ten Study Group V members appointed as Liaison Representatives.

The main activities of Study Group V consisted of:

- 4 Study Group V meetings;
- 17 Working Party meetings;
- 1 seminar on the Directives, following an invitation of the Greek Administration;
- 2 computer software demonstrations;
- 2 co-sponsorships to international symposia on EMC outside the CCITT.

The main results achieved by Study Group V have been:

- 5 new K-Series Recommendations, three approved under Resolution No. 2, two submitted to WTSC for approval;
- 6 amendments to existing K-Series Recommendations, two approved under Resolution No. 2, four submitted to WTSC for approval;
- 4 new sections for Manuals.

The study of four Questions was terminated.

4. Study Group VI (Document AP X-13) – Outside plant

4.1 The Chairman of Study Group VI, Mr. K. Nikolsky (Russia), summarized the activities of the Study Group and its Working Parties as follows:

In the period 1989-1992, CCITT Study Group VI dealt with the 13 Questions. Six of these Questions relate to conventional cable systems using copper conductors, while seven concern fibre-optic cable technology.

As a result, Study Group VI produced five new Recommendations, three of which were approved by the accelerated procedure provided for in Resolution No. 2. These Recommendations are L.12: "Optical Fibre Joints", L.13: "Sheath Joints and Organizers of Optical Fibre Cables in Outside Plant" and: L.14 "Measurement Method to Determine the Tensile Performance of Optical Fibre Cables Under Load".

Recommendation L.15: "Optical Local Distribution Networks – Factors to be Considered for Their Construction" and L.16: "Conductive Plastic Material (CPM) as Protective Covering for Metal Cable Sheaths" are submitted to this Conference.

The Study Group has produced a new manual: "Application of Computers and Microprocessors to the Construction, Installation and Protection of Telecommunication Cables", as well as the revised manual: "Construction, Installation, Jointing and Protection of optical-fibre cables", which not only represents a substantially modified version of the 1985 text, but also incorporates a number of new chapters containing material on cables inside buildings, passive optical components and configurations of optical plant in distribution networks.

In the forthcoming study period, SG VI intends to study 13 Questions.

The representatives of Study Group VI have established working contacts with Technical Committees 20, 46 and 89, and with Subcommittees 86A and 86B of the International Electrotechnical Commission (IEC), in whose investigations they have taken an active part.

Attention should be drawn to the important part played in the progress made by the Study Group in the period under review by support obtained from the Director of the CCITT, the CCITT Secretariat and other services. Particular gratitude is expressed to all Vice-Chairmen and Special Rapporteurs and to all representatives of Administrations and recognized private operating agencies who have actively participated in the work of Study Group VI during this period.

4.2 In approving the report of Study Group VI prompt publication of the manuals was requested.

Document 38 gives the amended section 7 of draft Recommendation L.16, reproduced in COM VI-R 11.

It was noted that Recommendation K.29 (drafted by Study Group V and already approved in accordance with the rules established by Resolution No. 2) should be further examined in order to ascertain its consistency with section 7 of Recommendation L.16.

5. Study Group X (Documents AP X-31) – Languages for telecommunication applications

On behalf of the Chairman of Study Group X, Mr. C. Carrelli (Italy), Mr. K. Schulz (Vice-Chairman, Germany) summarized the activities of the Study Group and its Working Parties as follows:

Study Group X adopted the following structure for the study of the Questions:

- WP X/1: Human-machine interface for telecommunication networks;
- WP X/2: Support environment and software quality for telecommunication systems;
- WP X/3: Formal description techniques, Specifications and Descriptions Language;
- WP X/4: CHILL.

As a result of the study period six new or revised Recommendations [Z.100(Rev.1), Z.120, Z.200(Rev.1), Z.351, Z.352, Z.400] were elaborated, submitted to the Committee and approved. Close cooperation with ISO was used. With regard to the area of TMN some overlap of study Questions of SG X and SG IV caused some delay for drafting the Recommendations and showed the complexity in this field. For future work a clear allocation of study Questions to the Study Groups is required.

For the forthcoming study period ten study Questions were proposed. Most of them are continuing active studies. Those old Questions where no contributions have been received were deleted.

For the promotion of the results of SG X papers were presented and published in proceedings at the:

- 5th CHILL Conference, Brazil, March 1990;
- Telecom Geneva, October 1991;
- SETSS Conference, Florence 1992;
- ISS 92, Japan.

Several SDL Conferences (forum) were held.

The next SDL Forum will be held in September 1993 in Darmstadt, Germany.

6. Study Group XI (Document AP X-17) – Switching and signalling

6.1 The Chairman of Study Group XI, Mr. J.S. Ryan (United States), summarized the activities of the Study Group and its Working Parties as follows:

Study Group XI was assigned 25 Questions to study in the 1988-1993 study period. To accomplish this seven Working Parties were formed:

- Working Party 1 was assigned Questions relating to mobile systems and interworking between signalling systems.
- Working Party 2 handled Questions relating to common protocols, e.g. the lower levels of signalling systems.
- Working Party 3 produced a handbook on the implementation of Signalling System No. 7 and coordinated the preparation of the Questions for the next study period.
- Working Party 4 studied issues relating to new techniques, e.g. IN, broadband, protocol architecture, etc.
- Working Party 5 studied the information flows necessary for the implementation of services and produced the stage 2 (common) descriptions for them.
- Working Party 6 studied issues relating to user-to-user control, i.e. upper levels of Signalling Systems No. 7 and DSS 1.
- Working Party 7 studied signalling and switching aspects of OAM and was responsible for TMN protocols.

In the studies, 1900 pages of regular contributions, and more than 12 000 pages of delayed contributions were studied. The studies resulted in 260 reports with more than 20 000 pages. This resulted in major revisions to 63 Recommendations, minor revision to 14 Recommendations and 88 new Recommendations. In addition one handbook was prepared. Twenty five Recommendations were approved using Resolution No. 2 procedures.

It is not possible in the available time to list all of the accomplishments of the Study Group. A few highlights are:

- work started on signalling and switching for UPT and FLMTS;
- Recommendations for Capability Set 1 of the Intelligent Network were produced;
- a study of protocol architecture was completed;
- work was nearly completed on Recommendations for switching and signalling in B-ISDN;
- stage 2 and 3 descriptions of a large number of ISDN services were completed;
- work is well along on the OSI based protocol techniques for TMN;
- at the request of an ad hoc meeting of Administrations and carriers held in Geneva during Telecom 91, Study Group XI initiated procedures for monitoring and studying severe failures of Signalling System No. 7 with a view to correcting any deficiencies in its design which might be uncovered.

Thanks are due to the seven Working Party Chairmen, the 22 Sub-Working Chairmen, and the more than 200 editors and Rapporteurs which made it possible to produce this very significant result.

6.2 The Chairman of Study Group XI pointed out that several Recommendations could be approved at the final meeting in accordance with the rules established by Resolution No. 2. This however was not possible due to the workload in the secretariat.

The meeting pointed out the need to find appropriate means in order to fully adapt the publication procedure of new Recommendations in accordance with the procedures defined in Resolution No. 2.

7. Study Group XII (Document AP X-7) – Transmission performance of telephone networks and terminals

The Chairman of Study Group XII, Mr. P. Lorand (France), summarized the activities of the Study Group and its Working Parties as follows:

The IXth CCITT Plenary Assembly (Melbourne, 1988) assigned to Study Group XII 30 Questions, to which two Questions adopted by correspondence were added:

Q.31/XII: Speech quality in multimedia terminals

Q.32/XII: In-service non-intrusive assessment of telephone channel transmission performance

Study Group XII has four working parties:

WP 1: Electroacoustics

WP 2: Telephone terminals

WP 3: Transmission performance and modelling

WP 4: Performance objectives and planning.

Questions 1 and 3 were not assigned to a Working Party. Moreover, the Speech Quality Experts' Group (SQEG) worked in conjunction with Study Group XV to define transmission performance in various speech signal processing equipments.

Study Group XII has held four Plenary Meetings in Geneva. The working parties and the SQEG met concurrently, and held another meeting in Brasilia. The SQEG has also held a number of other meetings.

Document AP X-7 summarizes the results achieved.

The detailed reports and the complete versions of the revised texts, or the new texts proposed for Recommendations, appear in the Study Group XII Documents COM XII-R 23 to COM XII-R 31 inclusive.

The results may be summed up as follows:

- *Six new Recommendations:*
  - P.57: Artificial ear
  - P.58: Head and torso simulator
  - P.59: Artificial conversational speech
  - P.83: Subjective performance assessment of telephone-band and wideband digital codecs
  - G.126: Listener echo in telephone networks
  - G.173: Transmission planning aspects of the speech service in digital public land mobile networks.
- *Preparation* of the revised version of the Handbook on Telephonometry
- *Preparation* of the revised version of the Network Planning Handbook
- *Revision* of 20 P-Series Recommendations and seven G-Series Recommendations
- *Preparation* of six new Supplements, withdrawal of five Supplements
- *12 Questions completed:* 4b, 7, 10, 11, 14, 15, 16, 19, 21, 22, 24 and 26.
- *SQEG:* Tests on 16 kbit/s codecs and choice of the 8 kbit/s codec.

Thanks are due to the four Vice-Chairmen of Study Group XII, the Chairman of the SQEG, the Special Rapporteurs, the staff of the CCITT and the Administrations, which have all contributed to the success of the work of Study Group XII.

8. Study Group XV (Document AP X-29) – Transmission systems and equipment

The report of Study Group XV was presented by Mr. D.G. Fisher (United Kingdom), Vice-Chairman, on behalf of all the Vice-Chairmen of Study Group XV, because of the sad death of the Chairman Mr. A.M. Nouri (Saudi Arabia). Mr. Nouri guided the work of the Study Group through most of the study period until his sudden death on 7 January 1992. A minute of silence was observed in his memory at the final Study Group meeting.

During the study period, 22 Recommendations have been approved under the procedure of Resolution No. 2. In addition 14 new Recommendations and 20 amended Recommendations are submitted for approval to the World Telecommunication Standardization Conference. Highlights of the work are given below.

Working Party 1 produced 16 new or revised Recommendations in the area of audiovisual systems. Of particular note is Recommendation H.261 covering the "Video codec for audiovisual services at $p \times 64$ kbit/s" which is now used extensively in videotelephones throughout the world.

Working Party 2 produced eight new or revised Recommendations on signal processing including G.728 on speech coding at 16 kbit/s and the extensive Recommendations G.763 and G.764 on DCME and PCME.

In the area of Multiplexing systems, Working Party 3 produced seven new or revised Recommendations. Four of these are concerned with equipment for the Synchronous Digital Hierarchy (SDH) and were produced within a two year period demonstrating that CCITT can react rapidly to market needs.

Working Party 4 responded to the Question 31/XV, introduced by the Islamic Republic of Iran at the IXth Plenary Assembly, by editing the text of the intended publication "Introduction of new technologies in local networks".

Optical Transmission was handled by Working Party 5. The resulting 14 new or revised Recommendations include G.957 and G.958 on optical interfaces and line systems for SDH and G.661 on optical fibre amplifiers.

Six new or revised Recommendations were produced on transmission network management by Working Party 6. They include important contributions to the Telecommunications Management Network concept in cooperation with Study Group IV and others.

Working Party 7 revised one Recommendation, maintained the Study Group's status report and edited the new Questions.

Working Party 8 revised G.701 on vocabulary, coordinated liaison with other groups and organized the editorial group.

All the Vice-Chairmen acknowledge the contribution of the 33 members of the Study Group who acted as Special Rapporteurs. They deserve the majority of the credit for the results; we would encourage any way of increasing the level of recognition of this work.

9. Study Group XVII (Document AP X-35) – Data transmission over the telephone network

The Chairman of Study Group XVII, Mr. K. Kern (Germany), summarized the activities of the Study Group and its Working Parties as follows:

The studies of Study Group XVII were carried out on the basis of 16 Questions; for most of these Questions Special Rapporteurs were appointed who prepared the texts for draft Recommendations or the revisions of existing ones (AP X-35, § 2.2).

The Study Group held five meetings, all in Geneva; the Working Parties held six. There were ten meetings of Special Rapporteurs which took place independently from Working Party meetings.

The Study Group has drafted four new Recommendations, three of them were approved by the procedure according to Resolution No. 2 [V.42 *bis* (data compression procedures for DCEs), V.17 (modems for facsimile applications with data signalling rates up to 14 400 bit/s) and V.32 *bis* (duplex modem for general use at data signalling rates up to 14 400 bit/s)]. Recommendation V.38 (A 48/56/64 kbit/s data circuit terminating equipment) is proposed to be accepted by this meeting.

There are six Recommendations which we think are obselete and we see no need for them to be reprinted.

The Study Group has drawn up ten Questions for the coming study period, eight of them being continuations of previous studies, two are new ones. They propose studies on:

- modems in communicating with hearing impaired people;
- wireless DCEs.

The main task of Study Group XVII has been and will be concerned with modems for the transmission of data over the public telephone network. Although considerable progress has been made in network digitalization, most of the subscriber lines are still analogue. Hence, there is still a need for modems.

Modern technologies allow the processing of more and more complex procedures such as modulation, automatic line equalization, error correction and data compression methods. The existing Recommendations describe modems with data signalling rates of up to 14 400 bit/s over a normal telephone channel. With a data compression method described in the new Recommendation V.42 *bis* it is possible to increase the rates at the DTE/DCE interface approximately by the factor 4 and possibly even more depending on the structure of the data signals.

New technologies like:

- multidimensional trellis code modulation,
- constellation mapping/shaping techniques,
- adaptive bandwidth and data rate line probing, etc.,

are under consideration at present for modems with data signalling rates of up to 28.8 kbit/s.

All these methods have the aim of increasing the throughput of data over an ordinary telephone channel, and by that to lower the costs for the transmission of data.

Other existing Recommendations were improved, expanded and adapted to new requirements; this is particularly true of those describing adaptation methods of V-series terminals to the ISDN.

According to a proposal of the ad hoc Group on Resolution No. 18, Study Group XVII will take over tasks from Study Group IX, i.e. all telex transmission aspects. Since Study Group XVII has had liaisons with Study Group IX in the past, no major problems should be encountered.

10. Study Group XVIII (Document AP X-37) – ISDN

The Chairman of Study Group XVIII, Mr. H.K. Pfyffer (Switzerland), presented the report of the Study Group.

He drew particular attention to the following points:

The study programme 1988-1992 was defined by 23 Questions.

The work was organized by setting up eight Working Parties; 33 Special Rapporteurships were defined and 21 Liaison Rapporteurs designated to cooperate with other Study Groups and Standards Organizations.

The main areas of interest during the studies covered the following topics:

B-ISDN/ATM, e.g:

- Basic parameters of ATM (worldwide unique solutions)
- Network functionalities and architecture
- Service principle for ISDN
- User-network interface
- Network protocol specifications

64 k-ISDN, e.g.:

- Packet-mode bearer services (frame relay)
- Multimedia service principles
- UPT
- User network interfaces and access issues

Interworking between networks

Synchronous digital hierarchy

Network Architecture for IN (in cooperation with Study Group XI)

Network performance issue, e.g.:

- Error performance of higher bit rates
- Availability
- Connection processing performance

Handbook on field trial guidelines

Meetings were held in Geneva, San Diego (United States), Matsuyama (Japan) and Melbourne (Australia). The total number of meeting days at Study Group level was 12; at Working Party level it was 89, and at Special Rapporteur's Group level it was about 20.

Study Group XVIII had to cope with diversified interests on time for agreements and on functional requirements with highly complex topics and a very large number of documents.

Study Group XVIII achieved the following results:

- 25 new Recommendations were approved by the Resolution No. 2 procedure;
- 19 new Recommendations, and
- 37 revised/enhanced Recommendations are submitted to the WTSC;
- 12 new Recommendations are available in the form of drafts for early approval by the Resolution No. 2 procedure in the new study period; a number of new Recommendations have also been planned.

Also the future work reported in § 5.1 of AP X-37 was successfully carried out during the Geneva meeting (19-29 January 1993).

Relating to work in the next study period, SG XVIII has drafted 28 new Questions, many of them relevant to B-ISDN, interworking issues and network capabilities for new services (e.g. multimedia, UPT, etc). Consideration was given to the proposed revised mandate for SG XVIII in the course of drafting the new Questions.

A release plan for guiding the timing of the development of Recommendations has been prepared.

A number of publications and papers to conferences and seminars on topics related to the work of SG XVIII have been issued with the purpose of disseminating the results of the ongoing work.

The Chairman expressed his appreciation for the good cooperation and generous support offered by the members, the hosting organizations and the CCITT Secretariat without which the results could not have been achieved.

11. CMTT (Document 19) – Television and sound transmission

The Chairman of CMTT (Mr. W.G. Simpson, United Kingdom) summarized the activities of the joint Study Group CCIR/CCITT as follows:

The Report of the Chairman of the CMTT (Document 19) gives details of the organization of the CMTT into three Working Parties and five Task Groups. It lists the five new or revised Recommendations which have been approved by correspondence together with six new or revised Questions which have also been approved by correspondence.

During the study period the Questions of the CMTT have been thoroughly revised taking into account the new working methods of the CCIR which for this purpose are consistent with those of the Standardization Sector. As a result of this revision the number of Questions have been reduced to 31 (25 without the Questions allocated to Task Group 5, which are not to be transferred).

In the light of the decisions of the APP and the Report of the joint meeting of the CCIR ad hoc Advisory Group and the CCITT ad hoc Group (Res.18) (Document AP X-40) the Chairman of the CMTT asks the WTSC to formally agree to transfer the CMTT to the administration of the TSB whilst maintaining its nature as a single entity and as a joint Radiocommunication/Telecommunication Standardization Study Group. Also, in the light of the report of

the joint meeting of ad hoc Groups, he requests that arrangements are made to continue to schedule CMTT Study Group, Working Party and Task Group meeting to overlap meetings of Radiocommunication Sector Study Groups 10 and 11, other than in exceptional circumstances.

12. Conclusion

Committee 5 proposes to the World Telecommunication Standardization Conference the adoption of the Recommendations listed in Annex 1 and the deletion of Recommendations listed in Annex 2.

ANNEX 1

List of Recommendations submitted to the Conference approval

Study Group IV

Draft Rec. No.	Title	Doc. (COM IV-R)
M.60 Rev. 1	Maintenance terminology and definitions	35
M.1020 Rev. 1	Characteristics of special quality international leased circuits with special bandwidth conditioning	35
M.1025 Rev. 1	Characteristics of special quality international leased circuits with basic bandwidth conditioning	35
M.1045 Rev. 1	Preliminary exchange of information for the provision of international leased circuits	35
M.1050 Rev. 1	Lining up an international point-to-point leased circuit	35
M.1340	Performance allocation and limits for international data transmission links and systems	35
M.1370 Rev. 1	Setting up and lining up of international data transmission systems	35
M.1375 Rev. 1	Maintenance of international data transmission systems	35
M.1380	Bringing into service of international leased circuits that are supported by international data transmission systems	35
M.1385	Maintenance of international leased circuits that are supported by international data transmission systems	35
M.4100[1] Rev. 1	Maintenance of common Signalling System No. 7	95
N.1 Rev. 1	Definitions for application to international sound-programme transmissions	88
N.10 Rev. 1	Limits for the lining-up of international sound-programme links and connections	89
N.55 Rev. 1	Organization, responsibilities and functions of control and sub-control ITCs and control and sub-control stations for international television connections, links, circuits and circuit sections	90
N.60 Rev. 1	Nominal amplitude of video signals at video interconnection points	91
N.62 Rev. 1	Tests to be made during the line-up period that precedes a television transmission	35
N.67 Rev. 1	Monitoring television transmissions. Use of the field blanking interval	93
N.86 Rev. 1	Line-up and service commissioning of international videoconference systems operating at transmission bit rates of 1544 and 2048 kbit/s	35
N.90 Rev. 1	Maintenance of international videoconference systems operating at transmission bit rates of 1544 and 2048 kbit/s	94
O.41 Rev. 1	Psophometer for use on telephone-type circuits	35
O.133 Rev. 1	Equipment for measuring the performance of PCM encoders and decoders	35

[1] New Rec. M.4100 = to *Blue Book* Rec. M.782 revised.

Study Group V

Draft Rec. No.	Title	Doc. (COM V-R)
K.10 Rev. 1	Unbalance about earth of telecommunication installations	11
K.11 Rev. 2	Principles of protection against overvoltages and overcurrents	7, 9
K.20 Rev. 2	Resistibility of telecommunication switching equipment to overvoltages and overcurrents	11
K.28 Rev. 1	Characteristics of semi-conductor arrester assemblies for the protection of telecommunications installations	11
K.31	Bonding configurations and earthing of telecommunication installations in a subscriber's building	11
K.30	Positive temperature coefficient thermistors	11

Study Group VI

Draft Rec. No.	Title	Doc. (COM VI-R)
L.15	Optical local distribution networks – Factors to be considered for their construction	11
L.16	Conductive plastic material as protective covering for metal cable sheaths	11

Study Group X

Draft Rec. No.	Title	Doc. (COM X-R)
Z.100 Rev. 1	Specification and description language (SDL)	26 to 32
Z.120	Messages sequence charts	33
Z.200 Rev. 1	CCITT High Level Language (CHILL)	34
Z.351	Data-oriented human-machine interface specification techniques – Part 1: Introduction	24
Z.352	Data-oriented human-machine interface specification techniques – Part 2: Scope, approach and reference model	24
Z.400	Structure and format of quality manuals for telecommunication software	25

Draft Rec. No.	Title	Doc. (COM XI-R)
Q.50 Rev. 1	Signalling between circuit multiplication equipments (CME) and international switching centres (ISC)	186
Q.68	Methodology for developing management services	249
Q.71 Rev. 1	ISDN circuit mode switched bearer services	220
Q.72	Stage 2 description for packet mode and frame mode services	221
Q.72.1	Packet mode	98
Q.72.2	Frame mode	221
Q.82	Stage 2 description for call offering supplementary services	222
§ 2 Rev. 1	Call forwarding	222
§ 3	Call deflection	222
Q.84	Stage 2 description for multiparty supplementary services	223
§ 1	Conference calling	223
Q.86	Charging supplementary services	224
§ 3	Reverse charging	224
Q.87	Additional information transfer supplementary services	225
§ 1 Rev. 1	ISDN User-to-user signalling	225
Q.107 *bis* Rev. 1	Analysis of forward address information for routing	186
Q.115 Rev. 1	Control of echo suppressors and echo cancellers by international switching centres	186
Q.118 Rev. 1	Special release arrangements	186
Q.141 Rev. 1	Signal code for line signalling	186
Q.144 Rev. 1	Line signal receiver	186
Q.513 Rev. 1	Exchange interfaces for operations, administration and maintenance	175
Q.521 Rev. 1	Exchange functions	175
Q.541 Rev. 1	Digital exchange design objectives – General	175
Q.542 Rev. 1	Digital exchange design objectives – Operations and maintenance	175
Q.543 Rev. 1	Digital exchange performance design objectives	175
Q.601 Rev. 1	General	187
Q.602 Rev. 1	Introduction	187
Q.604 Rev. 1	Information analysis tables	187
Q.614 Rev. 1	Logic procedures for incoming signalling system No. 7 (TUP)	187
Q.617	Logic procedures for incoming signalling system No. 7 (ISUP)	187
Q.624 Rev. 1	Logic procedures for outgoing signalling system No. 7 (TUP)	187
Q.627	Logic procedures for outgoing signalling system No. 7 (ISUP)	187
Q.646	Logic procedures for interworking of signalling system No. 5 to No. 7 (ISUP)	187
Q.656	Logic procedure for interworking of signalling system No. 6 to No. 7 (ISUP)	187
Q.667	Logic procedures for interworking of signalling system No. 7 (TUP) to No. 7 (ISUP)	187
Q.675	Logic procedures for interworking of signalling system R1 to No. 7 (ISUP)	187

Draft Rec. No.	Title	Doc. (COM XI-R)
Q.686	Logic procedures for interworking of signalling system R2 to No. 7 (ISUP)	187
Q.690	Logic procedures for interworking of signalling system N.° 7 (ISUP) to No. 5	187
Q.691	Logic procedures for interworking of signalling system No.7 (ISUP) to No. 6	187
Q.692	Logic procedures for interworking of signalling system No. 7 (ISUP) to No. 7 (TUP)	187
Q.694	Logic procedures for interworking of signalling system No. 7 (ISUP) to R1	187
Q.695	Logic procedures for interworking of signalling system No.7 (ISUP) to R2	187
Q.698	Interworking of signalling system No. 7 (ISUP and TUP) and No. 6 using arrow diagrams	187
Q.700 Rev. 1	Introduction to CCITT Signalling System No. 7	189
Q.701 Rev. 1	Functional description of the message transfer part of signalling system No. 7	190
Q.703 Rev. 1	Signalling link	190
Q.704 Rev. 1	Signalling network functions and messages	191
Q.705 Rev. 1	Signalling network structure	192
Q.706 Rev. 1	Message transfer part signalling performance	192
Q.708 Rev. 1	Numbering of international signalling point codes	193
Q.709 Rev. 1	Hypothetical signalling reference connection	194
Q.711 Rev. 1	Functional description of the signalling connection control part	195
Q.712 Rev. 1	Definition and function of SCCP messages	195
Q.713 Rev. 1	SCCP formats and codes	195
Q.714 Rev. 1	Signalling connection control part procedures	196
Q.716 Rev. 1	Signalling connection control part (SCCP) performances	196
Q.723 Rev. 1	Formats and codes	186
Q.724 Rev.1	Signalling procedures	186
Q.725 Rev. 1	Signalling performance in the telephone application	196
Q.730 Rev. 1	ISDN supplementary services	226
Q.731	Stage 3 description for number identification supplementary services using signalling system No. 7	227
§ 3	Calling line identification presentation	227
§ 4	Calling line identification restriction	227
§ 5	Connected line identification presentation	227
§ 6	Connected line identification restriction	227
Q.732	Stage 3 description for call offering supplementary services using Signalling System No. 7	228
§ 2	Call forwarding busy	228
§ 3	Call forwarding no answer	228
§ 4	Call forwarding unconditional	228
§ 5	Call deflection	228

Draft Rec. No.	Title	Doc. (COM XI-R)
Q.733	Stage 3 description for call completion supplementary services using Signalling System No. 7	229
§ 2	Call hold	229
§ 4	Terminal portability	229
Q.734	Stage 3 description for multiparty supplementary services using Signalling System No. 7	230
§ 1	Conference calling	230
§ 2	Three-party service	230
Q.735	Stage 3 description for community of interest supplementary services using Signalling System No. 7	231
§ 1	Closed user group	231
§ 3	Multi-level precedence and preemption	231
Q.737	Stage 3 description of additional information transfer supplementary services using Signalling System No. 7	232
§ 1	User-to-user signalling	232
Q.750	Operations, maintenance and administration part of Signalling System No. 7 management overview	250
Q.752	Signalling system No. 7 monitoring and measurements	197
Q.753	Operations, maintenance and administration of Signalling System No. 7	197
Q.754	Operations, maintenance and administration part of Signalling System No. 7 management application service elements definitions	251
Q.755	Signalling System No. 7 protocol tests	197
Q.761 Rev. 1	Functional description of the ISDN user part of Signalling System No. 7	233
Q.762 Rev. 1	General function of messages and signals	233
Q.763 Rev. 1	Formats and codes	234
Q.764 Rev. 1	Signalling procedures	235
Q.766 Rev. 1	Performance objectives in the integrated services digital network application	197
Q.771 Rev. 1	Functional description of transaction capabilities	198
Q.772 Rev. 1	Transaction capabilities information element definitions	199
Q.773 Rev. 1	Transaction capabilities formats and encoding	199
Q.774 Rev. 1	Transaction capabilities procedures	200
Q.775 Rev. 1	Guidelines for using transaction capabilities	201
Q.780 Rev. 1	Signalling System No. 7 test specification general description	202
Q.781 Rev. 1	Message transfer part level 2 test specification	202
Q.782 Rev. 1	Message transfer part level 3 test specification	202
Q.784 A	TTCN version of Recommendation Q.784	156
Q.786	Signalling connection control part test specifications	203
Q.787	Transaction capabilities part test specifications	121, 122
Q.811	Lower layer protocol profiles for the Q3 interface	252
Q.812	Upper layer protocol profiles for the Q3 interface	253
Q.821	Stage 2 and stage 3 description for the Q3 interface	254

Draft Rec. No.	Title	Doc. (COM XI-R)
Q.850	Use of cause and location in digital subscriber signalling system No. 1 and Signalling System No. 7 ISDN user part	236
Q.920 Rev. 1	ISDN user-network interface data link layer – General aspects	204
Q.921 Rev. 1	ISDN user-network interface – Data link layer specification	205
Q.921 *bis*	Abstract test suites for LAPD conformance tests	206
Q.930 Rev. 1	ISDN user-network interface layer 3 – General aspects	237
Q.931 Rev. 1	ISDN user-network interface layer 3 specification for basic call control	238
Q.931 A Rev.1	User side and network side SDL diagrams	131
Q.932 Rev. 1	Generic procedures for the control of ISDN supplementary services	239
Q.933	Layer 3 signalling specification for frame mode bearer service	240
Q.939	Service indicator coding examples	241
Q.941	ISDN user-network interface protocol profile for management	249
Q.950	ISDN supplementary services	242
Q.951	Stage 3 description for number identification supplementary services using digital subscriber signalling system No. 1	243
§ 3	Calling line identification presentation	243
§ 4	Calling line identification restriction	243
§ 5	Connected line identification presentation	243
§ 6	Connected line identification restriction	243
Q.952	Stage 3 service description for call offering supplementary services using digital signalling system No. 1	244
§ 2-5	Call diversion	244
Q.953	Stage 3 description for call completion supplementary services using digital subscriber signalling system No. 1	245
§ 2	Call hold	245
Q.954	Stage 3 description for multiparty supplementary services using digital subscriber signalling system No. 1	246
§ 1	Conference call	246
§ 2	Three-party service	246
Q.955	Stage 3 description for community of interest supplementary services using digital signalling system No. 1	247
§ 3	Multi-level precedence and preemption	247
Q.957	Stage 3 description for additional information transfer supplementary services using digital subscriber signalling system No. 1	248
§ 1	User-to-user signalling	248
Q.1051 Rev. 1	Mobile Application Part	89
Q.1100 Rev. 1	Structure of the Recommendations in the INMARSAT mobile-satellite systems	188
Q.1111 Rev. 1	Interfaces between the INMARSAT Standard B system and the international public switched telephone network/ISDN	188
Q.1112 Rev. 1	Procedures for interworking between INMARSAT Standard-B system and the international public switched telephone network/ISDN	188

Study Group XI *(end)*

Draft Rec. No.	Title	Doc. (COM XI-R)
Q.1151 Rev. 1	Interfaces between the INMARSAT aeronautical mobile-satellite system and the international public switched telephone network/ISDN	188
Q.1152 Rev. 1	Procedures for interworking between INMARSAT aeronautical mobile-satellite system and the international public switched telephone network/ISDN	188
Q.1200	Q-series intelligent network Recommendations structure	207
Q.1204	Intelligent network distributed functional plane architecture	208
Q.1205	Intelligent network physical plan architecture	209
Q.1208	Intelligent network application protocol general aspects	209
Q.1211	Introduction to the intelligent network capability set 1	210
Q.1213	Global functional plane for intelligent network capability set 1	211
Q.1214	Distributed functional plane for intelligent network capability set 1	212 to 215
Q.1215	Physical plane for intelligent network capability set 1	216
Q.1218	Intelligent network interface Recommendations	217
Q.1290	Terminology used in the definition of intelligent networks	218
Q.1400	Architecture framework for the development of signalling and OAM protocols using OSI concepts	219

Study Group XII

Draft Rec. No.	Title	Doc. (COM XII-R)
G.100 Rev. 1	Definitions used in Fascicle III.1	29
G.101 Rev. 1	The transmission plan	29
G.111 Rev. 1	Loudness ratings (LRs) in an international connection	29
G.113 Rev. 1	Transmission impairments	29
G.114 Rev. 1	Mean one-way propagation time	29
G.121 Rev. 1	Loudness ratings (LRs) of national systems	29
G.122 Rev. 1	Influence of national systems on stability, talker echo, and listener echo in international connections	29
G.126	Listener echo in telephone networks	29
G.173	Transmission planning aspects of the speech service in digital public land mobile networks	29
P.10 Rev. 1	Vocabulary of terms on telephone transmission quality and telephone sets	28
P.11 Rev. 1	Effect of transmission impairments	28
P.31 Rev. 1	Transmission characteristics for digital telephones	28
P.34 Rev. 1	Transmission characteristics of hands-free telephones	28
P.37 Rev. 1	Magnetic field strength around the earcap of telephone handsets which provide for coupling to hearing aids	28

Study Group XII *(cont'd)*

Draft Rec. No.	Title	Doc. (COM XII-R)
P.38 Rev. 1	Transmission characteristics of operator telephone systems (OTS)	28
P.50 Rev. 1	Artificial voices	28
P.51 Rev. 1	Artificial mouth	28
P.52 Rev. 1	Volume meters	28
P.56 Rev. 1	Objective measurement of active speech level	28
P.57	Artificial ears	28
P.58	Head and torso simulator for telephonometry	28
P.59	Artificial conversational speech	28
P.62 Rev. 1	Measurements on subscribers' telephone equipment	28
P.63 Rev. 1	Methods for the evaluation of transmission quality on the basis of objective measurements	28
P.64 Rev. 1	Determination of sensitivity/frequency characteristics of local telephone systems to permit calculation of their loudness ratings	28
P.65 Rev. 1	Objective instrumentation for the determination of loudness ratings	28
P.66 Rev. 1	Methods for evaluating the transmission performance of digital telephone sets	28
P.78 Rev. 1	Subjective testing method for determination of loudness ratings in accordance with Recommendation P.76	28
P.79 Rev. 1	Calculation of loudness ratings	28
P.80 Rev. 1	Methods for subjective determination of transmission quality	28
P.81 Rev. 1	Modulated noise reference unit (MNRU)	28
P.83	Subjective methods for evaluating the performance of digital voice- and broadband codecs	28
P.84 Rev. 1	Subjective listening test method for evaluating digital circuit multiplication and packetized voice systems	28

Study Group XV

Draft Rec. No.	Title	Doc. (COM XV-R)
G.165 Rev. 1	Echo cancellers	86
G.167	Acoustic echo controllers	86
G.180 Rev. 1	Characteristics of N + M type direct transmission restoration systems for use on digital and analogue sections, links or equipment	86
G.181 Rev. 1	Characteristics of 1 + 1 type restoration systems for use on digital transmission links	86
G.191	Software tools for speech and audio coding standardization	86
G.650	Definition and test methods for the relevant parameters of single-mode fibres	89
G.651 Rev. 1	Characteristics of a 50/125 μm multimode graded index optical fibre cable	89

Study Group XV *(cont'd)*

Draft Rec. No.	Title	Doc. (COM XV-R)
G.652 Rev. 1	Characteristics of a single-mode optical fibre cable	89
G.653 Rev. 1	Characteristics of a dispersion-shifted single-mode optical fibre cable	89
G.654 Rev. 1	Characteristics of a 1550 nm wavelength loss-minimized single-mode optical fibre cable	89
G.661	Definition and test methods for the relevant generic parameters of optical fibre amplifiers	89
G.701 Rev. 1	Vocabulary of digital transmission and multiplexing, and pulse code modulation (PCM) terms	90
G.722 A	Testing signal-to-total distortion ratio of 7 kHz audiocodecs within 64 kbit/s Rec. G.722 connected back-to-back	90
G.725[1)]	System aspects for the use of the 7 kHz audiocodec within 64 kbit/s	
G.736 Rev. 1	Characteristics of a synchronous digital multiplex equipment operating at 2048 kbit/s	90
G.772 Rev. 1	Protected monitoring points provided on digital transmission systems	90
G.773 Rev. 1	Protocol suites for Q-interfaces for management of transmission systems	90
G.797	Characteristics of a flexible multiplexer in a PDH environment	90
G.911	Parameters and calculation methodologies for reliability and availability of fibre optic systems	91
G.955 Rev. 1	Digital line systems based on the 1544 kbit/s hierarchy on optical fibre cables	91
G.957 Rev. 1	Optical interfaces for equipments and systems relating to the synchronous digital hierarchy	91
G.971	General features of optical fibre submarine cable systems	91
G.972	Definition of terms relevant to optical fibre submarine cable systems	91
G.974	Characteristics of regenerative optical fibre submarine cable systems	91
H.120 Rev. 1	Codecs for videoconferencing using primary digital group transmission	92
H.200 Rev. 1	Framework for recommendations for audiovisual services	92
H.221 Rev. 2	Frame structure for a 64 to 1920 kbit/s channel in audiovisual teleservices	92
H.230 Rev. 1	Frame-synchronous control and indication signals for audiovisual systems	93
H.231	Multipoint control unit for audiovisual services using digital channels up to 2 Mbit/s	93
H.233	Confidentiality systems for audiovisual services	93
H.242 Rev. 1	System for establishing communication between audiovisual terminals using digital channels up to 2 Mbit/s	94
H.243	Procedures for establishing communication between three or more audiovisual terminals using digital channels up to 2 Mbit/s	94
H.261 Rev. 2	Video codec for audiovisual services at $p \times 64$ kbit/s	95
H.320 Rev. 1	Narrow-band visual telephone systems and terminal equipment	96
H.331	Broadcasting type multipoint systems and terminal equipment	96

1) Note to be added in the Catalogue of CCITT Recommendations: "For new implementations, refer to CCITT Recommendations H.320, H.242 and H.230 dealing with audiovisual services."

Study Group XVII

Draft Rec. No.	Title	Doc. (COM XVII-R)
V.10 Rev. 1	Electrical characteristics for unbalanced double-current interchange circuits for general use with integrated circuit equipment in the field of data communications	10
V.11 Rev. 1	Electrical characteristics for balanced double-current interchange circuits for general use with integrated circuit equipment in the field of data communications	10
V.13 Rev. 1	Simulated carrier control	10
V.14 Rev. 1	Transmission of start-stop characters over synchronous bearer channels	10
V.24 Rev. 1	List of definitions for interchange circuits between data terminal equipment (DTE) and data circuit-terminating equipment (DCE)	10
V.28 Rev. 1	Electrical characteristics for unbalanced double-current interchange circuits	10
V.32 Rev. 1	A family of 2-wire, duplex modems operating at data signalling rates of up to 9600 bit/s for use on the general switched telephone network and on leased telephone-type circuits	R 2, 4; COM 14*
V.38	A 48/56/64 kbit/s data circuit terminating equipment standardized for use on digital point-to-point leased circuits	10
V.42 Rev. 1	Error-correcting procedures for DCEs using asynchronous-to-synchronous conversion	10

Study Group XVIII

Draft Rec. No.	Title	Doc. (COM XVIII-R)
G.707 Rev. 2	Synchronous digital hierarchy bit rates	105
G.708 Rev. 2	Network node interface for the synchronous digital hierarchy	105
G.709 Rev. 2	Synchronous multiplexing structure	105
G.803	Architecture of transport networks based on the synchronous digital hierarchy (SDH)	106
G.823 Rev. 1	The control of jitter and wander within digital networks which are based on the 2048 kbit/s hierarchy	106
G.824 Rev. 1	The control of jitter and wander within digital networks which are based on the 1544 kbit/s hierarchy	106
G.825	The control of jitter and wander within digital networks which are based on the synchronous digital hierarchy	106
G.831	Management capabilities of transport networks based on the synchronous digital hierarchy	106
G.960 Rev. 1	Digital section for ISDN basic rate access	107
G.961 Rev. 1	Digital transmission system on metallic local lines for ISDN basic rate access	107
G.962	Access digital section for ISDN primary rate access at 2048 kbit/s	108
G.963	Access digital section for ISDN primary rate access at 1544 kbit/s	108

* White Contribution COM XVII-14.

Draft Rec. No.	Title	Doc. (COM XVIII-R)
I.112 Rev. 1	Vocabulary of terms for ISDNs	109
I.114	Vocabulary of terms for universal personal telecommunication	109
I.120 Rev. 1	Integrated services digital networks	109
I.122 Rev. 1	Framework for providing additional packet mode bearer services	109
I.140 Rev. 1	Attribute technique for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN	109
I.150 Rev. 1	B-ISDN asynchronous transfer mode functional characteristics	109
I.210 Rev. 1	Principles of telecommunication services supported by an ISDN and the means to describe them	110
I.211 Rev. 1	B-ISDN service aspects	110
I.221 Rev. 1	Common specific characteristics of services	110
I.310 Rev. 1	ISDN – Network functional principles	111
I.311 Rev. 1	B-ISDN General Network aspects	111
I.325 Rev. 1	Reference configurations for ISDN connection types	112
I.327 Rev. 1	B-ISDN functional architecture	112
I.333 Rev. 1	Terminal selection in ISDN	113
I.350 Rev. 1	General aspects of quality of service and network performance in digital networks, including ISDN	114
I.351 Rev. 1	Recommendations in other series concerning network performance objectives that apply at reference point T of an ISDN	114
I.352 Rev. 1	Network performance objectives for connection processing delays in an ISDN	114
I.353	Reference events for defining ISDN performance parameters	115
I.354	Network performance objectives for packet-mode communication in an ISDN	115
I.355	ISDN 64 kbit/s connection type availability performance	115
I.361 Rev. 1	B-ISDN ATM layer specification	116
I.362 Rev. 1	B-ISDN ATM adaptation layer functional description	116
I.363 Rev. 1	B-ISDN ATM adaptation layer specification	116
I.364	Support of broadband connectionless data service on B-ISDN	116
I.371	Traffic control and congestion control in B-ISDN	117
I.372	Frame relaying bearer service network-to-network interface requirements	117
I.373	Network capabilities to support universal personal telecommunication	117
I.374	Framework Recommendation on network capabilities to support multimedia services	117
I.411 Rev. 1	ISDN user-network interfaces – Reference configurations	118
I.413 Rev. 1	B-ISDN user-network interface	118
I.414	Overview of Recommendations on Layer 1 for ISDN and B-ISDN customer accesses	118
I.430 Rev. 1	Basic user-network interface – Layer 1 specification	119
I.431 Rev. 1	Primary rate user-network interface – Layer 1 specification	119
I.432 Rev. 1	B-ISDN user-network interface – Physical layer specification	119

Study Group XVIII *(end)*

Draft Rec. No.	Title	Doc. (COM XVIII-R)
I.500 Rev. 1	General structure of the ISDN interworking Recommendations	120
I.501	Frame mode bearer services interworking	120
I.510 Rev. 1	Definitions and general principles for ISDN interworking	120
I.515 Rev. 1	Parameter exchange for ISDN interworking	120
I.520 Rev. 1	General arrangements for network interworking between ISDNs	120
I.525	Interworking between ISDN and networks which operate at bit rates of less than 64 kbit/s	121
I.530 Rev. 1	Network interworking between an ISDN and a public switched telephone network (PSTN)	120
I.570	Public/private ISDN interworking	121
I.580	General arrangements for interworking between B-ISDN and 64 kbit/s based ISDN	121
I.610 Rev. 1	B-ISDN operation and maintenance principles and functions	122

ANNEX 2

List of Recommendations proposed for deletion to the Conference

Study Group IV

Rec. No.	Title	Fascicle Blue Book
O.25	Semiautomatic in-circuit echo suppressor testing system (ESTS)	IV.4
O.31	Automatic measuring equipment for sound-programme circuits	IV.4
O.32	Automatic measuring equipment for stereophonic pairs of sound-programme circuits	IV.4
O.51	Volume meters	

Study Groups V, VI: None

Study Group X

Rec. No.	Title	Fascicle Blue Book
Annexes B, C, D and E to Rec. Z.100	Annex B – Abstract syntax summary Annex C1 – Concrete graphical syntax summary Annex C2 – SDL PR syntax summary Annex D – SDL User guidelines Annex E – State-oriented representation and pictorial elements	X.1 X.1 X.1 X.2 X.1

Study Group XI

Rec. No.	Title	Fascicle Blue Book
Q.10	Definitions relating to national and international numbering plans	VI.1
Q.11 *bis*	Numbering plan for the ISDN ear	VI.1
Q.11 *ter*	Timetable for coordinated implementation of the full capability of the numbering plan for the ISDN era (Recommendation E.164)	VI.1
Q.13	International telephone routing plan	VI.1
Q.15	Nominal mean power during the busy hour	VI.1
Q.16	Maximum permissible value for the absolute power level of a signalling pulse	VI.1
Q.36	Customer recognition of foreign tones	VI.1
Q.40	The transmission plan	VI.1
Q.41	Mean one-way propagation time	VI.1
Q.42	Stability and echo (echo suppressors)	VI.1
Q.43	Transmission losses, relative levels	VI.1
Q.49	Specification for the CCITT automatic transmission measuring and signalling testing equipment ATME No. 2	VI.1
Q.791	Monitoring and measurements for SS No. 7 networks	VI.9
Q.795	Operations, maintenance and administration part (OMAP)	VI.9

Study Group XII: none

Study Group XV

Rec. No.	Title	Fascicle Blue Book
G.161	Echo-suppressor suitable for circuits having either short or long propagation time	III.1
G.163	Call concentrating systems	III.1
G.234	8-channel terminal equipments	III.2
G.235	16-channel terminal equipments	III.2
G.311	General characteristics of systems providing 12 carrier telephone circuits on an open-wire pair	III.2
G.312	Intermediate repeaters for open-wire carrier systems conforming to Recommendation G.311	III.2
G.313	Open-wire for use with 12-channel carrier systems	III.2
G.314	General characteristics of systems providing eight carrier telephone circuits on an open-wire pair	III.2
G.323	A typical transistorized system on symmetric cable pairs	III.2
G.324	General characteristics for valve-type systems on symmetric cable pairs	III.2

Study Group XV *(cont'd)*

Rec. No.	Title	Fascicle Blue Book
G.326	Typical systems on symmetric cable pairs [(12 + 12) systems]	III.2
G.327	Valve-type systems offering 12 carrier telephone circuits on a symmetric cable pair [(12 + 12) systems]	III.2
G.337	General characteristics of systems on 2.6/9.5 mm coaxial cable pairs	III.2
G.338	4 MHz valve-type systems on standardized 2.6/9.5 mm coaxial cable pairs	III.2
G.339	12 MHz valve-type systems on standardized 2.6/9.5 mm coaxial cable pairs	III.2
G.356	(120 + 120) channel systems on a single coaxial pair	III.2
G.361	Systems providing three carrier telephone circuits on a pair of open-wire lines	III.2
G.371	FDM carrier systems for submarine cable	III.2
G.412	Terminal equipments of radio-relay systems forming part of a general telecommunication network	III.2
G.433	Hypothetical reference circuit for trans-horizon radio-relay systems for telephony using frequency-division multiplex	III.2
G.434	Hypothetical reference circuit for systems using analogue transmission in the fixed-satellite service	III.2
G.444	Allowable noise power in hypothetical reference circuit of trans-horizon radio-relay systems for telephony using frequency division multiplex	III.2
G.445	Allowable noise power in the hypothetical reference circuit for frequency-division multiplex telephony in the fixed-satellite service	III.2
G.453	Improved transmission system for HF radio-telephone circuits	III.2
G.464	Principles of the devices used to achieve privacy in radiotelephone conversations	III.2
G.541	Specification of factory lengths of loaded telecommunication cable	III.2
G.542	Specification of loading coils for loaded telecommunication cables	III.2
G.543	Specification for repeater sections of loaded telecommunication cables	III.2
G.544	Specifications for terminal equipment and intermediate repeater stations	III.2
G.641	Waveguide diameters	III.3
G.700	Framework of the Series-G.700, -G.800 and -G.900 Recommendations	III.4
G.712[1)]	Performance characteristics of PCM channels between 4-wire interface at voice frequencies	III.4
G.713[1)]	Performance characteristics of PCM channels between 2-wire interfaces at voice frequencies	III.4
G.714[1)]	Separate performance characteristics for the encoding and decoding sides of PCM channels applicable to 4-wire voice-frequency interfaces	III.4
G.715[1)]	Separate performance characteristics for the encoding and decoding side of PCM channels applicable to 2-wire interfaces	III.4
G.721[2)]	32 kbit/s adaptive differential pulse code modulation (ADPCM)	III.4
G.723[2)]	Extensions of Recommendation G.721 adaptive differential pulse code modulation to 24 and 40 kbit/s for digital circuit-multiplication equipment application	III.4
G.771	Q interfaces and associated protocols for transmission equipment in the telecommunications management network (TMN)	III.4

Study Group XV *(en)*

Rec. No.	Title	Fascicle Blue Book
G.955[3)]	Digital line systems based on the 1544 kbit/s hierarchy on optical fibre cables	III.5
G.956[3)]	Digital line systems based on the 2048 kbit/s hierarchy on optical fibre cables	III.5
J.22	Performance characteristics of 10 kHz type sound-programme circuits	III.6
J.32	Characteristics of equipment and lines used for setting up 10 kHz type sound-programme circuits	III.6

Notes:

1) New draft Recommendation G.712 (Transmission Performance characteristics of PCM channels) replaces Recommendations G.712, G.713, G.714 and G.715 of the CCITT Blue Book Volume III, Fascicle III.4. New draft Recommendation G.712 is submitted to the rules of Resolution No. 2 (see CCITT Circular No. 149).

2) Recommendation G.726 (40, 32, 24, 16 kbit/s adaptive differential pulse code modulation (ADPCM)), approved with the rules of Resolution No. 2 and published in 1990, completely replaces the text of Recommendations G.721 and G.723 published in Fascicle III.4 of the Blue Book.

3) Recommendation G.955 (Digital line systems based on the 1544 kbit/s and the 2048 kbit/s hierarchy on optical fibre cables) replaces Recommendations G.955 and G.956 published in Fascicle III.5 of the Blue Book.

Study Group XVII

Rec. No.	Title	Fascicle Blue Book
V.5	Standardization of data signalling rates for synchronous data transmission in the general switched telephone network	VIII.1
V.6	Standardization of data signalling rates for synchronous data transmission on leased telephone-type circuits	VIII.1
V.20	Parallel data transmission modems standardized for universal use in the general switched telephone network	VIII.1
V.35	Data transmission at 48 kilobits per second using 60-108 kHz group band circuits	VIII.1
V.40	Error indication with electromechanical equipment	VIII.1

Study Group XVIII

Rec. No.	Title	Fascicle Blue Book
I.110	Preamble and general structure of the I-Series Recommendations for the Integrated Services Digital Network (ISDN)	III.7
I.111	Relationship with other Recommendations relevant to ISDNs	III.7
I.326	Reference configuration for relative network resource requirements	III.8

4.6 – REPORT BY COMMITTEE 6

(as approved by the Conference)

TELECOMMUNICATION SERVICES

General

Mandate of Committee 6

To examine the reports of Study Groups I, II, III, VII, VIII, IX and GAS, (with the exception of the list of Questions), and the documents submitted by countries relating to the activities of those Study Groups.

Chairman: Mr. J. S. Ryan (United States of America)

Vice-Chairman: Mr. J. Galvan Talledos (Mexico)

The Committee held three Plenary Meetings on 2, 5 and 8 March; the details of the debates may be found in summary records (Documents 47, 84 and 89).

Of the relevant documents, the following two are from the Director of CCITT:

AP X-1 List of Recommendations adopted under Resolution No. 2 since the IXth Plenary Assembly of the CCITT (Melbourne, 1988)

AP X-2 General statistical information on CCITT activities between the IXth and Xth Plenary Assemblies and list of CCITT meetings held during the 1989-1992 study period

are relevant to the various study groups. The other documents relate to the study groups concerned.

1. Report of Study Group I

Chairman: Mr. M. Israel (Canada)

Documents: AP X-15, 48; COM I-R 47; WTSC/13, 15 + Corr.1, 16, 17, 22, 45; DT/6, 12

1.1 *Presentation by the Chairman*

With over 200 experts, Study Group I has been consolidating its leadership role in the rapid pace of standardization of telecommunication services and promoting greater collaboration with other study groups and international organizations. Since 1988 considerable progress has been made to further integrate human factor considerations in the drafting of Recommendations. The human factors group is working on a Recommendation regarding access to public telephones and other telecommunication terminals by people with special needs. This is the first Recommendation that the CCITT has produced aimed specifically and exclusively at this subject. CCITT is turning its attention to this often-neglected group, which represents a substantial part of the population in all countries, and which needs access to telecommunication services just as much as the rest of the population. The Recommendation will deal specifically with visual, hearing and motion impairments. It will probably be completed in 1993. Similar efforts are being made to channel users' views into the process with the objective of enhancing the responsiveness of CCITT and of its Recommendations in today's environment. Most remarkably, Study Group I has managed to attract a diverse group of experts working in an atmosphere of cooperation and collective achievement.

The work programme of the Study Group encompasses the whole range of traditional and emerging telecommunication services including the interworking aspects and their integration in the ISDN and audiovisual applications. Substantial progress has been achieved during this study period in the definition of supplementary services, message handling, facsimile, etc., while work has continued towards the enhancement and/or adaptation of existing telematic services. This ambitious programme looks at the continuing convergence of telecommunication and

information technologies to satisfy market demands. The most recent area of study is Universal Personal Telecommunication (UPT), which is gathering momentum in CCITT and elsewhere and which promises to generate considerable interest in the years to come. Study Group I has managed to complete, in a short period of time, pertinent draft Recommendations providing the general principles of the service and has made considerable progress in the drafting of the detailed operational provisions in order to pave the way for a harmonious development of this exciting application of modern technology.

Coupled with new working methods and a further streamlining of the CCITT standardization process, Study Group I has also developed a post-1992 work programme that is tailored to give priority to those areas of standardization activity that best respond to the needs of its members. In the post-1992 study period, Study Group I expects to see an increasing convergence of services and technologies in UPT. Facsimile, data and audiovisual services will continue to evolve in tune with increasing market demand, evolution of terminals and further technological network developments.

A further challenge will be the integration of standards activity resulting from the restructuring of the ITU and in particular those areas of CCIR activity related to telecommunication services.

1.2 *Discussion*

The following points were discussed.

1.2.1 *Entry into force of the instructions from Recommendation E.141 (Report COM I-R 47 § 4)*

After verification that there were no expected difficulties, Committee 6 accepted the date of 1 January 1994.

1.2.2 *CCPS/CCITT Contact Committee; Resolution No. 11 (Revised)*

The proposal in DT/6 was accepted by Committee 6, but the acronyms will have to be updated by the TSB prior to publication.

The delegate of UPU expressed his satisfaction at the prevailing spirit of collaboration between the ITU and UPU.

1.2.3 *Revision of Recommendation E.161 (COM I-R 47); Contributions AP X-48 from Canada, WTSC/13 from Australia, WTSC/22 from New Zealand*

There was a common proposal that the final decision for the assignment of letters "Q" and "Z" should be unique.

Canada and a majority of delegations preferred option A. Australia and New Zealand preferred option B.

Australia and New Zealand, supported by Singapore, introduced Document WTSC/45 and proposed that the matter be referred to Study Group I for study.

The representative of the United States, supported by the United Kingdom and Canada, hoped that Committee 6 could arrive at a unique solution, as also requested by ISO/JTC 1, rather than deferring the matter for further study.

After discussion, the revision of Recommendation E.161 was accepted subject to the addition of a note reflecting the consensus and amendment of Section 2.2 of the Recommendation as follows:

"In accepting this compromise, the Conference has received the assurance that the adoption of a single universal standard is to be implemented by all ITU Members, including developments in GSM and FPLMTS."

The amendments to be made to Recommendation E.161 are set out in Annex 2 to this report.

1.2.4 *Revision of the procedure for collection and publication of official service documents; DT/12, WTSC/16 and 17*

Several questions were raised regarding the evolution of the procedure for allocating codes and for publication; see also § 2.2.2.

Committee 6 draws the attention of Committee 4 to this proposed study.

2. Report of Study Group II

Chairman: Mr. G. Gosztony (Hungary)

Documents: AP X-5 + Corr., 42; COM II-R 31(Add.); WTSC/15 + Corr.1, 43 + Corr.1, 64; DT/23(Rev.1).

2.1 *Presentation by the Chairman*

At the beginning of his presentation of the results and plans of Study Group II (Network operation), Mr. G. Gosztony (Hungary), Chairman of the Study Group, emphasized the complexity of interrelation of issues related to services, networks, terminals, technology and operation. During the last study period it had been the intention of the Study Group to facilitate the smooth introduction of new services and advanced network technologies in the worldwide telecommunication network taking existing limitations and problems of operation into account.

In its work the Study Group had applied the method of hierarchical screening of texts, a structured responsibility system of Special Rapporteurs, Liaison Officers and also Project Rapporteurs for key standardization areas (UPT, TMN and IN), stressed the importance of the personal link in cooperation, improved its management practice and enjoyed the logistic innovations initiated by the TSB.

Statistical data showed that Rapporteur Groups including the Development Groups had held 55 meetings outside Geneva. The work of those groups had played a key role in achieving the result that 74% of the 31 new and 35 revised Recommendations prepared by the Study Group had been accepted under the Resolution No. 2 procedure. The importance of the practical feedback given by the Development Groups for Network Management and for quality of service had also to be emphasized, since those groups activated many experts who otherwise did not take part in the work of the Telecommunication Standardization Sector.

Following an overview of results in different study areas (numbering, routing, operational performance, network management, traffic engineering, Handbook on quality of service and network performance), some problems of the present and hopes for the future were also presented. The difficulties mentioned covered the lack of coordination between study groups and even "at home" in some areas, and the absence of expertise to study certain aspects of some Questions. The hopes included the beneficial role of the Telecommunication Standardization Advisory Group to be created and further speeding up of the process of producing Recommendations by the improved Resolution No. 2 mechanism.

As a result of the applied working methods, the Study Group had succeeded in being transparent, i.e., offering its results in a well structured format, and in being flexible in embarking on new study areas and had done its best to respond to all liaison requirements in a quick and clear way. Not underestimating the results of other areas of cooperation, the good atmosphere of common work with Study Group VII should be stressed.

In conclusion, Mr. Gosztony thanked all those who had taken part in the work and appealed for further support, so as to continue and even strengthen the activities of Study Group II in the network operation field.

2.2 *Discussion*

Two subjects were addressed:

2.2.1 *Draft Recommendation E.168 on UPT numbering*

Contribution AP X-42 from Australia indicated that UPT is undergoing rapid evolution and that Recommendation E.168 is perhaps not yet mature. After discussion, Committee 6 agreed to the adoption of Recommendation E.168 after the addition of a new paragraph set out in Document DT/23(Rev.1), as follows:

In the Introduction of Recommendation E.168 (see Addendum to COM II-R 31-E), after the third paragraph the following text should be inserted:

"Recognizing that UPT is evolving, there are items requiring further study including those identified in Annex A. The intention of this Recommendation is to provide a basis for a common understanding of the underlying issues and hence to facilitate early implementation of UPT within a common framework."

The last sentence of § 4 of the original text:

"Additionally ... in Annex A" should be *deleted.*

2.2.2 *Country codes; WTSC/15 + Corr.1*

Committee 6 noted the amendments to the Annex to Recommendation E.164.

The list will be modified again to reflect the new situation of the Czech and Slovak Republics, as indicated in Document WTSC/43 + Corr.1 (see Annex 3 to this report).

The Director of the TSB indicated the present procedures followed by the TSB.

The delegate of the United Kingdom proposed that the Committee on procedures should study evolution of the procedures for modifying and publishing the list of codes for telex and telephone.

3. Report of Study Group III

Chairman: Mr. B. Rouxeville (France)

Documents: AP X-9

3.1 *Presentation by the Chairman*

Since the VIth Plenary Assembly (Geneva, 1974), Study Group III has been entrusted with all studies on tariffs and accounting for international telecommunication services.

Under those terms of reference, during the 1989-1992 study period Study Group III drew up 33 Questions, including two Questions approved by correspondence after the IXth Plenary Assembly.

The work of Study Group III resulted in:

- the preparation of 15 draft new Recommendations;
- the revision of nearly 30 Recommendations;
- the revision of Supplement No. 3 to Fascicle II.1 of the *Blue Book*;
- the deletion of three Recommendations.

Of the new or revised Recommendations which have been adopted, particular attention should be drawn to:

- Recommendation D.1 (revised) relating to general principles for the lease of international private telecommunication circuits;
- Recommendation D.7 (new) concerning the concept and implementation of one-stop shopping for international private leased circuits;
- Recommendation D.36 (new) relating to tariff and accounting principles for the international message handling service;
- Recommendation D.140 (new) relating to accounting rate principles for international telephone services;
- Recommendation D.94 (new) concerning the charging, billing and accounting principles for aeronautical mobile services.

In addition, the regional tariff groups have made significant progress in the development of new rules or standards at the regional level, for the setting of accounting rates and the remuneration of facilities made available.

The TEUREM Group, for instance, has revised Recommendations D.300 R, D.306 R and D.307 R. Also, the TAS and TAF Groups have succeeded in revising Recommendations D.500 R and D.501 R and Recommendations D.600 R and D.601 R, respectively. Those four Recommendations are shortly to be submitted for approval under the accelerated approval procedure.

This progress should not obscure the increasing difficulties which the regional tariff groups are encountering in their work, on account of the changing commercial and regulatory environment and the lack of adequate facilities (resources, analytical cost accounting in the developing countries).

Thought thus needs to be given to the possibility of reforming the working methods of those groups.

3.2 *Discussion*

3.2.1 The delegates of Senegal and Lebanon recalled that, since the "Maitland" Report, the possibility had been mooted of apportioning income on a basis other than 50%/50% to take account of the needs of the developing countries, and asked what action had been taken on Resolution No. 3 of the WATTC (Melbourne).

The Chairman of Study Group III replied that studies had been carried out. Recommendation D.150 already allowed for some flexibility in bilateral negotiations and Recommendation D.140 providing for the cost-oriented adjustment of accounting rates had been approved by correspondence. It still remained to prepare the annexes, and in particular Annex 3, to specify costs.

Study Group III would necessarily confine itself to technical aspects, and the political problems involved would have to be discussed within the BDT or other competent bodies.

The delegate of Greece welcomed the adoption of Recommendation D.140.

3.2.2 *Future of the Regional Tariff Groups*

The Chairman of Study Group III drew Committee 6's attention to the new tariff environment and the need to review the terms of reference of the Regional Groups, or even to reconsider their very existence within the Telecommunication Standardization Sector.

The delegate of Lebanon proposed that the matter be raised in the Plenary Meeting of the Conference.

4. Report of Study Group VII

Chairman: Mr. J. O. Wedlake (United Kingdom)

Documents: AP X-22, 49; COM VII-R 50, 51, 58, 59; WTSC/17; DT/3

4.1 *Presentation by the Chairman*

Mr. Wedlake, Chairman of Study Group VII, presented the report which was contained in AP X-22. Seven Vice-Chairmen and 28 Special Rapporteurs had led the work on the 33 allotted Questions. Five Study Group meetings and a large number of Special Rapporteur group meetings had been held, and 246 formal and 512 delayed contributions had been considered.

There had been no fundamental changes to the Recommendations on which data networks are based, but extensions to the capabilities had been drafted to include more advanced features, higher data rates and interworking with services defined in other study groups. New areas of work, in particular performance quality requirements, verification of conformance to the Recommendations, and the development of the Telecommunication Management Network, had been addressed to reflect the emerging needs for data communications systems.

An important feature of Study Group VII's work was its close relationship with analogous studies in ISO and IEC. Close collaboration had been maintained (involving joint meetings) which had enabled compatible texts to be prepared. To aid future collaboration a "Guide" had been drafted for inclusion as an annex to Recommendation A.23.

Sixty-five new or revised Recommendations had been approved by means of the Resolution No. 2 procedure during the study period. A further 29 new or revised Recommendations were intended for presentation to the World Telecommunication Standardization Conference for approval, but recent work in collaboration with the ISO/IEC had resulted in divergences that made it undesirable to approve ten of those Recommendations.

4.2 *Discussion*

The proposals set out in Documents AP X-49 and DT/3 were accepted.

The ten draft Recommendations were removed from the list in Document DT/15.

The procedure for approval of the revised texts will be initiated at the first meeting of Study Group VII. The Chairman of Study Group II thanked Study Group VII for its excellent collaboration.

The Chairman of Study Group XI thanked Mr. Wedlake for the outstanding work he had accomplished as Chairman of Study Group VII.

5. Report of Study Group VIII

Chairman: Mr. W. Staudinger (Germany)

Documents: AP X-19, 46(Rev.), 47; COM VIII-R 38, 40, 45; WTSC/51, 68; DT/33

5.1 *Presentation by the Chairman*

5.1.1 *Organization*

WP VIII/1 – Terminal aspects (Mr. Y. Yamazaki, Japan)

- Facsimile apparatus (G3, G4, G3C)
- Mixed mode, processable mode, terminal characteristics, options for teletex
- Digital phototelegraphy
- Syntax aspects of interactive videotex

WP VIII/2 – Protocol aspects (Mr. A. Pugh, United Kingdom)

- Refinements concerning telematic protocols including protocol aspects of interactive videotex
- telematic interworking
- Conformance testing

WP VIII/3 – Coding, conversion, transmission (Mr. A. Macchioni, Italy)

- Coding of characters and control functions (ISO, ECMA)
- Conversion between different applications, common components for image communication, imaging conversion between different facsimile apparatus groups
- Equipment and protocols for audiographic conferencing
- Transmission problems in telephone networks

WP VIII/4 – Document architecture (Mr. H. Silbiger, United States)

- Document architecture, transfer and manipulation (DATAM)
- Operational structure, communication, and document application profiles

Special Rapporteur for Question 2/VIII – Definitions (Mr. A. Bence, United Kingdom)

Special Rapporteur for Question 17/VIII – Terminal characteristics and protocols for telematic services on ISDN (Mr. M. Matsumoto, Japan)

- Implications from ISDN on telematic terminals
- Impact from satellite links in ISDN on the operation of telematic terminals.

5.1.2 *Status of the 27 Questions*

Nine Questions to be discontinued, relating to the following areas:

- Digital phototelegraphy: replacement by G4 facsimile
- telematic interworking: work concluded, draft Recommendation
- Conformance testing: two revised Recommendations, no further interest
- Network/session protocols, application rules for telematic terminals: three revised Recommendations, work concluded

Proposed Questions for the next study period (Document AP X-20)

22 Questions (15 modified old Questions, seven new subjects)

- Continuation of work on interactive videotex, facsimile, teletex, and other telematic applications, and on basic issues, like ODA, DTAM, coding, conversion, etc.
- New subjects, like colour for telematic applications, colour in facsimile, PCI, APPLICOM, etc.

Proposed draft new and revised Recommendations (AP X-19, Annex, pp. 24-31)

- 20 draft revised and new Recommendations approved through the procedure according to Resolution No. 2
- 28 draft revised and new Recommendations proposed to WTSC-93.

5.2 *Two main points were discussed.*

5.2.1 *Annex C to Recommendation T.30 [Documents AP X-46(Rev.1); WTSC/36 + (Add.1)]*

The delegate of Japan introduced Document AP X-46(Rev.1) opposing the adoption of Annex C.

The representative of the United States introduced Document WTSC/36 calling for the adoption of Annex C.

The two documents were supported by their respective co-sponsors.

A compromise was sought in order to break the deadlock.

Document WTSC/51, drafted by a small group (Austria, France, Germany, Japan) as a compromise, was accepted by Committee 6 by acclamation. The text of that document is given below:

"Austria, France, Germany and Japan are still strongly concerned that the 64 kbit/s option in the G3 facsimile (Telefax 3) service specified in draft Annex C to Recommendation T.30 (G3C) cannot provide direct interworking with the existing G4 facsimile. The above-mentioned countries are still of the opinion that the lack of direct interworking will cause confusion to facsimile users on ISDN and consequently a high number of complaints.

However, the above-mentioned countries are very aware of their responsibility in the international standardization process. Based on the experience gained in international standardization that the development of standards is often a step-by-step process the countries consider the draft Annex C to Recommendation T.30 not to be in the final status but as a reasonable basis for future work, i.e. the definition of the above-mentioned interworking.

Therefore the countries do not want to block the standardization process and are prepared to withdraw their objection to Annex C to Recommendation T.30 as expressed in Document AP X-46(Rev.) under the following assumptions:

1) modification of draft Question E/VIII, and

2) insertion of relevant text in Recommendation T.4, where § 12 should be replaced with the following text:

12. 64 kbit/s option for Group 3

For Group 3 facsimile, a capability to operate at a rate of 64 kbit/s over the integrated services digital network (ISDN) is provided as a standardized option. There are two technical solutions for this option. One, based on G4 class 1 protocol, is defined in Annex F to this Recommendation and called Group 3 64 kbit/s option F (G3F) which interworks with G4 class 1 terminals directly. The other, based upon T.30 ECM protocol, is defined in Annex C to Recommendation T.30 and called Group 3 64 kbit/s option C (G3C) which does not interwork directly with G4 class 1/G3F.

Note – Interworking between G3C terminals and G3F/G4 terminals may be provided by multiple mode terminals using the procedure defined in Recommendation T.90, Annex F. The capability of Group 3 terminals using the protocol defined in Recommendation T.30, Annex C to interwork directly with Group 4 terminals is the subject of an urgent study under Question E/VIII."

This shall form a clear guideline to SG VIII that direct interworking between G4 and G3C terminals is the subject of urgent study.

The delegate of Japan requested that the following statement be included in the report:

"Considering that the meeting agreed to the modification to study the capability of Group 3 apparatus using the protocol defined in Recommendation T.30, Annex C to interwork directly with Group 4 apparatus, the Japanese delegation makes an appeal that this study should be completed as soon as possible, preferably before the appearance of G3C apparatus by the effort of related countries, particularly those countries which are going to introduce G3C apparatus to address the problems which are raised in Document AP X-46(Rev.1)."

5.2.2 *Comments on draft Recommendation T.52 (AP X-47; DT/33)*

The delegate of Greece requested that the text of Section 5.2.2 of the draft report WTSC/53 be replaced by the following text:

"Greece drew the Committee's attention to:

a) a question of substance created by the above Recommendation which does not include the existing common Latin-Greek supplementary set, but, instead, proposes an independent Greek supplementary set that does not suit the situation prevailing in Greece at present;

b) editorial suggestions to be taken into account when T.52 was published. Committee 6 accepted the editorial amendments, which will be provided by Greece and will be taken into account when the Recommendation is edited by the TSB.

With regard to the problem of substance, which could not be solved during the Conference, Greece agreed to the approval of draft Recommendation T.52 subject to insertion in the Recommendation of the note proposed in DT/33, and continued study within Study Group VIII.

It was pointed out that the study in question also applies, as appropriate, to the revised Recommendation T.101 (International Interworking for Videotex services) on the same subject."

Annex 4 to this report sets out a note for insertion in Recommendation T.52.

6. Report of Study Group IX

Chairman: Mr. M. Matsubara (Japan)

Documents: AP X-27

6.1 *Presentation by the Chairman*

Study Group IX deals with telegraph networks and terminal equipment. It covers three series of Recommendations: R-Series (Telegraph transmission), S-Series (Telegraph services terminal equipment) and U-Series (Telegraph switching). As indicated in Section 2 of Document AP X-27, four Working Parties had been established and Special Rapporteurs had been appointed for specific Questions. Some of the Special Rapporteur meetings had been held outside Geneva, and the second Plenary Meeting had been invited to Kobe, Japan by the Japanese Administration and private operating agencies and scientific industrial organizations, to whom thanks are expressed, as to Working Party Chairmen, Special Rapporteurs, members whose efforts had contributed to the setting up of the worldwide standards, and the CCITT Secretariat.

Some highlights of the results of the Study Group's work are new Recommendations in the U.200 Series which cover interworking of the telex network with other services such as the data network, videotex, G3 facsimile and INMARSAT C System. New Recommendation R.113, which defined the method to combine telegraph and data channels into the same muldex, would be of value to countries where a large-scale system is not justified. Other subjects deserving special mention are the addition of the use of the D-channel of ISDN for telegraph transmission to U.202 and deletion of U.82 – Interconnection of telex store and forward unit – because of the development of X.400 MHS system. Deletion of X.40 – FDM system for telegraph and data channels is also proposed on account of its obsoleteness.

Study Group IX has made a great contribution for the development of worldwide standards, which play a big role in setting up a worldwide infrastructure of the telex network. Study Group IX accepted the suggestion of its dissolution in the spirit of Melbourne. Without the acceptance by Study Group IX of its termination, restructuring of the CCITT organization could not be accomplished. Proposed Questions for next study period would be allocated to two Study Groups, I and XVII.

Mr. M. Matsubara (Japan) is to be the last Chairman of Study Group IX, and his tribute is paid to his predecessors Mr. A. Jansen (Netherlands), the late Mr. R. Brown (Australia) and Mr. E. E. Daniels (United Kingdom).

6.2 The report was approved without discussion and the Chairman of Committee 6, supported by applause from the floor, congratulated and thanked Mr. Matsubara.

7. Recent activities of Special Autonomous Groups 7, 9 and 12 (DT/4)

7.1 *Activities of GAS 7, 9 and 12*

Presentation by Mr. Maurice-Habib Ghazal (Lebanon), Senior Chairman and Coordinator of the GAS, Chairman of GAS 9 (Global network).

The last CCITT Plenary Assembly, held at Melbourne in 1988, set up three Special Autonomous Groups (GAS 7, 9 and 12).

A special autonomous group consists of experts appointed by administrations, operating agencies and industrial or scientific organizations.

Since these persons are experts in various technical fields, the GAS are in a position to respond to the specific requirements of the Member countries, especially the developing countries.

The last CCITT Plenary Assembly set up the following three Special Autonomous Groups:

1) GAS 7 – Rural telecommunications, chaired by Mr. Rudilosso (Italy), who is in fact present at this Conference and will be able to provide a brief account of the activities of the past four years;

2) GAS 9 – Economic and technical aspects of transition from an analogue to a digital network – responsible for studying the case of a global network, chaired by Mr. M. Ghazal (Lebanon);

3) GAS 12 – Strategy for the introduction of new non-voice telecommunication services, chaired by Mr. J. B. Pecresse (France).

GAS 9 has produced two new handbooks, one on the progressive introduction of ISDN in a national network (based on the networks of Lebanon, Cyprus and Islamic Republic of Iran) and the other concerning regional networks such as EUROTELDEV and METELNET.

The case studies have been carried out in specific developing countries with networks at various stages of development. They have covered a broad range of subjects from market demand, introduction policy, network planning, operation and maintenance to financial and tariff aspects, not forgetting human resources.

GAS 7 has produced four new handbooks, as follows:

i) Radio systems in rural areas

ii) Switching, ISDN, financial aspects and the use of optical fibres in rural networks

iii) Maintenance of rural networks

iv) Rural case studies.

The GAS 12 handbook deals with non-telephone services. It analyses service demand and discusses the technical, economic, legal, socio-economic and commercial aspects together with features relating to operation, maintenance and training associated with the introduction of these new services.

Thanks to the inputs provided by a number of experts, the work of the special autonomous groups has led to the production of handbooks which may be used for reference purposes by administration officials responsible for the economic and technical aspects of telecommunication networks (e.g., switching, transmission, networking, maintenance, power supply, planning, case studies, etc.).

The skills and experience of the Chairman of the specialized autonomous groups and of their experts are available for future work to be undertaken within the new structure of the BDT.

For information purposes, attention may be drawn to the main points which were considered at the last coordination meeting of GAS Chairmen held in November 1991 at Geneva, in the presence of the Secretary-General, Mr. Pekka Tarjanne, the Director of the TSB, Mr. Theodore Irmer and the representative of the BDT, Mr. Ahmed Laouyane.

The GAS 7 studies should be continued, at least in two important areas: power supply systems for rural telecommunication equipment, in order to take account of the latest technical innovations in this field; and broadcasting (radio and TV) in rural areas, since this is recognized as a stimulus to the development of telecommunications and their penetration in these areas.

GAS 9 intends to complete its terms of reference by studying the implementation of digitization in an intercontinental network.

Furthermore, GAS 9 proposes a new handbook on the construction of operational systems, which we regard as dealing with system architecture, management and maintenance.

Finally, it will be necessary to upgrade several of the handbooks, such as those of GAS 1, 2, 3, 4, 5, 6, 7, 8 and 9, in order to take into account the digitization of the network and the progressive introduction of new technologies and services.

In accordance with the decisions adopted by the Additional Plenipotentiary Conference (Geneva, 1992), future work on these activities has been entrusted to the BDT. (Resolutions 6 and 7).

7.2 *Discussion*

The floor congratulated Mr. Ghazal for the efforts he made during all the GAS activities and strongly supported the continuation of the work within the BDT.

Mr. A.Ph. Djiwatampu, Director of BDT said that he was ready to go on with the activities previously performed by the GAS.

Mr. Ghazal and all contributors to this activity are welcomed in BDT and the Director expects an increased participation of non-administration members.

The activity will be planified according to the programme of future development conferences.

The delegate of Senegal drew the attention of the Committee on the need for developing countries to participate in meetings of the ITU-T and evoked the possibility for the BDT to create adequate resources.

8. List of Recommendations proposed for approval or for deletion

The Chairman of Committee 6 having indicated at the outset that all reports and all proposals for the approval or deletion of Recommendations would be considered as adopted unless there were any comments to the contrary, all the reports were approved, and the list of Recommendations submitted in DT/15 was approved subject to the relevant comments of this report including Annexes 2, 3 and 4 and to two amendments:

1) Page 5 of DT/15: *Delete* X.500 Rev.1 and the subsequent Recommendations from the list of draft Recommendations.

2) From page 10 onwards, the title of the column "Draft Rec. No." should be *amended* to "Rec. No.".

The list, as amended, is reproduced in Annex 1 to this report.

9. Conclusion

The Chairman of Committee 6 paid tribute to the spirit of compromise which had prevailed within the Committee, and sincerely thanked the Study Group Chairmen for their excellent reports and the work accomplished. His thanks also went to the Vice-Chairman and Secretary of Committee 6.

ANNEX 1

List of Recommendations proposed by Committee 6 for approval and for deletion

1. List of Recommendations submitted to the Conference approval

Study Group I

Draft Rec. No.	Title	Doc. (COM I-R)
C.2	Collection and publication of official service information	46
C.3 Rev. 1	Instructions for international telecommunication services	47
E.113 Rev. 1	Validation procedures for an automated international telephone credit card system	47
E.115 Rev. 2	Computerized information service for telephone subscriber numbers in foreign countries (directory assistance), reserved for operators	47
E.134	Human factors aspects of public terminals: general operating procedures	46
E.141 Rev. 1	Instructions for operators on the operator assisted international telephone service	47
E.161 Rev. 1	Arrangement of digits, letters and symbols on telephones and other devices that can be used for gaining access to a telephone network	47
F.30 Rev. 1	Use of various sequences of combinations for special purposes	47
F.63 Rev. 1	Additional facilities in the international telex service	47
F.72 Rev. 1	International telex store and forward – General principles and operational aspects	47
F.140 Rev. 1	Point-to-multipoint telecommunication service via satellite	47
F.160 Rev. 1	General operational provisions for the international public facsimile services	47
F.180 Rev. 1	General operational provisions for the international public facsimile service between subscribers' stations (telefax)	47
F.182 Rev. 1	Operational provisions for the international public facsimile service between subscriber stations with group 3 facsimile machines (telefax 3)	47
F.184 Rev. 1	Operational provisions for the international public facsimile service between subscriber stations with group 4 facsimile machines (telefax 4)	47
F.201 Rev. 1	Interworking between teletex service and telex service – General principles	47
F.220 Rev. 1	Service requirements unique to the processable mode number one (PM1) used within the teletex service	47
F.300 Rev. 1	Videotex service	47
F.551	Service Recommendation for telematic file transfer within telefax 3, telefax 4, teletex and message handling services	46
F.581	Guidelines for programming communication interfaces definition (service Recommendation)	46
F.600 Rev. 1	Service and operational principles for public data transmission services	47
F.850	Principles of universal personal telecommunication	46
F.901	Usability evaluation of telecommunication services	46
I.231.9	Circuit mode 64 kbit/s 8 kHz structured multi-use bearer service category	48
I.232.3 Rev. 1	User signalling bearer service category	48
I.241.7	Telephony 7 kHz	48
I.256.2 a	Advice of charge: charging information at call set-up time	48
I.256.2 b	Advice of charge: charging information during the call	48
I.256.2 c	Advice of charge: charging information at the end of the call	48

Study Group II

Draft Rec. No.	Title	Doc. (COM II-R)
B.18 Rev. 1	Traffic intensity unit	32
E.160 Rev. 1	Definitions relating to national and international numbering plans	32
E.168	Application of Recommendation E.164 numbering plan for universal personal telecommunications	31(Add.)
E.215 Rev. 1	Telephone/ISDN numbering plan for the mobile-satellite services of INMARSAT	32
E.216 Rev. 1	Selection procedures for the INMARSAT mobile-satellite telephone and ISDN services	32
E.301 Rev. 1	Impact of non-voice applications on the telephone network	32
E.450	Facsimile quality of service on PSTN – General aspects	31
E.451	Facsimile call cut-off performance	31
E.452	Facsimile modem speed reductions and transaction time	31
E.526	Dimensioning a circuit group with multi-slot bearer services and no overflow inputs	31
E.550 Rev. 1	Grade-of-service and new performance criteria under failure conditions in international telephone exchanges	32
E.600 Rev. 1	Terms and definitions of traffic engineering	32
E.750	Introduction to the E.750-Series of Recommendations on traffic engineering aspects of mobile networks	31
E.751	Reference connections for traffic engineering of land mobile networks	31
E.770	Land mobile and fixed network interconnection traffic grade of service concept	31
E.771	Network grade of service parameters and target values for circuit switched terrestrial mobile services	31
E.846	Accessibility for 64 kbit/s circuit-switched international end-to-end ISDN connection types	31

Study Group III

Draft Rec. No.	Title	Doc. (COM III-R)
C.1 Rev. 1	Year-book of ITU statistics	19
D.000 Rev. 1	Terms and definitions for the Series D Recommendations	19
D.98 Rev. 1	Charging and accounting provisions relating to the transferred account telegraph and telematic services	28
D.120 Rev. 1	Collection charges applied to automated telephone credit cards	14
D.170 Rev. 1	Monthly telephone and telex accounts	26, 27
D.178 Rev. 1	Monthly accounts for semi-automatic telephone calls (ordinary and urgent calls, with or without special facilities)	7, 14
D.180 Rev. 1	Occasional provision of circuits for international sound- and television-programme transmissions	26, 27

Draft Rec. No.	Title	Doc. (COM VII-R)
X.1 Rev. 1	International user classes of service in public data networks and integrated services digital networks	52
X.2 Rev. 1	International data transmission services and optional user facilities in public data networks and ISDNs	52
X.3 Rev. 1	Packet assembly disassembly facility (PAD) in a public data network	54
X.6	Multicast service definition	52
X.7	Technical characteristics of data transmission services	52
X.10 Rev. 1	Categories of access for data terminal equipment (DTE) to public data transmission services	52
X.25 Rev. 1	Interface between data terminal equipment (DTE) and data circuit-terminating equipment (DCE) for terminals operating in the packet mode and connected to public data networks by dedicated circuit	53
X.28 Rev. 1	DTE/DCE interface for a start-stop mode data terminal equipment accessing the packet assembly/disassembly facility (PAD) in a public data network situated in the same country	54
X.29 Rev. 1	Procedures for the exchange of control information and user data between a packet assembly/disassembly (PAD) facility and a packet mode DTE or another PAD	54
X.30 Rev. 1	Support of X.21, X.21 *bis* and X.20 *bis* based data terminal equipments (DTEs) by an integrated services digital network (ISDN)	56
X.31 Rev. 1	Support of packet mode terminal equipment by an ISDN	56
X.32 Rev. 1	Interface between DTE and DCE for terminals operating in the packet mode and accessing a packet switched public data network through a public switched telephone network or an ISDN or a circuit switched public data network	53
X.75 Rev. 1	Packet-switched signalling system between public networks providing data transmission services	55
X.96 Rev. 1	Call progress signals in public data networks	52
X.218 Rev. 1	Reliable transfer: model and service definition	57
X.220 Rev. 1	Use of X.200-Series protocols in CCITT Applications	57
X.301 Rev. 1	Description of the general arrangements for call control within a subnetwork and between subnetworks for the provision of data transmission services	55
X.340	General arrangements for interworking between packet switched public data networks and international public telex network	55
X.400 Rev. 1	Message handling system and service overview	57

Draft Rec. No.	Title	Doc. (COM VIII-R)
T.4 Rev. 3	Standardization of group 3 facsimile apparatus for document transmission	40
T.22	Standardized test charts for document facsimile transmissions	45
T.30 Rev. 3	Procedures for document facsimile transmission in the general switched telephone network	40
T.52	Non-Latin coded character sets for telematic services	45
T.60 Rev. 1	Terminal equipment for use in the teletex service	40
T.61 Rev. 1	Character repertoire and coded character sets for the international teletex service	40
T.62 Rev. 1	Control procedures for teletex and Group 4 facsimile services	41
T.62 *bis* Rev. 1	Control procedures for teletex and G4 facsimile services based on Recommendations X.215 and X.225	41
T.63 Rev. 1	Provisions for verification of teletex terminal compliance	41
T.64 Rev. 1	Conformance testing procedures for the teletex Recommendations	41
T.70 Rev. 1	Network-independent basic transport service for the telematic services	41
T.82	Coded representation of picture and audio information – Progressive bi-level image compression	46
T.101 Rev. 1	International interworking for videotex services	41, 42, 43
T.102	Protocols for syntax-based videotex using ISDN circuit mode	46
T.103	Protocols for syntax-based videotex using ISDN packet mode	46
T.104	Packet mode access for syntax-based videotex via PSTN	47
T.105	Syntax-based videotex application layer protocol	47
T.106	Framework for videotex terminal protocols	47
T.122	Multipoint communications service	48
T.123	Protocol stacks for audiographic and audiovisual teleconference applications	48
T.501 Rev. 1	A document application profile MM for the interchange of formatted mixed mode documents	48
T.502 Rev. 2	Document application profile PM-11 for the interchange of character content documents in processable and formatted forms	44
T.504 Rev. 1	Document application profile for videotex interworking	44
T.510	Overview of sub-series T.510 Recommendations	49
T.523 Rev. 1	Communication application profile DM-1 for videotex interworking	44
T.541 Rev. 1	Operational application profile for videotex interworking	44
T.563 Rev. 2	Terminal characteristics for group 4 facsimile apparatus	44
T.564 Rev. 1	Gateway characteristics for videotex interworking	44

Draft Rec. No.	Title	Doc. (COM IX-R)
F.69 Rev. 1	Plan for telex destination codes	8
R.5 Rev. 1	Observation conditions recommended for routine distortion measurements on international telegraph circuits	3
R.9 Rev. 1	How the laws governing distribution of distortion should be arrived at	3
R.11 Rev. 1	Calculation of the degree of distortion of a telegraph circuit in terms of the degrees of distortion of the component links	3
R.54 Rev. 1	Conventional degree of distortion tolerable for standardized start-stop 50-baud systems	3
R.55 Rev. 1	Conventional degree of distortion	3
R.56	Telegraph distortion limits to be quoted in Recommendations for equipment and transmission plans	3
R.100 Rev. 1	Transmission characteristics of international TDM links	8
R.101 Rev. 1	Code and speed dependent TDM system for anisochronous telegraph and data transmission using bit interleaving	3, 8
R.102 Rev. 1	4800 bit/s code and speed dependent and hybrid TDM systems for anisochronous telegraph and data transmission using bit interleaving	8
R.105 Rev. 1	Duplex muldex concentrator, connecting a group of gentex and telex subscribers to a telegraph exchange by assigning virtual channels to time slots of a bit-interleaved TDM system	8
R.111 Rev. 1	Code and speed independent TDM system for anisochronous telegraph and data transmission	3
R.112 Rev. 1	TDM hybrid system for anisochronous telegraph and data transmission using bit interleaving	8
R.113	Combined muldex for telegraphy and synchronous data transmission	3, 7
R.114 Rev. 1	Numbering of international TDM channels	5
R.115 Rev. 1	Maintenance loops for TDM-systems	8
R.117	End-to-end error performance of telegraph, telex and gentex connections involving regenerative equipment	7
R.118	Performance and availability monitoring regenerative TDM systems	7
S.1 Rev. 1	International Telegraph Alphabet No. 2	3
S.4 Rev. 1	Special use of certain characters of the International Telegraph Alphabet No. 2	8
S.8 Rev. 1	Intercontinental standardization of the modulation rate of start-stop apparatus and of the use of combination No. 4 in figure case	3
S.16 Rev. 1	Connection to the telex network of an automatic terminal using a V.24 DCE/DTE interface	3
S.20 Rev. 1	Automatic clearing procedure for a telex terminal	3
S.21 Rev. 1	Use of display screens in telex machines	3
S.22 Rev. 1	Conversation impossible and or pre-recorded message in response to J/BELL signals from a telex terminal	3
S.23 Rev. 1	Automatic request of the answerback of the terminal of the calling party, by the telex terminal of the called party or by the International Network	3
S.33	Alphabets and presentation characteristics for the intex service	5, 7
S.34	Intex terminals – Requirements to effect interworking with the international telex service	7
S.35	Answerback coding for the intex service	5, 7

Study Group IX *(cont'd)*

Draft Rec. No.	Title	Doc. (COM IX-R)
U.1 Rev. 1	Signalling conditions to be applied in the international telex service	3
U.7 Rev. 1	Numbering schemes for automatic switching networks	8
U.10 Rev. 1	Equipment of an international telex position	3
U.11 Rev. 1	Telex and gentex signalling on intercontinental circuits used for intercontinental automatic transit traffic (type C signalling)	3
U.12 Rev. 1	Terminal and transit control signalling system for telex and similar services on international circuits (type D signalling)	3, 8
U.15 Rev. 1	Interworking rules for international signalling systems according to Recommendations U.1, U.11 and U.12	8
U.40 Rev. 1	Reactions by automatic terminals connected to the telex network in the event of ineffective call attempts or signalling incidents	3
U.45 Rev. 1	Response to the not-ready condition of the telex terminal	3
U.46	Interruption of automatic transmission and flow control in the international telex service	5
U.61 Rev. 1	Detailed requirements to be met in interfacing the international telex network with maritime satellite systems	3
U.62 Rev. 1	General requirements to be met in interfacing the international telex network with the fully automated maritime VHF/UHF radio system	8
U.75 Rev. 1	Automatic called telex answerback check	8
U.80 Rev. 1	International telex store and forward access from telex	8
U.81 Rev. 1	International telex store and forward – Delivery to telex	8
U.101	Signalling systems for the intex service (types E and F signalling)	5, 7
U.200	The international telex service – General technical requirements for interworking	7
U.201 Rev. 1	Interworking between the teletex service and the telex service	8
U.202 Rev. 1	Requirements to be met in providing the telex service within the ISDN	8
U.203	Technical requirements to be met when providing real-time bothway communications between terminals of the international telex service and data terminal equipments on a PSPDN or via the PSTN	7
U.204 Rev. 1	Interworking between the telex service and the public interpersonal messaging service	8
U.205	Store-and-retrieve facility for the delivery of messages from a telex terminal to a data terminal equipment which connects to a packet-switched public data network over the public switched telephone network	17, 7
U.206	Technical requirements for interworking between the international telex service and the videotex service	5, 7
U.207	Technical requirements to be met for the transfer of messages between terminals of the international telex service and group 3 facsimile terminals connected to the PSTN	7
U.208	International telex service – Interworking with the INMARSAT standard-C system using one-stage selection	7
U.210	Intex service – Network requirements to effect interworking with the international telex service	7
U.220	International telex service – Technical requirements for a status inquiry function in an interworking scenario	COM 40*; R.7
X.53 Rev. 1	Numbering of channels on international multiplex links at 64 kbit/s	8

* White contribution COM IX-40.

2. List of Recommendations proposed for deletion to the Conference

Study Group I

Rec. No.	Title	Fascicle *Blue Book*
E.119	Instruction of staff operating international positions (E.119 included in revised Recommendation E.140)	II.2
E.142	Time-to-answer by operators	II.2
E.143	Demand operating of international circuits	II.2
E.144	Advantages of semi-automatic international service	II.2
E.145	Advantages off international automatic service	II.2
E.146	Division of circuits into outgoing and incoming circuits	II.2
E.147	Manually operated international transit traffic	II.2
F.62	Duplex operation in the telex service	II.4
F.601	Service and operational principles for packet-switched public data networks (F.601 replaced by revised Recommendation F.600)	II.5

Study Group II: None

Study Group III

Rec. No.	Title	Doc. (COM III-R)
D.6	General principles for the provision of international telecommunications facilities to organizations formed to meet the specialized international communications facilities to organizations formed to meet the specialized international communication needs of their members	27, 28
D.101	Charging in automatic international telephone service	14
D.195	Settlement of international telecommunication balances of accounts	19

Study Group VII: X.40 (See SG IX)

Study Group VIII: None

Study Group IX

Rec. No.	Title	Doc. (COM IX-R)
U.82	International telex store and forward	8
X.40	Standardization of frequency-shift modulated transmission systems for the provision of telegraph and data channels by frequency division of a group	8

ANNEX 2

Changes to draft revised Recommendation E.161

(COM I-R 47)

2.2 Where letters as well as digits appear on a dial or its surround, the recommended relationships between the letters and the digits are as shown in the two options that follow:

Option A						Option B[1]					
1		2	ABC	3	DEF	1	QZ	2	ABC	3	DEF
4	GHI	5	JKL	6	MNO	4	GHI	5	JKL	6	MNO
7	PQRS	8	TUV	9	WXYZ	7	PRS	8	TUV	9	WXY
		0						0			

3. Pushbuttons as keys

3.1 *Ten pushbuttons*

3.1.1 *Arrangement and numbering*

The standard arrangement and numbering for pushbuttons corresponding to the digits 1 to 0 is as shown below:

1 2 3
4 5 6
7 8 9
0

Extensive research has shown that this arrangement leads to shorter entry times and lower error rates than other arrangements[2].

---

1) Not preferred for countries which are introducing a standard on alphanumeric keypads. To be phased out, in international service, where practicable, in those countries using this option, preferably 1 April 1996 (provisional date – for further study).

2) An annotated list of literature references is available in the article cited in [1].

When a need exists within an administration for a 2 × 5 array or a 5 × 2 array for use on special telephone apparatus, the arrays should be as shown below:

				1 2
1	2	3	4	5 3 4
6	7	8	9	0 5 6
				7 8
				9 0

Note – User dialling performance on these special arrays is slightly inferior to that on the standard array given above.

ANNEX 3

Updating of and supplement of Recommendations E.164, X.121 and F.69

Country codes for the telephone service: Zone 4 – Code 42

- 42 Slovak (Republic)
- 42 Czech (Republic)

Country codes for the telex service: Code 66

- 66 Slovak (Republic)
- 66 Czech (Republic)

County codes for the data transmission service: Code 230

- 231 Slovak (Republic)
- 230 Czech (Republic)

ANNEX 4

Draft Recommendation T.52

[Document COM VIII-R 45, page 72 (E)]

Insert the following note at the bottom of the above page:

Note – The Greek Administration intends to revert to the issue of the above-mentioned Greek supplementary set by requesting its replacement by another one better suited to its requirements.

However, subject to reconsideration of this set and for reasons of compatibility, it declares that, for the time being, it will continue to apply the supplementary set appearing in Figure 2/T.61, on page 260 of Recommendation T.61 (*Blue Book*, 1988).

5 – LIST OF PARTICIPANTS

The following symbols are used:

C Head of delegation
CA Deputy Head of delegation
D Delegate

I. ADMINISTRATIONS AND RECOGNIZED OPERATING AGENCIES

Albania (Republic of)

C Mr. QESTERI E.

Germany (Federal Republic of)

C Mr. SILBERHORN A.
CA Mr. MOHR U.
D Mr. ALTEHAGE G.
D Mr. ECKERT J.
D Mr. GEORGE E.
D Mr. GROTELÜSCHEN G.H.
D Mr. KERN K.
D Mr. KRISOR P.
D Mr. LIESER E.
D Mr. LORKE H.
D Mrs. MAMVURA S.
D Mr. SCHNEIDER P.
D Mr. SCHULZ K.
D Mr. SCHÜTTE U.
D Mr. STAUDINGER W.
D Mr. STOLL D.
D Mr. WICHARDS F. H.
D Mr. WOLF A.
D Mr. ZEDLER G.

Saudi Arabia (Kingdom of)

C Mr. AL-BASHEER S. S.
D Mr. AL KUSSAYER H. M.
D Mr. AL-JUBAIR O.
D Mr. EL HAMAMY A. K.
D Mr. KHALIL K. O.

Argentine Republic

C Mr. GABRIELLI A. J.
CA Mr. VON KESSELSTATT M. M.
D Mr. GARDELLA J.

Telefónica de Argentina

Mr. GABELLONI E.

Telecom Argentina

Mr. KUSTRA R. O.

Australia

C Mr. HORTON B.
D Mr. BOX R.
D Mr. CABRERA A.
D Mr. DARLING P.
D Mr. HAYDON J.
D Mr. HIBBARD J.

Austria

C Mr. KUDRNA W.

Bahamas (Commonwealth of the)

C Mr. BETHEL L. A.
D Mr. FARQUHARSON C.
D Mrs. PINDER D.

Bahrain (State of)

C Mr. AL-SATEEH A. S.
D Mr. ABDULLA RASHID

Belgium

C Mr. LAMBOTTE J. P.
CA Mr. GONY M.
D Mr. DAVID R.

Benin (Republic of)

C Mr. AGBOGLO C.

Brazil (Federative Republic of)

C Mr. SILVA J. J.
CA Mr. MATOS L.
D Mrs. BUSSINGER B.
D Mr. CELSO NETO J.
D Mr. COLCHER R.
D Mr. MATARAZZO E.
D Mr. SANTOS FILHO W.

Bulgaria (Republic of)

C Mr. POPOV P.

Burkina Faso

C Mr. BAKO M.
D Mr. OUEDRAOGO Y. M.

Cameroon (Republic of)

C Mr. KAMDEM-KAMGA E.
CA Mr. BISSECK H. G.
D Miss ABENKOU EBAA P.
D Mr. NYEMECK M.

Canada

C Mr. HELM M.
(1-5.3.93)
C Mr. DALLAIRE G.
(8-12.3.93)
CA Mr. ISRAEL M.
(8-12.3.93)
D Mr. BEATY E. W.
D Mrs. BERTRAND F.
D Mr. BRETT R. F.
D Mr. BURNS J. L.
D Mr. EXTON E. J.
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Chile

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D Mrs. WANG YURONG
D Mr. WU BAO RONG
D Mr. WU HEQUAN
D Mr. YU DONGMAO
D Mrs. ZHANG ZHIHUI

Cyprus (Republic of)

C Mr. CHAPPAS C.
(1-5.3.93)
C Mr. CHRISTODOULIDES K.
(8-12.3.93)

Colombia (Republic of)

C Mr. CASTRO ROJAS F.
D Mr. AVENDAÑO MENDOZA H.
D Mr. SANCHEZ BALLEN J.

Korea (Republic of)

C Mr. IM JEONG-JAE
CA Mr. CHOI MYUNG-SUN
D Mr. CHOI SANG-IL

Korea (Republic of) *(cont.)*

D Mr. HEE-CHANG CHUNG
D Mr. HWANG JIN
D Mr. HWANG JIN-SOO
D Mr. JUN KYUNG-PYO
D Miss KIM EUN-JU
D Mrs. KIM HYEYOUNG
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Cuba

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Denmark

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D Mr. TOFT O.
D Mr. TOFT V.

Egypt (Arab Republic of)

C Mr. ALY A. F. A.

United Arab Emirates

C Mr. AL BAHHAR S.
D Mr. AL-ETER A.

Spain

CA Mr. RUBIO CARRETON V.
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CA Mr. SANCHEZ VALLE J. N.
D Mr. FANJUL CAUDEVILLA J. M.
D Mr. MORENO SANTABARBARA F.
D Mr. SORIANO S.

Telefónica de España

Mr. DOMINGUEZ SANZ J.
Mr. LEON CABREJAS J. J.
Mr. MUÑOZ DEL CASTILLO J. A.
Mr. PAÑEDA COELLO L. A.
Mr. SANCHEZ-MORA V.

United States of America

C Mr. BARBELY E.S.
CA Mr. FERENO G.M.
CA Mr. FITCH M.T.N. (1-5.3.93)
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MCI Telecommunications

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Mr. WILLEY B.

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D Mr. THUE M.

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Mr. PECRESSE J.

Gabonese Republic

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D Mr. MBENG EKOGHA F.

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D Mr. VARJU G.
D Mr. VILLANYI O.

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Telecom Eireann

Mr. MULLEN A.

Iceland

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CA Mr. ARNAR G.

Israel (State of)

Israel Postal Authority

Mr. SERFATY J.

Italy

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CA Mr. MACCHIONI A.
D Mr. BONCOMPAGNI LUDOVISI P. F.
D Mr. CIPOLLA C.
D Mr. COLAVITO C.
D Mr. DE ANGELIS T.
D Mr. DEL PRETE G. L.

Italy *(cont.)*

D Mr. DI GIORGIO I.
D Mr. LISERRE V.
D Mrs. PILERI A.
D Mr. REPACI G.
D Mr. REPICI G.
D Mr. VALENTINI G.

Japan

C Mr. OHASHI I.
CA Mr. ISHIDA Y.
D Mr. AMEMIYA T.
D Mr. AMPO N.
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D Mr. MATSUMOTO M.
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D Mr. SHIOYA M.
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D Mr. SUZUKI N.
D Mrs. TAKASHINA A.
D Mr. TANAKA H.
D Mr. TANIHARA H.
D Mr. TOMITA S.
D Mr. WASHIDA T.
D Mr. YAMASHITA M.
D Mr. YAMAUCHI T.
D Mr. YAMAZAKI Y.
D Mr. YATA M.

DDI Corporation

Mr. FUGONO N.

Japan *(cont.)*

KDD

Mr. IKEDA Y.
Mr. OHMURA Y.
Mr. SATO T.
Mr. SHINTANI Y.
Mr. SHIOMI K.

NTT

Mr. KOMIYA K.
Mr. KUWABARA E.
Mr. MATSUO T.

Jordan (Hashemite Kindgom of)

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D Mr. AHMED M.

Kenya (Republic of)

C Mr. NGANYI A.
D Mr. MUREITHI M.
D Mr. OGUYA W. N. O.

Kuwait (State of)

C Mr. AL-IBRAHIM A. A. A.
CA Mr. ABU REZA A.
CA Mr. AL-KATTAN H. H.
D Mrs. AL-FARKH M. A.
D Mr. HUSAIN M. M. K.
D Mr. KHALAF S. K. H.
D Mr. YOUSEF W.A. A.

Lebanon

C Mr. GHAZAL M. H.

Luxembourg

C Mr. SCHUH P.
CA Mr. PESCHON J.
CA Mr. POEKER J.

Malaysia

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D Mr. AMBIKAPATHY
D Mrs. NORAZMALAYATI I.

Mali (Republic of)

C Mr. TOURE D.
D Mrs. TRAORE H.

Morocco (Kindgom of)

C Mr. BERRADA A.
D Mr. AGADI L.
D Mr. LOHR M.

Mexico

C Mr. BROWN HERNANDEZ L. M.
CA Mr. LOPEZ CELAYA L.
CA Mrs. RAMIREZ DE ARELLANO R. M.
D Mr. DE LA ROSA RABAGO R.
D Mr. DIAZ DE LEON C.
D Mr. GALVAN TALLEDOS J.
D Mr. HANSEN RIVERA E.

Teléfonos de México

Mr. ALVAREZ CARMONA E.

Mónaco

C Mr. BIANCHERI L.
D Mr. ALLAVENA L.

Norway

C Mr. SMAALAND K.
CA Mr. BRYN K.
D Mrs. LILLEBÖ A. L.
D Mr. ODEGAARD F.
D Mr. SANDNES B.
D Mr. UTVIK E.

New Zealand

C Mr. HOLMAN M.
D Mr. HAMILTON A.

Papua New Guinea

D Mr. GAGAU S.

Netherlands (Kingdom of the)

C Mr. DE LIEFDE T.
CA Mr. HAMELBERG P.
D Mr. BRAEKEN M.
D Mr. MULDER H.
D Mr. PAYMANS J. F. H.

Philippines (Republic of the)

Globe Telecom

Mr. SANTIAGO J. A.

Philippine Long Distance Telephone Company

Mr. VIRATA N.

Poland

C Mr. RUTKOWSKI J.
CA Mr. GUZEK J.
D Mr. MARUSZAK L.

Portugal

C Mr. ILHARCO DE MOURA J.
D Mr. CUNHA J.
D Mr. SILVA GOMES J. A.
D Mr. SOUSA E.

Slovak Republic

C Mrs. DEMUSOVA J.

Czech Republic

SPT Telecom

Mr. BEK Z.
Mr. BRANDEJSKY P.
Mr. MAKOVEC J.
Mr. SCHNEIDER S.
Mr. VASATKO J.

Romania

C Mr. CRACIUNESCU S.
D Mr. MATEI I.
D Mr. RUSOVICI I.

United Kingdom of Great Britain and Northern Ireland

C Mr. HENDON D. A.
CA Mr. THOMAS D.
D Miss BISHOP S.
D Mr. FISHER D. G.
D Mr. HALL D. J.
D Mr. JOHNSON M.
D Mr. LAU K. D. N.
D Miss LAWRENCE K.
D Mrs. LINDSAY F.
D Mr. LUCAS W.
D Miss MATTHEWS L.
D Mr. MOORE B.
D Mr. PUGH A.
D Mr. SIMPSON G.
D Mr. SPURLING J. O. N.
D Mr. WEDLAKE J.

British Telecom

Mr. MARCHANT R. W.

Russian Federation

C Mr. TOLMACHEV Y.A. (1-5.3.93)
C Mr. ALESHIN A. A. (8-12.3.93)
CA Mr. VARAKIN L. E.
D Mr. BIRUKOV V. A.
D Mr. BYSHOVETS V. P.
D Mr. CHTCHEPOTIN V. I.
D Mr. GLOUKHOV V. I.
D Mr. KARNAKOV V. V.
D Mr. KORBUT N. E.
D Mr. KOUCHTOUEV A. I.
D Mrs. KREINGEL I. V.
D Mr. KRYLOV V. S.
D Mr. MATROSSOV V. M.
D Mr. NIKOLSKY K. K.
D Mr. OSSIPOV V. G.
D Mr. REPIN A.

Senegal (Republic of)

C Mr. MBAYE S.
CA Mr. MBENGUE P. G.

Singapore (Republic of)

C Mr. TAN C. T.
D Miss NG C. K.

SINGAPORE TELECOM

Miss LIAN M.

Sweden

C Mr. ANDERSSON C.
CA Mr. SÄRNQUIST J.
CA Mr. VIKLUND B.
D Mr. GRAHN G.
D Mr. HELLING H.
D Mr. KAHN L.
D Mr. KLINGEN I.
D Mr. TROILI B.

TERACOM Svensk Rundradio

Mr. JOHANSSON H. G.
Mr. SUNDIN L.

Switzerland (Confederation of)

C Mr. PFYFFER H. K.
D Mr. DUPUIS G.
D Mr. OBERSON R.
D Mr. PROBST P. A.
D Mr. WUHRMANN K.

Thailand

C Mr. BRUMINHENT S.
D Mr. BIJAYENDRAYODHIN S.
D Mr. SATHIENPAKIRANAKORN P.

Togolese Republic

C Mr. AYIKOE K. P.
D Mr. DELFY K.

Venezuela (Republic of)

C Mr. DE JESUS VIVAS O.

II. INTERNATIONAL AND REGIONAL ORGANIZATIONS

International Electrotechnical Commission (IEC)

Mr. GISSEL H.
Mr. RAEBURN A. M.

European Telecommunication Standard Institute (ETSI)

Mr. HAMELBERG P.

European Telecommunications Satellite Organization (EUTELSAT)

Mr. AMADESI P.
Mr. DHARMADASA G.

International Maritime Satellite Organization (INMARSAT)

Mr. EARL J.

International Telecommunications Satellite Organization (INTELSAT)

Mr. LEWIS H.
Mr. CHASIA H.

International Telecommunications Users Group (INTUG)

Mr. ALLEN P.

International Organization for Standardization (ISO)

Mr. EICHER L. D.

Universal Postal Union (UPU)

Mr. BLOMQVIST Ch.
Mr. PAPE M.

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J. JIPGUEP, Deputy Secretary-General

III.2 Radiocommunication Bureau (BR)

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R. NICKELSON, Department A

III.3 Telecommunication Standardization Bureau (TSB)

Th. IRMER, Director
Assistant: E.-M. RAPELI (Mrs.)

M. MALEK ASGHAR, Department A, in charge of the Conference
Assistants: K. FAMELIADOU (Miss)
S. PITT (Mrs.)

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Y. SENUMA	CE V, VI, IX, XVII
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Z. J. TAR	CE I, II
H. ZHAO	CE VII
G. TURNBULL	TE Department

Assistants: G. ANTONIAZZI (Miss)
M.-H. BERCHER (Mrs.)
I. FROST (Mrs.)

III.4 Telecommunication Development Bureau (BDT)

A. Ph. DJIWATAMPU, Director

IV. SECRETARIAT OF THE CONFERENCE

IV.1 Plenary Meeting and Committees

Plenary Meeting and Committee 1:
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Assistants: K. FAMELIADOU (Miss)
S. PITT (Mrs.)

Committee 2: A. TAZI RIFFI
Assistant: M. PADEREWSKA (Mrs.)

Committee 3: M. MALEK ASGHAR, H. ZHAO
Assistant: K. FAMELIADOU (Miss)

Committee 4: Z. J. TAR, A. GANGULI
Assistant: G. ANTONIAZZI (Miss)

Committee 5: F. BIGI, M. BETANCOURT
Assistant: M.-H. BERCHER (Mrs.)

Committee 6: J. LEPESQUEUR , S. TANAKA
Assistant: M.-H. BERCHER (Mrs.)

Committee 7: G. TURNBULL
Assistant: I. FROST (Mrs.)

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Press

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Assistant: V. SHAHNA-EKMAN (Mrs.)

V.2 Coordination Common Services and Conferences

J. ESCUDERO
A. JOSSERAND (Mrs.)

– *Technical Support*
P. PRASAD

V.3 Finance and Personnel

A. TAZI RIFFI
Assistant: M. PADEREWSKA (Mrs.)

V.4 Delegates Registration

K. COURVOISIER (Mrs.)

V.5 Documents Control

J. FILLION (Miss)
M.-L. SCHIFFERLI (Mrs.)

V.6 Translation

French Section

F. SALA (Mrs.)
D. BLOUD
M. TOURAUD (Miss)

English Section

A. J. PITT

A. T. JENNINGS

Spanish Section

B. LUTZKY

J. HIERONYMI-MORENO (Mrs.)

J. M. MAZO

V.7 Precis-writers

Coordination: S. ROSSINGTON (Mrs.)

V. COSTARINI (Mrs.)

K. COWX

T. ELDRIDGE

C. FERRIE-TENCONI (Mrs.)

R. GRANGER

R. PICKERING

C. BRIAND (Mrs.)

A. C. AKESSON (Mrs.)

J.-P. MISSIRE

T. LUCAS (Miss)

V.8 Interpretation

Coordination: J. JOUFFROY (Mrs.)

French Section

M. DUCROUX (Mrs.)
M. GUCASSOFF (Mrs.)
C. LITVINOV-GONIN (Mrs.)
D. PORRET (Miss)
Ch. ROJAS (Mrs.)
D. PORTIER (Mrs.)

English Section

M. DE GREN (Mrs.)
N. GREGORY
A. SIEVEKING (Miss)
A. TADEVOSSIAN
E. NEKROUF (Mrs.)
K. CRU (Mrs.)

Spanish Section

M. ALVAREZ (Mrs.)
J. UDLER (Miss)
L. RAMIREZ (Mrs.)
R. POSEWITZ (Mrs.)
E. GOLDBERG (Mrs.)
E. FLEGENHEIMER (Mrs.)

Russian Section

O. ROMANOVA (Mrs.)
A. GORBUNOVA (Mrs.)
I. KHROUSTALEVA (Mrs.)
V. OUKHANOV

Chinese Section

J.L. SCHOTT
S. GAO (Mrs.)
X. ZENG (Mrs.)
X. WU (Mrs.)
G. SHEN
P. CHENG
L. ZHAO (Mrs.)
J. CHI

Arabic Section

C. ARNAOUT (Mrs.)
G. ELIAS (Miss)
S. ABDELLATIF (Mrs.)
M. KHALLAF
J. AOUAD (Miss)
A. EL-MANZALAWIY
N. CHALABI
F. MASTOUR (Miss)

Relief

C. BIELIK (Mrs.)
E. HARLEY
F. STUBY (Mrs.)
C. ENCINAS (Mme)

V.9 Documents capture

D. DUVERNAY (Mrs.)
Assistant: J. FELISAZ (Mrs.)

French Section

G. MAZELLA (Mrs.)
M.-C. GIRARD (Mrs.)
M. BREVOT (Mrs.)
C. FRANCONY (Mrs.)
C. ARMINJON (Mrs.)
M. MIGUET (Mrs.)
G. UNGER (Mrs.)
M. ALLARD (Miss)

English Section

V. ROLSTON-DELLAMURO (Mrs.)
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J. LINDSAY (Miss)
R. VERNEY (Miss)
D. ALLEN (Miss)
S. CASTELINO (Miss)
N. SAXOD (Miss)
J. MAGERO (Miss)

Spanish Section

M.C. BURRO (Miss)
R. CABRERA (Mrs.)
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A. MITROPULOS (Miss)
B. GIOVANNINI (Mrs.)

V.10 Reprography

J. ALLINGER
R. FERRIER

V.11 Documents Distribution

G. CLAIRO
C. DUTY (Miss)
M. CIVIC

V.12 Conference room messengers

T. BERROD

6 – LIST OF DOCUMENTS

6.1 – AP X DOCUMENTS

Document AP X	Source	Title
1	Director of CCITT	List of Recommendations adopted under Resolution No. 2 since the IXth Plenary Assembly of the CCITT (Melbourne, 1988)
2	Director of CCITT	General statistical information on CCITT activities between the IXth and Xth Plenary Assemblies and list of CCITT meetings held during the 1989-1992 Study Period
3	Director of CCITT	Report on the CCITT Specialized Secretariat
4	Director of CCITT	Report to the Xth Plenary Assembly - Estimate of the financial needs of the CCITT
5	SG II	Report to the Xth Plenary Assembly – General, Replies to the Questions and Highlights
Corrigendum 1 to AP X-5	SG II	Report to the Xth Plenary Assembly – General, Replies to the Questions and Highlights – Corrigendum
6	SG II	Report to the Xth Plenary Assembly – Questions proposed for study in the 1993-1996 Study Period
7	SG XII	Report to the Xth CCITT Plenary Assembly – General
8	SG XII	Report to the Xth CCITT Plenary Assembly – Wording of Questions proposed for study during the 1993-1996 Study Period
9	SG III	Report to the Xth CCITT Plenary Assembly – General considerations and formal replies to Questions
10	SG III	Report to the Xth CCITT Plenary Assembly – Questions proposed for study in the 1993-1996 Study Period
11	SG V	Report of Study Group V to the Xth Plenary Assembly – General
12	SG V	Report of Study Group V to the Xth Plenary Assembly, Point 5 – Questions proposed for study in 1993-1996
13	SG VI	Report of Study Group VI to the Xth Plenary Assembly – General
14	SG VI	Report of Study Group VI to the Xth Plenary Assembly, Point 5 – Questions proposed for study in 1993-1996
15	SG I	Report to the Xth CCITT Plenary Assembly – General, replies to the Questions and Highlights
Addendum to Doc. AP X-15	SG I	Report to the Xth CCITT Plenary Assembly – General replies to the Questions and highlights – Addendum
16	SG I	Report to the Xth CCITT Plenary Assembly – Questions proposed for study in the post-1992 Study Period
Corrigendum to AP X-16 (English only)	SG I	Report to the Xth CCITT Plenary Assembly – Questions proposed for study in the post-1992 Study Period - Corrigendum
17	SG XI	Report to the Xth CCITT Plenary Assembly – General
18	SG XI	Report to the Xth Plenary Assembly – Questions on switching and signalling allocated to Study Group XI for the 1993-1996 Study Period

Document AP X	Source	Title
19	SG VIII	Report to the Xth Plenary Assembly – Part I – General report – Answers to the Questions
20	SG VIII	Report to the Xth Plenary Assembly – Part II – Draft Questions for the period 1993-1996
21	SG VII	New Questions for 1993-1996 proposed by Study Group VII
22	SG VII	General report of Study Group VII activities during 1989-1992
23	Ad Hoc Group – Resolution No. 18	Report of the Ad Hoc Group – Resolution No. 18 to the Xth Plenary Assembly – General – Draft Resolution: Rules of procedure and working methods of the CCITT
23 (Rev.1)	Ad Hoc Group – Resolution No. 18	Report of the Ad Hoc Group – Resolution No. 18 to the Xth Plenary Assembly – General – Draft Resolution No. Res. 18/X: Rules of procedures and working methods of the CCITT – Draft Resolutions Nos. Res. 18/11 and Res. 18/12: Electronic document handling – Draft Resolution No. Res. 18/13: Information bulletin
24	Ad Hoc Group – Resolution No. 18	Report of the Ad Hoc Group – Resolution No. 18 to the Xth Plenary Assembly – Draft Resolution: Study Group responsibility and mandates
24 (Rev.1)	Ad Hoc Group – Resolution No. 18	Report of the Ad Hoc Group – Resolution No. 18 to the Xth Plenary Assembly – Draft Resolution No. Res. 18/9: Study Group responsibility and mandates
25	Ad Hoc Group – Resolution No. 18	Report of the Ad Hoc Group – Resolution No. 18 to the Xth Plenary Assembly – Draft Recommendation A.[23]: Collaboration with other international organizations on information technology, telematic services and data transmission – Draft Resolution No. Res. 18/14: Relations with other organizations
26	Ad Hoc Group – Resolution No. 18	Report of the Ad Hoc Group – Resolution No. 18 to the Xth Plenary Assembly – Draft Resolutions Nos. Res. 18/7, Res. 18/8, Res. 18/10: Publication of CCITT Recommendations, Identification and layout of CCITT Recommendations, Supplements to CCITT Recommendations
27	SG IX	Report of Study Group IX to the Xth Plenary Assembly – General
28	SG IX	Report of Study Group IX to the Xth Plenary Assembly, Point 5 – Questions proposed for study in 1993-1996
29	SG XV	Report to the Xth CCITT Plenary Assembly – General
30	SG XV	List of Questions proposed for study during the 1993-1996 Study Period (Part 5 of the report)
31	SG X	Report to the Xth CCITT Plenary Assembly – General
32	SG X	Report to the Xth CCITT Plenary Assembly – New Questions proposed
33	SG IV	Report to the Xth Plenary Assembly – General, replies to the Questions and Highlights
Corrigendum to AP X-33 (English only)	SG IV	Report to the Xth Plenary Assembly – General, replies to the Questions and Highlights – Corrigendum
34	SG IV	Report to the Xth Plenary Assembly – Questions proposed for study in 1993-1996

6.1 – AP X DOCUMENTS *(end)*

Document AP X	Source	Title
35	SG XVII	Report of Study Group XVII to the Xth Plenary Assembly – General
36	SG XVII	Report of Study Group XVII to the Xth Plenary Assembly – Point 5 – Questions proposed for study in 1993-1996
37	SG XVIII	Report to the Xth CCITT Plenary Assembly – General
38	SG XVIII	List of Questions proposed for study during the 1993-1996 Study Period (Part 5 of the report)
39	CCITT Secretariat	List of the Xth Plenary Assembly Documents (Documents AP X-1 to 39)
40	Ad Hoc Group – Resolution No. 18	Report of the joint meeting of the CCIR Ad Hoc Advisory Group (Resolution 106) and the CCITT Ad Hoc Group (Resolution No. 18)
41	Australia	Services using network "intelligence"
42	Australia	UPT numbering
43	Australia	Tariff principles for services using network "intelligence"
44	France	Establishment of joint coordination groups
45	France	Relations between the CCITT and JTC 1
46	Austria, France, Japan	Objection to a Draft Recommendation concerning a 64 kbit/s option in the G3 facsimile (telefax 3) service (Annex C to Recommendation T.30) of Study Group VIII
Corrigendum 1 to Doc. AP X-46	Concerns French and Spanish versions only.	
Revision 1 to Doc. AP X-46	Austria, France, Germany, Japan	Objection to a Draft Recommendation concerning a 64 kbit/s option in the G3 facsimile (telefax 3) service (Annex C to Recommendation T.30) of Study Group VIII
47	Greece	Comments/amendments to Draft Recommendation T.52 contained in COM VIII-R 45
48	Canada	Proposed amendments to draft revision of Recommendation E.161
49	United Kingdom	X.500-series of Recommendations (Directories)
50	United Kingdom	Vocabulary coordination
51	United States of America	Proposed clarification to SG XVIII study Questions (AP X-38)
52	CCITT Secretariat	Final list of the Xth Plenary Assembly documents (documents AP X-1 to 52)
Corrigendum to Doc. AP X-52	CCITT Secretariat	Modifications to the final list of the Xth Plenary Assembly documents

6.2 – CONFERENCE DOCUMENTS

No.	Origin	Title	Destination
1	TSB	Extracts from the Final Acts of the Additional Plenipotentiary Conference (Geneva, 1992)	PL
2 + Corr.1, 2	G	Overlap of Questions on optical fibres and cables in Study Groups XV and VI	C4
3	G	Transfer of work from Study Group XVIII to Study Group XV	C4
4 + Add.1, 2, 3	TSB	List of delegates to CCITT meetings who have died since the IXth Plenary Assembly	PL
5 + Add.1, 2	TSB	List of delegates to CCITT meetings whose retirement has been announced since the IXth Plenary Assembly	PL
6	TSB	Abbreviations/Acronyms (based on the Geneva Constitution and Convention)	
7	USA	Proposal for an intersector coordination Group	C3 C4
8	USA	Organization of the ISDN/SAT work between the Radiocommunication Sector and the Telecommunication Standardization Sector	C4
9	USA	Organization of FPLMTS work between the Radiocommunication Sector and the Telecommunication Standardization Sector	C4
10	URS	Proposals concerning rules of procedure and working methods of the CCITT	C3
11	URS	Proposals for clarification of the CCITT work programme for 1993-1996	C4
12	URS	Proposals on clarification of the CCITT Study Groups mandates	C4
13	AUS	Alphanumeric Keypads (Draft revised Recommendation E.161)	C6
14	TSB	List of Questions proposed for the 1993-1996 Study Period	C4
15 + Corr.1	TSB	Country codes allocated since the publication of Document AP X-5 (Addendum to Document AP X-5)	C6
16	TSB	Telex destination codes allocated since the publication of Document AP X-15 (Addendum to Document AP X-15)	C6
17	TSB	Country or geographical area codes for data transmission allocated since the publication of Document AP X-22 (Addendum to Document AP X-22)	C6
18	KOR	Relations with other standardization organizations	C3
19 + Add.1	CMTT	Report by the Chairman of the CMTT	C4 C5
20	INTELSAT and EUTELSAT	Resolution to establish a joint Group on satellite matters of common interest to the Standardization and Radiocommunication Sectors	C3 C4
21	NZL	Proposals for the work of the Conference	PL C3 C4

No.	Origin	Title	Destination
22	NZL	Alphanumeric Keypads (Draft revised Rec. E.161)	C6
23	MEX	Proposals for the work of the Conference (Resolution No. 2)	C3
24	SG	Financial responsibilities of Conferences	C2
25 + (Rev.1)	SG	Budget of the World Telecommunication Standardization Conference	C2
26	SG	Situation of the accounts of the Conference as at 3 March 1993	C2
27	SG	Agreement between the Government of Finland and the Secretary-General of the International Telecommunication Union	C2
28	EUTELSAT	Expanded participation of International Organizations within the Standardization Sector under Article 7D	C3
29	TSB	Structure of the World Telecommunication Standardization Conference (Helsinki, 1993) (as adopted by the First Plenary Meeting)	
30	TSB	Chairmanship of the Conference (as established by the First Plenary Meeting)	
31	TSB	Secretariat of the Conference	
32	KOR	Telecommunication Standardization Advisory Group (TSAG) [ref. Section 4, AP X-23(Rev.1)]	C3
33	USA	Proposed clarifications to Draft Resolution No. 18/X as found in Document AP X-23(Rev. 1)	C3
34	PL	Minutes of the Opening Meeting – Monday, 1 March 1993, at 1100 hours	PL
35	USA	Additional Rationale for proposed text changes to Questions L, M, N, P/XVIII (see also AP X-51)	C4
36 + Add.1	AUS, CAN, I, G, USA	Comments on AP X-46(Rev), regarding Fax interworking on ISDN	C6
37 + Corr.1	PL	Minutes of the first Plenary Meeting – Monday, 1 March 1993, at 1435 hours	PL
38	Drafting Group	Corrigendum to Draft new Recommendation L.16 – Conductive plastic material (CPM) as protective covering for metal cable sheaths (Ref. COM VI-R 11)	C5
39 + Corr.1	C3	Summary record of the first meeting of Committee 3 (Working methods) – Tuesday, 2 March 1993, at 0900 hours	C3
40 + Add.1 and Corr.1	C5	Draft report of Committee 5 – Technology of Telecommunication Networks	C5
41	C6	Draft report of Committee 6 – Telecommunication services – (first Part)	C6
42 + Add.1 + Corr.1 to Add.1 + Add.2	C4	Report by Committee 4 (Part 1)	C4
43 + Corr.1	SVK	Updating of and supplement to Recommendations E.164, X.121 and F.69	C6
44	C5	Summary Record of the first meeting of Committee 6 (Networks) – Tuesday, 2 March 1993, at 1405 hours	C5

No.	Origin	Title	Destination
45	AUS, NZL	Comments on AP X-48, Doc. 13 and Doc. 22 regarding alphanumeric keypad numbering (Draft revised Recommendation E.161)	C6
46	HNG, IRL, ARS, SUI, USA	Proposed additions to Draft Resolution Res. 18/7, Annex 1, (AP X-26) "Publication of [CCITT] Recommendations"	PL
47	C6	Summary record of the first meeting of Committee 6 (Working methods) – Tuesday, 2 March 1993 at 1405 hours	C6
48 + Corr.1	WG/C3	Proposed revisions to Draft Resolution No. Res. 18/X [see Annex 1 to Document AP X-23(Rev. 1)] – Rules of procedure and working methods of the CCITT	C3
49 + Add.1	LBN, BFA, CME, ETH, GAB, MRC MLI, SEN	The importance of Telecommunication Standardization for the developping countries	PL
50	TSB	List of documents	
51	AUT, F, D, J	Compromise for point 5.2.1 of the Report	C6
52 + Corr.1	C3	Summary record of the second meeting of Committee 3 – (Working methods) Wednesday, 3 March 1993, at 0900 hours	C3
53	C6	Draft Report of Committee 6 – Telecommunication services (second part)	C6
54	C4	Summary record of the first meeting of Committee 4 (Structure and Programme) Wednesday, 3 March 1993, at 1400 hours	C4
55 + (Rev.1)	Ad hoc Group	Transfer of work from the Radiocommunication Sector to the Standardization Sector	C4
56	C2	Summary record of the first meeting of Committee 2 (Budget control) – Tuesday, 4 March 1993, at 0900 hours	C2
57 + Corr.1	PL	Minutes of the second Plenary Meeting – Thursday, 4 March 1993, at 1400 hours	PL
58 + (Rev.1)	Group on T.30 Annex C	Amendments consecutive to the decision of Committee 6 about Annex C to Recommendation T.4 and new Questions E/VIII and J/I	C6
59	C5	Summary record of the second meeting of Committee 5 (Networks) – Thursday, 4 March 1993, at 0910 hours	C5
60 + (Rev.1, 2)	AUS, CAN, J, KEN, KOR, LBN, E, USA, ETSI	Annex 2 (Document AP X-25, page 4) – Draft Resolution No. Res. 18/14 – Relations with other standardization organizations	C3
61	C5	Summary record of the third and last meeting of Committee 5 (Networks) – Friday, 5 March 1993, at 1435 hours	C5
62	C3	Resolution No. 7 (amended) – Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) (Malaga-Torremolinos, 1984; [Helsinki, 1993])	PL
63	C3	Draft Recommendation A[23] – Collaboration with other International Organizations on information technology, telematic services and data transmission [Helsinki, 1993]	PL

No.	Origin	Title	Destination
64	C6	Amended text for the Committee 6 Report (Document 41, point 2.1)	PL
65	C3	Draft Resolution No. Res. 18/7(Rev.3) – Publication of [CCITT] Recommendations	PL
66	C3	Draft Resolution No. Res. 18/8(Rev.3) – Identification and lay out of Recommendations	PL
67	C3	Draft Resolution No. Res. 18/10(Rev.1) – Supplements to the [CCITT] Recommendations	PL
68	C6	Japanese Statement (to be added to the Report of Committee 6, point 5.2)	PL
69 + Corr.1 + Add.1	C7	Report of Committee 7 – (Part I)	C7
70	AUS, CAN, USA	Draft Resolution: Allocation of country and network codes	C4
71	C3	Draft Recommendation A.15 – Elaboration and presentation of texts for Recommendations of the ITU Telecommunication Standardization Sector (Geneva 1980, Revised 1993)	PL
72	C3	Draft Resolution No. Res. 18/11 – Development of Electronic Document Handling	PL
73	C3	Draft Resolution No. Res. 18/12 – EDH Group within the TSAG	PL
74	C3	Draft Resolution No. Res. 18/13 – An Information Bulletin for the Telecommunication Standardization Sector	PL
75	C2	Report by the Budget control Committee to the Plenary meeting	C2
76	C6	Report of Committee 6 – Telecommunication Services –	PL
77	B	Data elements and tabular data in ITU Recommendations	C3
78	C3	Resolution No. 11 (Revised) – Collaboration with the Consultative Council for Postal Studies (CCPS) of the Universal Postal Union (UPU) in the study of new services concerning both the postal and the telecommunication sectors (Malaga-Torremolinos, 1984)	PL
79	C3	Resolutions, Opinions and Recommendations adopted at Melbourne (1988) – Observations and suggestions	PL
80	C4	Summary record of the second meeting of Committee 4 (Structure and programme) – Friday, 5 March 1993, at 0900 hours	C4
81 + Corr.1	C7	Report of Committee 7 – (Part II)	C7
82	C3	Report by Committee 3 to the Plenary meeting	PL
83 + Corr.1, 2, 3	C7	Report of Committee 7 (Part III)	PL
84	C6	Summary record of the second meeting of Committee 6 (Services) – Friday, 5 March 1993, at 1430 hours	C6
85	C3	Draft Resolution (for both WTSC and RA) – Principles and procedures for the allocation of work to, and coordination between, the Radiocommunication and Telecommunication Standardization Sectors	PL

No.	Origin	Title	Destination
86	C4	Report by Committee 4	PL
87 + Corr.1	C7	Report of Committee 7 (Part IV)	PL
88	C3	Summary record of the third meeting of Committee 3 (Working methods) – Monday, 8 March 1993, at 0905 hours	C3
89	C6	Summary record of the third and last meeting of Committee 6 (Services) – Monday, 8 March 1993, at 1600 hours	C6
90	C7	Report of Committee 7 (Part V)	PL
91	C4	Summary record of the third meeting of Committee 4 (Structure and programme) – Monday, 8 March 1993, at 1405 hours	C4
92	PL	Minutes of the third Plenary meeting – Tuesday, 9 March 1993, at 1515 hours	PL
93		Proposals of the meeting of Heads of delegation concerning the appointment of the Chairmen and Vice-Chairmen of the Study Groups in the Telecommunication Standardization Sector	PL
94	C3	Summary record of the fourth meeting of Committee 3	PL
95	C4	Summary record of the fourth and last meeting of Committee 4	PL
96	C2	Summary record of the second and last meeting of Committee 2	PL
97	PL	Minutes of the fourth Plenary meeting	PL
98	PL	Minutes of the fifth Plenary meeting	PL
99	PL	Minutes of the sixth Plenary meeting	PL
100	PL	Minutes of the seventh and last Plenary meeting	PL
101	PL	Minutes of the closing ceremony	PL
102	TSB	Final list of documents (1 to 101)	

6.3 – TEMPORARY DOCUMENTS

No.	Origin	Title	Destination
DT/1	TSB	Draft structure of the World Telecommunication Standardization Conference (Helsinki, 1993)	
DT/2	Chairman of CMTT	Allocation of work between the Radiocommunication and Telecommunication Standardization Sectors	C4
DT/3	Chairman of SG VII	Approval of some Recommendations in the X.500 series and Recommendation X.862	C6
DT/4	Chairman of GAS 9	Activities of Special Autonomous Groups (GAS 7, 9 and 12)	C6
DT/5	Chairman of CCTT	Terminology coordination within the CCITT	C3
DT/6	TSB	Draft revised Resolution No. 11	C3
DT/7	TSB	Allocation of documents	PL
DT/8	TSB	Resolution No. 7 (amended) – Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) (Malaga-Torremolinos, 1984; [Helsinki, 1993])	C3
DT/9 + (Rev.1)	Director of TSB	Draft Recommendation A.15	C3
DT/10	Ad hoc Group Res No. 18	Draft Recommendation Res 18/a.2 – Production maintenance and publication of CCITT terminology	C3
DT/11 + (Rev.1)	Director of TSB	Resolutions, Opinions and Recommendations adopted at Melbourne (1988) – Observations and suggestions	C3
DT/12	Director of TSB	Revision of the collection and publication of official service documents: proposed Resolution	C6
DT/13	Directors, BR and TSB	Allocation of work to the Radiocommunication Sector and the Telecommunication Standardization Sector	C4
DT/14	TSB	Calendar of the Period (2.III.93-5.III.93)	
DT/15	C6	Draft list of Recommendations proposed by Committee 6 for approval and for deletion	C6
DT/16	C5	Draft list of Recommendations proposed by Committee 5 for approval	C5
DT/17 + Add.1	C5	Draft list of Recommendations proposed by Committee 5 for deletion	C5
DT/18	POL	Coordination of standards approval process during consultations on national level	C3
DT/19	D	Resolution 18, Section 8 – Proposal of Germany	C3
DT/20	MLI	Proposals for the work of the Conference 1. Resolution No. 18 Ad hoc Group 2. Resolution No. 2 (Melbourne, 1988)	C3

6.3 – TEMPORARY DOCUMENTS *(cont.)*

No.	Origin	Title	Destination
DT/21	E	Submission and processing of contributions	C3
DT/22	E	Abbreviations/Acronyms	C3
DT/23 + (Rev.1)	Drafting Group	Proposed text about E.168 (UPT numbering)	C4 C6
DT/24	AUS	Possible amendments to AP X-26	C3
DT/25	BR and TSB Directors	Organization of FPLMTS work between RS and TSS	C4
DT/26	C7	Report of first Committee 7 meeting	C7
DT/27	B	Data elements and tabular data in ITU standards	C3
DT/28	Chairman of CCT	Use of abbreviations (information document)	C3
DT/29	Chairman of CMTT	Proposed title and area of responsibility of CMTT for insertion in Annex A to Draft Resolution No. 18/9	C4
DT/30	BR and TSB Directors	Organization of the ISDN/SAT work between RS and TSS	C4
DT/31	Chairman ad hoc Group on ICG	Draft report to Committee 4	C4
DT/32	TSB	Calendar of the period (5.III.93-12.III.93)	
DT/33 + Corr.1	GRC	Draft Recommendation T.52	C6
DT/34	Ad hoc Group	Results of Ad hoc Group on Document 11	C4
DT/35	Chairman ad hoc Group on ICG	Report to Committee 4 on establishment of intersector coordination Groups (ICGs)	C4
DT/36	Editing Group	Amendments to Questions of Study Group I	C4
DT/37	Drafting Group	Note for Point 1.2.3 of the Report	C6
DT/38	Ad hoc Group	Resolution relating to the establishment of an intersector coordination Group to deal with satellite matters of common interest to the Telecommunication Standardization and Radiocommunication Sectors	C4
DT/39	Ad hoc Group	Resolution relating to the establishment of an intersector coordination Group to deal with activities relating to the FPLMTS in the Telecommunication Standardization and Radicommunication Sectors	C4
DT/40	Drafting Group	Options for the "New" CMTT	C4

6.3 – TEMPORARY DOCUMENTS *(end)*

No.	Origin	Title	Destination
DT/41	Drafting Group	Resolution relating to the initiation of joint coordination Groups to deal with matters of concern to multiple Study Groups in the Telecommunication Standardization Sector in accordance with Resolution No. 18/X	C4
DT/42	Drafting Group	Draft Resolution (See Doc. 55) – Inclusion of Appropriate Work from the CCIR into the Program of the Telecommunication Standardization Sector	C4
DT/43	Chairman, Vice Chairman of SG II	Proposed amendments to Questions 5/II, 6/II and Annex C of AP X-24(Rev. 1)	C4
DT/44	TSB	Calendar of the Period (10.III.93-12.III.93)	
DT/45	TSB	Final list of DT Documents	