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I. INTRODUCTION

The International Telecommunication Union (ITU) is the oldest international organization in the world. In the beginning, it had no prototypes to emulate and thus was forced to create its own structure and method of functioning. It thus has been the model on which most other international organizations have been based.

Over the years, the ITU has modified its structure and operating procedures to respond to world economic conditions and international politics. In this role, it continues to lead the way in modeling how smaller, less developed countries can participate as equals to more developed nations. Its one-country, one-vote process has helped to define the future processes of all international organizations. For this reason, a review of the ITU's history is useful in the study of all modern international organizations.

II. BACKGROUND

For one hundred and thirty years the International Telecommunication Union has worked to guarantee that telecommunications are used in the most efficient manner throughout the world. The four major periods in the existence of the ITU include: 1) the creation of the International Telegraph Union in 1865; 2) the merger of the International Telegraph Union with the semi-official International Radiotelegraph Union in 1934; 3) the reorganization of the ITU at the Atlantic City Plenipotentiary Conference in 1947; and 4) the reorganization of the ITU at the Nice Plenipotentiary Conference in 1989, the 1992 Extraordinary Plenipotentiary Conference, and the Kyoto Plenipotentiary Conference in 1994. This article will examine each of these time periods and highlight the events that have formed the ITU as it is known today. One of the more interesting aspects of the evolution of the ITU has been the emergence of a developing country majority and its willingness to use the voting power it wields at ITU conferences and meetings.

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III. THE BEGINNING

The ITU was created in 1865 when representatives of twenty European states met in Paris to attempt to organize the European telegraph network. The 1865 International Telegraph Conference drew up a Convention and a Telegraph Regulation. In addition to creating the International Telegraph Union, the international Morse code was designated the preferred code for telegrams, the hours for telegraph offices were fixed, and the French franc was chosen as the monetary unit for the settlement of international accounts. A system of uniform rates for all member countries was proposed, but never finalized.[1]

It was also suggested at the conference that the new organization have a secretariat at the location of the last conference. This would help plan for future conferences and make general investigations into the problems of the international telegraph network. This suggestion was ignored for fear that it would place the secretariat under the control of Napoleon III and France. A secretariat was created at the second International Telegraph Conference in Vienna. It was entrusted to the Swiss and was placed in Berne, the capitol of neutral Switzerland. Membership in the International Telegraph Union increased steadily as more and more countries created their own telegraph networks and connected them to the European network.

The United States never joined the International Telegraph Union. This was on the basis that telecommunications in the United States was carried out by private enterprises and the government had no authority to regulate these entities.

The telephone, when it was perfected, was not received with the same enthusiasm as the telegraph. There was a language barrier, especially in Europe. In addition, the telephone was considered to be a competitor of the telegraph. An English study, for example, found that where the telephone was introduced, people tended to use the telegraph less. In the United States it was different. There was no language barrier and the telephone was less expensive that the telegraph, as an experienced telegraph operator received a higher salary than a telephone operator.

The telephone changed the structure and method of operations of the International Telegraph Union. This process began in 1924 with the creation of the International Consultative Committee for Long Distance Telephony,[2] later known as the International Telegraph Consultative Committee (CCIF). This committee consisted of a group of individual experts who exchanged views concerning technical and operational problems in the international telephone network. The Committee did an

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1. Much of the history of the ITU comes from GEORGE A. CODDING, THE INTERNATIONAL TELECOMMUNICATION UNION: AN EXPERIMENT IN INTERNATIONAL COOPERATION (1952).

2. *Comité consultatif international des communications téléphoniques à grande distance* in French.

excellent job and, as a result, the Paris Conference of the International Telegraph Union in 1925 voted to bring this new committee under the auspices of the International Telegraph Union. This decision gave the International Telegraph Union standards-making authority for the first time.

The 1925 Paris Conference also decided to create a similar organ to undertake an investigation of the international telegraph network. This was an effort to bring standardization to the world's telegraph network and to investigate the many operational questions that existed at the time. This organ was given the name of the International Telegraph Consultative Committee (CCIT).[3]

Radio needed immediate regulation because of its ability to generate harmful interference. In addition, there was the desire to end the Marconi practice of forbidding Marconi operators to communicate with operators of other equipment types. This was interfering with the ability to communicate, one of the primary reasons that radio was an important new technology.

The regulation of radio came under the auspices of another group of interested nations, informally called the International Radiotelegraph Union. Conferences of this group were held in Berlin in 1903 and 1906, and London in 1912. The major purpose of these conferences was to convince Marconi to allow its operators to communicate with operators using equipment other than the Marconi type. This was finally accomplished at the London Conference of 1912. The 1927 Washington Radiotelegraph Conference also created an International Radio Consultative Committee.

These three consultative committees brought the International Telegraph Union and later the International Telecommunication Union into the mainstream of telecommunication standardization. Although the decisions of these committees were in the form of recommendations and were not legally binding, the high quality of the recommendations caused the administrations that made up the International Telegraph Union and the International Telecommunication Union to adopt them for their national networks. The CCIF and the CCIT were merged in 1965 to create the CCITT.[4]

IV. MERGER TO FORM THE ITU

Because the telegraph, telephone, and radio were all regulated by the same ministry in most countries, it was not long before pressure built up to merge these organizations. This was accomplished by holding an International Telegraph Conference and an International Radiotelegraph Con-

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3. *Comite consultatif international des communications télégraphiques* in French, the official language of the International Telegraph Union. It was also known as the International Telegraph Consultative Committee and given the acronym CCIT.

4. For an account of the merger, *see* GEORGE A. CODDING & ANTHONY M. RUTKOWSKI, THE INTERNATIONAL TELECOMMUNICATION UNION IN A CHANGING WORLD, 89-90 (1982).

ference simultaneously in Madrid in 1932. Through the use of joint committees and plenary meetings a new international organization, the International Telecommunication Union, was created on January 1, 1934. The word "telecommunication" was supplied by the French.

The new organization did not have long to carry out its mandate before World War Two occurred. Technology, especially that of telecommunications, is heavily impacted by wars. Many new advances occurred, such as Loran, Radar, micro-wave communication, and international broadcasting.

V. 1947 REORGANIZATION OF THE ITU

The first post-war ITU conference, which was held in Atlantic City in 1947, was confronted with a number of important tasks. It was necessary to bring the new technologies under the auspices of the ITU, and it was necessary to prepare the ITU for its relationship with the new United Nations organization. An additional problem was that of radio frequencies. During the war, the victors appropriated the radio frequencies of the vanquished. Certain countries had continued to register frequency usage with the ITU secretariat during the conflict, while others did not. The international frequency list was in a chaotic state.

Among the accomplishments of the Atlantic City conferences was the rearrangement of the frequency allocation table to reflect the new technologies and the creation of an Administrative Council to provide liaison with the new United Nations. The secretariat was moved from Berne, Switzerland, to Geneva, Switzerland, the home of the European headquarters of the United Nations. The United States was able to convince the delegates to begin the process of creating a new "engineered" international frequency list. ("Engineered" was the buzz word of the times.)

This new list would allocate frequencies to all members of the ITU to satisfy their present and future needs. To keep the new list organized, the United States suggested the creation of an International Frequency Registration Board (IFRB). Despite a tremendous amount of effort, the creation of a new international frequency list proved to be impossible. There were too many requests for frequencies. India, for instance, thought that radio would be essential for its future and asked for numerous frequencies for future use. This was the era before computers, so that the records of frequency use and request were contained on long strips of paper that at one point were allegedly misplaced. In addition, the Cold War started about this time, and the USSR refused to cooperate. The International Frequency Registration Board continued to operate.

In the years between this time, it was agreed to discontinue the creation of a new "engineered" frequency list, and in the 1980s, the IFRB was reduced from eleven members to five.

VI. REORGANIZATION IN THE 1980S

A notable change occurred in the membership of the ITU from one

that was dominated by the developed countries to one in which the vast majority of members were developing countries. These new countries had different needs and requirements. Starting about 1965, the developing countries began a campaign to involve the ITU in development, including a special ITU fund, a regional presence, and a special ITU organ devoted to technical assistance. All of this was to be financed from the regular ITU budget. In general it was desired to place development assistance on an equal level with the standards-making and radio communications regulation of the ITU. None of these requests were met at the 1965 Plenipotentiary Conference. About the only decision was to exclude South Africa from ITU conferences and meetings because of its policy of apartheid.

Little by little, however, the developing countries attained their goals. The 1973 Malaga-Torremolinos Plenipotentiary Conference created a development assistance fund from voluntary contributions. The request for development assistance from the regular budget caused the head of the U.S. delegation to state that if a regular budget fund was created "the U.S. would not be able to contribute to it." It was pointed out that "an allocation from the regular budget would raise very serious problems for the U.S. Administration."[5] In addition, the delegate warned that "the actions of many of the developing countries caused many members to doubt whether it was worthwhile to continue to furnish the union with major support."[6] The voluntary fund did not become a primary source of income for developing countries.

The developing countries were not deterred by the U.S. warning and made a new effort to achieve their goals at the next plenipotentiary conference in 1982 in Nairobi. Not only were the developing countries better prepared, but their cause was reinforced by the fact that the conference was being held in a developing country. All of the 1965 Montreux proposals were put forward again at Nairobi.

The developed countries defeated a proposal to create a telecommunications technical assistance fund financed through the regular ITU budget. Instead, it was agreed to create a new voluntary fund to replace the old voluntary fund, which received little financial support from ITU members. The new fund, which was to be called the Special Voluntary Program for Technical Cooperation, was to be financed through "contributions in currency, training services, or in any other form to meet as much of the telecommunication needs of developing countries as possible."[7]

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5. *See* OFFICE OF TELECOMMUNICATIONS, U.S. DEP'T OF STATE, REPORT OF THE UNITED STATES DELEGATION TO THE PLENIPOTENTIARY CONFERENCE OF THE INTERNATIONAL TELECOMMUNICATION UNION, MALAGA-TORREMOLINOS, SPAIN, SEPTEMBER 14 - OCTOBER 25, 1973, 43 (1973).

6. *Id.* at 9.

7. *See* International Telecommunication Union, International Telecommunication Convention, 1982, Res. No. 19. This text can be found at: Nov. 6, 1982, S. TREATY DOC. NO. 99-6, 99th Cong., 1st Sess. 252 (1985), *microformed* on CIS No. 85-S385-6 (Congressional

Only the request for an ITU regional presence achieved a partial degree of acceptance at Nairobi. The conference hesitantly agreed to request that the Secretary-General "carry out the necessary cost/benefit and organizational studies with the objective of achieving a strengthened regional presence which will be as economical as possible and at the same time improve the effectiveness of the Union's activities. . ."[8]

The developing countries achieved two important victories at Nairobi, one primarily symbolic and the other practical. The symbolic victory was the decision of the conference to make the first paragraph in the ITU Convention to read; "to maintain and extend international cooperation between all Members of the Union for the improvement and rational use of telecommunications of all kinds as well as to promote and to offer technical assistance to developing countries in the field of telecommunications."[9] The practical victory was the listing of more than a dozen development assistance activities that could be financed from the regular ITU budget.

The decision of the Nairobi Plenipotentiary that received the most attention, however, was the one to create an International Commission for World-Wide Telecommunications Development. This was comprised of individuals "of the highest international reputation" to examine the entire issue of existing and future technical cooperation and to recommend methods for stimulating telecommunications development in the developing world.[10]

The Commission issued a report, "The Missing Link," in December 1984. The Commission came to the conclusion that good telecommunication systems are essential in modern society.

> Our study of the role that (telecommunications) can play has persuaded us that telecommunications can increase the efficiency of economic, commercial and administrative activities, improve the effectiveness of social and emergency services, and distribute the social, cultural and economic benefits of the process of development more equitable throughout a community and a nation.[11]

However, in a majority of developing countries the telecommunications systems are inadequate to sustain essential services. In many areas, there is no system at all. "Neither in the name of common humanity nor on grounds of common interest," states the report, "is such a disparity acceptable."[12] To bring the developing world up to the standards set by

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Info. Serv.). For an account of the funds contributed to the 1972 and 1982 funds, *see* George A. Codding, Jr., *Financing Development Assistance in the ITU,* 13 TELECOMMUNICATION POL'Y 22 (1989).

8. *Id.* at Res. No. 26.

9. *Id.* at ch. I, art. 4, ¶1.

10. *Id.* at Res. No. 20.

11. REPORT OF THE INDEPENDENT COMMISSION FOR WORLD-WIDE TELECOMMUNICATIONS DEVELOPMENT, INTERNATIONAL TELECOMMUNICATION UNION, THE MISSING LINK 10-12 (1984).

12. *Id.* at 3.

the Commission would require a total investment of US $12 billion a year.[13]

Development assistance had received a great deal of publicity as a result of the Maitland Report. In the months prior to the 1989 Plenipotentiary Conference in Nice, Secretary-General Richard Butler made a number of speeches concerning the need to reorganize the ITU in order to meet the needs of the future. He also commissioned a study of the changing telecommunications environment and its impact on the ITU to be conducted by a group of experts chosen by the Secretary-General. This report was distributed widely and was made an official document of the 1989 plenipotentiary conference.[14]

The developing country majority was well prepared for the plenipotentiary, having held a series of meetings prior to and during the conference. Ethiopia proposed the creation of a new organ in the ITU structure, a Telecommunication Development Bureau, which would be devoted to development assistance and would be financed from the regular ITU budget. Development assistance, according to the Ethiopian delegate, was one of the three major functions of the ITU, but had never been given the status that had been given to standardization and radio regulation.[15] The proposal was immediately opposed by the developed countries. However, this issue was so important to the developing countries that it almost brought the conference to a complete halt.

The stalemate was ended when the chairman of the conference submitted a compromise on June 22, eight days before the conference was to end, that he had worked out with representatives of both sides.[16] The four interrelated parts of the compromise were as follows:

1. The new Telecommunication Development Bureau would be created immediately. The Bureau would take over the Technical Cooperation Department of the General Secretariat and would have an initial budget of 15 million Swiss francs, which would increase in five years to 22.5 million Swiss francs.

2. The Nice Plenipotentiary would not make any additional changes to the structure of the ITU.

3. A high level committee would be formed to study the structure and operation of the permanent organs of the ITU. If necessary, a special

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13. *Id.* at 57.

14. *See* INTERNATIONAL TELECOMMUNICATION UNION, THE CHANGING TELECOMMUNICATION ENVIRONMENT: POLICY CONSIDERATIONS FOR THE MEMBERS OF THE ITU (1989).

15. *See* INTERNATIONAL TELECOMMUNICATION UNION, PLENIPOTENTIARY CONFERENCE, Doc. 66-E, 2 (1989).

16. The compromise, which became Document 388 of the Conference, had the support of ninety countries including France, the Federal Republic of Germany, and the Scandinavian countries. The United States, United Kingdom, the USSR, and Japan remained opposed. *See* OFFICE OF TELECOMMUNICATIONS, U.S. DEP'T OF STATE, REPORT OF THE UNITED STATES DELEGATION TO THE PLENIPOTENTIARY CONFERENCE OF THE INTERNATIONAL TELECOMMUNICATION UNION, NICE, FRANCE, MAY 23-JUNE 30, 1989, 4 (1990).

conference would be held to consider changes suggested by this committee.

4. The Nice Plenipotentiary would be permitted to complete the remainder of its work, including the election of the directors of the International Radio Consultative Committee (CCIR) and CCITT along with the members of the IFRB, which had been postponed pending a decision on the Telecommunications Development Bureau.

A new committee was formed, which became known as the High Level Committee, and made its report on April 26, 1991.[17] In this report the committee recommended that the ITU's functions be grouped under three sectors; a Standardization Sector, a Radiocommunications Sector, and a Development Sector.
The IFRB would be replaced by a part-time board that would meet only as needed. All three sectors would work through regional and world-wide conferences, study and work groups, an elected director, and a specialized secretariat.

The extent of the recommendations of the High Level Committee persuaded the ITU Administrative Council to schedule an additional plenipotentiary conference. This was to be held in Geneva in December 1992 to make the necessary changes in the ITU's basic documents.

The 1992 Geneva Additional Plenipotentiary Conference was held in the record time of only two weeks and restructured the ITU along the lines suggested by the High Level Committee.[18]

A. *The Radiocommunication Sector*

The new Radiocommunication Sector was given the responsibility of "ensuring the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radio services, including those using the geostationary-satellite orbit. . ." and "carrying out studies without limit of frequency range and adopting recommendations on radiocommunication matters."[19]

The Radiocommunication Sector was to carry out its functions by means of a world and regional radiocommunication conference, a part-time Radio Regulations Board, radiocommunication assemblies, radiocommunication study groups and a Radiocommunication Bureau headed by an elected director.

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17. *See* INTERNATIONAL TELECOMMUNICATION UNION, HIGH LEVEL COMMITTEE TO REVIEW THE STRUCTURE AND FUNCTIONING OF THE ITU, TOMMORROW'S ITU: THE CHALLENGES OF CHANGE, ITU Doc. No. 145-E (1991).

18. *See* Figure 1.

19. INTERNATIONAL TELECOMMUNICATION UNION, FINAL ACTS OF THE ADDITIONAL PLENIPOTENTIARY CONFERENCE 11 (1992).

B. *The Telecommunication Standardization Sector*

The Telecommunication Standardization Sector was assigned the responsibility of "studying technical, operating and tariff questions with a view to standardizing telecommunications on a worldwide basis."[20]

The Telecommunication Standardization Sector carries out its functions by means of world telecommunication standardization conferences, telecommunication standardization study groups and a Telecommunication Standardization Bureau headed by an elected director.

C. *The Telecommunication Development Sector*

The Telecommunication Development Sector has the responsibility of discharging the Union's responsibility as an executing agency for projects under the United Nations development system and "offering, organizing and coordinating technical cooperation and assistance activities."[21]

The Telecommunication Development Sector carries out its responsibilities by means of world and regional telecommunication development conferences, telecommunications development study groups and a Telecommunication Development Bureau headed by an elected director.

The Additional Plenipotentiary Conference also created advisory groups for all three sectors made up of representatives of recognized operating agencies, scientific and industrial organizations, and other interested parties. The Secretary-General was also provided with a World Telecommunications Advisory Council, made up of the chief executive officers of various telecommunication entities.

VII. THE 1994 KYOTO PLENIPOTENTIARY CONFERENCE

The last stage in the reorganization of the ITU came at the 1994 Kyoto Plenipotentiary Conference. Probably the most important decision was the creation of a strategic plan for the period between 1995-1999.[22] This plan provided many provisions for the future.

The first was the increased participation of the private sector. The strategic plan recognizes the changing nature of the telecommunication administrations in many countries. Although the ITU is an intergovernmental organization, and its members wish it to remain so, "great advantage" can be derived from the increased participation of the private sector.

> The ITU's role as an international organization and the achievement of its purposes as set out in the Constitution fundamentally depend

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20. *Id.* at 15.

21. *Id.* at 17.

22. *See* INTERNATIONAL TELECOMMUNICATION UNION, FINAL ACTS OF THE ADDITIONAL PLENIPOTENTIARY CONFERENCE 49-68 (1994).

> on the enhanced participation of non-administration entities and organizations. This in turn requires continued consultation with industry participants to ensure that their contributions are rewarded by effective results. The need to enhance the ITU's character as a partnership between the public and private sectors is therefore a fundamental strategic premise.[23]

The second item is the recognition of telecommunications as an important element in the world economy.

> This may require adaptation of the Union's traditional strengths. In particular the interplay between activities of the ITU and the WTO (World Trade Organization) on telecommunication matters will have to be considered. Some adjustments in jurisdiction or procedures may ultimately be necessary. The Union should establish immediately effective liaison with the WTO to identify issues at an early stage and avoid duplication or inconsistent activities. More generally, to maintain ITU's claim to global technical pre-eminence in matters relating to telecommunications, the Union should continue to keep pace with developments in the areas of telecommunication policy, law, regulation and trade.[24]

The next provision is to increase alliances with other international organizations with an interest in telecommunications.

> Strategic alliances should be developed with other international and regional organizations which have an important influence on the development of telecommunications. At the international level, cooperation with the new WTO, OECD, the World Bank and UNESCO should be priorities. At the regional level, telecommunication standardization, development and financial organizations are of increasing importance.[25]

The last provision is for the better use of information resources.

> There is a huge and growing demand for information about telecommunications. By capitalizing on the technical information available through its radiocommunication, standardization, and development study groups, the data collected by the Standardization and Development Sectors, and the telecommunication indicators programme, the ITU could respond to this demand and increase revenues from its publications Programme. In developing an ITU information resource strategy along these lines, the terms and conditions under which members should obtain access to ITU information resources must be carefully considered, and care taken to avoid policies which would create incentives for companies simply to purchase ITU information products and services instead of becoming Sector members.[26]

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23. *Id.* at 54.
24. *Id.* at 53.
25. *Id.* at 56.
26. *Id.* at 56.

VIII. CONCLUSION

As the oldest international organization, the International Telecommunication Union has had an interesting and tumultuous history. It has survived two world wars, a cold war, and at least one major depression.

With the beginning of the privatization of telecommunication ministries in the 1980s it became apparent that the ITU was in serious need of revision. The ITU accepted the challenge and went to work to revise its structure and methods of operation to meet the needs of the changing times. The Nice Plenipotentiary of 1989, the Additional Plenipotentiary of 1992, and the Kyoto Plenipotentiary of 1994 were all parts of this process. As a result of these conferences, the developing country majority has achieved all that they have demanded. It is also now obvious that the developing countries have the power to continue to reshape the ITU as it wishes in the future.

From a general perspective, it looks as though the ITU has been successful. Whether it will actually meet the needs of its member states will only be known in time. If deficiencies are discovered, they can and will be addressed at the next plenipotentiary conference scheduled for 1999.