NIST HEARINGS
April 3 - 5, 1990

Date of your testimony: April 5, 1990
Time: 9:15 a.m.
Place: Auditorium of the U.S. Department of Commerce
14th Street and Constitution Avenue, N.W.
Washington, D.C.

Witness List Attached

EXCHANGE CARRIERS STANDARDS ASSOCIATION

5430 Grosvenor Lane • Bethesda • Maryland 20814-2122 • 301•564•4505

Attached please find a copy of my testimony as presented at the National Institute of Standards and Technology Hearing on Improving U.S. Participation in International Standards Activities on April 5, 1990. I request that it be included in the record of the hearing. If there are any questions or comments with respect to my testimony, I can be reached at Ameritech Mobile Communications Inc., 1515 Woodfield Road, Suite 1400, Schaumburg, IL 60173, (Phone: 708-706-7601).

Sincerely,

Bruce R. DeMaeyer, Chairman
Exchange Carriers Standards
Association, Inc.

STATEMENT OF BRUCE R. DEMAEYER

PRESIDENT, AMERITECH MOBILE COMMUNICATIONS, INC.

AND

CHAIRMAN OF THE
BOARD OF THE EXCHANGE CARRIERS
STANDARDS ASSOCIATION, INC.

BEFORE THE

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
OF THE
DEPARTMENT OF COMMERCE

APRIL 3, 1990

INTRODUCTION

Good morning, my name is Bruce R. DeMaeyer, and I am submitting this statement in my capacity as the President of Ameritech Mobile Communications and as the Chairman of the Board of the Exchange Carriers Standards Association ("ECSA"). I have been President of Ameritech Mobile Communications since September 1, 1989. Prior to that time I was President of Ameritech Services, a position I held since April of 1985. I am also a member of the Board of the American National Standards Institute ("ANSI"), of which ECSA is one of the largest members.

I am particularly pleased to have the opportunity to present these comments today because of my involvement in the U.S. standards community and my strong belief that the current private voluntary standards process administered by ANSI is the most sound, efficient and effective means for achieving essential standardization, particularly as it relates to telecommunications products and services. Moreover, based on the performance and results of the present process, there can be no doubt that U.S. interests are not only adequately being represented in the global standards arena, but that they are assuming a leadership position.

For these reasons, I believe it would be a grave error if any effort were undertaken to redesign the domestic standards infrastructure so that greater government involvement would result. Government representatives already play an important role in the development of voluntary standards. As respects

telecommunications, for example, the government is perhaps the largest consumer of products and services, and as a result has an enormous influence on the direction of standards development and the priorities placed on specific projects. This traditional role should no doubt be reaffirmed.

On the other hand, structural modifications to the current process resulting in an increased administrative or regulatory role for the government, or any of its agencies, would only lead to a slower, less responsive system for the development of standards. Resources would not be allocated as efficiently and priorities would be misdirected. As a result, U.S. industry would be negatively impacted because it would find itself in even a less advantageous position for purposes of competing in the global marketplace.

That is not to say, however, that the government has no role to play relative to standards, or that its role cannot be enhanced. At the present time, there can be no doubt that competition is global in nature. This is true for telecommunications and many other industries which benefit from standardization. There also should be little question that there exists a pressing need for the government to enhance the ability of domestic firms to compete in world markets. The task that remains, then, is how to coordinate the efforts of the government and those of the private sector so that foreign markets are made fully accessible and free from artificial barriers to all forms of trade, including standards developed in the United States.

One way would be to establish a well-defined complementary partnership between government and the private sector that relies on the respective strengths of each. Thus, substantive standards development should remain the responsibility of private sector standards developers, and the government should have the task of exercising its influence so that the fruits of the private sector's efforts would be provided the fullest access available to all markets of the world. Such a division of responsibility would not encumber the existing highly productive efforts of the private sector, and would not impose layers of bureaucracy or regulation on a process that has become recognized as the leader in its field. It would, however, serve U.S. interests and make U.S. industry an even stronger competitive force throughout the world. U.S. interests would be able to rely on the technological advancements that readily result from the current standards process.

In support of these views, I would like to present some hard facts. In particular, the success and influence of the ECSA-sponsored Committee T1 stands as a compelling example of the effectiveness of the current voluntary standards system. Not only has T1 assumed the leading position for telecommunications standards domestically, its preeminence is recognized worldwide. I would also like to provide some additional comments on how coordination could be improved between private sector standards bodies and governmental entities.

TELECOMMUNICATIONS STANDARDS DEVELOPMENT ACTIVITIES

The development of standards took on new importance for those of us in the telecommunications industry at the time of the AT&T divestiture. It became clear that we could no longer rely on a monolithic Bell System to ensure compatibility and inter-operability of networks and equipment. Nor could we predict how increased competition for service and equipment offerings would impact our ability to deliver first rate telecommunications services. To say the least, as the President of the service company for one of the Regional Bell Operating Companies, the prospect of operating a large network without standardized equipment and services was frightening to me, as was the possibility that critical efforts in developing more advanced telecommunications technologies would be delayed.

In part, for these reasons, I joined with others in the telecommunications industry, in 1983 in anticipation of divestiture, in an effort to establish a standards development group. The purpose of this group was to prepare for divestiture and the fragmented highly-competitive marketplace which was sure to and which in fact did follow. In particular, we took it upon ourselves to draw up plans that we thought would permit the continued availability of the high quality of telephone service to which we have all grown accustomed in this country. The importance of and the need for developing new services and keeping pace with emerging technologies was recognized as well.

From this effort, ECSA was born. ECSA, a non-profit trade association, was incorporated in the summer of 1983 for the purpose of providing a forum for and representation of wireline exchange carrier interests in connection with standards and related activity affecting the telecommunications industry. ECSA was also formed to provide the sponsoring organization for an independent standards committee. Presently, ECSA has as its members one hundred and fifty (150) wireline exchange carriers, ranging in size from the Regional Bell Operating Companies with millions of access lines, to small rural carriers with only a hundred or so lines.

When we were formulating the T1 committee, we researched other standards developing organizations to look for success and failure elements. We found that all of the successful standards developers were a part of the ANSI federation. ANSI due process concepts fit our needs precisely, and accordingly requested that ANSI sanction our request to become Secretariat of the newly-proposed T1 committee on Telecommunications. ANSI provided provisional acceptance on January, 1984 and permanent accreditation on September 20, 1984. Committee T1 Telecommunication held its first official meeting in February 1984, and commenced its operations under procedures proscribed by ANSI.

As an ANSI-accredited committee, T1 is open in membership to all persons with a direct and material interest in its activities, which, as set forth in its bylaws, include:

> develop[ing] standards and technical reports related to interfaces for U.S. telecommunications networks; some of which are associated with other North American networks. T1 also develops positions on related subjects under consideration in various international standards bodies. Specifically, T1 focuses on those functions and characteristics associated with the interconnection and interoperability of telecommunications networks at interfaces with end user systems, carriers, and information and enhanced service providers. These include switching, signaling, transmission, performance, operation, administration and maintenance aspects. Committee T1 is also concerned with procedural matters at points of interconnection, such as maintenance and provisioning methods and documentation, for which standardization would benefit the telecommunications industry.[1]

From the outset, as required by ANSI, a broad cross-section of the industry has been represented in Committee T1. The Committee currently has ninety (90) members, representing, in addition to exchange carriers such as Ameritech; interexchange carriers such as AT&T and MCI; manufacturers such as Rockwell International, Northern Telecom and AT&T; and members of the user community, including many representatives of U.S. government agencies. Notably, T1's members also include many foreign firms, including those from EC countries and Japan such as Fujitsu, NEC, Seimens, Ericsson and Alcatel. Representatives from foreign telecommunications administrations and associations such as British Telecom and the Canadian Standards Association also participate in T1. In addition, a significant number of foreign

---

[1] Bylaws of Standards Committee T1-Telecommunications, Art. I. § 1.

interests maintain observer status in T1, which entitles them to full access to the Committee's work product. These entities include the PTT of the Netherlands, Telecom Australia, and Telecommunication Laboratories from Taiwan.

Perhaps most important, however, is the high level of productivity Committee T1 has been able to achieve during its short existence. As of last count, fifty (50) standards developed by Committee T1 have been approved as American National Standards. In addition, another one hundred and fifty (150) projects continue to be worked on in Committee T1, many of which will also result in American National Standards.

Thus, in only a little over six years, Committee T1 has been able to establish a forum where over one hundred participants from all aspects of the telecommunications industry have been able to engage in a consensus process and develop technical standards relating to existing and newly-emerging technologies. Such success, I strongly believe, could not have been achieved through government mandate. To the contrary, Committee T1's effectiveness can be attributed only to the voluntary nature of the current process of standards development as managed by ANSI. Through this process, industry participants are able to define priorities and utilize and allocate resources for achieving specific goals in the most efficient and cost effective manner.

What's more, such success reflects T1's effectiveness in managing the flow of critical technical information to interested

parties throughout the industry and globally. Specifically, procedures exist which ensure the timely, comprehensive and cost-effective distribution of information to members and non-members of T1 alike. Moreover, in response to requests from Japan's Telecommunications Technology Committee (TTC) and the European Telecommunications Standards Institute (ETSI), T1 has established arrangements for the sharing of documentation concerning each others respective standards work. T1 also has established a formal liaison relationship with ETSI. It should be noted, however, that the amount of information flowing towards T1 pales in comparison to that which is going in the direction of ETSI and the TTC. While this may merely be a result of the preeminence T1 has achieved in the global telecommunications standards community, it might also illustrate an area in which the U.S. government could exert its influence in an effort to level the playing field.

Committee T1's preeminence throughout the world is reflected in yet other ways. For example, Committee T1 stands as a model for the TTC in Japan and ETSI in Europe. Each of these entities have contacted the Committee T1 Secretariat seeking advice and guidance regarding their structures and procedures. While, of course, these organizations do not mirror T1 identically, its influence is clearly discernable.

Foreign standards bodies have further emulated T1's work product by reproducing T1 standards as their own. In particular, the Canadian Standards Association and ECSA have recently

consummated a publishing agreement pursuant to which the CSA may republish and distribute T1-developed American National Standards in Canada as Canadian National Standards with only slight modifications to reflect Canadian regulatory requirements. Similarly, ECSA has recently extended permission to the Swiss PTT to reprint a T1 standard relating to ISDN signalling technologies for distribution to suppliers of equipment used in the Swiss PTT's internal network.

Mention also must be made of the Interregional Telecommunications Standards Council meeting held in Fredericksburg, Virginia on February 20 and 21, 1990. This meeting was convened at the invitation of Committee T1 for the purpose of urging the International Telecommunication Union (ITU) Administrative Council to consider changes within the International Telegraph and Telephone Consultative Committee (CCITT) structure to maintain its preeminence as a worldwide telecommunications standards body. Specifically, these changes included the need for CCITT to give priority to modernization, flexibility, and efficiency of its organization and working methods. Representatives from telecommunications administrations throughout the world attended, including Europe, Japan, Canada, and Australia. This meeting established even further T1's recognition and leadership position in the international standards community.

Finally, Committee T1's influence internationally is reflected by the large number of contributions emanating from T1

to the State Department's U.S. National Committee, which has the responsibility for U.S. positions to CCITT. This has been particularly the case as respects contributions developed within T1 relating to the emerging ISDN technology. I should also note that the T1 technical subcommittee that has been primarily responsible for these contributions has been led since T1's creation by Dr. William Utlaut of the Commerce Department's National Telecommunications and Information Agency.

Thus, through the success of its efforts to date, Committee T1 has established its positions as a leading, if not the leading body for the development of telecommunications standards throughout the world. It has achieved this position through the use of ANSI's consensus procedures which have permitted it to react quickly and effectively to the ever-changing technological demands of the highly-competitive telecommunications markets within the U.S. and internationally.

WHAT SHOULD BE THE GOVERNMENT'S ROLE

Given such unmitigated success, it is my view, as a representative of the private sector and a highly committed participant in the standards process, that imposing governmental administrative or regulatory control over standards developers in the U.S. would be a terrible mistake. Such a step would compromise the effectiveness of committees such as T1, and potentially redirect their efforts to projects deemed important from a government perspective, rather than as demanded by the

marketplace. This would especially be true if standards developers were made dependent, even to the slightest degree, upon the government for funding. Political or bureaucratic infighting could be rife and budgetary constraints devastating, all to the detriment of the standards process.

But, as I indicated earlier in my remarks, there are initiatives which the government could undertake to make U.S. industry even more successful in its efforts to remain competitive in the global marketplace. Most importantly, through existing legislative authorizations, the Department of Commerce and the United States Trade Representative's office must make every effort to ensure that a level competitive playing field exists throughout the world. Foreign markets must be made free of trade barriers for U.S. products and services. Achieving full and complete transparency of standards on an international basis must also be a primary undertaking.

To ensure that any such efforts are pursued in a coherent fashion will require both greater coordination among the various government agencies involved in standards and trade issues (e.g., the Department of State, the Department of Commerce, and the USTR), and better communications between the private sector and such government agencies.

To achieve improved coordination and communication may be the easiest aspect of all, however. ANSI already serves as a coordinating force for the voluntary standards developers that operate under its auspices, and would be an appropriate and

logical liaison between U.S. government representatives and the private sector. By playing such a role, ANSI would also enhance its position as the focal point for managing non-treaty U.S. positions internationally. ANSI's recently opened Washington and Brussels offices would also enhance its ability to perform such a function.

CONCLUSION

In sum, as a general proposition, the effectiveness of U.S. standards development cannot be questioned. Committee T1, as just one example, has already demonstrated in its short lifetime the preeminence of its technical expertise and the leading position it has assumed in the world standards community. No steps should be taken to hinder these efforts. Rather, a coordinated effort between private industry and all relevant government entities must be developed so that the opportunities for U.S. industry to compete abroad are maximized.