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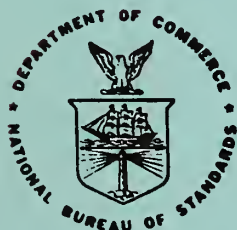
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Eric A. Vadelund, Editor

U.S. DEPARTMENT OF COMMERCE  
National Bureau of Standards  
Office of Product Standards Policy  
Gaithersburg, Maryland 20899

August 1985



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U.S. DEPARTMENT OF COMMERCE

BUREAU OF STANDARDS

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**PROCEEDINGS OF CONFERENCE ON  
INTERNATIONAL STANDARDS**

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Eric A. Vadelund, Editor

U.S. DEPARTMENT OF COMMERCE  
National Bureau of Standards  
Office of Product Standards Policy  
Gaithersburg, Maryland 20899

August 1985

**U.S. DEPARTMENT OF COMMERCE, Malcolm Baldrige, *Secretary***  
**NATIONAL BUREAU OF STANDARDS, Ernest Ambler, *Director***



# C O N T E N T S

Overview . . . . .	1
Conference Opening Remarks Deputy Secretary of Commerce Clarence J. Brown. . . . .	3
Introductory Remarks Chairman, Interagency Committee on Standards Policy Stanley I. Warshaw . . . . .	4
Keynote Address Commissioner, U.S. International Trade Commission David B. Rohr. . . . .	6

## MORNING SESSION - TUESDAY, APRIL 2, 1985

### FEDERAL POLICIES COVERING STANDARDS PARTICIPATION AND USE

#### Moderator

Alan Andersen, Deputy Director, Office of Standards and  
Regulations, Food and Drug Administration

#### Panelists

DoD Policies on Participation and Use of Standards  
Peter Yurcisin, Director, Standardization and Acquisition Support  
Office of the Under Secretary of Defense  
Department of Defense. . . . . 14

The General Agreement on Tariffs and Trade  
Donald Abelson, Director, Technical Trade Barriers  
Office of U.S. Trade Representative. . . . . 18

Competition and Consumer Protection Policies Affecting Standards Development  
Dean Graybill, Senior Staff Attorney  
Bureau of Consumer Protection  
Federal Trade Commission . . . . . 22

Guidelines for Participation in International Standards Activities  
David Edgerly, Manager  
Standards Management Program  
National Bureau of Standards . . . . . 27

Question and Answer Session. . . . . 32

AFTERNOON SESSION - TUESDAY, APRIL 2, 1985

FEDERAL GOVERNMENT/PRIVATE SECTOR INTERFACE

Moderator

William Higgins, Deputy Director  
Directorate of Safety Standards Programs  
Occupational Safety and Health Administration

Panelists

Benefits of the Government/Private Sector Interface

Lawrence Eicher, Assistant Secretary General  
International Organization for Standardization . . . . . 37

ANSI's Role in International Standardization

Vincent D. Travaglini, Washington Representative  
American National Standards Institute. . . . . 41

Federal Government/Private Sector Interface

Melvin R. Green, Managing Director, Codes and Standards  
The American Society of Mechanical Engineers . . . . . 48

The Role of UL in International Standards and Certification

Henry E. Collins, Vice President, Governmental Affairs  
Underwriters Laboratories, Inc . . . . . 53

Question and Answer Session. . . . . 60

MORNING SESSION - WEDNESDAY, APRIL 3, 1985

AGENCY REPRESENTATION OF U.S. GOVERNMENT IN TREATY AND NON-TREATY  
INTERNATIONAL STANDARDS BODIES

Moderator

Guy A. Arlotto, Director  
Division of Engineering Technology  
Nuclear Regulatory Commission

Panelists

Department of Defense Representation in International Standards Bodies

Samuel Miller, Special Assistant  
Defense Material Specifications and Standards Office  
Department of Defense. . . . . 66

International Food Standards and Non-Tariff Trade Barriers

Sanford A. Miller, Director, Center for Food Safety and Applied Nutrition  
Food and Drug Administration . . . . . 72

<b>International Standards in Telecommunications</b>	
Earl S. Barbely, Director	
Office of International Communications Policy	
Department of State. . . . .	77
<b>International Standards Activities</b>	
Edwin Johnson, Director	
Office of Water Regulation and Standards	
Environmental Protection Agency . . . . .	80
<b>U.S. Participation in a Treaty Organization</b>	
Eddie F. Kimbrell, Deputy Administrator, Commodity Services	
Agricultural Marketing Service	
U.S. Department of Agriculture . . . . .	88
<b>Question and Answer Session . . . . .</b>	<b>93</b>

**AFTERNOON SESSION - WEDNESDAY, APRIL 3, 1985**

**AGENCY EXPERIENCE IN USE OF INTERNATIONAL STANDARDS**

**Moderator**

Robert W. Poe  
Office of Quality Assurance and Standards  
Department of Energy

**Panelists**

<b>Experience in the Use of International Standards</b>	
Francis J. Turpin, Executive Director, Technical Harmonization Program	
National Highway Traffic Safety Administration	
Department of Transportation . . . . .	98
<b>DOD Experience in Use of International Standards</b>	
Michael C. Corridore, Director	
Defense Materiel Specifications and Standards Office	
Department of Defense. . . . .	100
<b>A Standard Experience</b>	
Mary C. McKiel, Chemist, Office of Procurement	
Office of Federal Supply and Services	
General Services Administration. . . . .	104
<b>HUD's Role in International Standards Development</b>	
G. Robert Fuller, Chief, Standards Branch	
Department of Housing and Urban Development. . . . .	107
<b>Question and Answer Session. . . . .</b>	<b>111</b>
<b>ICSP Membership. . . . .</b>	<b>119</b>





ICSP Conference on  
International Standardization  
Overview

The Office of Management and Budget Circular A119, "Federal Participation in the Development and use of Voluntary Standards" contains the following:

It is the policy of the Federal Government in its procurement and regulatory activities to:

- a. Rely on voluntary standards, both domestic and international, whenever feasible and consistent with law and regulation pursuant to law;
- b. Participate in voluntary standards bodies when such participation is in the public interest and is compatible with agencies missions, authorities, priorities, and budget resources; and
- c. Coordinate agency participation in voluntary standards bodies so that (1) the most effective use is made of agency resources and representatives; and (2) the views expressed by such representatives are in the public interest and, as a minimum, do not conflict with the interests and established views of the agencies.

The key words in the policy are rely, participate and coordinate. The coordinating body is the Interagency Committee on Standards Policy (ICSP). The ICSP arranged for a two-day Conference on International Standardization in part to determine the reliance and participation levels of Federal agencies in international standards development and use.

The Conference was structured as a series of panel sessions, followed by question and answer periods, to elicit as much interaction as possible. The format proved successful in that the panel presentations initiated an abundance of comments and questions, thereby maximizing information exchange.

Perhaps the most notable feature of the discussions was the variety. Comments and responses were heard concerning process, procedures, funding, representation, policy, law, regulation, metrication, communication and cooperation.

The most notable conclusion that can be drawn is that Federal agencies are relying on and participating in the development of voluntary standards both domestically and internationally. It was shown that (1) the need for international standardization efforts

exists and is growing, (2) the mechanisms, processes and procedures are largely in place, and (3) motivation appears to be a problem area. On the last point, there was a clear call by the public sector for greater involvement by the private sector and an equally clear call by the private sector for greater public sector involvement.

A key point in all the discussions was that industry involvement is absolutely necessary. This point was reiterated by many participants whether discussing international standardization efforts carried on solely in the private sector or as the result of obligations imposed by government membership in various treaty organizations.

The questions of overlap and duplication of effort were rather thoroughly aired. Suggestions were made to establish some procedure or mechanism to avoid such problems. The consensus was that the various international organizations were making efforts to minimize duplication by formal liaison efforts between the various groups involved. A major mitigating factor is the fact that there is overlapping membership in the committees of the various organizations dealing with similar problems or parts of the same problem. There appears to be no question, however, that duplication of effort in the international standards arena is a continuing cause for concern, if only because of the way that various nations deal with the matter.

In any endeavor as pervasive and complex as international standardization, the matter of timely and informative communication is paramount. Each organization has its own procedures and channels for vertical communication within the group. The Conference indicated a need for more inter-organization communication, both between the various Federal agencies and between the private sector groups and the Federal agencies. The discussions revealed that all of the groups involved face similar problems and cross-communication could help resolve them.

In summary, the Conference suggested three areas that can be considered by the ICSP: (1) attention should be paid to the matter of adequate funding and proper participation; (2) efforts should be made to eliminate or minimize, where possible, overlap and duplication; and (3) horizontal communication should be encouraged thus enabling standards personnel in the public and private sectors to view each other as resources.

Eric A. Vadelund  
Editor

## Opening Remarks

Clarence J. Brown  
Deputy Secretary  
Department of Commerce

Welcome to the Department of Commerce, and to this meeting on "International Standardization." Today's conference will focus on Federal agency participation in international standards activities.

In the past years, I have met with people from standards-developing organizations and trade associations. I have been impressed with their commitment to international standardization and to related product certification issues.

Our current trade balance points to the need to do everything we can to increase exports. Standards clearly provide an effective means for U.S. products' acceptance worldwide. We need to strengthen the Government-business partnership in order to advance U.S. trade interests.

Government contributes to a favorable trade environment through General Agreement on Tariffs and Trade negotiations, other high level trade initiatives, and through numerous treaty organizations. Our efforts also need to be aimed at a more practical level. We need to work with the private sector in the standards arena to assure adequate U.S. representation.

In the Commerce Department we have about 550 scientists, engineers, and others involved in standards work through organizations like the International Organization for Standardization, the International Electrotechnical Commission, the American Society for Testing and Materials, the American Society of Mechanical Engineers, and the Institute of Electrical and Electronics Engineers. Such participation represents a large investment of resources. I think that the United States benefits from such involvements. The quality of U.S. standards is readily apparent since many of our standards are "de facto" international standards by virtue of their extensive use. The United States faces increasing competition in trade and should not expect that its domestic standards will continue to be accepted worldwide.

So we welcome the work of this conference. I hope that you will spot actions that the Interagency Committee on Standards Policy can take to improve U.S. effectiveness in international standards. President Reagan is clearly committed to improving our trade position, and that is why Secretary Baldrige and I particularly support this conference.



## Introductory Remarks

Stanley I. Warshaw  
Director, Office of Product Standards Policy  
National Bureau of Standards

Today and tomorrow we will be talking about international standards activities. I'd like to start off the conference by pointing out that these two words, "international" and "standards," may convey different meanings to some of the panelists today and to many of you in the audience.

First, let's take the word standards. Most of us would agree that standards are documents that describe design or performance characteristics of a material or product. In some instances, the standards may define maximum tolerances, or establish levels of acceptance. Conformance to a standard in commerce may be optional or even desirable, but not necessary for marketing a product. In many instances, safety or health considerations may be involved, or compatibility with other products or systems may be required. Then the use of the standard may be necessary to market successfully - and, sometimes, compliance with the standard may be required by regulatory or procurement officials or insurers - thus making it mandatory. The standards of some developers are often employed in certification or accreditation programs that are required in certain sectors of the marketplace.

We have complicated the issue of standards still further by introducing the word international. What is international? If a standard is developed with open participation by anyone from any nation, does that make it international? Is a standard international by virtue of its being used in many nations? Are standards international only when developed by international organizations composed of national bodies that have agreed in advance to recognize such standards? Is there a moral obligation or a legal obligation to employ specific national or international standards?

There are differences in the legal systems of nations. Newton Minow, a former FCC Chairman has pointed out, "In Germany, under the law everything is prohibited except that which is permitted. In France, under the law everything is permitted except that which is prohibited. In the Soviet Union, everything is prohibited, including that which is permitted. And in Italy, under the law everything is permitted, especially that which is prohibited."<sup>1</sup>

Of course, in the United States we permit only the permissible and prohibit what's not! But there are some U.S. laws that result from bi- or multi-national agreements or treaties, where we are encouraged to employ or take note of relevant international standards to satisfy our nation's needs.

As we know, OMB Circular A-119 encourages Federal agencies to use and participate in the development of so-called voluntary standards. This

is deemed to be an efficient use of U.S. resources for Government procurement and regulatory purposes. The Circular is also explicit in directing Federal agencies to be active in both national and international standards activities.

The Interagency Committee on Standards Policy (ICSP) was established by the Department of Commerce to serve as the interagency consultative mechanism required by the OMB Circular A-119, entitled "Federal Participation in the Development and Use of Voluntary Standards."<sup>2</sup> The charter for the committee was approved by the Secretary of Commerce on July 6, 1982, and the committee was established in September 1982.

The committee has already developed four policy documents,<sup>3</sup> published in the Federal Register, and is pursuing their implementation by Federal agencies. These policies are designed to better utilize the resources of the voluntary standards community. Two of them deal with the criteria for incorporating private sector certification activities into agency needs. One deals with self-certification, and the other with third-party certification. Recently, the ICSP published criteria for accepting laboratory accreditation programs<sup>4</sup> that qualify lab testing competences and capabilities. These policies are all in concert with those published by the standards community; namely, the American National Standards Institute in the case of certification and the American Society for Testing and Materials in the case of laboratory accreditation.

Of special interest to those of you in attendance are the policy statements which address participation in international standards activities of both the private sector, such as the International Organization for Standardization and the International Electrotechnical Commission, and the treaty or agreement type international standards organizations, such as the International Organization of Legal Metrology and some United Nations' agencies. These Federal standards policies are designed to encourage a greater partnership between the public and private sectors in order to enhance the value and efficacy of our nation's standards and their employment.

I expect that we'll gain much insight these next two days regarding some of the questions I have raised, and many more that I haven't mentioned. Your active participation in the panel discussions is not only invited, but can contribute greatly to the success of our sessions. The members of the ICSP and I hope you will find this conference to be of value to you in the conduct of your agency's business.

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<sup>1</sup>Time Magazine, p. 73, March 18, 1985.

<sup>2</sup>Federal Register, Vol. 47, No. 211, pp. 49496-49499, Nov. 1, 1982.

<sup>3</sup>Federal Register, Vol. 49, No. 32, pp. 5792-5803, Feb. 15, 1984.

<sup>4</sup>Federal Register, Vol. 50, No. 43, p. 8760, Mar. 5, 1985.

## KEYNOTE REMARKS

DAVID B. ROHR

### INTERNATIONAL TRADE AND INTERNATIONAL STANDARDIZATION

Good morning. I very much appreciate the opportunity to participate in today's conference on "International Standardization." When I received the invitation to speak today, at first I felt a bit reticent about what I could offer in a keynote address to an audience that is composed largely of bona fide experts in the standards field. Clearly, I am no standards expert.

However, I have spent my government career in the field of international trade. As I thought about my remarks today, I considered that an important goal of this conference is to increase awareness that standards, and in particular international standards, have a critical effect on trade. Consequently, what I would like to offer to you this morning are my thoughts on the relationship between standards and trade, and the special role of international standards. While I am only a novice in your field, I have learned that standards can be a vitally important force in mine.

Rarely in our national history has trade had such prominence in our popular consciousness. And trade deserves a high priority on the national agenda. The growth and expansion of international trade that we have witnessed over the last several decades has provided a vital boost to the quality of life throughout the world. During the 1960's and 1970's the volume of world trade expanded at an average annual rate of about 7 percent. That expansion of trade allowed countries with raw material resources and fertile agricultural lands to raise their incomes significantly by marketing their minerals and crops outside their borders.

Apart from deriving benefits from their natural resources, the expansion of trade also has allowed nations to improve their quality of life by devoting their labor and physical capital to large scale production of manufactured goods and providing services. The pressures of international competition associated with the expansion of world trade have encouraged the efficient use of resources, helped to restrain the forces of inflation, and fostered a continuing stream of new products and technologies that have pervasively affected the lives of us all.

Historically, because of the size and diversity of its economy, the United States has been less dependent on foreign trade as a factor in economic growth than most other countries. However, the interdependence of the United States with the economies of other countries is increasing by leaps and bounds. Particularly during the 1970's the inter-relationship of our economic growth and world trade grew markedly.



For example, between 1960 and 1970, the growth of U.S. exports as a share of our gross national product (GNP) rose only from 4.1 to 4.4 percent. By 1980, the export share had nearly doubled to 8.5 percent. Concurrently during the decade of the seventies, U.S. imports as a share of GNP more than doubled, rising from 4.1 to 9.5 percent. It is estimated that in the early 1980's over 5 million workers were dependent on foreign trade for their livelihood. Our manufacturing sector in 1980 exported 19 percent of the goods it produced. The value of our agricultural exports, after more than doubling in the 1970s, now account for over a quarter of farm income.

With this critical and increasing economic interdependence among the nations of the world firmly in mind, U.S. trade policy in the 1980's will be played against a very different background than that of earlier times. The challenge to the trade policy of the eighties is to reconcile all of the benefits of international competition, with the formidable array of trade-related tensions that confront us today.

There is perhaps no more visible sign of the vigorous competition in world trade than the current state of the U.S. trade account. The U.S. merchandise trade deficit has become front page news. Our 1984 trade deficit was \$123 billion, up \$54 billion from the \$69 billion total for 1983.

And the deficit is only the beginning. A severely overvalued dollar has weakened U.S. competitiveness in world trade. Trade frictions with Japan have become acute, intensified by a bilateral trade deficit that has soared to record levels. Add to this the ever-quickenning pace of technological change and the emergence of a number of developing countries as full-scale international competitors and you have a situation that clearly justifies the public concern on trade that has reached alarming proportions.

To respond to this alarm, two powerful forces must be balanced. On one hand, all nations, particularly the industrialized nations, are under enormous pressure to intervene to protect domestic markets and workers from the wrenching changes that are occurring in their economies. On the other, over the long term the decision not to adjust will mean economic deprivation for the very populations clamoring for insulation against change. Those nations which choose to protect themselves from adjustment surely face the threat of a decline in competitiveness in the future.

For the United States, the method of balancing these forces has consistently included a fundamental interest in international trade liberalization and fair market access. The present world trading system, embodied in the General Agreement on Tariffs and Trade (the GATT), is founded on a premise that fair market access and international trade liberalization are compatible.

Trade liberalization is intended to and should ensure the continued fairness of the international trading system and equitable access to

world markets. The international trading system has come a long way from the self-defeating economic isolationism of the 1930's. A great tribute to the success of the international trading system is that since World War II, tariff levels have declined steadily and significantly.

However, success in reducing tariffs has made the traders of the United States aware of newer, more subtle forms of protection--the so-called nontariff barriers. Nontariff barriers come in an almost endless variety, and affect literally every sector of international trade. Among those nontariff measures that concern trade policy makers as potential threats to open and free commerce are subsidies, quotas, restrictive government procurement practices, commercial counterfeiting and . . . as you undoubtedly know, product standards. Any number of U.S. and foreign product standards, testing procedures, certification practices, etc. have been the subject of complaint as having a limiting effect on trade. Trade policy people have also come to realize that standards can be a strong enhancement to trade.

The importance of standards, testing and certification in international trade has not only not been fully appreciated, but frequently overlooked completely. Their impact is enormous. The simplest illustration is found in weights and measures. A generally accepted standard for weights and measures is virtually a prerequisite for the existence of trade on any significant scale. The widespread use of a basic standard for weights and measures strongly facilitates trade. However, the use of differing standards in individual markets tends to limit the free flow of goods.

As a rule, standards perform an extremely essential and constructive purpose in commerce and trade. Most of international trade is based on product standards which usually include terminology, definitions, descriptions, tolerances, performance criteria, test methods and acceptance procedures. If a standard has a wide degree of recognition, it can promote the flow of goods by allowing traders in various areas of the world to know precisely what a product is without seeing it.

Beyond this commercial importance, standards are also essential for the protection of public health and safety, the preservation of the environment, the control of plant and animal diseases, and other public welfare purposes. As a result, many standards are created for purposes that have no relationship to trade or commerce--and quite rightly so. Those in the trade business clearly agree with the objective of most standards being the assurance that products meet certain levels of performance, quality, purity, safety or sanitary conditions. They understand that the primary reason behind the establishment of these standards has little to do with trade. Likewise, they understand that standards are probably intended by their writers to apply equally to all products without regard to their origin.

However, the standards experts must understand that merely because there are differences from market to market, these standards can have an



inhibiting effect on trade. Though this effect is most often inadvertent, it is nonetheless very real. Anyone who has traveled to a country that uses 220 voltage and could not plug an electrical appliance into an outlet understands how differing product standards can result in disrupting trade.

And, to be quite honest, sometimes the intent behind the standard or testing procedure is to impinge more severely upon imports than upon domestic output. Product standards can be constructed to exclude imports in numerous ways.

Required testing and approval procedures, developed primarily for domestic or regional use, can be carried out arbitrarily or in a way that unnecessarily increases the expenses of importers. Certification systems may, because of their internal orientation, either limit access for imports or deny the right of the certification mark to imported products.

As was true for most U.S. trade analysts, my initiation into this type of nontariff barrier effect caused by discriminatory standards and certification systems was in the 1960's. At that time the European regional electrical certification system, CENEL, was formed. The CENEL system was basically closed to non-European electrical products. U.S. firms forcefully pointed out to U.S. trade negotiators that this type of certification scheme could act as a major trade barrier. And for the first time, the U.S. government awoke to the important relationship between standards and trade.

Now standards problems are no longer considered esoteric, non-trade related issues. Last week most every major paper carried stories about U.S. negotiators pressing the Japanese to ease technical standards to eliminate voice-quality requirements and other measures they feel are too subjective and can be used to block U.S. goods. They also want Japan to ease requirements that all sophisticated computer-network equipment be approved, item-by-item, in advance, before it can be installed. These talks are considered so important, the Senate has voted to advise the President to consider retaliating against the Japanese if the discriminatory effect of these practices is not eliminated.

Through their experience with the CENEL system, it became clear to U.S. trade negotiators that while standards had a significant trade effect, the international trading system had no rules to deal with standards. Consequently, a group of countries began in the early 1970's to develop an agreement that would regulate the use of standards and certification systems in international trade. In 1979, as part of the Tokyo Round of Multilateral Trade Negotiations, the Agreement on Technical Barriers to Trade -- "The Standards Code" -- was concluded. It is the first international agreement to recognize the importance of standards-related activities in international trade.

Most of you as standards experts are probably most familiar with the provisions of the code. Its purpose is not to write any standards or to

take away a nation's discretion in using standards to serve the public welfare. Rather, the Code aims to make standards and certification as "trade neutral" as possible. The Code seeks to eliminate the use of standardization and certification as a means to interrupt or prohibit trade.

The Code aims to achieve this goal through the establishment of principles by which countries adhering to the Code should set standards or regulations and test and certify products. The two basic principles of the Code are "national treatment" or treating foreign products as domestic products are treated and "most-favored nation treatment," that is, treating all Code adherents similarly.

Realizing the importance of international standardization, the Code encourages signatories to base domestic standards on international standards wherever they can appropriately do so and to participate in international standards activities. The Code also establishes an information network by which signatories in supplier countries can comment on proposed standards in other signatories. Finally, the Code provides for a dispute settlement mechanism for the resolution of complaints that may arise as a result of a signatory's implementation of the Code.

To illustrate how the Code works, I can use the example of metal baseball bats. In August 1982, the U.S. Government initiated a Standards Code dispute settlement case based on Japanese certification practices for U.S. aluminum softball bats. The essence of the complaint was that the Japanese Government did not provide foreign producers access to its certification system on the same basis as provided to Japanese producers, a violation of the Standards Code.

Metal bats are among several consumer products for which the Japanese government has developed standards for safety reasons. These products must be inspected and certified by the Government before they can be sold. Imports were given certification marks after they were inspected individually upon arrival in Japan (i.e., lot inspected) and destructive testing of 12 out of every 1,000 bats was done. However, domestically produced bats were certified at the factory after they were "type approved" by the Government. In 1980, U.S. metal bat manufacturers began to complain that Japanese Government standards and certification procedures for bats discriminated against them because lot inspection was time-consuming and costly.

U.S. negotiators attempted to resolve the problem through bilateral consultations. These consultations came to a standstill in mid-1982. At that time, the United States warned Japan that it considered Japan's discriminatory certification procedures for bats a clear violation of the Standards Code.

The United States filed a formal complaint under the Code in August 1982, arguing that metal bats were just one example of how Japan's standards



and certification system discriminated against foreign suppliers and effectively blocked import competition. Both Governments conducted intense discussions to resolve the disagreement, and on March 13, 1983, the United States suspended its Standards Code case based on a solution proposed by the Japanese Government. The solution would allow U.S. suppliers to have access, on the same conditions, to all certification systems for metal bats in Japan.

Overall, the Code can be assessed as a success in most of its goals. It has a broad base of support. At present thirty-seven countries have become signatories. While it is difficult to judge the benefits of the Code in a quantitative sense, it seems that information about foreign standards is much more available than it was prior to the Code. Inroads have been made in adding greater transparency to foreign standards and certification systems. The Code has also prompted a series of bilateral discussions on standards issues with the United States' key trading partners.

Of particular note in the context of today's conference is the Standards Code's encouragement to the development and use of international standards. As I understand it, the United States has been involved in international standards work for over one hundred years. At first, most international standardizing activities were the product of professional societies made up of technical experts. They became interested in standards to promote better understanding of new scientific discoveries and to develop safe and practical applications for them. Standards were convenient tools in this effort.

Beyond this scientific purpose, it seems clear that international trade has always been a strong incentive for international standards. This is truly the point at which the worldwide interdependent trading system and standards converge. As industries have broadened in geographic scope, so have standards. In the beginning, national interests dominated the formulation of standards. However, the vast expansion of international trade, not to mention the growth of multinational concerns, have given impetus to the development of international standards. As a result, work on international standards is constantly escalating. For example, in 1970 there were almost 1400 ISO standards, in 1980 there were 4000 and at present there are about 5400.

These factors underscore the importance of international cooperation and coordination in standards-related activities. Not only would international standards, if accepted by regulators and manufacturers throughout the world facilitate trade, but seemingly they could act as the eventual solution to all standards-related trade issues. As I mentioned before, most of the trade barrier effect of standards results from no particular discriminatory intent, but rather merely from the fact that there are differences among the standards.

However, international standards in today's world are not a total panacea either. Some experts complain that international standards work takes

far too long and is incapable of keeping up with the innovative and advanced technologies that have become so important to modern trade flows. Another criticism is that international standards characteristically end up as being the "lowest common denominator." Certainly when many countries participate in any harmonization effort there is a tendency to settle on whatever most parties can accept. In international standards, that could lead to a situation where the cost of participating in international efforts is not justified in terms of results.

It is precisely because international standards are not always what they could be that the Standards Code encourages signatories to participate in international standardizing organizations with a view to harmonizing countries' mandatory standards. Also, the Code recognizes that there may be situations in which the use of international standards may not be appropriate for a particular country.

Dealing with fundamental technological problems can be such a situation. For example, international standards will often be written in metric units and the United States does not use the metric system -- an international standard in this case might be inappropriate for use in the United States.

Other cases in which international standards may not be appropriate are national security requirements, prevention of deceptive practices, protection of human health or safety, animal or plant life or health, or the environment. When a nation feels that its needs in these areas are not met by a particular international standard, certainly it has an acceptable reason to bypass international standards.

While no one can argue that there will be situations where countries will want to take an exception, it is to be hoped that standards makers will closely evaluate the relative merits of international standards before they determine that an individual standard is inappropriate. As someone whose background is in trade, the benefits of widespread acceptance of international standards seems too great to be ignored. If the rules for making goods were the same everywhere, we could certainly avoid the trade distortions caused when standards reflect competing international interests.

So you see, as someone coming from the trade side of the equation, I see standards as a potent force either to facilitate or to limit trade. Clearly, they are far too important to the movement of goods for the trade community not to pay careful attention to both how standards are made and applied. Those of us from the trade side would hope that the obverse is true for the standards writers. We would hope that they are sensitized enough to the critical importance that their endeavors hold for commerce that they carefully consider the potential trade effects of their actions.

As I noted earlier, trade has become a central national concern. In the years to come, even with the best of efforts, the United States is likely to face a series of painful dilemmas in the foreign trade area. There will be no easy answers or paths out of this dilemma. My work at the International Trade Commission proves that to me every day.

Much has been done since World War II towards accomplishing the goal of building an open, competitive world market. We have achieved a great deal of trade liberalization -- and a great deal of economic benefit. Now we must continue to work toward dealing with nontariff barriers. We will have made great strides towards this goal if standards makers follow the ideals of the Standards Code -- and keep an eye to the potential use of international standards. Thank you, and I wish you all the best for a successful conference.



## DoD Policies on Participation and Use of Standards

Peter Yurcisin  
Director, Standardization and Acquisition Support  
Office of the Under Secretary of Defense  
Department of Defense

Good morning ladies and gentlemen. It is a pleasure to be asked to speak to as diversified an audience as this about DoD policies and procedures on use of standards and specifications. DoD has been a part of the ICSP since its inception and we have been actively involved in nearly every aspect of its deliberations. While I have only been the DoD representative for a short time, I am familiar with the important work accomplished and the many activities currently going on.

The Department of Defense Standardization and Specification Program operates under the authority of a 1952 public law known as the Cataloging and Standardization Act. This act was primarily concerned with reducing the variety of items in the Defense supply system to meet similar needs. The act states that it is our duty to "achieve the highest practicable degree possible in the standardization of items used throughout the Department of Defense through the development of single specifications, in the elimination of overlapping and duplicating item specifications, and in the reduction of the number of sizes, kinds, or types of generally similar items."

The responsibility for managing the Defense Standardization and Specification Program is assigned to the Under Secretary for Research and Engineering. Within R&E, delegation has been made in turn to the Deputy Under Secretary for Acquisition Management, to the Assistant Deputy Under Secretary of Defense for Production Support, who is the chairman of the flag rank Defense Materiel Standardization and Specifications Board, and then to my office, the Director for Standardization and Acquisition Support. Under my office is the Defense Materiel Specifications and Standards Office, DMSSO. Mr. Mike Corridore, from whom you will be hearing later in the program, is the director of that office. DMSSO is the real working arm of policy formation, recommendations, and monitoring. DMSSO has a close working relationship with the field offices who directly implement the policies and procedures. They stay in touch with the problems and issues from the field and make recommendations for policy revisions to deal with those issues.

The actual preparation of documents, participation with nongovernment standards groups and with international standards groups, and adoption of nongovernment domestic or international standards, takes place at nearly 100 technical offices across the United States. Our program is decentralized to the greatest extent possible with policy direction coming from my office, but the real action is at these technical centers. Organizations such as the Army Materials and Mechanics Research Center,

and the Defense Electronics Supply Center provide the scientific and engineering expertise vital to the program.

The DoD developed a comprehensive program for the development of specifications and standards for use in procurement of needed materiel. The DoD has the largest collection of specifications and standards in the free world with over 45,000 documents. Our library has been created over time to meet the acquisition needs of the Services. To insure that items purchased by the government are suitable for their intended purpose and to obtain maximum value for the dollars expended, we express our requirements in specifications and standards. Because documents suitable for use in procurement were not available elsewhere, the DoD wrote them in-house. In many cases these documents became de facto standards because they filled identified voids. Twelve-inch square floor tile was first defined by a Federal specification, the now standard four-inch spacing between lavatory faucets first appeared in a Federal specification. MIL-STD-105 has become the widely accepted "standard" for defining sampling plans for acceptance inspection.

DoD engineers responsible for writing specifications and standards realized that there were organizations such as ASME, ASTM, SAE, and others that were developing standards in many of the same areas in which they were working. Many of these standards prepared by nongovernment organizations began to be used by DoD either through direct reference in contracts, or through reference in military documents. In 1960 the DoD issued a formal policy directing adoption of what we then called industry documents. There has been little substantive change to that policy over the past 25 years.

We now refer to those documents as nongovernment standards. We feel that this terminology is more accurately descriptive than the term chosen by OMB - voluntary standards. Military standards are in fact voluntary until selected by a contracting officer and placed on a contract. Once placed on contract, neither military nor nongovernment standards are voluntary. The terminology has however, created some degree of confusion among contracting officers and contractors alike. Calling a standard voluntary gives the wrong implication to the contractor for whom the standard has been made a contractual requirement. The thing that really separates the standards covered by OMB circular A119 from government standards is who the issuing organization is, not the degree of volunteerism in either preparation or application of the standard. This is not an imaginary issue. Lawyers in government contracting offices have actually resisted use of nongovernment standards on contract because of the voluntary implications supported by the OMB circular.

Let me speak briefly about OMB A119 and the DoD's implementation. Others here who were personally involved probably know this history better than I, but the history is important to DoD's implementation of the circular so let me outline what I know of the history. When the issue first developed in the ICSP, several of the member agencies which were having good luck using nongovernment standards suggested that a set of policy



principles be developed by the ICSP to encourage other agencies to make use of this tremendous national resource. As the policy principles developed and neared approval by the full committee, some consideration was given to how the principles should be promulgated. It was decided that more impact could be achieved by having OMB issue the policy than if it were promulgated by the chairman of the ICSP. When OMB issued their first draft in 1976, the DoD was in the process of revising our instruction governing adoption and use of nongovernment documents. OMB's initial effort went beyond the guidelines developed by ICSP in mandating things that we felt were best left to the good judgement of the agencies. As a result, DoD went on record as supporting the principles but objecting to several of the mandatory provisions. The important point though was that circulation of a draft, government-wide policy supporting adoption and participation, lent high visibility and attention to these policies. This high visibility helped "grease the skids" for approval, issuance, and implementation of our revised policies. So although the circular was not signed until 1980, in the late 1970's it was already having a significant impact on activities of the DoD. When the circular was issued, the DoD's program was already well underway and implementing regulations were in place. Issuance of the OMB circular, its subsequent revision and reissuance added impetus to our already successful program.

DoD policy covering participation, adoption, and use of nongovernment standards is included in our overall policy directive, DoD Directive 4120.3. Implementing rules are provided in a separate DoD Instruction 4120.20 - this is the instruction that was issued in 1976. Detailed procedures are included as a separate section of a policy and procedures manual known as the Defense Standardization Manual, 4120.3-M. This section outlines the conditions under which DoD participates, the criteria for adoption, and the procedures for preparing and coordinating notices of adoption.

The way that we measure the success of which I speak is by watching how many nongovernment standards are formally adopted for use in procurement. We have more than 3,500 nongovernment standards listed in our DoD Index of Specifications and Standards (DoDISS) adopted and approved for use. Nongovernment standards are increasing as a percentage of the total number of documents in the DoDISS. We cancel almost as many old Military Specifications and Standards as we write, but nongovernment standards are approaching 8% of the DoDISS, up from 6% in 1982.

Briefly, and in summary, it is DoD policy to participate in the standards development activities of nongovernment standards groups when feasible, economical and to the benefit of the DoD. Further, nongovernment standards are to be adopted and used in lieu of preparing or maintaining duplicative military documents. This is DoD's policy today and has been since 1960. We are constantly doing things to refine the policy and to enhance implementation. Last year a pamphlet describing the preferred procedures for adoption and participation was published and copies sent to over 400 nongovernment standards preparers. This pamphlet, the SD-9, was designed to provide nongovernment standards bodies a road map for



how to interface with the DoD standardization program. Single copies are available free of charge from the Naval Publications and Forms Center in Philadelphia. The response from this publication has been good. A number of organizations with which we have not previously done business have written in to offer their standards for consideration, or to see if DoD personnel wanted to participate. We are intent on continuing to increase our participation, adoption, and use of nongovernment standards wherever it makes sense to do so.

Thank you for giving me this opportunity to tell you about DoD's standardization and specification program.

## The General Agreement on Tariffs and Trade

Donald Abelson  
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Office of U.S. Trade Representative

I intend to address some of the challenges that are before us with regard to using international standards and participating to a greater extent in the international community. These challenges were issued to the U.S. about five years ago when we entered into an official agreement with 36 other countries to facilitate international trade by eliminating barriers that are created by standards related activities.

Two of the principle obligations that the U.S. Government took on at that time, and still accepts, were to use international standards and to participate, to the extent of our resources, in relevant international standards activities. These challenges are significant ones for the U.S. because our past performance is somewhat dismal.

We are a large country. We are a large market. We have our own technologies and it has been a traditional view that international activities are for the foreigners. While certainly we are interested in what goes on, because we want to protect our overseas markets, the adoption of international standards in the U.S. was something that was rarely considered.

I start with the document that Commissioner Rohr mentioned to you. It's the Standards Code. This is a document that now has 37 signatories and it is under the GATT, which is an agreement on trade that has existed for some 36 years. This agreement, the GATT Standards Code, contains two provisions that are particularly relevant within this area of international standardization. The first provision is that the U.S. Government will participate in international activities; that is, that it will make the commitment to be involved and to participate at a substantive level. After making the commitment to be involved there is another provision in the agreement that is even more significant and it is that the U.S. Government will use appropriate international standards. Those are the two relevant provisions of this document. If they had just remained on the shelf, there probably would be a minor effect in the U.S. But they don't. They are, in fact, incorporated in U.S. law and they have been a part of U.S. law for almost six years now.

In 1979, the Congress, in reviewing this agreement as well as other international agreements adopted as U.S. law the principle that Federal agencies will use appropriate international standards. So, for six years it has been a fact of law, of statute, that agencies of the U.S. Government must use international standards. Now there is a caveat, and the caveat is the word "appropriate". That word "appropriate" was put into the Standards Code and into U.S. law to take care of some concerns.

Let me read what the concerns are; there are five of them. The reasons why an international standard would not be appropriate for use by an agency of the U.S. Government are: (1) national security requirements; (2) the prevention of deceptive practices; (3) the protection of human health or safety, animal and plant life or health, or the environment; (4) fundamental climatic or other geographical factors; and (5) fundamental technological problems. Those are the five concerns. Why are they necessary? They are necessary, at least they were necessary in the view of U.S. industry people, because we cannot be forced to do something in the United States that would not be appropriate for our particular usage.

What am I saying? Well let's think of something like our customary units of measurement and other countries deciding to use something called the International System. The metric system is clearly not the choice of the U.S. and one of those five criteria would permit us to continue using our customary measurement system. That is the caveat about fundamental technological differences. On the one hand we have a way to say yes we will commit ourselves to using international standards, on the other hand we have to take those standards into account, look at them carefully, and see whether they are appropriate for our use. But what is important here is that we are under obligation to 36 other signatories of this agreement to make our best effort to join the world in developing international standards and then to come home and use those standards.

Obviously a Conference like this has to recognize that the United States is unique in allowing, permitting and fostering the private sector to be the direct participant in the major international standards bodies; that is, the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). In both we are represented by private organizations--the American National Standards Institute and the U.S. National Committee for the IEC. Now taking those two organizations and putting them aside, because you will hear about them this afternoon, and talking about Federal Government policies with regard to participation in other than the ISO and IEC, I think that we have a very significant problem to address and that is in what manner does the U.S. participate in these other organizations. I will limit my comments to the treaty organizations, those bodies in which or to which the U.S. Government has responsibility. Sometimes in the discussion of international standardization, those treaty organizations are left out, because the private sector is basically thinking ISO and IEC. But from the Government side we think more about the OECD, the Organization for Economic Cooperation and Development, and we think about CCITT, which is the Consultative Committee for International Telephone and Telegraphy, or we think about the CODEX Alimentarius Commission, which is a World Health Organization (WHO) and Food and Agriculture Organization (FAO) sub-body. Dave Edgerly will tell you about the Organization for International Legal Metrology (OIML). In all of these bodies, the U.S. Government is the direct participant.

We have some problems in being the direct participant. The first problem is that it is the State Department that is the official U.S. representative to any of these organizations and the State Department must delegate this responsibility to another Federal Government Agency. Why is that a problem? It really isn't a problem in terms of policy, although it can be; it's really a problem of money. The State Department is under a White House order to cut back the delegations to these international organizations. The theory is



that these are just junkets for lazy bureaucrats who have a good time instead of attending the particular conference. Therefore the delegations are cut back. This is not a desire on the part of the White House; this is an edict. It sometimes results in not being able to send representatives to these meetings who can effectively represent U.S. Government interest and U.S. private sector interest.

Every U.S. Government agency is involved in some way or another. I have a list of agencies with which I deal regularly and it includes practically every Federal Government agency and independent Federal regulatory agency. These are the places in which our experts reside and from which we must draw our resources in participating in international standards organizations in accord with our obligation under the Standards Code and under Federal Law. When we go to these agencies we often find that traveling internationally is viewed as a political perk and the person that attends the meeting is not necessarily the person who has the greatest expertise. It may be the special assistant to the assistant secretary who hasn't taken a trip recently; or we find that the views of a bureaucrat are considered to be politically unacceptable and so that bureaucrat, who may be the expert for the U.S., is barred from attending a meeting. It also may be that there is no Federal Government agency with responsibilities in a particular area. I just got a call yesterday from the Motor Vehicle Manufacturers Association. They are concerned about the noise emission standards drafting activities of the United Nations Economic Commission for Europe. They would like to have someone represent the U.S. at this meeting. It could only be a U.S. Government person as it is a treaty organization. They have approached several different departments in the U.S. Government and no one will attend, no one has the authorization to go to a noise standards meeting because there is no Federal Government noise administration. The EPA no longer takes care of that.

The fundamental problem is how do you represent the interest of U.S. people in an international organization when there is no mechanism to do it. How do you meet the obligation of this agreement to participate? In this case we may very well fail, which is not very encouraging. There are all sorts of other Federal agencies with involvements overseas and you will hear about that tomorrow at the morning session. That session has some of the most qualified U.S. Government people to talk about their direct involvement in these international organizations.

The use of international standards is not just a theoretical issue; it is not one that exists simply on paper in terms of documents or circulars; it is actually a way to help the United States sell more and if we need anything at this moment in history it is to sell more, to export more. If you take a look at the overall trade balance between the United States and all continents of the world, you'll be amazed and shocked. One way that we can export more is to secure access for our products in foreign markets. Part of that access is in adhering to the standards that are adopted internationally because more and more countries are going to look towards the international standards and say that's what we should be adopting.

With major industrially developed countries we increasingly find that technical trade barriers become a very important issue. Over the weekend, the President dispatched to Japan a special envoy. He went to talk about standards. He went to personally appeal to the Prime Minister that Japan

adopt Federal Communications Commission type standards for telephone equipment. The President sent such a high level official to meet with the Prime Minister of our major trading partner to talk about standards because it is the most significant issue at this point. Now this exists elsewhere, but with Japan we find that constantly we run into a problem where we have one set of standards, they have another set of standards, and we have to try to find a way through that. Other than sending a White House official to the Prime Minister, there are some mechanisms to resolve such problems. One mechanism is to send our experts and their experts to Geneva to sit down in joint meetings on telephone equipment, pesticide residues, food additives, and the like.

This is a continual process, it is not just a single example at one point in time. We find over and over and over that we need access to these international organizations to resolve disputes. Unfortunately, it has also come to our attention, within the last three years, that for political reasons we are not allowed to go overseas. U.S. Government experts may not have access for political reasons. These reasons may have to do with a domestic debate, a decision by one element of our constituency that the issue should not be discussed. Its unfortunate that, in that kind of internal political debate, the most affected party is the U.S. trading community. Because if we refuse to discuss an issue internationally, it is not as if our views are represented by somebody else, it is usually that we are not represented at all.

I put these points to you as a challenge that we have to take up and that we have to address very seriously. In fact, if things go well and we have our way at my office, we will be initiating a new round of trade talks. In this new round of trade talks, which may end in 1990, we hope to achieve even greater commitments on the part of our Government to international standardization and in particular to acceptance of test data generated overseas. Of course, the reverse of that is greater overseas acceptance of test data generated in the United States. How do you gain greater acceptance of test data? You can only do it on the basis of agreed international standards.

So we have before us an agenda that takes up this challenge and that is this new round of talks. I hope that as you address these issues during the course of this Conference, you will also take up this challenge.

## Competition and Consumer Protection Policies Affecting Standards Development

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Bureau of Consumer Protection  
Federal Trade Commission

I greatly appreciate the opportunity to serve as a panelist on the opening day of ICSP's Conference on International Standards. Our panel's assignment this morning is to discuss federal policies covering standards participation and use. In this connection, I will discuss those federal policies central to the mission of the Federal Trade Commission, namely consumer protection and the preservation of competitive markets. You should know that the views expressed are my own, and do not necessarily reflect the views of the Commission or any individual Commissioner.

The voluntary standards system is a particularly intriguing topic from a competition and consumer protection standpoint. On the one hand, private standards setting is a type of industry self-regulation that typically enhances competition and advances consumer welfare. Thus one could argue that standards setters make the Commission's job that much easier. On the other hand, standards development presents opportunities to industry participants that wish to inhibit the entry of competitors into the market or use standards to deceive consumers as to the safety or efficacy of their products. This is not to say that successful manipulation of the standards process is a common occurrence. However, given the enormous influence of standards in the marketplace, the potential for misuse of standards is something that law enforcement agencies must be concerned about.

### Applicable Laws

I should first describe the statutory framework for these policies. At the federal level antitrust and consumer protection policies are principally embodied in the Sherman Act and Federal Trade Commission Act. The Sherman Act prohibits, among other things, concerted activity of individuals or groups that unreasonably restrain trade. The Justice Department is authorized to bring civil or criminal actions under the Act, and private parties can bring lawsuits for damages. Under the Federal Trade Commission Act, the Commission also has the authority to prohibit unreasonable restraints of trade under the rubric "unfair methods of competition." Under its statute the Commission may further prohibit "unfair or deceptive acts or practices." The Commission



has a number of enforcement tools at its disposal, including the issuance of administrative cease and desist orders and the institution of civil penalty actions in the federal courts against those who violate the Commission's orders or trade regulation rules.

### The Applicability Of These Laws To Standards Activities

In reviewing the propriety of private standards activities under these statutes, law enforcement agencies cannot ignore the competitive benefits that typically flow from these programs. Perhaps the most significant benefit is the reduction of transaction costs. Standards are a highly efficient means for buyers and sellers to exchange information on complex product attributes. For instance, building contractors can specify the minimum quality of cement, steel, and other materials they want by simply referencing relevant standards in procurement contracts. If necessary, they can also be assured that particular brands of these materials conform to the standards by specifying in the contract that materials must be approved by third-party certification laboratories. This saves the contractor from having to buy equipment or hire experts to conduct independent tests on each item purchased. Standards also ease the introduction of new technologies by enabling innovative manufacturers to demonstrate the safety or efficacy of new products; enhance consumer confidence by setting minimum quality or safety levels; and reduce production and distribution costs by eliminating superfluous product varieties.

However, standards development also presents opportunities for illegal conduct to industry participants who have a commercial interest in the outcome of the process. Because of their technical expertise, industry participants may be in a position to exercise a disproportionate and unreasonable influence in the process to inhibit innovation, restrict entry into their markets, or mislead consumers. The potential for harm is especially great when the standards are referenced by local, state, or federal government. This potential for harm was recognized by the Supreme Court in the recent case of American Society of Mechanical Engineers v. Hydrolevel.<sup>1</sup> The Court's description of ASME's influence is equally applicable to many other standards developers:

ASME wields great power in the economy. Its codes and standards influence the policies of numerous States and cities, and, as has been said about "so-called voluntary

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<sup>1</sup> 456 U.S. 556 (1982).

standards" generally, its interpretation of its guidelines "may result in economic prosperity or economic failure, for a number of businesses of all sizes throughout the country," as well as entire segments of an industry.<sup>2</sup>

There are no bright lines that automatically define unreasonable standards or unreasonable standards actions. However, certain types of activity clearly raise concern when the standards developer has substantial market power: (1) promulgation of standards that explicitly or implicitly restrict product designs without a sound factual or theoretical basis for the restriction; (2) promulgation of standards that include testing or labelling procedures that misrepresent the safety or efficacy of conforming products; (3) unreasonable failure by standards developers to modify standards to accommodate new products, technological change, or changes in knowledge, and (4) unreasonable delays in making such modifications.

I should emphasize that, from an antitrust standpoint, it is only standards that unreasonably restrain trade that are of concern. It is not the mere fact of exclusion of a product that identifies an unlawful standard. Rather it is the basis and extent of the exclusion that is the focus of our concern. The exclusion should not exceed that which is reasonably necessary to achieve the legitimate goals of the standards and certification organization.

Since the focus of this conference is on international standards, I should mention that the Commission, under certain circumstances, can take a action against standards activity that impacts on international trade. The clearest case would be where a domestic standard unreasonably restricts foreign competitors from selling their products in this country. The Commission could act to prohibit this restraint if we had jurisdiction over the standards developer and could prove that this restraint of trade affects domestic interstate commerce.

#### Federal Trade Commission Activities In The Standards And Certifications Area

The Federal Trade Commission's efforts in this area have been aimed at protecting consumers and competition without disrupting the beneficial activity of standard developers. The Commission activity is divided into three areas: an industry-wide rulemaking; case-by-case litigation; and an intervention-advocacy program.

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<sup>2</sup> Id. at 570.



## 1. Rulemaking

The Commission is now in the final stage of a rulemaking proceeding aimed at identifying any industry-wide unfair methods of competition that may exist among domestic standard developers or certifiers. In April 1983, staff recommended that the Commission address the problems found in the rulemaking record by bringing individual cases where appropriate. At that time the staff further recommended that the Commission promulgate a rule to remedy a perceived failure of standards developers to handle complaints that their standards unreasonably restrain trade. However, the Commission reopened the rulemaking record to invite public comment on whether the landmark Hydrolevel decision in the Supreme Court and other recent developments may have prompted standards developers to change their complaint handling procedures. The Bureau of Consumer Protection is now reviewing a staff recommendation and will make public its recommendation to the Commission.

## 2. Case-by-case

While the rulemaking proceeding is continuing, the staff of Bureaus of Consumer Protection and Competition are reviewing additional standards and certification matters that may raise antitrust and consumer protection problems. Our basic approach is to focus on cases in which the standards organization or certifier has considerable market power. For example, when a standard is incorporated into building codes, the standards organization that develops the standard acquires market power.

On July 26, 1984, the Commission accepted, subject to final approval, a consent agreement with the American Society of Sanitary Engineering. The complaint, published with a consent agreement, alleges that ASSE unreasonably restrained trade by refusing to extend standards coverage to an innovative plumbing valve produced by a small business. ASSE had already written standards covering competitors' products. The complaint asserted that as a result of ASSE's refusal, sales of the innovative product were unduly restricted in numerous state and local jurisdiction that rely on ASSE standards.

We are also investigating a number of additional matters in which complainants have alleged that standards and certifications have kept small businesses out of the market or deceived consumers. However, the nonpublic nature of our investigations prevents disclosing specific details.

### 3. Advocacy and Intervention

The Commission also has an advocacy and intervention program that seeks to encourage government agencies that rely on product standards to do so in a way that enhances competition and consumer welfare. Government selection of a particular standard as a basis for regulation, or of a particular certifier to evaluate compliance with its regulation, can have a significant competitive impact. Unless government agencies are sensitive to the competitive implications of their actions, and take steps to minimize any resulting adverse competitive impact, their reliance on standards and certification may unnecessarily harm competition and consumers. Our role here is essentially to provide state and federal agencies with information, analysis, and encouragement on the procompetitive use of standards.

We have also co-sponsored two projects aimed at improving the building regulatory process. One of these projects is aimed at developing models of efficient and effective code administration for use by states, in an attempt to speed up the building permit and approval process. Another project is examining the approval process for building products in order to find ways to speed up the evaluation and approval of innovative products and methods.

I hope this has given you at least of glimpse of how federal policies favoring competition and consumer protection impact on standards development. In closing, let me again thank the ICSP for this opportunity to discuss FTC's role in the standards area.

# GUIDELINES FOR PARTICIPATION IN INTERNATIONAL STANDARDS ACTIVITIES

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National Bureau of Standards

## Introduction

Several years ago the Interagency Committee on Standards Policy (ICSP), established a task group to develop guidelines covering agency and employee participation in international standards activities. I was pleased to have the opportunity to chair this group because it gave me a chance to work with other agencies in developing advice aimed at strengthening the effectiveness of government participation in the international standards arena. Our work was completed last February with the publication in the Federal Register of the "Guidelines for Participation by U.S. Government Agencies, Employees, or Representatives in International Standards-Related Activities". I hope that you are familiar with the Guidelines and that most agencies have already adopted them. In case you are not familiar with them, they will be appended to my paper in the proceedings of this Seminar.

The decentralized nature of the U.S. standards system poses a unique challenge in terms of assuring effective United States representation in the international arena. According to the recently issued NBS Special Publication 681, entitled "Standards Activities of Organizations in the United States", there are some 420 nongovernment organizations involved in developing standards in this country. Of the total current population of 80,000 standards in the United States, about half come from these 420 nongovernment standards groups and the other half from government agencies. The Department of Defense alone is responsible for almost half of the total population. On the international front, NBS Special Publication 649, entitled "Directory of International and Regional Organizations Conducting Standards-Related Activities", reports some 272 international or regional organizations involved in standards activities. This includes both intergovernmental (treaty) and nongovernmental bodies.

It was in recognition of the decentralized U.S. standards system, and the need for some expression of what government's role should be in that system, that OMB Circular A119 was developed and issued. As you know, it encourages participation in and use of domestic and international standards within the boundaries of agency mission and resources. As a policy document, A119 underlines the importance of participation in the standards arena, both domestic and international. It was a long time coming and clearly encourages increased interaction between government and the private sector standards community. It also directed the establishment of the Interagency Committee on Standards Policy which is proving to be an effective means for coordinating government wide standards issues.



## The Task of Developing the Guidelines

Even though A119 endorses government participation in standards activities, it is still a formidable task in trying to decide which standards activities and organizations are important to government and deserving of support, given the large number of standards developing organizations, both national and international; the complexity of dealing with a decentralized standards system; and, the limited resources available for standards activities. Another important point is that the 272 international and regional standards bodies mentioned above include a number of organizations in which the United States Government is the member body. For these organizations, it is important that government reach out to the private sector in assuring that their interests are adequately represented in those international organizations in which government is the member body. Thus, the job facing the Task Force was to develop guidance which, on the one hand, addressed how government should be an effective participant in cases where the private sector was the member of the international organization and, on the other hand, how government should be an effective member body to an international standards organization in terms of assuring adequate U.S. representation.

It was with the above considerations in mind that the Task Group set out to do its work of developing guidance that would be useful to agencies and/or employees, depending on the various roles that have been mentioned. In my opinion, one of the more positive aspects of the Guidelines is that they do recognize that government's responsibilities differ depending upon whether participation is through a private sector member body or whether government itself is the member body. It was also our goal to try and make the guidelines covering both roles as compatible as possible, particularly on such important points as voting on draft standards.

### Section I Government as the U.S. Member Body

Section I of the Guidelines is devoted to organizations in which government is the U.S. member body. In such cases, particularly as regards treaty organizations, a lead agency is designated by the Department of State and generally looked to by State for developing U.S. positions taken within the organization. The section further distinguishes between plenary meetings of organizations where U.S. delegations and position papers are formally accredited and approved by State, and technical level meetings where the lead agency takes on the approval and accreditation functions. It is in the latter case where most standards related activities occur and for which the lead agency is responsible for assuring adequate United States representation.

Several points in Section I are worth noting. First, the Task Force felt it important to draw attention to the need for agencies to seek balanced representation of interests when developing U.S. positions on draft standards. This is particularly critical where the proposed international standard may measurably affect trade, or may be adopted as law or regulation in the United States. We felt it important in such cases to draw attention to the need for the lead agency to seek representation from industry, other

agencies, State and local governments, labor, universities, and the consuming public. Obviously, how far an agency can go in assuring balanced representation will be tempered by available time and resources. Nevertheless, every effort should be made to assure that affected groups have the opportunity to participate in the development of the U.S. position.

The Task Group also devoted a lot of emphasis to steps that agencies should take in preparing delegations to participate in international standards meetings. The emphasis is that a U.S. delegation has to be prepared not only for the substance of the standards meeting, but also for possible side issues and actions that can have a significant impact on the success of the delegation. Along these lines, we emphasized the importance of continuity of representation as a means of assuring the success of U.S. delegations. Having delegates who have followed the development of a standard through a number of international meetings and who know the history and rationale of changes that have taken place in the standard is indispensable in terms of assuring effective U.S. representation.

Perhaps the most important subject the Task Group had to deal with, and also the one which provided the most difficulty, was developing guidance on voting on draft international standards. We looked at those that were available from private sector organizations like the American National Standards Institute (ANSI), the U.S. member body to the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). It was the feeling of the Task Group that every attempt should be made to have uniform voting criteria between government and the private sector, regardless of whether a government agency or a private sector organization had the role as U.S. member body. After all, to have the U.S. vote "yes" for one reason in organization A, and "no" in organization B for the same reason would be unacceptable and potentially damaging to our image and credibility. We discovered that uniformity with ANSI was possible, but with qualifications. These qualifications bear mentioning because they are important and will have an effect on those of you who participate in U.S. Technical Advisory Groups for ISO and IEC committees.

First of all, the Task Group had to consider that we were developing guidelines intended to cover all international standards organizations, voluntary and intergovernmental, in which agencies or employees participate. The ANSI guidelines cover only ISO and IEC. Secondly, we recommended that in developing a proposed vote, consideration be given to the impact of existing Federal regulations or policies on the standard under consideration. ANSI guidelines are silent on this point. It is generally felt that it is the responsibility of Federal agency participants in U.S. Technical Advisory Groups to evaluate draft ISO and IEC standards in light of existing regulations and policies. To draw attention to the fact that this is your responsibility as a government member of a USTAG, we have included such guidance in Section II, which deals with organizations like ISO and IEC - those in which government is not the member body. The assumption on the part of ANSI that agencies are ever vigilant of ISO and IEC activities which could impact upon Federal regulation or policy is, in my opinion, a little risky, and I would like to find some way to make government review of ISO and IEC activities more systematic. Perhaps this is an area for consideration by ICSP.



There are two other important differences between the ANSI and ICSP voting guidelines that bear mentioning. First, ANSI recommends that the U.S. should vote "no" on an ISO or IEC standard when no U.S. consensus position can be established on a vote, or when the U.S. feels there is no need for the standard. The Task Group did not agree with this reasoning. In our opinion, a "no" vote may result in the defeat of the standard and, therefore, should always be accompanied by defensible arguments. Absence of a consensus among U.S. interests does not seem to be reason enough to jeopardize the international standard. Accordingly, the Task Group recommended that in the absence of a consensus, the U.S. should "abstain" from voting on the draft. As regards the question of need for the standard, the Task Group recommended an "abstention" rather than a "no" when no national standard, regulation or Federal policy exists and there is no intent to develop one. The rationale behind the abstention rather than negative is that the U.S. should not stand in the way of a standard being initiated if there is agreement among other nations as to its need and importance. We have made ANSI aware of the differences of view regarding these two points and hope eventually to come together on them. However, for the present, the differences do exist and those of you currently participating in U.S. TAGS to ISO and IEC committees should be aware of them.

## Section II Government as a Participant

Section II of the Guidelines deals with participation in standards activities where government is not the member body. In developing this section we obviously had in mind participation by government agencies and employees in ANSI activities relative to U.S. membership in ISO and IEC. However, the section also pertains to activities of many other international technical and scientific organizations involved in drafting standards where U.S. membership is outside of government. Generally speaking, the Task Group divided government participation in such organizations into three possibilities:

1. an agency may be designated by the U.S. member body to function as a secretariat of an international standards committee, subcommittee, working group or task force;
2. an agency may be requested by the U.S. member body to function as administrator of an advisory group for coordinating U.S. participation in an international standards activity; or
3. agency employees may be invited to serve on established U.S. advisory groups or as members of U.S. delegations to international standards meetings.

The guidance included in Section II relate to these three roles and stress the importance of agency and employee support to U.S. member bodies in these type of international standards activities. For example, the Task Group felt it important to emphasize that before accepting responsibility as secretariat or advisory group administrator of an international standards activity, agencies should thoroughly explore the resource implications and match to mission of such activity and make sure that the work can be completed in an effective and timely manner. The Task Group also felt it important to stress that agencies and employees have a responsibility to represent the public

interest of the United States in the broadest sense, which means the interests of those parties who are substantially affected by the standards under consideration including manufacturers and producers, industrial users, distributors and retailers, government agencies, individual consumers and the public at large.

Perhaps the most important piece of advice offered in Section II is that in the three areas that agencies and employees might play a role, they are responsible for adhering to the working procedures of both the parent international standards body and the respective U.S. member body through which their participation is channeled. What happens when such procedures conflict with the ICSP Guidelines? There is really only one area where such conflicts might arise and this deals with the question of voting on draft standards. It has already been pointed out that there are two areas of difference with the ANSI guidelines for ISO and IEC. Additionally, the ICSP Guidelines recommend that agencies and employees consider the impact of regulation and Federal policy when developing their comments on draft international standards. If in your standards work you run into a situation where you consider a proposed U.S. position as being in conflict with the public interest or the interests of the Federal Government, you should attempt to resolve the conflict within the framework of the U.S. advisory group or delegation on which you are serving. If unsuccessful, you should make your position clear in writing to the U.S. member body for the particular organization in question and inform your agency of the perceived conflict.

### Summary

In summary, the ICSP Guidelines were developed with the intention of providing practical advice to agencies and employees that will help to improve government's effectiveness in the international standards arena. The Task Force feels that we have accomplished this goal. However, we also feel that there is always room for improvement and would welcome your comments and suggestions. Finally, I hope that those responsible for issuance of standards policy within agencies will recognize the importance of early adoption of the Guidelines and of assuring their distribution to all standards participants. To this end, the NBS Office of Product Standards Policy is ready to provide you with assistance in your plans for implementation.

What obstacles exist, if any, for domestic manufacturing or marketing interests to select and finance the travel of qualified government staff to international standards meetings?

Don Ableson:

It would depend on the agency with which you are dealing. I am not an expert in this area of Federal law, but it probably would be the case that a regulatory agency could not accept money from a private sector body as it would be viewed as unduly influencing the decision of that regulatory agency. So that would be the major barrier.

Peter Yurcisin:

In DOD, it would be specifically against the standards of conduct and contrary to the regulations. The intent of the question obviously is to draw out whether we can improve our representation overseas by getting some other money into it, but it doesn't look very much like its a good way to go.

Please briefly discuss the meaning of the two terms, standards and specifications, how do they differ, and might they in fact be similar?

Peter Yurcisin:

The simplest way to distinguish them is that the specification itself is the requirements document. It is the document called out in a contract in an aquisition process. A standard is a document which is a compendium of the engineering information and data or related supplemental information and support of a specification. We generally refer to the specification as referencing standards, and when the specification is cited in a contract, in that indirect process, its citing both the specification and the standard.

Will the FTC proposed trade rule require modification to OMB Circular A119?

Dean Graybill:

I think two things need to be addressed here. One, at this point there has been no decision that there will be a trade regulation rule. As I said, there will be staff recommendations to the Bureau of Consumer Protection which ultimately the five member commission will decide. I have not thought about that particular question before, but I would guess that if there were to be a standards rule, I can't really see that that would require modification to the OMB Circular. FTC staff participated on the ICSP Committee and, if you read the Circular, you will see that as a result of our efforts and others, there is language in the OMB Circular already which, in effect, asked agencies to be sensitive to consumer protection and the



competition issues when they rely on standards. The OMB Circular doesn't really provide a law enforcement remedy and it doesn't purport to further the consumer protection or antitrust laws. A standards regulation rule is just another tool that the agency would use to enforce the laws and, in that sense, I don't think it really changes the basic relationship of the two.

**How do the efforts of OIML get transferred to the weights and measures official in Peoria?**

**David Edgerly:**

I often draw a parallel between the problem that we have in this country in terms of seeing to it that international requirements are accepted at the local level with what the Common Market must have in trying to harmonize requirements among ten nations with five or six different languages. In this case, when it comes to measurement law or regulation, we are dealing with the fifty states. That means we must work through the National Conference on Weights and Measures for which the NBS, office of Weights and Measures, provides a secretariat function.

OIML is in the business of adopting model regulations that deal with performance of instrumentation of all types. It's my responsibility as a U.S. representative to try and bring these model regulations home and have them adopted in Federal agencies and by States that have similar requirements. We have been very effective in working with the fifty state jurisdictions through the National Conference. I would say that we have been successful in the very basic areas of mass, length, volume and temperature in getting state requirements to be uniform, or at least not in conflict with the international requirements.

We are working in some new areas such as pollution measurement and medical instrumentation. That will require me to spend more time interacting with Federal agencies that have these basic responsibilities. The two basic criteria and mechanisms that I use are the National Conference on Weights and Measures, which are the fifty state authorities, and the Federal agencies that have unique regulatory authority in each given area.

**What is the point of the recognition of compliance tests to US standards and regulations done by foreign laboratories?**

**Don Abelson:**

Turn it around and talk about what is the benefit for foreign countries to accept data generated in the United States according to the foreign standards. Let's just take a pharmaceutical. This is a product in which basically we are equal in terms of trade. We ship out as much in pharmaceuticals as we take in, so its about an equal trade volume. If we have to generate one set of test data for approvals in the U.S., that may take anywhere from 2 to 6 years and may cost about two million dollars. If we have to regenerate that data for every country to which we send the pharmaceutical, you can see immediately that the cost becomes prohibitive. What the producer could end up doing is producing in the foreign country because its much simpler. What we want to try to get towards is a case where

we generate the data once and it is accepted all around the world. This kind of effort is being undertaken for test data in the chemical area by the Organization for Economic Cooperation and Development. The good is that we get a quid pro quo; that is, if we accept it here, they accept it there. Obviously, we would not agree to accept data generated elsewhere to U.S. standards, unless the country from which the data was coming was accepting data generated in the U.S.

From a standpoint of public health and new product approval, the FDA very much wants to be in a position to be able to accept foreign data as fulfilling the obligations to demonstrate safety and effectiveness. We would want to be in a position to make use of that kind of data as long as there are no particular differences in the population studied.

**Has the FTC ever taken action where an International Standard was involved? If so, what was it?**

**Dean Graybill:**

We basically have jurisdiction over domestic standards developers. What constitutes a domestic standards developer, however, may be a somewhat slippery concept. The easy case is one where a domestic standards developer produces a standard which is referenced throughout the country. Therefore, a foreign producer, in order to sell in this country, finds that he has to meet the standard. In the rule making proceeding, we had gotten some allegations of problems, where it was alleged that producers of various building materials, who had been selling their products for years and years in the European market, had been unable to enter this country because of standards. However, in rule making, while these cases were studied a great deal, none has resulted in a case. We also are starting a litigation project, but that is fairly new. Frankly, the only public case we had so far is the one I discussed, which is the American Society of Sanitary Engineering, and that was a domestic organization.

**If we must use international specifications or standards, how can we make them available to be seen and used at the lowest levels? Most must be purchased from non-government organizations (e.g. ISO, IEC) where no budget item exists.**

**Peter Yurcisin:**

Those international documents that we utilize and adopt are available through our distribution center in Philadelphia. One of the trade-offs in using private sector standards is that they must be purchased from independent groups. Its a touchy issue and I think its one that everybody has to be concerned about. How far do we go and are they generally available? All I can say is, that for those that have been adopted, they are available through the FTSC in Philadelphia.

From the NBS standpoint, and the Standards operation there, is there any help that might exist for people as far as getting copies of things going on in foreign countries?

David Edgerly

Yes. There are responsibilities under the GATT. Technical offices exist in the DOC (NBS) and in USDA. These offices issue, on a very regular basis, notices of draft foreign regulations and standards that may have an impact under GATT. Also, within our technical library, we have a comprehensive index of international standards on microfilm, which are available. We get thousands of inquiries from the private sector and Federal agencies regarding these.

Is the U. S. at a disadvantage in ISO and IEC since we are not represented by an organization affiliated with the Federal Government?

Don Abelson:

No, we are not at a disadvantage, because the Government could never be as efficient as the private sector working in its own interest. That is the theory behind having ANSI and the U.S. National Committee to the IEC represent U.S. interest. It is basically to remove the bureaucratic factor or to keep it at a minimum. I believe this view is proven by the amount of difficulty we have in representing ourselves in those bodies where, by treaty, we must appear. We run into things like arbitrary thirty percent cut of delegations I mentioned. There is no possibility of being flexible. At least in the private sector, if there's money, there's a way.

Would not U.S. trade be enhanced by Federal support of metrication?  
Current Federal policy has diminished such support.

David Edgerly:

Obviously the U.S. is an island in the world in that we have not accepted metric as widely as many proponents of the metric system would like to have seen us accept. I don't see, at least in the activities in which I'm involved in the international standards arena, that we are very much disadvantaged by having the customary system. It is not a question of its legality, it's a question of its practical use. I think the feeling is that it would be up to the private sector to decide whether or not that use should be more active or less active. I would reiterate that, as far as I can see in international trade, it has not been a sizeable disadvantage to us.



**Don Abelson:**

I would agree. In fact, the studies we have done over the past six years have shown that non use in the United States of metric measurement has not affected those companies that want to trade. If they want to trade with a country that has metric measurement, then they adapt it for those exported products. In some instances, they adapt it for the internal market, but the mere fact of the measurement system is not a barrier. There are other factors.

**You say that preparation of documents, participation in voluntary standardization groups, and adoption of standards is done in 100 groups in DOD. Does this decentralization contribute to redundancy, conflict, and overlap in DOD standards and specifications?**

**Peter Yurcin:**

We do have a problem, sometimes, with redundancy. I think the participation of all these groups helps us through this process and makes for better specifications. We have specifications that are geared for specific uses, and the system allows us to get out there to all the people that have an interest in that particular commodity. Our system of coordinating these particular kinds of documents allows for everyone to have their say. The fact that there are 100 or more of these groups does not mean that there are 100 different approaches. The system is channeled to where someone has overall responsibility for that commodity. They coordinate the entire process; they manage it; they see to it that it is updated and processed and coordinated and have the final decision in managing that process. Where we run into a problem is that we have so many specifications and standards that it is almost physically impossible to go back periodically and bring some of these up-to-date. Where there is high usage, we attempt to make sure that it covers today's state-of-the-art and our particular attention these days is to increase that effort.

## BENEFITS OF THE GOVERNMENT/PRIVATE SECTOR INTERFACE

Lawrence D. Eicher  
Assistant Secretary-General  
International Organization for Standardization (ISO)  
Geneva, Switzerland

It is a distinct honor and pleasure for me to be invited to be with you today, and to share some of my thoughts on the importance of international standardization work. I am particularly pleased to see many of my old friends from my former position as a member of the Interagency Committee on Standards Policy working for the National Bureau of Standards.

Many of you are familiar with ISO, and may perhaps have been involved in some of its technical work. However, I felt it would be useful to distribute our brochure, which should answer any basic questions about ISO, and also a copy of the annual report of the International Electrotechnical Commission, our sister organization dealing with electrotechnical standardization. I mainly speak about ISO, but a great deal of what I have to say is of a general nature, and applies to the whole field of international standards (and therefore to IEC matters) since ISO and IEC by mutual agreement constitute a system for international standardization as a whole.

You can see from the ISO brochure what national institutes are members of ISO and what the general procedure is for finding and building international standards agreements - as well as something about the work of the central secretariat in Geneva. In describing the sheer common sense of standards, you will notice also that we promote an international point of view (this is our main objective) but not in opposition to national standardization. In fact, we are keenly aware of the fact that standardization achievements are rooted in national soils.

In order to discuss the government/private sector interface in the international dimension I would start by reviewing what I understand as being the interest of governments in standardization in general. I will focus on four reasons why governments are interested in standardization.

1. Governments are generally interested in the economic well-being of their country and see standardization as contributing to this objective. Standardization is understood to be well-embedded in production and an important component in output, quality, interchangeability etc.

2. Another more specific use of standards from the government point of view is where it feels the need to promote some improvement regarding safety, health, environment or other public issue. Governments need reference to practical standardization agreements in doing so. Notice that I have not said that this leads to regulation. Government interest in standardization often avoids regulation with its attendant delays, expense, brain-teasers and loopholes.

3. Next there is government interest in standards which help to translate research results into general practice. Government-financed research activity is in fields such as fire testing, performance of building components, metallurgy and road safety measures - research which must have national application and be available to all manufacturers. Organizations carrying out such research exist all over the world - sometimes as independent bodies, sometimes within government departments, or simply subsidized by government.

4. Finally, an obvious use of standardization at the government/private sector interface goes almost without saying - this is the convenience and efficiency of specifying in procurement activities. From the government point of view you have the avoidance of over-specification and the benefit of choice in sources of supply: from the industry point of view, an easier participation in tendering for newcomers in the production field. The latter aspect brings us back to the broad economic question which I took as point one.

There may be other aspects that I have missed, but let us label these fairly well defined ones for convenience - general economic advantages, regulation or regulation-avoidance, implementation of research results, and ease of government purchasing. I shall come back to them in a moment: before that I want to widen the focus to the international arena as we see it in a world technical organization.

It happens that over 60% of our members are governmental bodies, and without further data you might assume that we are therefore dominated by a governmental point of view. However, in terms of input to ISO work, it is the non-governmental standards bodies (less than 40% of the membership) which keep the ISO machinery operating. The benefit to the international standards scene of these bodies, with their strong private sector input is vital. The USA is one of them.

International standards have become more flexible, practical and wider in scope because the agreements they represent are influenced by government policy viewpoints. In fact, the mode of operation of the major non-government standards institutes provides the most useful indicator of how the interface between government and private sector can be "tuned" by judicious development and use of standards.



Now I come back to the international dimension and to the five broad reasons why I have designated typical concerns at the government/private sector interface.

The first point is fairly easily encompassed, though not easy to quantify. The general economic advantages of standardization to a country appear to include rationalization with a minimum of technical restraint. This is equally true on an international level - only by practical agreement can the most basic raw materials and intermediate products enter into production anywhere in the world - being dimensionally and performance-wise up to requirements. Standards are therefore a world concern if overall economic stability is considered desirable. The slow or retro-development of less developed countries, for example, is seen as a disadvantage to the world economic balance. Standardization being a known benefit on the national level it follows that its promotion in developing countries - or in fields under development internationally - must be of value. Indeed, this is why so many governments actively transfer standardization technology to the third world.

The second factor, where government interests itself in standardization agreement in order to hone its actions with regard to matters of public interest. This is actually a prime point in favour of international standardization. Governments are deciding whether or not to regulate, and as the disciplines of standardization, certification and accreditation become more mature we find that efforts to ensure public safety through technical regulation can produce solutions which create trade problems. This is what the General Agreement of Tarrifs and Trade Standards Code is all about. According to this, signatories of the code will, when considering regulation, refer wherever possible to existing international standards.

There are many examples of international standardization now in progress for the purpose of avoiding technical barriers. One such project was completed in ISO last March when we published a complete dimensional and performance specification relating to anti-locking devices on brakes for heavy vehicles - a subject on which a number of governments are considering regulation. Other examples are in fields as far apart as bicycles, ceramic glazes and a code of practice for working with asbestos - the latter being a particular concern of the European Economic Community (EEC).

My third point, about translating research into practice is very well demonstrated at the international level. The international collaborative study is now a highly valued method of agreeing on the best way of conducting physical and chemical determinations, of sorting out decades of accumulated data, and simply ensuring true technical contact between professionals. The international

technical organisations that contribute to ISO standardization and implement it include the International Union of Testing and Research Laboratories for Materials and Structures (RILEM), the European Organization for Quality Control (EOQC), the Food and Agriculture Association (FAO), the International Organization for Legal Metrology (OIML), etc. There are over 400 international technical organizations in liaison with ISO, of which many are research bodies financed by governments, using standardization in some form or other as the medium for translating discovery into practice.

The fourth factor I mentioned; the facilitating of order and efficiency in purchasing, is also at work on the international level. The private sector trades abroad and governments purchase from abroad. One of ISO's needs for input from the interface relates to questions such as the kind of standards that are needed when the interface includes a national border.

ISO needs the input of governments now more than ever, especially we are moving so swiftly into areas of standardization previously thought beyond our reach. Only a few years ago the idea that international standards could only cover the generalities of terminology, dimensional rationalization of intermediate products, and test methods was so well entrenched that many people thought this was a natural limitation of the international standards process. Not true at all. We in ISO are now turning out product performance standards every week under pressure that comes ultimately from world trade needs and through the application of growing experience. That experience includes the government/private sector input which is inherent in the participation of this country.

The value of international standardization is now so well recognized that special steps have had to be taken to ensure that knowledge of how to draw on it is widely available. GATT is made practical by including an agreement regarding the availability of standards enquiry points in each country, and ISO's own information network, which we call ISONET, largely coincides with the GATT pattern. As to what is available we no longer simply count our own and the IEC catalogue of standards. To the 5000 of ISO and 2000 of IEC must be added the standards-type agreements of 27 other international organizations - some of them governmental. ISO has issued an index of all of these documents - this is the KWIC Index (I have included some information about it with your registration folders) and it is now in use in information centres world-wide.

ISO is convinced that the nature of standardization in the industrial nations, with its tough interplay between commercial, legislative, scientific and social interests, has set a standard of its own for efficiency and practicality.

## ANSI's Role in International Standardization

By Vincent D. Travaglini  
Washington Representative  
American National Standards Institute

I am pleased to have this opportunity to talk to you about the responsibilities of the American National Standards Institute in international standardization.

As many of you know, ANSI is a privately funded, nonprofit organization. It was founded in 1918 by five professional/technical societies and three federal government agencies to coordinate the development of voluntary standards in the United States and to approve standards as national consensus standards. It has been performing these functions for nearly seventy years. The Institute is a federation of the standards competence that exists in technical, trade, professional, labor, and consumer organizations, government agencies, and commerce and industry.

Except in the electrotechnical field, there was little significant progress on international standardization until after World War II. In 1946 national standards associations from twenty-five countries formed ISO--the International Organization for Standardization. ANSI was one of them. It has been the U.S. member of ISO since that time.

The International Electrotechnical Commission was founded in 1906. Membership is held by national committees--one from each country. The United States National Committee of IEC became affiliated with ANSI some fifty years ago, and is now a part of the Institute.

Despite early opportunities to participate in nongovernmental international standards organizations through ANSI, U.S. interests were slow to become involved. There were a number of reasons. U.S. standards were accepted worldwide after World War II. If an American exporter met them, he could be pretty sure of selling his products anywhere. And U.S. industry was not particularly concerned about exports--or imports--because of the size of the domestic market and American technical competitiveness. There was little incentive to participate in international harmonization of standards in order to facilitate world trade.

The economic situation changed in the 1960s and early 1970s, and so did the U.S. view of international standardization. Other countries began to equal or exceed our technical accomplishments in some fields, and products manufactured to U.S. standards were not as widely accepted. They were frequently rejected because they did not meet ISO, IEC, or other international standards that had been adopted as national standards by other countries. The incentive for international involvement



materialized, and U.S. industry, business, and government, through ANSI, began in the 1960s to increase participation in voluntary international standards activities of ISO and IEC.

ANSI's role is to coordinate and provide management leadership and financial and administrative support for this participation.

#### Overview

ISO develops, coordinates, and promulgates international standards that facilitate world trade, contribute to the safety and health of the public, and help protect the environment. They cover all fields, except electrotechnical, which is the responsibility of IEC. ISO's work is carried out by 163 technical committees and approximately 2100 subcommittees and working groups. One of ISO's members--national standards organizations from 75 countries--serves as secretariat of each of these technical bodies. ANSI is currently responsible for the secretariats of 14 ISO technical committees, 63 subcommittees, and more than 170 working groups. As a result of interest shown by U.S. industry, business, government, and other groups, ANSI participates in almost all of ISO's technical work and has observer status in the areas in which it is not an active participant.

IEC develops and promulgates electrotechnical standards. Its members are national committees from 44 countries. Standards are developed by 82 technical committees and more than 100 subcommittees, assisted by several hundred working groups. The U.S. National Committee, which ANSI administers, is involved in IEC's entire technical program. It holds the secretariat of 11 technical committees and 20 subcommittees.

ANSI helps govern ISO through representation on its policymaking and planning councils and committees. It has a permanent seat on the ISO Council, the international organization's governing body. ANSI President Donald L. Peyton is a member of the Executive/Finance Committee. Daniel W. Smith, Institute director of operations, serves on ISO's Planning Committee, which advises the Council on the organization, coordination, and planning of the technical work. The U.S. National Committee of IEC plays a similar role in the Commission's policy forums.

Almost a quarter of ANSI's annual budget is spent on administration of international standards activities and dues to ISO and IEC. In 1985 ANSI will spend some \$1.6 million on international standardization.

The Institute has a staff of one hundred people, an annual budget of \$7 million, and other responsibilities--most notably, coordination and approval of voluntary national standards. How then does it coordinate, manage, and support an international program of the magnitude just described?

The answer is cooperation. By the time ANSI became extensively involved in international standardization in the 1960s, it had been the

national standards coordinator for more than forty years. It had well-established channels of cooperation and communication and it greatly improved and expanded them in the last quarter century.

Let's look at participation in ISO.

#### Participation in ISO Technical Work

In electing Participating--"P"--membership in a technical committee or subcommittee, ANSI makes a commitment to ISO to take an active part in the work. This includes voting, as required, on the group's program and various levels of drafts of ISO standards. It involves sending delegates to meetings whenever possible.

ANSI carries out these obligations with the help of U.S. technical advisory groups--TAGs--which are administered by trade associations, technical or professional societies, or government agencies. TAGs develop ANSI positions for the technical work and are responsible for selecting qualified people to represent U.S. interests at international technical meetings. ANSI forms the TAG and appoints the administrator. Normally it names as a technical advisory group, the committee or organization that is developing parallel American National Standards, for the excellent reason that it represents directly and materially affected U.S. interests and possesses the required technical expertise. The secretariat or sponsor of the national standards developing group is appointed TAG administrator.

For example: Committees of the Society of Automotive Engineers that develop domestic standards for combustion engines, hydraulic braking systems, and other equipment serve as U.S. technical advisory groups for the ISO technical committee on road vehicles and its many subcommittees. SAE provides administration.

ANSI Accredited Committee X3 on Information Processing Systems is the U.S. technical advisory group for ISO Technical Committee 97, which is producing international standards for information processing. The Computer and Business Equipment Manufacturers Association, secretariat of the X3 Committee, is the TAG's administrator.

Federal agencies administer some technical advisory groups. The U.S. Geological Survey, as TAG administrator, supervises the development of the U.S. viewpoint for ISO work on measurement of liquid flow in open channels. The National Bureau of Standards administers the TAG for ISO technical committees and subcommittees on graphical symbols and on documents and data elements in administration, commerce, and industry. Recently NBS agreed to administer the TAG for a subcommittee of the new ISO committee on industrial automation systems.

A TAG administrator must meet the following criteria and requirements:

- \*Be competent in the technical activity involved
- \*Be willing to make a three-year financial and technical commitment

to ANSI

\*Agree to follow applicable ANSI and ISO procedures

\*Be willing to permit ANSI to monitor its administration of the TAG

ANSI provides technical advisory groups with:

\*Criteria and procedures to guide them in their operations and in reaching consensus on positions for the international work for transmittal to ANSI

\*Advice from staff and constant communication on those ISO technical committee and subcommittee matters on which the Institute needs the TAG's recommendations

\*Guidance from ANSI standards boards on coordination between parallel national and ISO international standards

When ANSI--or any ISO member--accepts the secretariat of a technical committee or subcommittee, it commits itself to international standardization in the field--to maintaining strict neutrality; not permitting itself to be influenced by national considerations. A secretariat's duties include: directing and advancing the standards development work; considering and using technical contributions of committee members--national standards developing organizations from other countries--and international organizations that have liaison; arranging and conducting international meetings.

ANSI holds the secretariat of nearly 250 ISO technical committees and subgroups. Some of the key committees are: Information Processing Systems; Banking; Freight Containers; Earth-Moving Machinery; Plastics; Fluid Power Systems; Boiler and Pressure Vessels; Photography; Cinematography; and Petroleum Products and Lubricants. Institute staff administers many committee and subgroup secretariats in-house. Others are handled on ANSI's behalf by organizational members. Responsibility for their effective operation remains with the Institute.

#### Participation in IEC

U.S. participation in the technical work of the International Electrotechnical Commission is managed by ANSI's U.S. National Committee of IEC. It takes part in the Commission's entire technical program and holds secretariats of some thirty technical committees and subgroups. Among them are committees that are developing international recommendations for solar photovoltaic energy systems; safety of data processing equipment and office machines; cables, wires, and waveguides for telecommunication equipment; and safety of household and similar electrical appliances.

The USNC appoints a technical advisor and a technical advisory group to develop the U.S. viewpoint for the work of each IEC committee and subcommittee. These advisors are drawn from U.S. professional/technical societies, trade associations, companies, government agencies, and testing laboratories that are involved in the development of national electrotechnical standards.



Included among the advisors are employees of the National Bureau of Standards; Institute of Telecommunications Science, Department of Commerce; Department of the Navy; Federal Communications Commission; Department of Defense.

ANSI supplies those involved in developing the U.S. viewpoint for IEC work with criteria to guide them in their operations and in making decisions. It also provides secretariat services to the USNC, its Executive Committee, technical advisors, and technical advisory groups.

#### Regional Cooperation

Close ties are also maintained by ANSI with some regional organizations. It is a founder and active participant in the Pacific Area Standards Congress. PASC does not develop standards. It concentrates on strengthening ISO and IEC and the ability of PASC members--the national standards organizations of countries on the Pacific Rim--to participate in these organizations.

The Institute also maintains contact with some of the many regional groups that do develop standards. The European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization (CENELEC) are among them. Their major objectives are to eliminate technical barriers to trade. As a step toward this goal both organizations have arranged with ANSI to have their drafts listed for public review in an Institute periodical--Standards Action. Through similar ANSI listings, U.S. exporters and other interests are given an opportunity to comment on draft ISO and IEC standards and on government regulations proposed by signatories to the GATT Standards Code.

#### The GATT Code

The acceptance of the GATT Standards Code in 1979 by the governments of many countries provided a new challenge and opportunity for those involved in international standardization. The purpose of the code is to eliminate technical barriers to trade caused by differences in national laws, regulations, and standards. To solve this problem, it requires governments to use international standards, where they exist, in national technical rules and regulations. The challenge to international organizations is to produce the high quality standards required.

In the United States Title IV of the Trade Agreements Act of 1979 implements the GATT Code. It recognizes the important role that organizations such as ISO and IEC play in reducing trade barriers and affirms that representation of U.S. interests in these organizations should be carried out by the U.S. member, which is ANSI.

One of the Institute's responsibilities is therefore to continue effective participation in nongovernmental standards activities. It works with the U.S. Department of Commerce and Agriculture and the U.S. Trade Representative's Office to strengthen participation where necessary. Through membership of ANSI's President on the International

Functional Advisory Committee on Standards for Trade Policy Matters (IFAC), the Institute provides advice to government on policy and on specific standards issues and problems. It also advises U.S. negotiators to multilateral and bilateral discussions and assists in preparation of position papers.

Guidelines issued last year by the secretary of commerce support ANSI's role in international standardization. They encourage federal agencies and their employees to participate in organizations, such as ISO and IEC, through the U.S. member--ANSI. They also recommend assisting the U.S. member by administering technical advisory groups, participating on them, or serving on delegations to international meetings. As I've indicated, some government agencies are currently providing ANSI with this type of support. The secretary's guidelines are very welcome, and should have the effect of increasing federal participation.

#### Standards Source and Information Center

Additional information on ANSI's role in international standardization is available from headquarters in New York. So is a wealth of national and international standards.

ANSI is the prime source of foreign and international standards in the United States. It stocks and sells all ISO and IEC standards and drafts, proposals of CEN and CENELEC, and the national standards of major U.S. trading partners--Japan, Canada, Germany, England, France--and 85 other countries that belong to the International Organization for Standardization.

Also available from the Institute are all 8500 American National Standards and an annual catalog and periodic supplements.

The latest catalogs issued by ISO, IEC, and more than fifty ISO members may be obtained from ANSI.

A biweekly Institute publication--Standards Action--solicits comments on standards being considered for approval by ANSI, ISO, IEC, CEN, and CENELEC. It also lists for public review foreign regulations proposed by GATT Standards Code signatories and proposed recommendations of OIML--the International Organization of Legal Metrology.

#### Conclusion

In closing, I'd like to emphasize that the United States is particularly qualified to contribute to international standardization because it has the strongest and most productive standards system in the world.

The strength of this decentralized system comes primarily from its voluntary nature and the competence of U.S. standards developers. In preparing standards they draw on the knowledge and experience of hundreds of thousands of volunteers, who represent all sectors of society.

The achievements of the unique U.S. voluntary standards system were acknowledged last year when President Reagan presented a Private Sector Initiative Commendation to ANSI, the system's coordinator. This award recognizes outstanding contributions to society through voluntary self-regulation programs.



Federal Government/Private Sector Interface

Melvin R. Green  
Managing Director, Codes and Standards  
The American Society of Mechanical Engineers

We appreciate this opportunity to address this Conference on International Standards and specifically the subject of this session: Federal Government/Private Sector Interface.

The American Society of Mechanical Engineers (ASME) is a scientific and technical society with individual members. The 110,000 members elect the Board of Governors, which is responsible for the policy direction of the Society. Five Councils under the Board set policy and general procedures for the specific areas for which they are responsible: Education, Engineering, Member Affairs, Public Affairs, Codes and Standards.

The 20 member Council on Codes and Standards oversees all aspects of that program. Reporting to this Council are five supervisory boards and five advisory boards. The supervisory boards oversee activities in the following areas:

Performance Test Codes  
Nuclear  
Safety  
Pressure Technology  
Standardization

The supervisory boards oversee 122 main technical committees responsible for the technical development of 560 codes and standards. They, in turn, establish technical subcommittees and working groups which do the actual writing of proposed standards and proposed revisions to existing standards.

As previously noted, there are, in addition, five advisory boards reporting directly to the Council on Codes and Standards. They are:

International Standards  
Metrication  
Accreditation  
Council Operations  
Hearings and Appeals.

Although ASME is a membership organization, there is no membership requirement or fee for serving on ASME Codes, Standards or Accreditation Committees. Of the 4,500 volunteers currently serving on these committees, approximately 50 percent are members of ASME. The American Society of Mechanical Engineers has been developing codes since 1884 and regards its codes and standards activities as a public service which enhances public health, safety and welfare. ASME provides the forum for the parties with an interest in a code or standard to participate in its development or in the administration of a related accreditation activity.

ASME Codes and Standards Operating Policy provides for a subscription service for any code or standard subject to revision or interpretation during the life of the document. This Policy provides a means for "user awareness" of all revisions or interpretations of codes and standards. This service is also an inherent part of ASME's accreditation systems.

Federal employees, along with others from industry, academia, architect/engineering firms, state, provincial and municipal governments, participate on ASME committees, boards and council. These engineers and allied scientists plan, organize and control the activities that result in the public service. With their various backgrounds, they are most qualified to anticipate the technical or safety problems that may be in our future and to provide the input necessary for ultimate development or updating of the needed codes and standards.

In the United States, there is no direct interface between Federal Government and Private Sector when development of codes and standards is involved. Because of the various roles of government agencies, the federal employees from different agencies represent different "categories of interest" when serving on a voluntary codes or standards committee; likewise, at times, there are adversary relations between standards organizations and federal agencies. This adversary relationship has an ultimate goal to remove barriers and promote awareness.

As an example of the varying roles of federal participants on ASME Codes and Standards Committees, the "categories of interest" on a particular committee may be: users, general interest, manufacturers, regulators, architect/engineers and academia. Federal employees normally serve on ASME Codes and Standards Committees in the category of "user" or "regulator." The agency for whom the individual is employed either uses the methods, materials or equipment covered by the scope of the committee's work or performs a regulatory role in that area. Those in the "user" category are employed by organizations such as Tennessee Valley Authority, Defense Department, and General Services Administration; those in the "regulator" category are employed by organizations such as Nuclear Regulatory Commission, United States Coast Guard, and Minerals Management Service. A "user" and a "regulator" employed by different federal agencies may serve on the same committee; therefore, ASME has taken the position that there should be no lead federal agency; federal employees should serve as individual professionals and act as their respective backgrounds in academia and professional experiences guide them.

After publication or adoption as a national or international code or standard, its implementation is sometimes monitored by accreditation. ASME accreditation means that the manufacturer's or supplier's quality control system and quality assurance program have been revised and accepted by ASME as meeting the requirements of the relevant ASME standard. Federal agencies may reference the accreditation system as a means of satisfying procurement or regulatory requirements. Being that ASME Constitution and Bylaws provide, in part, that the Board on Accreditation shall "audit personnel and provide internal audits", ASME has appointed to its audit team assessors who are employed by federal agencies that have an interest in the quality of ASME accreditation systems.

In the United States, the government sometimes attempts to change an organization's activities through the legal or court system. For instance, during the Kennedy Round of Tariff negotiations, it was alleged that the United States had a non-tariff barrier because of ASME's Boiler and Pressure Vessel Accreditation system. The United States Justice Department sued ASME and the National Board of Boiler and Pressure Vessel Inspectors to have them expand their respective accreditation and registration programs for boilers and pressure vessels from the United States and Canada to include the rest of the world. On September 11, 1972, the parties to the suit signed a consent decree which permitted the accreditation and registration systems to be expanded to other geographical areas. The host government, the United States, is party to the agreement.

Since this agreement in 1972, ASME codes and standards services have increased in international acceptance 400 fold. This increase in acceptance has resulted in increased input from volunteers located outside the United States and Canada. The result of the interaction between the government and private sector in this case has resulted in the ASME Boiler and Pressure Vessel Code becoming a defacto international standard. Likewise, ASME accreditation has become a symbol to be relied upon throughout the world.

As commerce among nations continues to increase, more ASME codes and standards will become defacto international standards and others will be preempted by other international standards or defacto international standards developed by organizations in the United States and elsewhere.

To maintain these defacto international standards, there will be increased participation of engineers and allied scientists from nations in Europe, Asia and South America. These standards will include specifications, design and manufacturing criteria developed outside North America. Because ASME codes and standards activities are open for participation, without membership or fee requirements, there is no barrier to this technological transfer.



Where ASME codes or standards are preempted by international standards or defacto international standards as evidenced by little or no demand for the ASME's services, ASME will continue the technical advisory group but may disband the domestic committee. ASME administers technical advisory groups when:

- 1) ASME administers the interfacing domestic standards committee
- 2) the predominant discipline is Mechanical Engineering
- 3) the resulting international standard will enhance ASME's codes, standards, or accreditation system of activities.

The technical advisory groups that replace standards committees that are disbanded will need continued support of industry, government and the public.

As international standards increase in importance, ASME will encourage that the roles of administrator of the technical advisory group and the international secretariat be played by different organizations. Rather than one organization playing the roles of administrative secretariat of the international secretariat, when the United States holds secretariat, and administrator of the technical advisory group, ASME will encourage the member body of the Organization for International Standards (ISO) to administer the secretariat and the standards developing body to administer the technical advisory group. The reason for this is that in ASME's view the secretariat should be neutral in positions; whereas, the technical advisory group should promote the United States position.

Because the guidelines for international standards provide that the technical advisory group's representatives should strive for compatibility between United States standards and proposed international standards, the volunteers from the various sectors of United States society who serve on codes and standards committees establish the parameters for input to international standards. The federal employees, along with all other volunteers involved, develop the United States positions. The goal regarding compatibility is to have common standards requirements across international boundaries. The domestic standard may be more or less comprehensive but it should be compatible.

ASME's Codes and Standards Operating Policy in regard to voluntary standards use by regulatory authorities is intended:

- 1) To encourage the referencing of voluntarily developed consensus standards in regulations as a means of complying with the intent of regulatory requirements, and

- 2) To encourage the participation of federal, state, and other government employees on voluntary codes, standards, and related accreditation committees, and
- 3) To enhance public health, safety and welfare through voluntary standards.

Although this policy addresses regulatory authorities, it is equally applicable to agencies that procure for the government.

ASME is unique because it develops consensus standards and administers related accreditation activities. ASME has the know-how to do both. The recent restructuring of the Society established the codes and standards boards which are necessary to provide a framework for this public service activity which lessens the burdens to government. As stated in the background of OMB A-119, voluntary standards "eliminates the cost to the government of developing its own standards." Because such burdens otherwise are reflected in taxes, lessening such burdens of government is attractive to ASME and to society in general.

Henry E. Collins  
Vice President, Governmental Affairs  
Underwriters Laboratories, Inc.

It is with a great deal of pleasure that I find myself appearing at this conference to tell you a little about the role UL plays in international standards making and international certification. All of the members of this panel, and many of you in the audience are old friends. I feel very much at home.

For those of you who are not familiar with Underwriters Laboratories, Inc. (UL), we are a private, not-for-profit corporation, operating on a worldwide basis, in the interest of public safety since 1894. We have no stockholders. Both the Corporate membership and the Board of Trustees are composed of individuals associated with one of the following categories: consumer interest, governmental body or agency, insurance, education, public safety body or agency, safety expert, standardization expert, public utility, or an officer of the corporation. Individuals associated with the manufacturing or vending of products subject to UL coverage are not eligible. Two Federal government employees currently serve on the Board of Trustees and 5 as members of the Corporation.

UL's activities include the development of product safety standards, the investigation of products to determine conformity with those standards, factory follow-up inspections to determine continued conformity of production, and the utilization of a system of marking to identify complying products produced under the follow-up service. Participation in all activities has been fully open to foreign manufacturers since 1955. We do not discriminate between domestic and foreign manufacturers.

In its role as a standards developer, UL currently publishes and maintains 493 Standards for Safety. Three hundred and thirty-five of them enjoy approval as American National Standards. Federal government interest in our standards is evidenced by the fact that (1) the names of almost 500 individuals representing 20 different agencies are on our mailing list to receive copies of one or more standards and revisions to those standards, (2) a number of those individuals actively participate in and contribute to UL's standards development process, and (3) many agencies adopt, reference, or otherwise make use of our standards in the discharge of their responsibilities.

In its role as a product investigator, inspector, and certifier, UL engineering and follow-up services presently cover more than 11,000 different product types. In 1984, almost 70,000 product investigations were conducted by UL's Engineering Departments. More than 20,000 of those were for manufacturers in foreign countries. By the end of 1984, UL's follow-up services were in operation in 35,481 factories, 12,482 of which were located in 72 foreign countries.



## INTERNATIONAL STANDARDS

Consistent with our worldwide operations, UL has been actively involved in international standards activities for the past 20 years. In 1984, 38 staff members attended 151 international standards meetings in Asia, Europe, Africa and the United States. In total, UL staff participated in 74 International Electrotechnical Commission (IEC) and 27 International Organization for Standardization (ISO) standards-making groups. We provide the Technical Advisor for 5 different U.S. Advisory Groups responsible for developing a U.S. position on specific international standards, and the Secretariat for 5 different IEC Technical Committees and Subcommittees.

The cost of UL's involvement in international standards activities is substantial in both time and money. In general, involvement is triggered by the initiation of an international activity related to products of a type covered by UL's engineering and follow-up services. To the extent practicable, our long-range objective is to achieve harmonization between UL standards and international standards. We attempt to influence international standards so that harmonization efforts will be more successful. When UL develops or revises a standard, our staff working with the affected industry and the other interested parties evaluates the applicable international standard when and where one exists, and embraces as many of those provisions as practical considerations will permit. We believe our approach is consistent with the obligations imposed by the GATT Standards Code to discourage discriminatory manipulation of product standards, product testing and product certification systems. We know that our approach guarantees that imported products are treated no less favorably than domestically produced products.

Despite our efforts, and those of many others, international harmonization will continue to be a difficult and slow process at best. Habits, customs, and usage practices are not easily changed. Protectionism is a fact of life. Fundamental problems exist. Let me cite just a few.

Basic Technical Differences - In the electrical field, there are differences in standards which are the result of differences in usage practices. Electrical energy is supplied at different frequencies, different voltages, and by different distribution systems throughout the world. Installation codes as a consequence differ. To the extent that change is impractical, standards for a particular country must be developed to be compatible with existing practices in that country, even though the standards deviate from those used in other countries. Similar technical differences exist in other fields.

Legal Liability Concerns - Manufacturers in the United States, and perhaps manufacturers in some other countries, face major risks from products liability. One of the factors, considered in products liability suits is whether the product incorporates state of the art design which would have reduced the risk of injury or damage. If harmonization requires agreement to lesser requirements, manufacturers would be faced with the dilemma of exposing themselves to greater risk of liability or producing products in excess of the standard and being noncompetitive. On the other hand, a country where such legal exposure is less likely would be more willing to compromise its standards.

Public Needs and Expectations - Needs and expectations vary from country to country. An insecticide that is considered unsafe for use in the United States may be considered essential for use in another country because the hazards are outweighed by the benefits. Guards on kerosene heaters, required in the United States to prevent contact burns, are considered an unnecessary addition and expense in other countries where the public is expected to exercise caution or suffer the consequences. In some countries, electrical appliances are required to have supply cords that are easily replaceable by the owner, and the appliance construction requirements are such as to accommodate the replacement. That is not normally the case in the United States where owner servicing is generally not encouraged and where many small appliances at least, are intended to be disposable rather than repairable.

Investments in Existing Systems - Harmonization will be resisted whenever it requires a country to make significant capital investments. For example, a country having millions of dollars invested in an evaluation testing system, will resist a harmonization effort that requires them to abandon that system and spend large amounts of money and time on a new one, regardless of the merits of the new one.

Economic Considerations - A country which does not export a product has little manufacturer support for the expenditure of time and money to harmonize standards for that product.

And, the list goes on.

## INTERNATIONAL CERTIFICATION SYSTEMS

Increasingly, international standards are being used in certification systems. This is to be expected. Certification is the "proof of the pudding". All of us want good standards, and we want compliance with those standards.

At the present time, the only international certification system in operation is the IECQ System on Electronic Components. In this System, which became operational January 1, 1982, components tested in the country of one of the members of the System in accordance with appropriate IEC Standards, are accepted by all other countries within the System. UL was involved in the development of the IECQ System and serves as the U.S. National Supervising Inspectorate for U.S. participation.

Another system exists for the exchange of test results. This is the CB scheme of the International Commission for Conformity Certification of Electrical Equipment (CEE). The CEE was originally a regional organization of European testing stations, but it has been expanded to include other countries, including Japan and the United States. This year, it will become part of the IEC and will be known as the IECEE. The U.S. has participated as an observer since 1962, and became a member of the system in 1983.

Under this system, national certification bodies in the member countries agree to recognize test data in specific product categories. In order for the system to be effective the standards used by each country must be essentially the same. Although some existing CEE standards are still being used, the objective is to use IEC standards, with some deviations within each country, as the basic documents. Tests may be conducted in a laboratory of one of the member countries, and if the product meets the applicable requirements, a test certificate is issued. This test certificate is then accepted by the other national certification bodies participating in the system, with respect to that type of product, subject in most cases, to some check testing. The test certificates are then used by each national certification body as the basis for certification within that country. Separate marks are used for each country. It must be emphasized that this is not truly an international certification system. There is no universal mark, and no follow-up inspection program associated with the scheme.

Although the United States is a member in the CEE, it is not a participant in the CB scheme. The U.S. could become a participant if manufacturers in one or more categories were to agree to the use of standards which were reasonably compatible with standards used by other countries within the system.

UL is willing to serve as a national certification body within the CB scheme for United States manufacturers, and would issue CB certificates if there was any interest on the part of U.S. industry. One of our staff members continues to serve as a representative at CEE meetings.



## ALTERNATIVES TO INTERNATIONAL CERTIFICATION PROGRAMS

An alternative to international certification programs, which tend to be rather cumbersome and expensive, are bilateral arrangements among testing stations in several countries. UL saw this as a more viable alternative several years ago, and we began discussions with several countries. Let me tell you what we have in the way of both formal and informal arrangements concerning the acceptance of test data with other countries.

Europe - In Europe we have very close relations with many of the major testing organizations. In some cases we have trained some of their engineers and we have sent our engineers to European laboratories for training. Additionally, all of the major agencies act as agents for UL in conducting follow-up inspections at factories within their respective countries. The history of close cooperation over a period of more than 20 years was the basis for informal discussions for the mutual acceptance of test data. At the present time, a number of organizations in Europe have indicated that they are willing to accept test data generated by UL.

In conducting our tests we would use the applicable international standard or the appropriate national standard.

Under these arrangements, a United States manufacturer can submit a product to UL for a complete evaluation to determine compliance with the appropriate standard. Upon completion of the evaluation, we supply a test report with complete information about the way in which tests were conducted, the instrumentation used, and the results. The report can then be sent to the appropriate testing station in Europe which may use the data as a basis for its own investigation of the product. They may conduct some check tests, and they may require an additional examination of the product. However, they have assured us that our data will materially shorten the time necessary to process the applications, and the result would be the use of the appropriate marks in each country.

Japan - In Japan we have a formal agreement with the Japanese Electrical Testing Laboratory (JET) whereby they will accept test data from UL for several product categories. In preparation for this agreement, UL and JET exchanged engineers for a three month period. The UL engineer is fluent in Japanese and has a thorough understanding of their requirements. Under this program, UL carries out all of the tests in its own

laboratory and JET will perform some check tests before final approval is granted. We also have a similar, though informal agreement with Japanese Metals and Machinery Institute (JMI) covering electronic products and in particular, test results on medical equipment.

There have been recent changes in Japanese laws which require an assessment of a manufacturer's facilities before products can use the appropriate certification marks. UL has been named by the Japanese Ministry of International Trade and Industry (MITI) as a designated foreign inspection agency. This means that we can carry out the factory surveys for MITI.

#### TECHNICAL ASSISTANCE TO EXPORTERS

Overlapping to some extent, and very much akin to the international certification efforts just discussed is UL's Technical Assistance to Exporters Program (TATE), started in response to continuing requests for technical and administrative assistance related to foreign standards and product certification. Under this program, the following services are available:

Dual Listing, Classification or Recognition Service - A product intended for use in the United States and for export may be investigated concurrently in accordance with UL's Standards and published international standards such as IEC, and ISO. If found to comply, the product will be permitted to bear an appropriate UL Mark indicating such compliance. UL's regular Follow-Up Services will apply in these cases.

Classification Service - A product intended only for export may be investigated in accordance with the published international standards without a corresponding investigation to UL Standards. Again, UL's regular Follow-Up Services will apply.

Letter Report Service - A product intended only for export may be investigated in accordance with a published foreign national or international standard or a portion thereof without corresponding investigation to a UL Standard. In such a case, UL will issue a letter report that includes a description of the tests performed, results obtained and, if applicable, an opinion concerning compliance with the standard or clauses of interest. No Follow-Up Service will be established and no reference to UL will be permitted on such products.

Information and Administrative Services - UL has gathered certain information concerning foreign testing laboratories and certification programs that may be of assistance to exporters. Consultation and report services can be provided on subjects such as national or international standards, regulations concerning foreign certification programs, submittal procedures of foreign testing laboratories and English translations of foreign specifications. A computerized technical information center that stores information on all these items has been established in an effort to provide service to clients.

## SUMMARIZING

Given the widespread concern in the U.S. over the imbalance between imports and exports, and efforts to make the GATT Standards Code work, there is no doubt that international standards and international certification are taking on increased importance. UL expects to continue to play an active role in the development of international standards and the certification of compliance with those standards. The extent of our role will obviously be determined to a large extent by the needs of our clients. Absent a need, they are not likely to support the effort.

UL expects to continue working closely with the International Trade Administration in their efforts to promote world trade and to strengthen the U.S. position in world trade. We expect to continue working with the Office of the United States Trade Representative in their efforts to make the GATT Standards Code a viable agreement. And, we intend to continue working with other Federal agencies such as the CPSC, GSA, NBS, OSHA, USCG, etc. in their efforts to discharge their responsibilities, which at times involve both international standards and international certification.



This morning we heard of our GATT commitment to use appropriate international standards. What is the basis for the recent change in ISO and IEC policy to no longer include the voting record with the standard? How are those, who would invoke these standards to know whether the U.S. technical experts considered the international standard appropriate in the U.S.?

Larry Eicher:

The decision to discontinue listing the countries who have voted yes or no had to do with the fact that it was not a very good indicator of where the standard had been adopted. It happens, for example, that countries decided to vote no but, nevertheless, implement the standard after it is approved. It also happens that the ISO standards get amended and revised and sometimes they have an addendum. It gets confusing as to whether a country voted yes on the addendum, the amendment, and so forth. Such votes did not in any way require the country to implement the standard.

I think it's an interesting point. In any international standardization work there is no mandatory application and that's true for the U.N. organizations as well as for the nongovernmental organizations such as ISO and IEC. The reason for doing away with the listing of voting positions had to do with two things; (1) it wasn't a good indication of the use of the standard and, (2) it was confusing because of the revisions and amendments.

The second part of the question is how can you find out how your country voted on a particular standard. That's reasonably easy to do by going to your national member. The ANSI in the U.S. keeps complete records of all the positions taken on ISO standards by the U.S. If they don't have it, we have it in ISO and it's not difficult to obtain the information.

International standards represent a significant portion of the body of standards in many countries. Why has the U.S. directly adopted only 4 or 5 international standards such as ANSI/ISO-1234? Does this reflect U.S. dissatisfaction with the international standards that cost so much to develop?

Vincent Travaglini:

I think the way the question was phrased doesn't give enough credit to the U.S. The fact is that the U.S. does have a slowly rising curve of acceptance of international standards so the outlook is not all that bleak. As to why there is not universal acceptance, I think you probably have to go to the individual circumstances of the countries that make up the ISO. There are some cases where the national authorities have decided to either largely or entirely forgo domestic standards activity in favor of simply adopting international standards as they come along to fit their needs. That's not the case in the U.S. There has already been abundant testimony here that there are literally hundreds of standards developing organizations, and some of them, like ASME and UL, have been at work for many many years. So there

is a great body of domestic standards readily available and being utilized. The process of going international is bound to be a little slower in that situation.

If it is possible for a product to have an unlimited lifetime, as in your example, why not have changeable components that would not jeopardize safety? Do you really think customers want to throw products away rather than design repair safety into such products?

Henry Collins:

What we do is directly related to what somebody wants tested. That decision is essentially made by our clients. If they don't want to submit appliances with interchangeable cord sets, we can't do much about it unless we could prove that those with permanently connected cord sets were unsafe and they had to go to interchangeable ones to be safe. Having come out of the wire business, I can assure you we have manufacturers by the hundreds in this country who can make interchangeable cords and do make them. They are available and we do have appliances with them on it. But when you get to making interchangeable cord sets, you then have to determine when somebody goes to replace this cord do they go inside the appliance to change it. That's what is done with some of the foreign standards. They permit the unit to be opened. When that happens, you become concerned with hazards to the do-it-yourselfer. Are they likely to contact some other part? You then have to provide inter-connected ground to all of the isolated current-carrying or potentially current-carrying parts. What you've gained by use of interchangeable cords may be offset by having to go to extra expense for other features necessary to make it reasonable and safe to change the cord.

UL will accept either one if it is safe. There is nothing that prohibits it. Under some foreign standards, only units with interchangeable cords are accepted.

A Federal employee represents his agency - a company employee represents his company - both are loyal to their employer. It is written Federal policy, OMB A119, State Department Guidelines, etc., that employees represent their agency. They are not independent as long as their participation relates to their skill or work. You are misleading government participants in ASME!

Melvin R. Green:

I don't believe we are misleading anyone because the individual serves a particular category of interest. If he comes from the user category, he serves on a ASME standards committee in the user category and if he comes from the regulator category, he serves in that category. That's not misleading anyone. Insofar as our commenting on lead agencies, we have commented several times to the Federal Government that we don't think its appropriate to have lead agencies. We want to have the individual professional, whose employed by the Federal Government, serve as any other individual does. They do not represent companies on our committees. They serve from a particular category of interest exactly the same as the Federal employee does.

**Are UL certification efforts accredited by ANSI?**

**Henry Collins:**

I don't know of any ANSI accreditation of certification. The only one I knew of was for doors and windows. If we get into that business we might see what's available, but I don't know of any areas that we have an accreditation available from ANSI.

**What do you believe is the greatest benefit the U.S. Government will derive from the bilateral agreements it has with NATA (Australia), TELARC (New Zealand) and NATLAS (UK) regarding laboratory accreditation insofar as benefiting the U.S. balance of trade? What do you believe is the most serious weakness in those agreements and what do you suggest to correct that weakness?**

**Vincent Travaglini:**

I think that there is a national standards process and there is an international standards process. While those two are not perfect organisms, nevertheless, they work very well and have served world trade very well. The problems that are arising now and will arise come from this area we have just been talking about--certification and testing of goods and services that move across national boundaries. I think that the more arrangements that we can have with the other trading nations will smooth the flow of trade and will interdict national efforts to curb trade by imposing unreasonable certification requirements. You just can't lose in that kind of work.

**Are there ISO members other than the U.S. where delegations are not sponsored by the government of their country?**

**Lawrence Eicher:**

There are many other members of ISO, both members of the organization and members of the technical committees, who are not sponsored by governments. In my earlier remarks I meant to say that most of the standards bodies that are members of ISO in Western Europe and North America may be regarded as predominantly private. In the U.S., I think for special reasons unique to this country, ANSI is especially concerned with remaining entirely private.

In some of the Western European countries, there is either a policy which connects government interest and the private side through statements of reliance on standards or there may be some government subsidy for international work, for example, in the Federal Republic of Germany. Nevertheless these ISO members are mainly private and they are organized through committees which have manufacturers and users and other people involved very much like they are in the U.S.



I think its false to think that the U.S. is the one bastion of private sector initiative left in the world, with respect to standardization, because in many countries it is organized very much as a consensus process as it is here in the U.S.

With respect to the question on U.S. adoption of International Standards, many ISO standards are technically compatible with the prevailing standards in the U.S.. The reason why this is true is because the standards are being worked on together. There is a national standard being worked on at the same time there is an international standard being worked on and that's particularly true for the high technology areas such as computers and information processing. After the war, the U.S. standards were predominant and they formed the basis for the standards which came into the international arena and since then the modifications have more or less been complementary. If there's a change at the international level, something happens at the national level, and thats true in the oil and petroleum products field, for example. What is also true is that the U.S. doesn't make very much of this known. The people who are working on a particular standard know there is no technical difference between a U.S. standard and an international standard, but you can't find that out easily. I would like to suggest that some way of identifying that technical compatability in the U.S. documents would be very helpful.

**When developing ISO standards, how do you assure that the members of an ISO Technical Advisory Group (TAG) truly represent a consensus position from their individual countries?**

**Larry Eicher:**

What we do as an organization is promulgate the policy for participation in ISO work. That is a set of rules which talks about getting the right people involved and getting a consensus at the national level. We can't, and I would never want to try to police that, so we don't interfere with ANSI and say your doing a bad job of that. Every once in a while we get a complaint but we send it right back to ANSI and they deal with it. We certainly don't try to police it in other countries.

**Vince Travaglini:**

Many of you are familiar with what is called the ANSI Green Book, which is a collection of the ANSI rules for qualifying a standard as an American National Standard. ANSI has a sort of sister compilation of rules for TAGS and international standards which, among other things, requires that there be consensus. The TAG process, as its run by the trade and professional associations, has a built in assurance that the people that are on the TAG and administering the program are bringing in outside voices and are paying attention to the contributions. The positions that are adopted have to be made public and people have to be given an opportunity to comment on them.

**Does UL use the metric system for new standards and test procedures?**

**Henry Collins:**

All dimensions are listed in both customary and metric units. We can obviously measure in metric as well as we can measure in other units. We test products in metric for use in other countries, for example. In some cases, wire and cable standards for example, metric units are not useful because we test for conformance with the National Electrical Code. That Code does not specify metric sizes.

**How do you answer those who say that active participation in ISO results in transfer of technology?**

**Larry Eicher:**

It very definitely does. ISO work and participation brings technical experts from all over the world together. They have a lot of discussions; they have meetings; they show their research results to each other to support a particular position that they would like to see adopted in an international standard. There is a lot of transfer of technical information, and its good, and it ends up in the international agreement which is based on a good understanding of the differences in the technologies in different parts of the world. Politically in the world from time to time, you get the negative side of transfer of technology and somebody worries that you are going to give away some technical information that you don't want to because you have an enemy somewhere. That's anti-internationalism and I am an internationalist and I'm opposed to it. If it has to do with military secrets, then it shouldn't be in the non-governmental side of work and that is to be kept secret in it's own way. I think that technology is international. The standards that serve the technology should be international and I will resist anyone, to the extent of my capacity, who would try to stop that.

**How extensively are ASME Codes and Standards being used in the Asian countries, such as Japan, S. Korea, Singapore, Taiwan, Peoples Republic of China, etc.?**

**Melvin Green:**

We had a group of Japanese visit with us about two weeks ago and they have been using our A17 Elevator Code as the basis of their codes or standards in Japan for some time now. The Boiler and Pressure Vessel Code and our Piping Codes are being used with our accreditation activity. I believe that one third of our foreign possessed Quality Systems Certificates are held by Japanese manufacturers. That alone will tell you that they are using it quite extensively.

Koreans have adopted Section 3 of the Boiler and Pressure Vessel Code as part of their regulations. As a result of a U.S. government agency referencing our accreditation program, there will be more extensive use of our accreditation in Singapore because they are doing some construction there that involves our accreditation activity.

**What general guidelines should be considered if a standard is intended for international application?**

**Larry Eicher:**

This morning we discussed standards that are very much internationally used but haven't gone through the ISO process and procedure. From a theoretical point of view, I see benefit in standardization without attaching too much emphasis on who does it. I say that if it is happening, and its having its benefit, then we should be pleased. We are reducing trade barriers, we are getting the kind of standard support we need for international trade and commerce. However, its not certain that every country is going to be happy with a standard that attains de facto status internationally when only one country is involved in its preparation. If you are developing a new standard or coming up with a new area where you believe standardization is needed, then I really think you ought to put it together internationally. That means that you should get an ISO committee established if there isn't one. If there is one and they are working, you should establish liaison with the international work. That will prevent there being two or three or possibly five solutions which are contradictory. The answer is, if it is not an ISO work, go to ANSI and get them to propose that there be one, and then go lock-step together.



Department of Defense Representation  
In International Standards Bodies

Samuel P. Miller  
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Office of the Under Secretary of Defense,  
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Department of Defense

Good morning, ladies and gentlemen. I am Samuel Miller, the Assistant Director for International Standards in the Department of Defense Specifications and Standards Office, under the Under Secretary of Defense for Research & Engineering.

Dr. Warshaw asked me to talk to you for the next 15 minutes about the Department of Defense participation in international standards bodies. Let me first say that I could talk for an hour or longer on this subject and still not adequately convey the scope and importance of the international standardization activities in which DoD is engaged. So, I will have to give you a broad-brush picture of that activity.

The DoD international standardization efforts are involved in both treaty and non-treaty international standards organizations. I will mention the various standards bodies in which DoD participates and the scope, and purpose of that participation.

I will also briefly discuss the functions and responsibilities of the DoD representatives serving on those bodies.

Most of the international standards work undertaken by DoD is performed for the several international defense treaty organizations, namely:

- o The North Atlantic Treaty Organization (NATO)
- o The American-British-Canadian-Australian (ABCA) Treaty Organization
- o The Air Standardization Coordinating Committee (ASCC) (Australia-Canada-New Zealand-England-United States)

NATO is the most active international standardization body in which DoD participates. In one of its roles, NATO sponsors the development of international standards. The importance of the NATO standards is obvious because most of the western European industrial nations and Norway, Greece, and Turkey participate with the U.S., the U.K., and Canada in the standardization activities of NATO. Although those NATO activities are directed primarily to developing interchangeability and interoperability interface standards for military equipments and components, there are commercial and industrial benefits derived indirectly from many of the materiel standards established in NATO. Recognition and application of the NATO standards by defense manufacturers in the U.S. and other NATO countries introduces those standards into commercial product design and manufacturing processes and often results in benefits to commercial and industrial users.

To a considerable extent, the substance of the NATO Standardization Agreements for defense materiel items are also effective in the ABCA and ASCC treaty organizations through adoption of similar standards.

To a lesser degree, DoD also participates in the non-treaty organizations for international standards such as the International Organization for Standardization (ISO) and the International Electro-Technical Commission (IEC). DoD participation in the development of international standards by the latter organizations is conducted principally through DoD technical representatives on the U.S. Technical Advisory Groups (TAGs), e.g., the TAG for ISO Technical Committee 20 sponsored by U.S. industrial and professional organizations such as the Aerospace Industries Association and the Society of Automotive Engineers. DoD also maintains representation on the ANSI International Standards Council, and will participate in the new initiative by ASTM for greater influence on international standards.

DoD also supports substantial technical representation in nongovernment voluntary standards organizations in the United States, e.g., the ASTM, SAE, IEEE, AIA-NASC, ASME, EIA, ANSI, etc., that sponsor development of product standards many of which are recognized as international standards and are used throughout the free world trade.

Another DoD contribution to international standards is the development and maintenance of our many military standards and specifications which have become international standards through their wide-spread use or adaptation throughout the free world and some non-free nations.

The DoD representation in international standardization activities in NATO and the other Defense Treaty organizations is substantial. The U.S. DoD representation in NATO is headed by the Defense Advisor who is the senior civilian representative serving on the staff of the U.S. Ambassador to NATO. The Ambassador reports to the Secretary of the State Department. The Defense Advisor reports to the Secretary of Defense usually through the Assistant Secretary of Defense for International Security Affairs. The Under Secretary of Defense for Research and Engineering and the Assistant Secretary of Defense for Acquisition and Logistics have principal responsibilities for providing the technical representatives for assisting in the development of standardization agreements applied in NATO defense procurement and operations.

The Secretary of State has delegated to the Secretary of Defense broad authority to negotiate international standardization agreements. However, concurrence from the Secretary of State is required for some agreements. Within the DoD, authority for approval and signing of NATO and other international standardization agreements is delegated to the Under Secretary of Defense and Assistant Secretaries of Defense. The Secretaries of the Military Departments, Army, Navy, and Air Force, are also authorized to sign NATO and other alliance standardization agreements relating to operational procedures or materiel interoperability within the scope of their departmental responsibilities.

At present, there are approximately one-hundred-thirty (130) various technical standardization working groups engaged in materiel related standards development in the treaty organizations:

- o NATO Military Agency for Standardization (MAS)
- o Air Force Board - 15 working groups
- o Army Board - 7 working groups
- o Navy Board - 2 working groups
- o NATO Military Committee - 15 working groups
- o NATO Conference of National Armament Directors (CNAD)  
12 main groups - 54 working groups
- o ABCA - 15 working groups
- o ASCC - 14 working groups
- o AGARD - 8 working groups

These 130 standardization working groups are staffed by approximately 280 technical experts, both military and civilian, representing most of the eighteen member nations of the several treaty organizations. The U.S. military departments and agencies provide and support approximately 180 of those technical experts.



There are currently approximately sixty (60) technical experts from DoD actively engaged in standards development in non-treaty organizations contributing to international standards for materiel items.

It must be noted, however, that assignment to the international standardization working groups, both in the treaty and non-treaty organizations, is a part-time assignment. The average time contributed by the individual experts ranges from 10% to 25% of total annual working hours, depending on the complexity of the projects and travel required.

As I previously mentioned, the primary purpose of DoD representation in international standards bodies is to facilitate intersupportability and interoperability of military equipments and supplies used by our armed forces and those of our allied nations around the world. Because of the increasing necessity for immediate availability of world-wide transportation and communication facilities for defense support, the cross-forces compatibility and interoperability of the equipments and supplies used by the allied armed forces is becoming more and more essential every year.

Most of the materiel related standards developed jointly and adopted by the alliance nations are for the purpose of harmonizing the interface design and operational performance characteristics and handling safety aspects of materiel items. The items covered by such standards range from screw-threaded fasteners, electronic parts and modules, personnel clothing, rations, and equipment, ammunition, aircraft engines, instruments, parts and support equipment, land-sea-and air based communications equipments, vehicle fuels and lubricants, cleaning and decontamination chemicals, paints, medical supplies, electric power generators, etc.

As you will notice, most of the items mentioned above, in general, will have applications not only in the military world, but also in the commercial and industrial world. Thus, the DoD representation in the international standards bodies serves a dual purpose, one directed for the support of the national and allied defense forces, and the other, as a by-product of the first, supports the commercial and industrial world. A main purpose for DoD technical representation is to try to ensure that the technical content of international standards will be useful for related defense acquisition applications. The standards published by the treaty organizations are in the form of standardization agreements and allied publications known as STANAGs, AQAPs, ASTANPs, Air Standards, QSTAGS, and others.

More than 1200 standards for materiel have been issued and the number of international and world-class national standards adopted by NATO is increasing rapidly.

In my work with the Interagency Committee on Standards Policy in 1981-83, I was leading the DoD panel that developed the draft guidelines for government representatives on international standards bodies. Consequently, the DoD procedures for international standards representation are consistent with the guidelines established in Feb 1984, in most activities.

The technical experts representing the DoD in international standards organizations and related U.S. standards bodies are required to perform several major functions including:

- o Identifying and maintaining liaison with key professionals in the U.S. & Allied Nations experienced in the related technology area.
- o Gathering pertinent technical information and sorting out the essential technical requirements to be included in the standards.
- o Developing and coordinating consensus U.S. positions with concerned DoD agencies and U.S. industry organizations, and appropriate officials in OSD, and other federal agencies.
- o Preparation and circulation of reports on meeting agendas and decisions.
- o Preparation of draft international standards for coordination with U.S. and international representatives.
- o Promoting, negotiating, and arbitrating with U.S. and foreign representatives to establish viable final requirements to be included in the published standard that is useful by DoD and other concerned agencies.
- o Preparing and presenting U.S. consensus position to the authorized DoD official for approval and acceptance.
- o Tracking and monitoring U.S. implementation of the approved international standards.

The technical experts assigned to serve as the DoD representatives on international standards organizations are selected from the most appropriate engineering activities in

the military departments and defense agencies. To the extent possible, we try to identify more than one highly qualified engineer or scientist to participate in the work of each of the standard working groups. Participation by experts from the Army, Navy, and Air Force on each group is sought. Where direct participation from each concerned DoD agency is not feasible, the selected single representative is responsible for identifying and maintaining liaison with key experts in the other agencies in order to obtain tri-Service inputs to the technical requirements intended to be included in international standards. When more than one DoD representative participates, one of them is designated as the principal representative.

The principal DoD representative assigned to any of the international standards bodies is responsible for planning and managing the work program required for developing the U.S. coordinated position for the drafts of the proposed standards and the final document offered for acceptance. The latter responsibility includes preparation and presentation of the recommendations for acceptance or rejection of the final standard by the appropriate authorized official in the DoD or other U.S. agency.

I've tried to present a lot of information in a short time. If there are any questions, I'll try to answer them or obtain an answer from another source.

Thank you for your attention.



## INTERNATIONAL FOOD STANDARDS AND NON-TARIFF TRADE BARRIERS

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Food and Drug Administration  
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Interest in the subject of trade continues to grow as the U.S. share of world trade continues to decline. The Washington Post, for example, proclaimed recently that we have entered a "new era of trade." As we begin this era, however, many see us facing a troubling situation. According to Commerce Secretary, Malcolm Balridge, more than seventy percent of U.S. made goods must now endure the competition of imports. A House Banking Committee report has stated, "The United States once dominated the world economy with virtually effortless superiority. Those days are gone forever." And John A. Young, president of Hewlett-Packard Co. is quoted as saying: "We have a problem." Of concern are both the traditional manufacturing industries and the fruits of new technologies, from computers to drugs to foods. For foods, there is a particular problem. Food is basically an international commodity and no nation in the world is independent of its free flow. In this context, the U.S. is still basically an agricultural country since, without question, the largest proportion of its export dollars come from agricultural commodities. (Indeed, even on the domestic front, food and food products play an important role representing approximately 25% of the GNP).

Against this backdrop, it is no wonder that we are taking a hard look at all of the elements influencing trade, particularly trade in food, including those factors known as "non-tariff" trade barriers. In the regulation of health and safety, such barriers can be erected in various ways. For example, restrictions can be imposed requiring that safety testing be conducted in the importing country or different testing requirements from those of the exporting nations can be imposed. And even when testing requirements are met, the importing country may apply a different safety standard in acting upon the results of the tests.

Thus, in today's world, it is becoming increasingly clear that technical issues of trade really involve two sub-issues:

1. First, the management of the scientific technical issues, and,
2. Second, the management of the regulatory interpretation of the scientific facts within the context of national law.

One of the major problems is that too often the issues become confused and scientific uncertainty or debate is used to obfuscate the fundamental issues and support narrow national interests.

When it is possible to segregate issues in this way, then the first task

is to find a means for resolving the purely scientific matters -- to find a common ground for the interpretation of scientific facts. Basically, this means bring the interested parties together. This is the function of both formal and informal international bodies. Historically we have seen a number of different efforts, depending upon the nations involved. For example, for food, USFDA has developed bilateral agreements, formal and informal with more than 20 countries including Japan, the Peoples Republic of China, India, Ireland, France, Finland, Saudi Arabia, Israel and Nigeria. In a more organized fashion, multilateral arrangements have been made such as the creation of the Tripartite group of nations consisting of the U.S., the United Kingdom, and Canada. This group meets in plenary session at least once a year for the purpose of informing and discussion of technical issues concerned with food and drugs. It serves as a framework for resolving matters of mutual concern, as was done with the proposal by the Japanese government to ban the food additive, butylated hydroxyanisole (BHA). Meetings are rotated among the participating nations, and the agenda for each meeting is set by the host country. In addition, subcommittees of the Tripartite meet more frequently to discuss more specific problems and to develop more technical joint papers. The result of this decade long effort has been a reduction in conflicting regulatory decisions and, more importantly, a sharp reduction in regulatory disputes based on technical issues.

Another such approach on a more global basis is the Joint Expert Committee on Food Additives (JECFA) and the Joint Meeting on Pesticide Residues (JMPR). These are joint committees of WHO and FAO in which representatives of various countries serve on a personal basis. The committee has from twelve to fourteen members nominated equally by FAO and WHO and meeting one to two times a year to consider questions of the safety of individual substances that might be found in food. The U.S., through the International Program for Chemical Safety, prepares a substantial number of monographs that are used as a foundation for the committee discussions. Of greater importance, these committees serve as the technical infrastructure for many developing countries which use their conclusions as a basis for their regulatory actions. These committees also serve as an international baseline against which even developed countries can measure their regulatory activities. In a similar sense for the economically developed countries of the world, the OECD serves a similar purpose.

A much more formal approach has been the operation of the Codex Alimentarius Commission. Codex Alimentarius -- translated freely as "code of food standards and regulations" -- is a collection of internationally adopted food standards drafted and presented in a uniform manner. The purpose of these international standards is to protect consumer health and promote fair practices in the food trade. They ensure that the consumer receives a wholesome product and is properly informed about what he is buying. The publication of the Codex Alimentarius standards is also intended to assist in harmonizing the



definitions and requirements for foods in the different countries of the world, and in so doing, to facilitate international trade. They are not intended to be used to create protective economic trade barriers for any country or region of the world.

The Commission is empowered to establish various subsidiary bodies to assist in accomplishing its program. The most important of those established so far are a number of expert committees whose function is to prepare draft standards and submit them to the Commission, which then transmits them to governments for comments and eventually for acceptance or rejection. In most instances each expert committee operates under the sponsorship of a member nation which supplies a chairman and facilities for conducting periodic meetings.

The establishment of tolerances under the Codex or any international system is not an easy one. Problems that we face on a national scale are multiplied at the international level. For example, if we ask ourselves whom we must protect domestically, the question becomes more difficult and complex on a world scale where consumption patterns and cultural dynamics are even harder to predict.

These considerations bring me to the second sub-issue: the management of the regulatory interpretation of scientific facts within the context of national law. Once scientific issues are agreed upon, a country has several regulatory options which it may follow. It may apply a set of regulations which apply primarily to imported products but may not affect domestic products. The use of pesticides on certain agricultural commodities to assure quality following long shipping times is an example of this sort of situation.

A country, however, may also be clearly compelled by its national laws (as an expression of national health and safety values) to follow a particular course of action. The prohibition of carcinogens under the Delaney clause of the U.S. Food, Drug, and Cosmetic Act is an example of this situation. Here the action required by the national law equally affects domestic and foreign products.

Consumer pressure may also play an important role in the interpretation of the scientific facts and their use in deciding the appropriate regulatory action. In some countries, the growing consumer movement has forced governments to take action on certain substances where, in other countries, no action has been taken. Similarly, on the other hand, pressure from domestic industries for protection may compel a government to restrict the use of certain substances on imported products since that same material is not needed for domestic products.

This brings me to my final point, that a country may also establish regulations which affects its own market to some extent but have even greater impact on imports. An excellent example of this is the use of antioxidants which, in many cases, may not be required to the same



extent in domestic products because of their relatively short storage time. Imported products, on the other hand, almost always require some kind of protection against oxidation due to the relatively long times they must remain in storage during transport.

As we know, barriers to trade, whether they be tariffs, quotas, or technical barriers, can have both planned and unanticipated effects upon the countries involved. Import restrictions may spur foreign investment in another nation; but they may also hinder the spread of scientific or technological knowledge. Indeed, the exchange of information itself is sometimes used as a barrier to trade. Different standards of confidentiality can deter the use of information to support the safety of a product.

Domestic regulatory agencies are increasingly finding themselves in the throes of trade issues of a technical nature. The proposed Japanese restriction of the food additive, BHA, provides an excellent example of this situation in the food area. When Japan announced to signatories of the Standards Code that it was about to restrict the use of BHA, FDA found itself arranging a four-nation working group of experts (from Canada, the U.K., Japan, and the U.S.) to discuss the restriction. Eventually the issue was forwarded to an international body -- the Joint Expert Group on Food Additives (JEGFA) -- the group which sets tolerances used by the Codex Committee on Food Additives. Basically, the JECFA agreed with the conclusions of the committee. At this moment in time, the Japanese are still considering what action should ultimately be taken, but if the Japanese government does act, it cannot use the technical issue alone as a reason for its action since there was general agreement among all scientists involved in the evaluation that BHA is safe for its current uses.

Increasingly, FDA, too, has found itself working with the office of the U.S. trade representative on matters which are presented to that office as possible technical barriers to trade. In this capacity, it has found itself serving as the technical resource for providing information and explaining scientific issues. In addition, we are working more and more closely with our colleagues in the Foreign Agricultural Service of the USDA, who often are the individuals best suited to evaluate food problems in a particular country. Nevertheless, it is important to remember that FDA is not a trade organization and that its action and policies are not directed towards improving U.S. trade. Rather, under our law, we are compelled to provide the same regulatory approach and emphasis to imported and domestic products. However, with the recognition that food is an international commodity and that the free flow of food among nations is in the best interest of the United States and of the recognition that FDA's mandate can be most effectively met when world standards and technical competence are uniform, the agency, particularly the Center for Food Safety and Applied Nutrition, has become increasingly involved in these international activities of the trade office.

The distinction between a technical trade barrier and regulations based on national values concerning safety is often a fine one. At a time when we are torn between forces for harmonization on the one hand and forces for protectionism on the other, we face an enormous task to smooth the way to permit making that distinction. In our opinion, the ability to treat scientific issues independently of national trade policy is essential for rational selection of regulatory options designated to resolve these issues. The scientific regulatory agencies must be constantly sensitive to the scientific base supporting regulatory actions. In the international arena, it is becoming increasingly apparent that this sensitivity must be multiplied and sustained. More importantly, the need for international consultation on scientific issues prior to the selection of regulatory options in individual countries is also becoming more apparent. If we can obtain agreement on the scientific issues, more often than not, disagreements on the regulatory solutions will become less and less.

## International Standards in Telecommunications

Earl S. Barbely

Director

Office of International Communications Policy

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In the telecommunication field standards are set and constantly revised under the impetus of rapidly changing technology. National and international telecommunication groups meet almost constantly to discuss whether standards are needed in particular instances, and if so, what the standards should be. The setting of an individual nation's standards often differs and makes this process more difficult.

Sovereign nations are members of the ITU and its working organs, but we, as a Government, do not believe that we hold the answers to all questions. Particularly in technical fields we consult with and rely on the expertise of the private sector utilizing the experience and the knowledge of those who have been most directly involved in the field including users, manufacturers and providers of service.

We have developed a system of extensive reliance on the private sector in our relations with the CCITT and the CCIR, using their knowledge in the planning, discussion and even negotiation of proposed standards (international recommendations) both here in the U.S. and in our international dealings.

It is more difficult to speak of standards in the communications field than in some others; our standards are more precise and exacting in some areas, but less concrete in others. Measurements are more often intangible rather than concrete. Yet we must have standards if only for compatibility's sake.

Indeed, our communications concern is not with consumer protection as is the case of setting measurement or weight standards, nor of possible health hazards, but rather communality and compatibility, without compatibility there is no communication. Thus the interest of Government is distinct in this area; it has a concern not of protection but of facilitation; in some sense the Government is a practitioner of laissez-faire in the broadest sense, letting the market work and involving itself only when absolutely necessary. What we seek in this field is the opportunity to use the expertise of those most concerned in these activities because those are the entities which not only have the experience, but will be most affected by the decisions.

Both providers and users of telephone data, radio services and allied means of communication need Government support rather than intervention particularly in international radio. Our goal as Government is to provide support when we can and intervene only when necessary.



Some in the audience will be moved to applaud this policy; those who believe in Governmental intervention and adjustment may be horrified. Nevertheless, as believers in the market system and the ability of private enterprise and the efficiency of the American economic system we have found the method to be optimal; and not just during the present administration, with its emphasis on the private sector and on the workings of the market. Since the inception of international telecommunications and the ITU, since the beginnings of the International Consultative Committee for Telephone and Telegraph the CCITT and its sister the CCIR, the International Consultative Committee for Radio, and the regional groupings, the U.S. has, except in those relatively rare cases where direction from above was clearly indicated, relied on the needs of carriers, users, and service providers, to direct the international standards to the best interests of their own concerns.

How can this be done in the international arena without subjecting the consumer to predatory pressure? And how does the Government avoid cartels, monopolistic practices, and collusion that will end up placing an economic tax on the people that Government represents? Let me begin by quoting Thomas Jefferson, who I am sure you will agree is not regarded as a friend of monopoly and monopolists but is considered an advocate of the individual and his rights. Thomas Jefferson said: "That government is best which governs least." Taking Jefferson then as our polestar, we begin by assuming that Government should not become involved except of necessity. And when Government must become involved, it is again only "by consent of the governed." While theories of Government vary, American political relationships are generally conceded to rest on this social contract.

For most of the more-than-two-centuries that our republic has existed, Government's function has been to watch and to insert itself only when overwhelming need has been asserted. Of course, monopolistic practices, robber barons, timber cultivation ignoring the needs of the future, similar misuse of water resources, unencumbered building with no regard for the ability of the environment to support it, predatory pricing, sales of useless products or those which may damage the buyer, have all caused Government to enter the arena, and with reason and justice. I postulate not the Government's absence, but the policy of Government hesitation; a necessity to be certain of required Government action, before allowing the sometimes ponderous, weighty, difficult to stop, intervention of the representatives of the republic in areas where there is no clear necessity.

Certainly there are examples to be cited where there is a clear necessity. In the field of radio communication Government, as the representative of the people has had to act to regulate frequencies so that the public interest is served by reserving some frequency bands for public purposes, including those of defense, and by licensing other frequencies to avoid chaos and give the populace access to what is available.

U.S. National Committees for both the CCITT and the CCIR now exist. Both these groups meet regularly here in Washington and elsewhere in the U.S. to discuss proposed policy in the larger international groups. American corporations, large and small are members. Some of the members of the National Committee are members of the CCITT as RPOAs, recognized private operating agencies and as such may attend sessions of the CCITT by themselves. Household names, MCI, ITT, AT&T and its various divisions, CDC, Control Data, Citibank attend these meetings in which there is broad discussion and not always unanimous agreement on America's position with respect to the international coordinating committees. The National Committees also have working groups to discuss some of the details of the broader policy-groups that contribute much time and effort to the discussion and that often come up with the initial recommendations for our negotiating stance.

What we do then is utilize American industry's talent for the greater good of all. Without this process, a far larger expenditure of time and effort by the Government would be necessary; additional public expenditures would be needed to hire people to discuss and evaluate the technical detail; and there is no guarantee nor expectation that the decisions would be any more imaginative correct, proper, sober, helpful, and yes profitable.

In international meetings U.S. delegations have almost always had advisors from the private sector. Our bureau in the State Department, the Bureau of Economic and Business Affairs among other matters, negotiates international aviation treaties. In these negotiations industry representatives are members of the negotiating panel. (Constitutionally the President may, of course, select whom he likes to represent the country.) Our representation on working groups of the CCITT also leans heavily on private sector personnel and their expertise. It seems to me, that this has worked extremely well for us as a nation, as a government and for the industry.

We have adopted what might be called a watching brief, relying for the most part on the day-to-day users of the systems. Only when American policy and the competitive balance demands it do we involve the parts of the government with telecommunications interests

I see no reason to suggest any change in this system. It is efficient, represents a basic form of democracy, helps to keep the government and private sectors cooperating, gives those concerned a chance to be heard nationally and internationally and is economical of the public purse. To use what may be the oldest cliché in the telecommunications field --or any other field: It ain't broke. Dont'fix it.



## International Standards Activities

Edwin L. Johnson  
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United States Environmental Protection Agency

The Environmental Protection Agency (EPA) is involved in several voluntary standards activities ranging from toxic chemicals to automobiles. I can not cover all of these today but have included a partial list as an attachment to my paper. Instead let me focus on one or two international standards activities with which I am personally involved to try to give you some idea of what those organizations do, how we prepare as U.S. representatives to participate in those sessions and who we involve in that preparation. These two activities involve the Food and Agriculture Organization and Codex Alimentarius activities in the field of pesticides. I am also approaching standards in a very broad sense. Dr. Warshaw yesterday gave us a definition of standards but I think you will find that my use of the term may go somewhat beyond the conventional definition.

The Food and Agriculture Organization (FAO) of the United Nations is comprised of about 140 member countries, including the United States, and it is a treaty organization. It has broad interests, in the fields of agricultural policy, food and nutrition and agricultural production. Pesticides are one of the major factors of production of many crops and in the 1970's when there began to be great concern about the environmental and health consequences of pesticides, the FAO shifted its emphasis from viewing pesticides simply as a means of crop protection to looking at other issues involving health and environmental aspects and regulatory approaches to control potential adverse effects.

For those of you who don't know much about the pesticide industry, let me digress for a few seconds to characterize it and to illustrate why the international aspects of trade in this area are extremely important. There are about 40 companies in the world that manufacture the basic pesticides that are used in agricultural production worldwide. These are located principally in the developed countries -- e.g., the United States, Europe and Japan. They export these pesticides around the world, principally to the agricultural, developing countries that produce many agricultural commodities. These agricultural commodities are often exported from the developing countries back to the developed nations that produced the pesticides in first place, often containing residues of those pesticides when they are imported. This is the kind of problem that Sandy Miller was talking about which is regulated through Food, Drug and Cosmetic Act tolerances administered jointly by the Food and Drug Administration (FDA) and EPA for pesticide residues.

The industry is very tightly regulated in developed countries and must obtain pre-marketing approval for every pesticide before it may be marketed and used. This approval requires industry submission of an extensive set of health and safety information that enables the country



to judge that the pesticide may be used safely. These similar kinds of regulatory approaches are not available in the developing countries in many cases, so there is often less control over the chemicals that are imported into a country and how they are used within that country. This situation can lead to disruption in international trade in both food and pesticides because of difficulties involving excessive residues, or concerns about poisonings of applicators.

The FAO saw this problem to the continued use of pesticides as a principal production factor in agriculture and they began to move into this area. They do several things in the standards area. The first is a conventional international standard -- chemical specifications for pesticides which are no longer under patent so purchasers of these pesticides have a set of characteristic chemical standards for purchasing.

But they also go into another area that is much broader. FAO develops guidelines and principals for regulating pesticides. They develop guidelines on such topics as labelling, packaging, storage and disposal of pesticides. They develop procedures for dealing with pesticide residues on food and analytical procedures which are intended principally to provide developing countries with standards as to how to regulate pesticides within their countries on a uniform basis. Some of the issues they are dealing with, for example, are harmonizing data requirements so that the expensive test-data supporting the safety of a pesticide in one country can be transported freely to another country to avoid the situation that Sandy Miller mentioned in which each country requires testing to be done differently or to be done within its own boundaries. Those are the objectives the FAO seeks to meet in developing these kinds of broad international standards.

Procedurally standards start with an expert committee, a group of 8 to 10 individuals selected worldwide because of their knowledge of the issues. These committees draw up working or background papers and when enough are accumulated, the FAO calls for an international Consultation of governments in which all member countries can participate in the modification or approval of the documents developed by the expert committees. Technical issues generally do not move above the Consultation; generally the approval comes without major disputes and the standards are issued by FAO. Let me talk a little bit now about the U.S. delegation and how it goes about preparing for one of these Consultations. As Don 'Ableson mentioned yesterday almost everyone in the U.S. government has some piece of the action when it comes to preparing for international meetings. In this particular case, the Environmental Protection Agency, because it has the basic regulatory authorities for pesticides leads the delegation. It is supported by members drawn from the Food and Drug Administration, the U.S. Department of Agriculture, Agency for International Development, and sometimes the Department of Commerce or other parts of the State Department. Preparation begins six months to a year before the consultation is to be held when we begin to receive background papers and working papers for the meeting. It involves not only the individuals formally compromising the delegation, but may require twenty-five to thirty other technical experts to review and prepare positions on the various documents

before us. We wind up with a series of U.S. position papers, generally at the technical level, which give the delegation some broad policy guidance and equally broad discretion to make technical decisions as the issues evolve during the international meeting.

One of the important things in this preparation is the involvement of non-government organizations. Many of the actions that will be taken by the U.S. delegation have profound impacts upon both international trade in pesticides and food, but also on potential global environmental consequences. As preparation progresses we are constantly in touch with industry, public interest and environmental groups. And when draft U.S. position papers are prepared, we sit down and discuss those papers to make sure we adequately reflect the interests of the many diverse parts of American society.

One of the more interesting exceptions that did not stop at the technical level and is still currently under debate is the Code of Conduct on Distribution and Use of Pesticides (a voluntary code of conduct). This is, perhaps, the broadest form of voluntary standard with which we have been involved in that it does not define technical specifications but rather defines standards of ethical conduct or responsible behavior for all those involved in international trade in pesticides. If you remember the United Nations breastmilk substitute controversy a few years ago, you will understand that this issue took extra care by the delegation to develop a U.S. position. For example, we did not stop at senior Agency technical level approval, but rather pursued a full State Department approval to go ahead with a positive U.S. position because of the controversy about codes of conduct in general. Incidentally that later proved to be very beneficial because in the latest round of government review there was great concern about having a code. Having that earlier clearance and agreement from industry and other outside parties early on, helped keep us on track in later efforts on the Code. Determining the appropriate level of clearance is an important aspect of preparation.

The other area that I will mention briefly is the Codex Alimentarius and in particular that part of Codex that deals with maximum residue limits for pesticides on food. These are maximum levels of residue permitted on commodities in international trade. Here the U.S. is not only a participant in developing the standards, MRL's (maximum residue levels), but is also a user of those levels. We bring information before the group to decide those levels, and here is where we have a major impact on foreign trade because there are often two sets of nations involved -- those who import food and see residues only at the port of entry after they have had an opportunity to degrade for several weeks or months and who want to establish low levels reflecting monitoring data. And then there are those countries such as the United States that actually produce much of this food for export and who have a system that measures and enforces the level of residue at the farm gate where residues are often much higher. So we are constantly confronted at these meetings with some importing countries relying on monitoring data saying "we don't see any reason what-so-ever why the level has to be five parts per million on this particular crop and we think it ought to only be one ppm!" The United States on the other hand perhaps cannot

live with the lower tolerance and export its food because good agricultural practices in the food's production requires a higher level. This is an area where the debate on trade and health impacts, and the reasons for higher residue levels and the need for those higher levels based on good agricultural practice within the country become very important and have immediate consequences on the agricultural sector.

Another feature of this standards activity is the fact that the Codex system on pesticide residues runs almost entirely on industry data. In fact, its the only official delegation that I have been involved with that has members of industry both pesticide manufacturers and growers, as formal members. And the information used to develop the standard comes basically from industry's confidential data base rather than from governments or from other sources such as published literature.

I'll wrap up by emphasizing one point. In order to represent the U.S. position at these international standards meetings, advance preparation is extremely important. And in order to prepare properly there must be involvement not only of a wide range of government agencies but also of non-government organizations, both industrial and environmental.



Attachment

Partial List of International Standards Activities involving  
the Environmental Protection Agency

Organization: FOOD AND AGRICULTURE ORGANIZATION (FAO)

International Standards Activity: Chemical Specifications for Commodity Pesticides  
Guidelines for Registering Pesticides  
Guidelines for Labelling, Packaging, Storing, Using, Testing Pesticides  
Code of Conduct for Distribution and Use of Pesticides  
Assessment of Residues of Pesticide Residues on Food Resulting from Good Agricultural Practices Residues with World Health Organization.

Contact for further information: Cathleen McInerney  
Office of International Activities  
EPA

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Organization: ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD)

International Standards Activity: Good Laboratory Practices for Testing Testing Protocols  
Ad hoc Group on Safety and Regulations

Contact for further information: Cathleen McInerney  
Office of International Activities  
EPA

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Organization: WORLD HEALTH ORGANIZATION (WHO)

International Standards Activity: Determination of Acceptable Intakes of Pesticide Residues on Foods (Joint Meeting on Pesticide Residues with FAO)  
Data Interpretation and Testing

Contact for further information: Pete Christich  
Office of International Activities  
EPA

Organization: Codex Alimentarius Commissions

International Standards Activity: General food standards for foods in international commerce, EPA specifically involved in limits of pesticides residues on food.

Contact for further information: Cathleen McInerney  
Office of International Activities  
EPA

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General Agreement - Tariffs and Trade

International Standards Activity: Automobile, testing methodologies

Contact for further information: Cathleen McInerney  
Office of International Activities  
EPA

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Radiation? No.

## International Standards Activities

Organization: World Health Organization (WHO)/ United Nations Environment Program (UNEP) Global Environmental Monitoring System (GEMS)

Int. Standards Activities:

- quality assurance/standardization for measurement methodology in monitoring urban air pollutants
- quality assurance/standardization for measurement methodology in monitoring fresh water

Organization: WHO/UNEP Human Exposure Assessment Locations (HEALS)

Int. Standards Activities:

- pilot project by U.S., Japan, Sweden and Yugoslavia; new ongoing multi-year effort to standardize designs and field studies of multi-media (air, water, food) monitoring of human exposure to toxic pollutants. Effort will integrate environmental monitoring and sampling of human population data gathering.

Organization: WHO/International Program on Chemical Safety

Int. Standards Activities:

- Environmental Health Criteria document development for certain chemicals provide criteria for establishment of national standards

Organization: International Organization for Legal Metrology

Int. Standards Activities:

- instrument performance standards efforts on air, water, toxics, pesticides, and hazardous waste measurements.

Organization: WHO

Int. Standards Activities:

- Guidelines for Drinking Water Quality

FOR FURTHER INFORMATION, CONTACT: PETE CHRISTICH  
EPA, OIA



Organization: International Atomic Energy Agency

Int. Standards Activities: establishes regulations on the sea disposal of radioactive wastes. The regulations consist of two parts:

1. a definition of those high level wastes that may not be dumped,
2. recommendations governing the dumping of low-level wastes.

FOR FURTHER INFORMATION, CONTACT: ALAN SIELAN,  
EPA/OIA

Organization: United Nations

Int. Standards Activities: system of identification of hazardous wastes by number, each with standards for the packaging and labelling of the waste. There are also several international conventions developed through the U.N. transport committees for specific kinds of transport --rail, road, sea.

Organization: International Maritime Organization

Int. Standards Activities: standards for the transport of hazardous waste by sea

FOR FURTHER INFORMATION, CONTACT: WENDY GREIDER,  
EPA/OIA

## U.S. Participation in a Treaty Organization

Eddie F. Kimbrell  
Deputy Administrator, Commodity Services  
Agricultural Marketing Service  
U.S. Department of Agriculture  
and  
Chairman  
Codex Alimentarius Commission  
Joint FAO/WHO Food Standards Programme

A major influence on the international standardization in the food area worldwide is the Joint FAO/WHO Food Standards Programme, through the efforts of the Codex Alimentarius Commission. When the Codex Commission elected me its chairman in July of 1983, it was the culmination of my 15 years of involvement with the Codex program. I feel very privileged to have been involved through the years in this standardization effort and am gratified that a degree of success has been achieved.

You will note that this activity is a treaty organization and as such is conducted officially on a government to government basis. However, to consider this program as just government bureaucrats negotiating would be a total distortion of the facts. In fact, without the participation and cooperation of private industry, academia, consumer groups, and many different government agencies, I feel safe in stating the Codex program could not possibly have accomplished what it has to date.

A Codex progress report would seem appropriate here, prefaced by a short explanation of what the Codex program is for those not familiar with its work.

The Codex Alimentarius Program is a joint effort of the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) to develop food standards which will both facilitate international trade and protect the health of consumers. FAO and WHO created the Codex Alimentarius Commission in 1962 to implement their Joint Food Standards Programme, which is based in Rome. Any nation that is a member or associate member of FAO or WHO may be a member of Codex. Currently, 129 nations participate.

To carry out its mission, the Codex Alimentarius Commission created 28 committees and two expert groups (Illustration No. 1) to develop international food standards. At last count, the Program had developed:

- (1) 158 product standards with at least 19 more under development;
- (2) 19 Codes of Hygienic and/or Technological Practice;
- (3) 54 Methods of Analysis and Sampling; and

#### (4) Maximum Limits for Pesticide Residues for 138 pesticides.

Of these, 133 product standards and six series of pesticide residue limits have been submitted to member governments for acceptance. The U.S. has finished action on 42 of the standards, (this number could conceivably double by July 1985), and many more actions are in the rulemaking stage at FDA and USDA. More than 60 countries have responded, accepting more than 820 pesticide residue standards to one degree or another. As Codex Chairman, I can say that with the winding down of the development phase of the program, we will be concentrating on encouraging more and faster acceptances.

As you can see the Codex program has accomplished a prodigious amount of work--the overwhelming majority of which is acceptable to the U.S. How did that happen? Part of the answer lies in the original formulation of the Codex Commission's procedural rules which force action to be taken. The rest of the answer lies in the preparation and participation of the 129 member countries, and the recognition of a special need. No longer is food just traded domestically. It has become increasingly important as a product crossing international boundaries.

I as the USA Codex Coordinator am constantly impressed with the procedural system which allows the USA to participate so effectively in the work of the Codex Commission.

The U.S. system includes the USA coordinator, who serves as administrator of the entire Codex program and also U.S. representative to the Codex Alimentarius Commission--the parent body. In each of the subsidiary bodies, committees which do the technical development work, we are represented by an individual from an appropriate agency (USDA, FDA, DOC, EPA) and discipline. In most cases, each committee representative has one or more alternates.

Oversight and policy coordination is provided by an ad hoc intergovernmental group on Codex Alimentarius with representatives from the Department of State, USDA, EPA, Department of Commerce, and Department of Health and Human Services.

Now that sounds like adequate infra-structure to handle the work of the Codex Alimentarius Commission. However, if we stopped here, I'm sure the results of our participation would be less than satisfactory. That is why each of the representatives to any Codex body, including the Commission itself, is responsible for seeking out and maintaining contact with interested parties from all sources. This list of interested parties forms the basis for distributing Codex proposals and drafts and gathering the information necessary to establish comprehensive, meaningful, and effective USA positions on items coming from the various committees and the commission. The crucial point of this whole exercise being that the views of all interested parties, government and non-government, are known before the USA position is established.



In the Codex program we have always been extremely fortunate to have had the complete cooperation of private industry and other interested parties to assist us in effectively representing the U.S. I mention this only because I know of other programs where this critical element is missing and they suffer because of it. Degree of voluntary participation is a reflection of the value placed on the activity by the interested parties. It has been my experience that private industry, in particular, is very reluctant to support programs or activities it views as of doubtful value.

After the USA positions have been established, by meetings and correspondence, the actual representation at the committee and commission sessions is crucial. U.S. delegates to Codex committee sessions consist of the U.S. representative, a government person, who speaks for the U.S., and depending on the complexity of the agenda one or more government advisors plus a number of industry technical advisors, who pay their own expenses to attend the sessions. The size of the U.S. delegation normally varies from 2 to 25-30 depending on the subject matter of the session. Of the general subject committees, food hygiene, labeling, food additives, and pesticide residues tend to draw the most interest. In the commodity committees, fish and fish products, cereals, pulses, and legumes and processed fruit and vegetables tend to have the largest delegations.

At the last commission meeting in Rome in 1983, the U.S. delegation consisted of 8 U.S. government employees and 20 industry advisors. This is not such a large group when you weigh it against an agenda consisting of over 90 significant specific items generated by the 28 subsidiary bodies plus the administrative work of the commission. Attempts are made to minimize the size of the U.S. delegation, mainly by having U.S. citizens attend as representatives of international observer organizations. As the head of that U.S. delegation, I can assure you it is very confidence inducing to look around and see all the technical help available on such a wide range of food standards related matters. Many times we have been able to win technical points supporting U.S. positions by producing immediate expert technical information.

So, to do the best job possible of representing the U.S. in international standards bodies, my experience with the Codex food standards program indicates one must maximize participation by all interested parties, prepare strong U.S. positions and have expert technical backup available at meetings whenever possible. To do any less is a waste of time and increasingly scarce resources. International standards are not just a wave of the future. They are here. And, regulatory bodies are using them. Thus, it is in our interest to see that they represent the latest technology, promote efficiency of production, and safeguard the health and welfare of consumers.

There is no enforcement mechanism within the Codex Alimentarius Commission. Each country that accepts a standard is responsible for its enforcement. Thus, acceptance is a key to removing trade barriers. And, as I've already indicated, that is beginning to happen. I think, as with all international standards, use by industry will force governments to consider international

standards. So whether in a treaty or non-treaty organization, industry participation ultimately will determine its success or failure.





How does DOD specify which standards are to be met in purchasing equipment and how does DOD verify that equipment produced in, say Germany, meets DOD requirements?

Sam Miller:

From the International Standards viewpoint, the main body that we are concerned with is NATO. We do agree as participating nations on which standards should be followed. Some of those are ISO standards, some of them are national standards, such as the DINs, some are military standards, such as our own. When it is agreed that these standards will be used, equipment offered by any NATO country industry is acceptable if it meets one or more of the approved standards.

Is there overlap between ITU, ISO and IEC in the communications area and how do you minimize any duplication?

Earl Barbely:

There is some overlap in border-line situations, as in the ISO and the CCITT, for example. However, at the recent plenary assembly this past fall in Spain, the CCITT, which has worked rather closely with the ISO and the EIA, we have established a mechanism by which that work can be done with better liaison than in the past. I think it's worked fairly well and there doesn't seem to be too much duplication, although there are always rivalries when you get down to the edge of what is or what isn't telecommunications, what is a computer standard, and things like that. But I think that the activity itself is working very well.

In the United States, the American National Standards institute, ANSI, works through both organizations and when ANSI establishes a standard, they normally bring it to the CCITT national committee and try to get it established as a world wide standard. Yes, there is very good liaison and we hope there is not too much duplication and we're trying to make it even better. All the organizations together will spend several years studying the situation to identify gaps and overlaps.

Mr. Barberly implied that government should act only when it is certain of the outcome it is trying to regulate. I wonder if Mr. Johnson and Dr. Miller of FDA agree with this statement.

Sanford Miller and Edwin Johnson:

I'm not sure how you can be certain of the outcome of anything you start. You may have a goal that you want to reach and maybe that is what the question means. In the areas that EPA and FDA cover there's a considerably greater intensity of interest in the sense that health, and ultimately life and death issues, are involved in the decision making process. This is really where I think most of the conflict comes in international decisions concerning food

chemicals, pesticides and food standards. To a large extent we are asking countries, who participate in CODEX, for example, to set aside national values concerning safety. The Japanese, for example, have a very long history, since World War II, of being opposed to everything called food chemicals. It's important that we begin to look at these things from a health point of view and they are very concerned about this. The Japanese are concerned about radiation of food, they have a cultural history of being concerned about radiation, one which we don't share.

I think we have to start off with a goal, and I agree with Mr. Barbely, that government should get involved in issues that people can't take care of themselves. I think in issues of safety of food and international standards for food individuals simply cannot play a role.

I agree completely with what's been said. We need to start with a goal and I think the thing that is different perhaps about some of the areas that we regulate in EPA and FDA is that there is much less agreement on what that goal ought to be. There is much more uncertainty about some of the effects the regulatory programs may have. In many areas of standard setting, the impact of the results can be measured in economic or monetary terms. With most of ours, we have competing goals of economic gain versus health and safety. The areas are often very murky and subject to a great deal of public perception rather than tight analysis and that really complicates things considerably.

**To what extent does DOD involve private sector interest in developing U.S. positions on NATO standards?**

**Sam Miller:**

That information will appear in your printed proceedings. The private sector representatives from industry are represented in many of the working groups, if not all of them, that develop the proposed standards for acceptance by DOD and by NATO. These industry people are usually selected because of their technical expertise in the field of technology involved.

**There is an interagency committee on standards policy (ICSP). What of the possibility of also establishing an international committee on standards policy to coordinate treaty and non-treaty international standards between ISO, IEC, WHO, UN, OIML, CODEX, CCIR and acting as a high council of international standardization?**

**Sanford Miller and Earl Barbely:**

We have an open public forum for international standard making which everyone is invited to. In fact, whether you have a committee here in this organization may not be terribly important because the DOC plays a major role in all of the international standards setting in the CCIR and the CCITT. They participate fully. The government expertise lies in the Commerce Department and it lies in FCC and some of it in State. We try to coordinate that activity. About 85 or 90% of it is private industry, so I think that we



already have a well rounded system of operating. I don't know, and I would not like to comment on whether you need an international committee in your organization.

I think the question is directed toward the establishment of an international coordinating committee on standards organization. We have a committee here in the Federal Government that, in essence, is attempting to do that, to indicate where there are areas of overlap and where there are areas where coordination in different standard setting groups is necessary. I think the first obvious answer is, of course, yes there are lots of areas of overlap. There is certainly a big overlap between the materials and standard setting organizations in the food area, particularly in such things as packaging materials or materials to produce materials capable of being sanitized for food production plants, and things of that kind. But there are some counter arguments. Its hard enough, within the context of relatively limited product or technical areas, to bring people together from widely varying cultural and economic backgrounds and have them agree on some conclusion. Political issues still play a role in CODEX activities, which is nearly forty years old. To a large extent cultural issues play a role. To take those individual organizations and have them come together to talk about the general issues is extremely complicated. I think the current situation where there is a lot of overlap in these committees, where individual members may sit on more than one of these committees, is probably, for the moment, the best way to do that.

Much of this is taken care of by overlapping membership on some of these committees and I think some of the international organizations are becoming much more aware of it than they have in the past. For example, the food and agriculture area began in the late seventies to work on pesticides. There was a great fear on the part of several of us that they would begin to duplicate standards for testing pesticides, for example, that were already underway within OECD, or efficacy testing which was being conducted by the European Plant Protection Organization. In fact, it didn't work out that way because people had enough sense to draw on the expertise of other organizations. It didn't happen because people in the international standards business are aware of it and are attempting to cope with it already.

**Please tell more about the ASTM's "New Initiative" to strengthen its activities in international standards. Has ASTM published info on this?**

**Sam Miller:**

The first meeting that ASTM called was held last week with about 11 representatives present. Several representatives were from government and the remainder came from the ASTM and industry. The initiative was announced about four or five months ago after lengthy deliberation in the ASTM organization. The meeting was primarily an open discussion to try to set objectives and procedures that might be effective in promoting ASTM and the use of ASTM standards throughout the world in more dominant positions than they are now. Methods by which ASTM standards might be utilized as ISO standards and the pros and cons of each of those issues were discussed. The



next meeting of the organization will be held in July and it will be announced in the ASTM publication. I believe that they are inviting a greater participation, so if someone is interested I suggest they get in touch with us.

**Your presentation appears to be radically at odds with Dr. Miller's of FDA. Can you discuss more factually, and less philosophically, why the State Department uses government funds to represent U.S. firms, and their profitability, in the absence of national law or a clearly stated public policy intended to achieve concrete benefits for the citizenry as a whole?**

**Earl Barbely:**

The Department of State has the foreign policy activity in this government and we have tried to carry out, under that foreign policy, the "I" of the activities of the International Telecommunications Union. It happens to be part of the United Nations and has been since 1947. It is an organization made up of governments, 160 governments. I would suggest then that the Department of State has some role to play in it's activities. Telecommunications is probably one of the most important industries we have and it's the magic industry at this time. The State Department has been involved in this activity since it's inception in the early thirties. It's role is to participate in the world administrative conferences for setting radio standards and radio regulations under these treaties.

The CCITT and CCIR are organizations that allow major private sector input under the authority of the U.S. Government, since the Government is the signatory to the convention. I'm sure that if you took a very close look at what the State Department spends on this activity, you would probably feel that we have underresourced it, understaffed it, and we have industry and the people that use the service coming from every area asking us to get more involved. We have tried to hold the line because we sincerely believe that the private sector should play the major role and does play the major role in the activities where standards are set. The ITU is a Government body, it's a United Nations body, and the State Department, therefore, plays the primary role in carrying out the foreign policy issues that are at stake within the organization itself. If you had any experience with the radio area, you know that we have a major conference taking place in August and September of this year. It's going to look at the spectrum for satellites, i.e., the orbit locations. If you don't think that's foreign policy, and you don't think the State Department has a role, I don't know who else you would expect to do that job.

**To what extent have the results of CODEX been adopted within the U.S.?**

**Eddie Kimbrell:**

The results are in the written presentation as is the complete organization of the CODEX Alimentarius Commission. The U.S. has acted on 42 of the commodity standards and we have many more that probably will be acted on within the next month.

The Commission meets in July, 1985, and at that time we hope to have about 80 commodity standards acted upon. In terms of pesticide residues, I have to compliment Mr. Johnson and the EPA because they have been absolutely tremendous in giving consideration to the pesticide residue standards that have been recommended by CODEX. I believe that of 138, they have acted on about 58 of those. I think they have done a good job in indicating to the international community that we are serious in terms of being willing to accept the product of the Commission. I think the other countries, by the way, are looking to us to provide leadership in terms of accepting those standards and I think the Food and Drug Administration and EPA have done a commendable job. By acted upon, I mean that they have published them for consideration of acceptance within the U.S..

In terms of the product standards for food, the FDA has, in some cases, deemed the standards as not necessary within the U.S. Yet the products that are produced in accordance with the CODEX standards will be allowed to move freely in the U.S. That is one of the key issues even though we have not adopted the standard per se. We have indicated that, if the product complies with the CODEX Standard, it can move freely in trade in the U.S. In terms of pesticides, of course, we have to take specific action to either accept or reject the tolerance. If ours is higher than the international tolerance has been recommended to be, we also indicate that. If it complies with the international tolerance, it will not be interfered with in terms of moving freely within the U.S. It simply means that we need that higher level to recognize good agricultural practice in the U.S.

## Experience in the Use of International Standards

Francis J. Turpin  
Executive Director, Technical Harmonization Program  
National Highway Traffic Safety Administration  
Department of Transportation

Introduction: The National Highway Traffic Safety Administration (NHTSA) is a modal administration of the U.S. Department of Transportation. It administers three Acts - the Highway Safety Act of 1966, the Motor Vehicle Information and Cost Savings Act, and the National Traffic and Motor Vehicle Safety Act of 1966. The latter Act provides NHTSA the authority to develop and issue Federal Motor Vehicle Safety Standards (FMVSS). The standards and regulations cover vehicles "driven or drawn by mechanical power manufactured primarily for use on the public streets, roads, and highways." There are approximately 50 FMVSS and 15 regulations currently on the books pertaining to passenger cars, buses, trucks, trailers, campers, and motorcycles.

Background: The first FMVSS were established in 1968 and those standards as well as many subsequent standards adopted portions of standards developed by the Society of Automotive Engineers (SAE), the American National Standards Institute (ANSI), the American Society for Testing Material (ASTM) and the International Standards Organization (ISO). Many FMVSS's refer to these standards, in particular instances, for test procedures, symbols, calibration of test devices, etc. To ensure that a FMVSS is not amended by simple amendment of referenced standards, the agency refers to voluntary standards by the voluntary standard's number and date. Amendments of FMVSS are governed by the Administrative Procedure Act which established specific procedures, (Notice, Comment Period, Reconsideration), as well as the agency's procedural orders which have become part of the regulatory process.

NHTSA also represents the United States at the Economic Commission for Europe of the United Nations and participates in the deliberations and negotiations of the Group of Experts on the Construction of Vehicles (Working Party 29/WP29). WP29 brings together representatives of 28 countries, mainly from Eastern and Western Europe, and includes the United States and Canada, in a forum aimed at establishing harmonized standards for motor vehicles that are then adopted by the member countries. Australia and Japan also participate in the work of WP29 as observers.

NHTSA has been participating in these deliberations for over a decade and has recently (1981) made the harmonization of FMVSS with ECE regulations a priority program. This program has concentrated on three specific areas; controls and displays, lighting, and brakes for passenger cars. The guiding policy is the harmonization of test procedures, certification requirements and performance standards in an effort to reduce the potential for non-tariff barriers to trade without compromising the level of safety currently achieved by the existing standards.



### NHTSA experience in the use of International Standards:

At the outset it is important to remind ourselves that the regulatory process which governs NHTSA's efforts requires that the establishment and or amendment of motor vehicle safety standards be aimed at an identified safety need, that alternative ways, including non-regulatory ones, for dealing with the safety problem are considered, and that economic analyses of the impact of the various alternatives are performed and published.

As these alternatives are developed within a policy framework that leans heavily toward performance standards rather than design standards and within a self certification system which is the U.S. system for FMVSS, test procedures and test devices must be specified to provide objective means for determining compliance with the standards. It is at this point that the work of various standards organizations is brought to bear on the regulatory process. The agency frequently uses test procedures, symbols, calibration procedures, etc. developed by voluntary standards organizations or international standards bodies in the elaboration of a FMVSS or amendment thereof. For example, we have adopted some but not all ISO symbols for various controls and displays on passenger cars and motorcycles; we have standards for brake fluids, brake hoses and couplings that were developed by the SAE, amended by NHTSA for incorporation into its standards, and eventually adopted by ISO as part of its standards. We have adopted ANSI standards in the glazing area and the motorcycle helmet area; SAE test procedures are referred to in many crash avoidance standards; SAE safety belt standards are incorporated in our safety belt standards; and NHTSA's specifications for the anthropomorphic test device that is used in crashworthiness tests are under consideration by ISO.

It is also important to note that the ECE/WP29 frequently requests that ISO provide documents on test procedures for use in the development of ECE regulations; and that NHTSA staff are involved in various subcommittees, working groups etc. of SAE, ANSI and ISO.

### Summary Points:

- o NHTSA incorporates by reference; test procedures, symbols, calibration procedures of voluntary standards organizations and international standards organizations. However, these references are more often specific parts of a standard as opposed to complete standards.
- o NHTSA participates in the ECE which often requests that ISO develop test procedures for its regulations.
- o NHTSA has participated in various subcommittees, working groups of ISO, SAE, ANSI.
- o The various standards applicable to motor vehicles are becoming a composite of governmental regulations and standards developed by voluntary standards organizations. This is due to the fact that NHTSA as well as other governmental organizations are inclined to use those standards that meet their needs rather than spend scarce resources redoing what is already applicable to the problem.

## DoD Experience In Use of International Standards

Michael C. Corridore  
Director, Defense Materiel Specifications and Standards Office  
Office of the Under Secretary of Defense,  
Research and Engineering  
Department of Defense

Let me first state that I am delighted to be participating in this important and timely conference on international standards. Also, I would like to take this opportunity to thank Dr. Warshaw for inviting me to participate.

My office is responsible for all aspects of the Defense Materiel Standardization Program including U.S. participation in NATO materiel standardization. The NATO policy on standardization is to use existing standards whenever feasible, very much like the policy expressed in OMB Circular A-119. Furthermore, the NATO policy gives preference to international standards over national standards. Consequently, you can understand why I'm so keenly interested in this topic.

When I reflect on the process of establishing international standards, I'm reminded of a story which illustrates the fact that there is usually more than one point of view in establishing international standards. It seems that there were two students at a local university, an American and a Japanese. They decided to go on a hike to the mountains. While hiking, they ran into a large grizzly bear. For a moment, they froze and stood there. Then, the Japanese student reached into his bag and pulled out a pair of running shoes. He began to take off his hiking boots to put on his running shoes, when the American student said, "Don't be stupid, you'll never outrun that bear." To which the Japanese student answered, "Well, you don't understand the problem. All I have to do is outrun you."

Before I proceed to discuss how DoD uses international standards, let me take a few moments to describe the environment in which our procurement system must operate and also note some conditions it must accommodate. In Fiscal Year 1984, this procurement system handled over 15 million purchase transactions for more than 150 billion dollars worth of goods. By public law, we are required to advertise our requirements and award to the lowest bidder. This necessitates that we describe our needs in sufficient detail so as to provide any interested firm the opportunity to bid. In doing so, we strive to state our requirements solely in terms of performance but for a number of good reasons cannot always manage to do so and frequently must include some design features.

Additionally, at any given time, this procurement system must be ready to buy any of the 4.2 million items used by the military. To

do so requires an adequate documentation base, i.e., documents which describe the items in sufficient detail to allow us to buy these items competitively and which also contain sufficient test and quality assurance requirements to ensure that we obtain the products that we need.

Military and federal specifications and standards and some nongovernment standards, generally, help us to meet our objectives while operating under the constraints imposed on the procurement process that I mentioned earlier. This, then, would help to explain why DoD is by far the largest producer of specifications and standards in the free world, with more than 38,000 active documents. One final point about our standardization documents is that they must serve not only as procurement tools but also as design tools.

In addition to our military specifications and standards, we also have adopted and use almost 3600 nongovernment standards developed by technical societies and trade associations. At this point, the question might be asked, why aren't we using more nongovernment standards? The answer to this question may not be so obvious. But the plain fact is, as pointed out by Bob Toth in his report on "An Assessment of the U.S. Defense Standardization and Specification Program," that only 20% or about 6400 standards of the 32,000 nongovernment standards are "product standards appropriate for competitive purchasing." This condition is even more acute in international standards.

Now, what has all of this to do with international standards? Well, in a way everything since to understand how we use international standards, one must understand the process of how we use specifications and standards in general.

Since international standards generally describe test methods or a set of parameters, such as head styles for bolts or bolt diameters, and not complete products, it is difficult for us to use such documents directly as stand-alone documents in either the procurement or design process. From this, one can surmise that DoD uses international standards to the extent that they are reflected or referenced in U.S. national standards and these, in turn, either used directly by DoD or reflected or referenced in military specifications and standards or the other way around, i.e., to the extent that adopted U.S. national standards are reflected in international standards.

Additionally, international standards are used to the extent that they are reflected in NATO Standardization Agreements (STANAGs) and such agreements in turn are reflected in our military specifications and standards. On some occasions, international standards are cited or referenced in the military documents and on rare occasions they are adopted and used as stand-alone documents.



We in DoD are active in a number of ISO and IEC standards committees and subcommittees. This participation has led to development of international standards acceptable to us and which subsequently were incorporated into military specifications. For example, since the Defense Industrial Supply Center is the DoD standardization manager and central buyer of fasteners, they have for a number of years represented DoD on the aerospace fasteners subcommittee, SC-4, of ISO's TC-20. Consequently, a number of the military specifications for fasteners incorporate parameters established in the ISO standards. In the case of DISC, participation in development of international standards is not only important but essential. Approximately seven percent of the 700,000 plus items they manage have at least one foreign supplier as a potential source and about 5,000 of these items refer to German DIN standards.

Another example of our use of international standards is the ISO standard for containers. We use this standard for both shipping and as a basis for our tactical shelter program. The Navy's Fleet Hospital and the Army successor to TV's MASH are both based on the ISO container standard.

Earlier, I noted that my office is also responsible for material standardization and interoperability with our NATO allies. This type of standardization in a sense also involves a form of international standards which we call NATO STANAGs for NATO Standardization Agreements. An example of this is the NATO STANAG for the trailer coupling hitch which is referred to in all of our specifications and standards for wheeled vehicles. The result is that we and our allies can mate up a loaded trailer of supplies and get it to the front lines a lot easier than a fire department from a small town could hook up to its neighboring towns hydrants and help in an emergency. Standardization agreements that covered these coupling hitches and pintle hooks are being revised to address the interface with newer vehicles as they enter the system.

Another example of this type of standardization involves our seafaring allies who have worked together with us to develop a standard shore-to-ship electrical connector. This standard connector now permits a ship of any nation to shut down its plant and go on hotel or station power at an allies naval base in 30 minutes rather than the eight hours that it used to take.

One could conclude from my remarks that I favor development of more international product standards. The dreamer in me tells me that it should be so; the realist in me, however, tells me that it can't be so. The reason for this is twofold:

1. The politics of nationalism and competition makes it difficult if not impossible for nations to agree on complete product standards; and,

2. The time-consuming process measured in years when developing international standards. This would result in high-technology product standards being obsolete before they were even printed.

Therefore, I feel that future international standards should concentrate, as most of them do today, on parameters, interfaces, and test methods. I should add that I'm encouraged by the product standards being developed under the IECQ system and that we're reviewing these documents to see if we can use them directly in our procurements. Consequently, after we gain more experience with the IECQ documents, I may change my views on development of international product standards.

On the other hand, I feel that national standards organizations should develop more product standards especially for consumer and industrial products. Bob Toth in the report I cited earlier notes that nongovernment standards could be developed for about twenty thousand of our military specifications. Those of you involved in national standards work, I solicit your help in bringing this about.

I would like to mention that together with SAE and ASTM, we plan to hold a conference on nongovernment standards next fall. One of our objectives in holding this conference will be to get nongovernment standards groups to produce more product standards which can be used directly in the procurement process.

This concludes my remarks. Thank you very much for your kind attention.

" A Standard Experience "

Mary C. McKiel  
Chemist, Office of Procurement  
Office of Federal Supply and Services  
General Services Administration

It is quite a privilege to be here today representing the Federal Supply and Services of the General Services Administration, and also as a member of several of the standards organizations participating in this conference.

From the beginning, let me address the topic of the panel by stating that GSA's experience in using non-Government standards spans many years right up to the present. The aim of this particular presentation is to give you an idea of why that experience has been so valuable and will be even more so in our future.

For those of you who may not be familiar with the General Services Administration, GSA procures many common use items for agencies of the Federal Government--both military and civilian agencies. Included in the category of common use items are office supplies, ADP and telecommunications equipment and supplies, textiles, tools, automotive equipment, and much more. While there are some overlaps and similarities among GSA procurement activities and those of other agencies, it is fair to say that one difference is that GSA is not its own biggest customer, which means GSA is in the position of trying to keep everyone supplied and happy.

GSA, through its Office of Federal Supply and Services, has three major procurement programs: Federal Supply Schedules, Stock, and Special Order Programs. Under the Stock Program, for example, FSS procures and distributes thousands of items. Nearly all of these are procured competitively. For a competitive procurement, GSA puts together a solicitation package which, in addition to providing terms and conditions, includes a technical description of the item desired. After bids are opened and evaluated, the responsive and responsible company offering the lowest price is awarded the contract for a given period of time or for a specified quantity. When "all's well with the world," the process is a very good one: the contract is solid, the contractor performs timely, the product is exactly right, and the taxpayer's pocketbook is safe.

An important element in the success of this process is the technical document. The document has to be clear and has to adequately describe the item in order to promote an equitable bidding environment. For years the cornerstone document of FSS procurement has been the Federal specification. Generally, these specifications tend to be lengthy, very exact descriptions of items and the various quality levels of those items. Saying that specifications tend to be lengthy is not at all meant to sound pejorative. Certainly there are examples of



"overkill," like the 35-page spec on mousetraps. Exceptions like this, though, are easy to pick out. In truth, just considering those thousands of stock items, Federal specifications used for their procurement ran--and still do run--a pretty good track record. The point here is that those specifications either contain parts of, or reference, non-Government, nationally recognized standards.

With certain exceptions, the Government procurement process mandates competitive procurement, and, where practical, encourages purchase of commercial, off-the-shelf and commercial-type products which meet the minimum needs of the Government and are procured at the lowest cost to the taxpayer. In the 1970's, the Office of Procurement Policy reemphasized the focus of procurement toward the commercial market. By their very nature, many Federal specifications over the years developed into descriptions of Government-unique items rather than commercial items. So, FSS began developing commercial item descriptions, CIDs. As defined in the Federal Property Management Regulations, CIDs are simplified specifications which make use of functional or performance terms rather than design requirements. As you might imagine, in the first throes of enthusiasm, hundreds of these CIDs were written in a relatively short period of time. Many--though certainly not all--of the CIDs reflected serious effort to simplify, to the point of going overboard, and this led to procurement of some products that did not meet even minimum requirements. Among CID writers it became known as the naked CID syndrome. The CIDs were naked, of course, because there were no salient characteristics or standards to provide framework, or "cover," if you will, for the functional and performance statements. The situation left competitive procurement in a vulnerable position.

As a result of the first-round experience using CIDs, FSS realized the need for including more detail through the use of standards. Enter, stage-right: ANSI, ASTM, TAPPI, IEEE, UL, and other such friends. Given the constraints of CIDs vs specs, these standards were more important than ever. As I said in the beginning, FSS is in a position to keep everyone happy. By that I mean, FSS procurement must follow Federal regulations governing procurement and must supply agencies with the usable, economic items and services they want. The National Tools Center within FSS, for example, is responsible for about 40,000 national-stock-number items, many of which are procured using CIDs. The military agencies comprise 90 to 95 percent of the business in this area. Believe me, it doesn't do FSS or the taxpayer any good to try to supply these agencies with below-grade tools or tools from companies that cannot meet delivery schedules and quantities. Good standards are essential.

Most recently, the Competition in Contracting Act is putting increased emphasis on open, competitive contracting. In turn, FSS is revising its own standardization program so that Federal procurement documents, and CIDs in particular, have the sophistication to adhere to the new

directives and to ensure the procurement of acceptable items and services. In this effort, FSS expects to make even more extensive use of non-Government, nationally and internationally recognized standards.

Mr. Donald Gray, the Assistant Administrator of FSS, says it best:

Quality is back into the FSS vocabulary. Quality items provided in a timely manner and at lowest cost to the taxpayer is the bottom-line goal of FSS. FSS firmly believes that participation in the use and development of non-Government standards is a critical element in achieving that goal.

## HUD'S ROLE IN INTERNATIONAL STANDARDS DEVELOPMENT

G. Robert Fuller  
Chief, Standards Branch  
Manufactured Housing and Construction Standards Division  
Office of Housing - Federal Housing Commission  
U. S. Department of Housing and Urban Development

In general, the Department has had minor involvement with International Standards. However, several technical and policy level staff members have played an active role in international organizations concerned with standards.

Major activities come under the auspices of the Offices of Housing, Policy Development and Research, and Community Planning and Development, with coordinations by the Assistant to the Secretary for International Affairs. The following is one major international standards activity which portrays HUD's role:

United Nations Economic Commission for Europe (UN-ECE),  
Committee on Housing, Building and Planning; Working Party on  
Building Industry

Between 1975 and 1980, HUD was actively involved in Working Party Activities on "Harmonization of Technical Content of Building Regulations" and, more specifically, on developing a "Unified European Code for Structural Design in Seismic Regions." An Ad Hoc Committee met in Belgrade, Yugoslavia in April 1978 and several Working Party meetings, attended by U. S. representatives, were held in Geneva from 1975 to 1979.

However, problems evolved with the overall coordination of international activities. Several Federal agencies and private industry were involved in the activities of UN-ECE, but generally there was a lack of continuity of U. S. representation. In addition, many meetings in Geneva were attended by non-technical personnel. Finally, because of lack of overall coordination and budget restrictions, U. S. participation declined.

Under the "International Harmonization of the Technical Content of Building Regulations," several topics of importance to our technological community needed to be coordinated:

1. Building Climatology: The International Organization for Standardization (ISO) agreed to coordinate the development of standards on snow and wind loads, temperature effects, and energy consumption. Since American National Standards Institute (ANSI) is the



U. S. representative to ISO, I assume that this work has continued. However, better coordination and reporting should be maintained so that all Federal agencies are kept apprised of the status.

2. Building in Seismic Regions: The European Association for Earthquake Engineering originally had the lead role in developig this standard. However, there have been many developments in the past five years in the U. S., Japan, Europe and elsewhere. A U. S. organization should take the lead in this area to coordinate and monitor all international activities. Several groups could assume this role; for example: ANSI, Building Seismic Safety Council (BSSC), Interagency Committee on Seismic Safety in Construction (ICSSC), or the Earthquake Engineering Research Institute (EERI).
3. Structural Safety and Loads and Use of Structural Materials: There is an ISO standard (ISO 2394) which was to have been revised in 1980. The Euro-International Committee on Concrete (CEB) and the Joint Committee on Structural Safety (JCSS) were active in developing standards for the verification of safety of structures. With the current emphasis on "Infrastructure" and safety of existing facilities, this project should be reactivated.
4. Unified International Climate Requirements of Buildings: The U. S. delegation in 1979 pledged its support in this area because of the emerging problem with indoor air quality, particularly in regard to Urea-formaldehyde foam insulation and other products. Research in Canada and the U. S. is being monitored by EPA, CPSC and HUD. If any other work on this subject is being conducted internationally, it should be properly coordinated.
5. Unified Fire Protection Requirements: ISO was very active in developing fire testing methods, and ANSI has effectively monitored progress in this area.

It is my opinion that there is a great deal of benefit for the U. S. to maintain an active role in the UN-ECE activities. The U. S. is considered by most nations as the leader in many technological fields, and our research in standards related areas cannot be matched by most other countries. Our prestige could be raised by transferring our technology to other nations. We could also benefit from the experience of those countries that have dealt with these problems for a much longer period of time than we have. Their technical expertise and research can also assist us in solving some of our problems.

These activities demonstrate how coordination and monitoring of international standards development needs to be improved. Even though HUD had the lead in providing representation at the UN-ECE, other U. S. agencies had programs that would be impacted by any standards developed. The Department of Commerce, U. S. Trade Representative, and State Department could have played a major role in coordinating the efforts.

#### U. S. - Canadian Memorandum of Understanding on Solid Fuel Heaters

Another significant area of cooperative international standards development has taken place between HUD and the Canadian Department of Energy, Mines and Resources. A Memorandum of Understanding was established to provide reciprocal testing, certification and acceptance of solid fuel burning room heaters and space heaters. The two countries reached an agreement on the use and application of standards which would provide for common safety objectives.

The draft Memorandum of Understanding was developed to satisfy the objectives of the "Agreement on Technical Barriers to Trade" of the General Agreement on Tariffs and Trade (GATT). It was coordinated by the Standards Subcommittee of the Trade Policy Staff Committee (TPSC), chaired by the Office of the U. S. Trade Representative.

When the MOU is finalized, it will recognize and accept testing laboratories, administrator/validators, and certification agencies in each country, to assure compliance with relevant standards. The overall goal is to establish uniform standards and procedures for acceptance of solid fuel-type room heaters and space heaters.

#### U. S. - Japan Agreement on Natural Resources (UJNR)

The only other major international activity HUD participates in (other than bilateral agreements with individual countries) is under the UJNR umbrella, and a related 1970 "Memorandum of Understanding on Cooperation in Areas of Building Technology and Urban Affairs." These cooperative activities are managed on the Japanese side by the Ministry of Construction (MOC).

Under the UJNR, the U. S. - Japan Panel on Wind and Seismic Effects, and the U. S. - Japan Cooperative Research Program offer a means of coordinating research and studies which are eventually reflected in improved standards and building codes in each country. Technical information, design and analysis methodologies, and research results are freely exchanged between countries.

The HUD-MOC Memorandum of Understanding actively promotes the exchange of experience and knowledge on urban planning, building and housing technology, housing finance, public housing, and systems for housing construction. A continuing problem with international activities such as these is the lack of a sufficient and well coordinated travel budget to enable exchanges of technical personnel. Technical representation by concerned Federal agencies is also not uniformly maintained.

If we are to fully comply with the intent of OMB Circular A-119, "Federal Participation in the Development and Use of Voluntary Standards," including international standards, then the Interagency Committee on Standards Policy, or an organization such as the National Academy of Sciences or National Institute of Building Sciences, must take an active role in coordinating and monitoring standards activities. However, any expanded program for implementation of international standards would necessitate an examination of the benefits versus the impact of increased expenditures on the Federal deficit. Many agencies, such as HUD, do not have the resources to maintain an extensive program on international cooperation.



What possible performance standard justification is there for requiring installation of door beams in large European cars which must be safer for occupants than Japanese and other mini-cars?

Frank Turpin:

The current standard on the books is SMFMVSS #214 which requires that any car that is manufactured for sale in the U.S. must meet side door strength requirements. Most manufacturers have chosen to meet these regulations by installing a side guard door beam. Its a side impact regulation standard that requires that. It doesn't make any difference where the car is manufactured. If it is being manufactured for sale in the U.S., it must meet that standard. Therefore, both the Japanese cars, as well as European cars, or any other car that is imported into the U.S., must meet that standard.

Approximately 8% of the standards DoD uses are non-government. What kind of increase, if any, is projected or desired?

Mike Corridore:

The desire is for us to have non-government standards for all the products that are available commercially. Non-government standards are the fastest growing body of documents in the Department of Defense Index of Specifications and Standards. They are growing at the rate of approximately 300 a year. The military documents, on the other hand, are declining for the first time since the inception of the program. Last year we had a net decline in the number of military specifications and standards.

Why buy only on initial cost basis? Why not buy on life cycle costing using performance standards!

Mary McKiel:

We do have a life cycle costing program. We have three different kinds of procurement programs at FSS. Life-cycle-costing is something that comes into consideration, particularly when we're procuring things like appliances. The Federal acquisition regulations, which govern all procurement, stipulate that the requirements describe the minimum essential requirements of the government. Philosophically that sounds good until you start thinking about life-cycle-costs. If you feel that they should be based on life-cycle-costs, and we should be looking at best value, then we should describe the essential characteristics that result in best value to the government. We're trying to bring that change around in the DOD, and working with the other agencies to get them in line with that kind of thinking.

The panel should recognize not only product standards, but also standards for recommended practices and test methods such as, OPSP use of ANSI Z34, ASTM E548 and ASTM E994 for Certification and Laboratory Accreditation. Please explain such uses.

**Robert Fuller:**

We do utilize all or most of those standards. We use the ANSI standards in a laboratory accreditation program and certification and labeling programs that we maintain. Documents are issued that we call Use of Materials Bulletins. They set up certification labeling programs for such things as woodstoves, carpet, aluminum windows and doors, and so forth. We do follow the procedures in some of those standards.

Type approval and standards for autos make it difficult to move from country to country. What progress in harmonization is being realized through the UNECE requirements?

**Frank Turpin:**

There are two systems. The European system is commonly known as the type approval system and is the same kind of system the FAA uses for airworthiness certification of aircraft. The U.S. system for motor vehicle safety standards is known as a self certification system. That means that the manufacturer certifies that the product meets all the motor vehicle safety standards. The way we deal with the problem is to attempt to harmonize both test procedures and performance levels. Performance levels tend to be different for different countries as a reflection of the evolution of their particular legislation. Thus harmonization of performance levels is a more difficult task. Harmonization of test procedures provides a system that manufacturers can use regardless of where the vehicle is built and countries can still set their own performance levels. If we can achieve harmonization, at least on the test procedures, it will essentially reduce a great deal of burden that is associated with exporting our products to the Europeans.

With the restrictions of low-bid and the use of voluntary non-government standards in your procurement, how do you assure the quality of the products? In the final analysis, did DOD actually spend more money in many of the procurements?

**Mike Corridore:**

In regards to quality assurance, every specification that we prepare or adopt must have a section on quality assurance and test requirements. The document not only contains a description of what it is we want to buy, but also how we're going to test it when we get it to make sure the product conforms to our requirements.

The process of buying commercial products is a complicated one because its difficult to describe, for example, something like ketchup. Its very difficult to describe what the salient characteristics of ketchup should be. If you do it in sufficient detail, Heinz and Hunts are going to tell you to take a hike. They won't want to sell to us because we would be dictating to them how to make ketchup. However, if we are not careful, and don't put in any quality assurance requirements at all, then we are apt to get anything the "mom and pop" shop makes in their garage. Its a difficult problem and we are trying to balance the equation.

Under the Acquisition and Distribution of Commercial Products Program (ADCOP) we were preparing Commercial Item Descriptions (CIDS) and that appeared to be a workable solution. It was working quite well in that we were describing only essential characteristics of products. We kept the documentation down to a page or two. A CID was coordinated with the affected segment of industry. ADCOP and CIDS were based on one assumption. We were looking to the private sector to determine quality. We said that if this product lasts in the commercial world then it must be of acceptable quality. If it was not of adequate quality, then the consumers would drive it out of the market place.

We tried to implement this philosophy and we thought we were doing it quite well. We required that if you wanted to sell ketchup to DoD, for example, you had to have a commercial market base established. We didn't want anyone to sell to the government only. This philosophy was put into practice and frankly was working quite well from the perspective of cost, quality and delivery schedule. Then, in the 1983 Defense Appropriations Act, Congress enacted legislation that prohibited DoD from using funds to discriminate against any small business suppliers by requiring that they have a commercial market established.

A basic problem in trying to identify whether it is cheaper to buy products with a non-government standard or CID, which essentially reflects what is available commercially, is how do you compare costs. Comparing costs in a year in which we have a cotton surplus, which drives the price of cotton down, for example, may be unrealistic. There are so many factors and conditions like this one, however, that it's very difficult to say yes or no. My gut feeling is yes; it does drive the cost down when we do business the way the commercial market is doing business and, certainly, using a non-government standard or CID is doing business the way the commercial world does business.

**Your description of the Naked CID indicates the commerciality clause was not effective?**

**Mary McKiel:**

I think the commerciality certification clause is being down-played at this point. There was a requirement, that in order to submit a bid on a product we were requesting, you had to show commerciality. Another part of the difficulty with the CIDS has been in describing adequate quality level in the commercial item. Just because something is on the market doesn't mean that that's the one that's going to meet the minimum needs of the agency.



Paper plates are a good example. I was involved with helping develop the CID on paper plates. The major user of paper plates is the military. You could argue that a paper plate is just a paper plate; it doesn't make any difference what kind you buy. Then the military comes to us and says but you don't understand. This paper plate is used in the field where you've got some 400 pound Seargent throwing the food from a mile away and if you catch it, you eat it. So you better have a decent plate and that's a real need. We had to refine what kind of quality level we needed in that instance. We didn't have any trouble finding a commercial supply. However, had we not found a commercial supplier, the need was really the overriding factor at that point.

**Isn't incorporation by reference of standards for regulatory purposes preferable to keep law current with the right reserved to government to reject specific standards where necessary? Doesn't this avoid unnecessary rule-making proceedings?**

**Frank Turpin:**

The law provides for what is called a petitioning process. We are constantly being petitioned by manufacturers. We average about 50 petitions a year to revise standards to bring them up to the current level of technology.

With respect to the question of whether it is a good idea to reference standards or not, yes it is. It is a much better idea to reference standards when they are applicable to the problem we are dealing with. We may not always reference the whole standard, but we very often reference test procedures simply because they have been developed, the industry is accustomed to them and they are adequate. The referencing of established practices is probably a better way to do it than to spend money to try and develop a procedure only to find out later that it already exists.

**Robert Fuller:**

We agree that incorporation by reference is the proper way to go, but that doesn't diminish the Federal rule-making-procedure. One of the problems we face is that any time we want to change the reference, we have to go through rule-making-procedures. We have to publish in the Federal Register any change in reference standards whether in a minimal property standard or in a manufactured housing construction safety standard. Any change has to go through the whole gamut of publication, review by OMB, and public comment. In our case it doesn't diminish any rule-making-procedure.

**Please elaborate on your comment that NATO is adopting international standards. Do these include European regional standards? What implication does this present for the U.S. in comparison to our European allies where their products and processes are more in tune with international standards?**

Mike Corridore:

NATO policy is to adopt existing standards in this order. The policy is that first preference is given to international standards. Second preference is to adopt the national standards of a given country when there isn't an international standard, and the third order is for NATO to prepare the standards.

We're in the process of trying to produce what we call interface standards within NATO. Its extremely difficult to standardize within NATO on design features. What we're doing is trying to standardize the interface and parameters so that the international standards fit.

As your agencies increase their use of international standards, will this lead to increased use of hard metric in your procurement? How will this affect your agency and the country?

Mike Corridore:

We think that the NATO policy, of using existing international standards and giving preference to international standards, will drive the DoD to produce more systems which are in SI units. I think that we will see an increase in the use of the SI system because of our commitments in NATO.

Mary McKiel:

GSA really is in the position of supplying to other agencies what they tell us they need. Certainly in tools, we have no problem procuring metric tools; they are in very common use in the U.S. right now. One problem area that I can see for GSA is if it ever got to the stock program. The way we're functioning now is to ensure that our product descriptions do not bar manufacturers who make their product in the SI system from bidding and obtaining a contract.

You do get into some tricky areas, I think, when you are comparing commodities supplied in the SI versus the English system, especially on volume. If your specification or your document calls for the SI system you have to be aware of handling problems. Transportation costs are also a factor, particularly when you are dealing with carloads. These things are not impossible to determine; I just think that they are tricky areas.

I think in the U.S. certainly metric is going to come. If we do go to the metric system, I think GSA, as a government agency, just has to make sure that we are prepared to respond to industry. I don't see us as directing industry but I see us as responding to what the U.S. and industry is going to do in this matter.

Since the IEC system for Electrical components is an active and well accepted international standard/certification system, why doesn't DOD use IEC instead of mil specs? NATO is recognizing it.

Mike Corridore:

We do not adopt a system in its entirety because we have to look at specific individual requirements. For example, we adopt documents that ASTM produces. We're not going to adopt everything ASTM produces but we will adopt those documents that we need. The same philosophy holds for the IEC and the IECQ documents. We've examined some of these documents and the ones we've examined did not have sufficient detail to ensure that we got the item that we want. As some other documents are developed we will review them and adopt them if they meet our needs. However, they have to meet our needs and that's an important consideration.

A number of panelists have mentioned the need for more product standards that are directly usable by government. How do we communicate these needs to the respective standards bodies?

Mike Corridore:

We are sponsoring a conference to help you understand the process. We want help from the non-government standards people. You need to understand how DoD is organized, understand who manages what in standardization, and understand what our requirements are, and how you identify those requirements. We do work with a number of non-government standards groups and have DoD representatives on those groups. One of the jobs of our people who attend non-government standards meetings is to let you know what DoD requirements are. Also to assist non-government standards groups how to interact with DoD, we have issued a publication titled "DoD Interaction With Non-Government Standards Bodies SD-9." This was distributed to all non-government standards bodies.

DoD is a very large organization and I don't know what all the requirements are. We have over a hundred technical organizations involved in this process of describing requirements. I think that its a process of working with us and asking the DoD people that work on your committees to identify DoD's requirements.

There is an individual in the audience from the Air Force Logistics Center in Sacramento. He mentioned that he's got about 30 military specifications that have been overtaken by technology and asked me, if and how, to update these documents. My first suggestion was to see if we can get a non-government standards organization interested in updating these documents. I mentioned that we have efforts in fiber optics with the Electronic Industries Association whereby we have made a considered decision not to produce any military standards. We're going to let EIA produce these. We're going to work with them and we're going to tell them what our requirements are and hope that they can incorporate those requirements in EIA standards. We have another very large project with the ASTM in shipbuilding, where the Navy has taken all their shipbuilding specifications and turned them over to ASTM to see if ASTM could produce non-government standards. That effort has gone very well. We also have a number of similar efforts with SAE, with IEEE, and others. I think the only way to communicate DoD's needs is to be present at meetings and to talk expert to expert.



Congress established NIBS - What are they supposed to do in standards and how do you relate? Does NIBS participate in UNECE?

Robert Fuller:

The National Institute of Building Sciences, as far as I know, does not participate in UNECE. It was established as a coordinating body for all of the Federal agencies to examine the need for standards or for research in certain areas. Most of the Federal agencies participate on the various NIBS committees. They involve the private sector with the Federal Government to develop research agenda and evaluate problems.

Quality assurance system standards and implementation guides are available as voluntary standards of ANSI C-1 and CSA Z 299. Please have speakers explain how they take advantage of these voluntary standards for quality management for products and services?

Frank Turpin:

From the standpoint of the National Highway Traffic Safety Administration, we do not look upon our role as controlling or doing quality controlling for the industry. We let the industry do that themselves. We try to put out performance standards that permit a high degree of innovation within the industry in meeting the requirements of these safety standards. We also feel that getting involved in quality control would be something that is extremely expensive for the Federal Government. We have a compliance testing program that buys vehicles off the show-room floor and tests them to the requirements in the standards. It's essentially a program that's driven by engineering considerations. If we had to buy vehicles on a random basis to assure ourselves that there was no more than 10 percent noncompliance with the standards, and have a ninety five percent assurance of that, I suspect we would be talking about a 10 to 12 billion dollar program. I'm sure that we're not going to get involved in that.

The Europeans have a different outlook because of their type approval system. They have conformity of production requirements within their standards which assures the inspecting authority that there is a quality assurance program in place within the industry. To that extent, there is government involvement in quality control in Europe.

In the U.S., government involvement in quality control is much more indirect. If we detect noncompliance with a standard, the industry is asked for information as to what basis was used for certifying compliance with the standard. This may quite often involve some quality control considerations but we are not in the business of telling U.S. industry how to do this quality control. We leave that up to them.

**Are there any quality assurance standards incorporated in the CIDS?**

**Mike Corridore:**

No, the CIDS are basically just very short purchase descriptions and we have decided what really makes a specification lengthy is the quality and testing requirements. We wanted to rely on the commercial sector so we didn't have any quality assurance requirements in the CIDS. Because of a congressional restriction, we have now had to revise our policy so that in the future CIDS will incorporate a QA requirement.

**What is the difference between DoD and Military specifications? Why not all DoD?**

**Mike Corridore:**

The question pertains to the designation in front of the number on a specification, such as Mil T 4536. Some documents, a very minor portion, have a DoD instead of a MIL designation. The reason for that policy which came about 6 or 7 years ago, was to identify those documents that were prepared in the SI system, i.e., that it was a hard metric document as opposed to soft conversion. It was developed to see if we could track and identify those metric documents. That policy is under scrutiny now and we might decide that we want to revise it so that everything is identified as MIL because we have other means to identify whether it is an SI or English unit document.

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