

# **GOVERNMENT'S ROLE IN STANDARDS-RELATED ACTIVITIES: ANALYSIS OF COMMENTS**

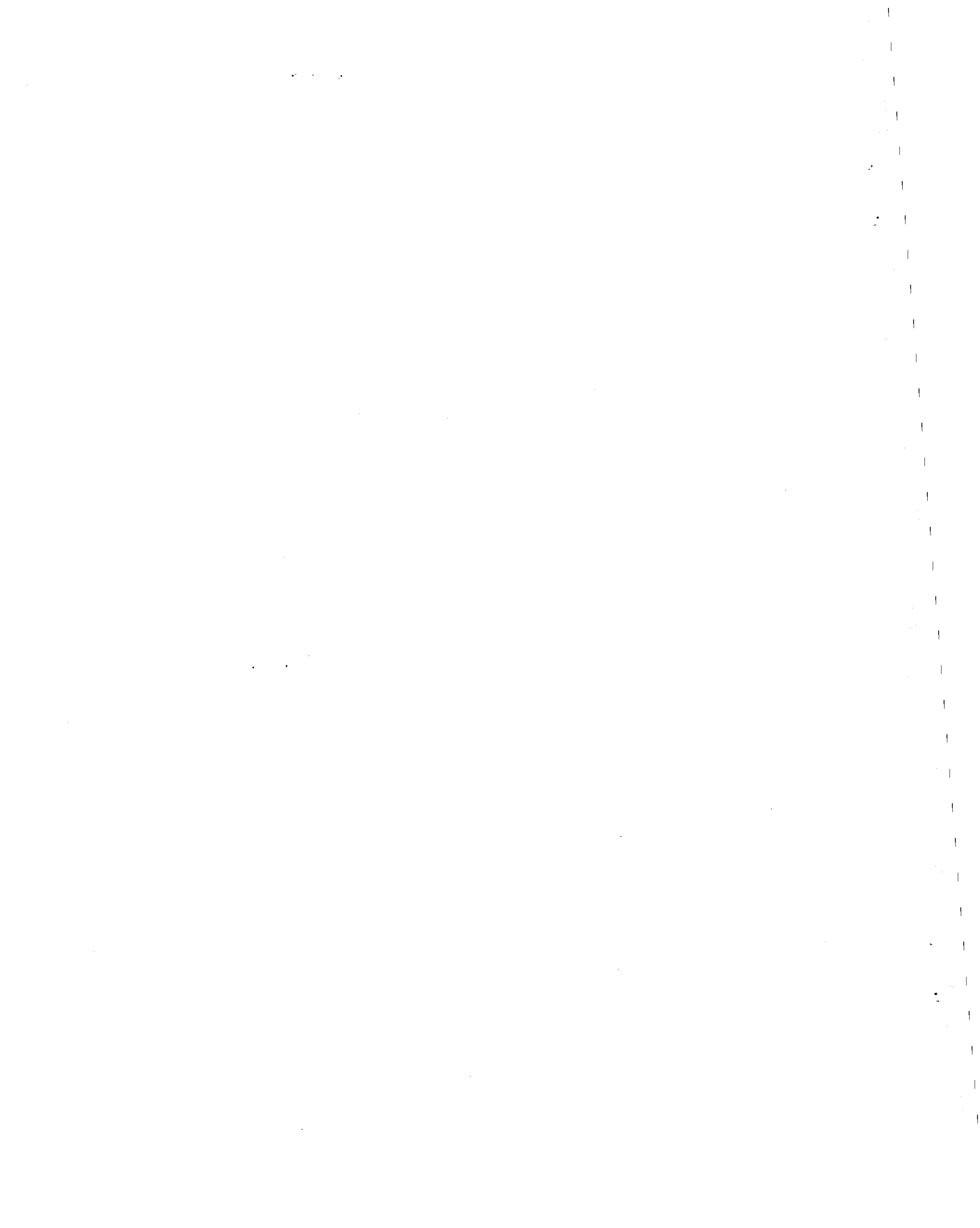
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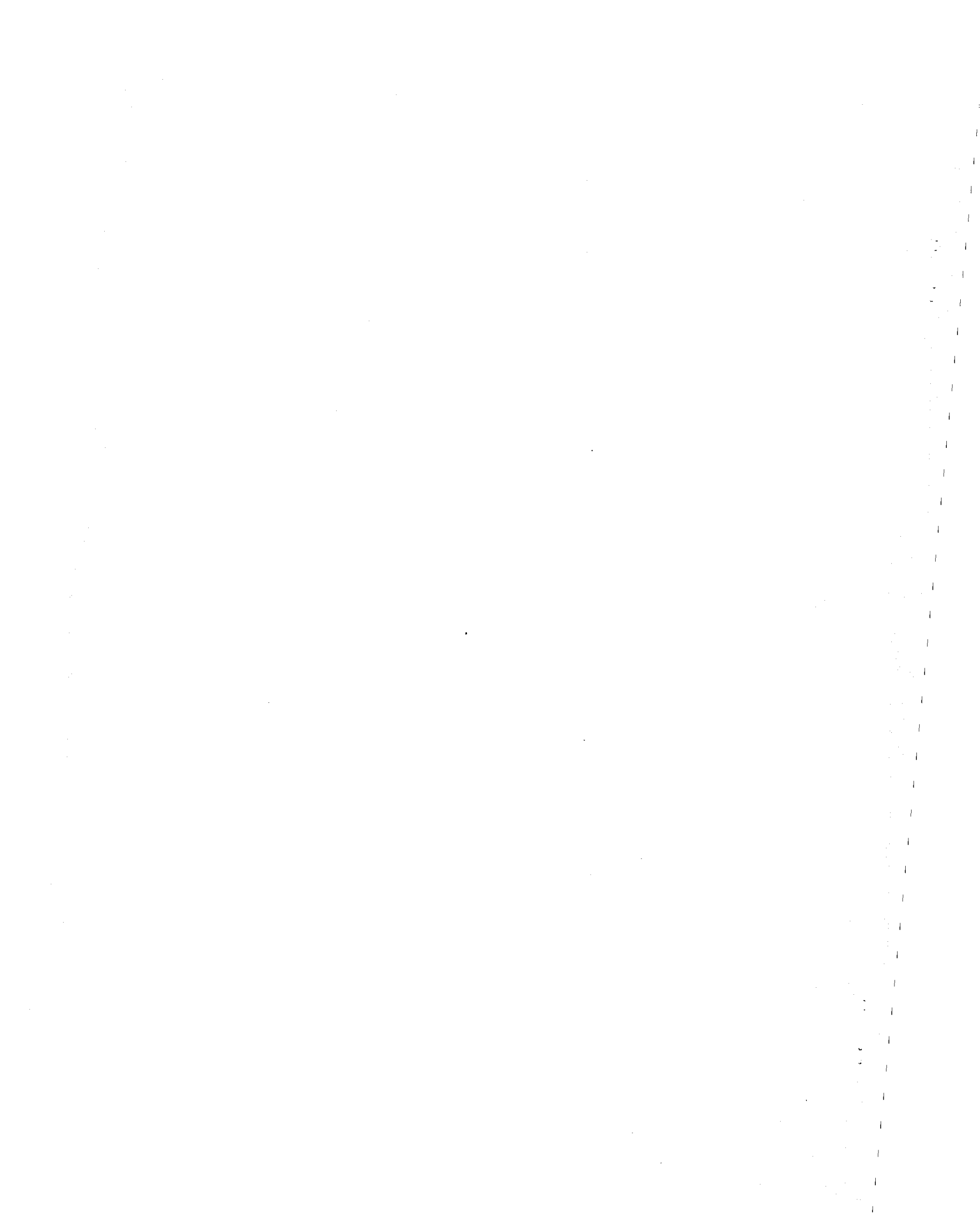
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**July 1990**



**U.S. DEPARTMENT OF COMMERCE  
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## ABSTRACT

The National Institute of Standards and Technology, supported by a panel of standards experts from other agencies, conducted a hearing on April 3-5, 1990, to gather information, insights, and comments relating to improving U.S. participation in international standards-related activities and to identify possible Government actions. Oral presentations were made by 65 organizations and individuals; written submissions were received from 257 others. Thorough review of the hearing transcripts and the complete supplementary written record reveals a number of areas where the private sector and the Federal Government should take constructive actions, especially with respect to coordinating mechanisms for conformity assessment processes.

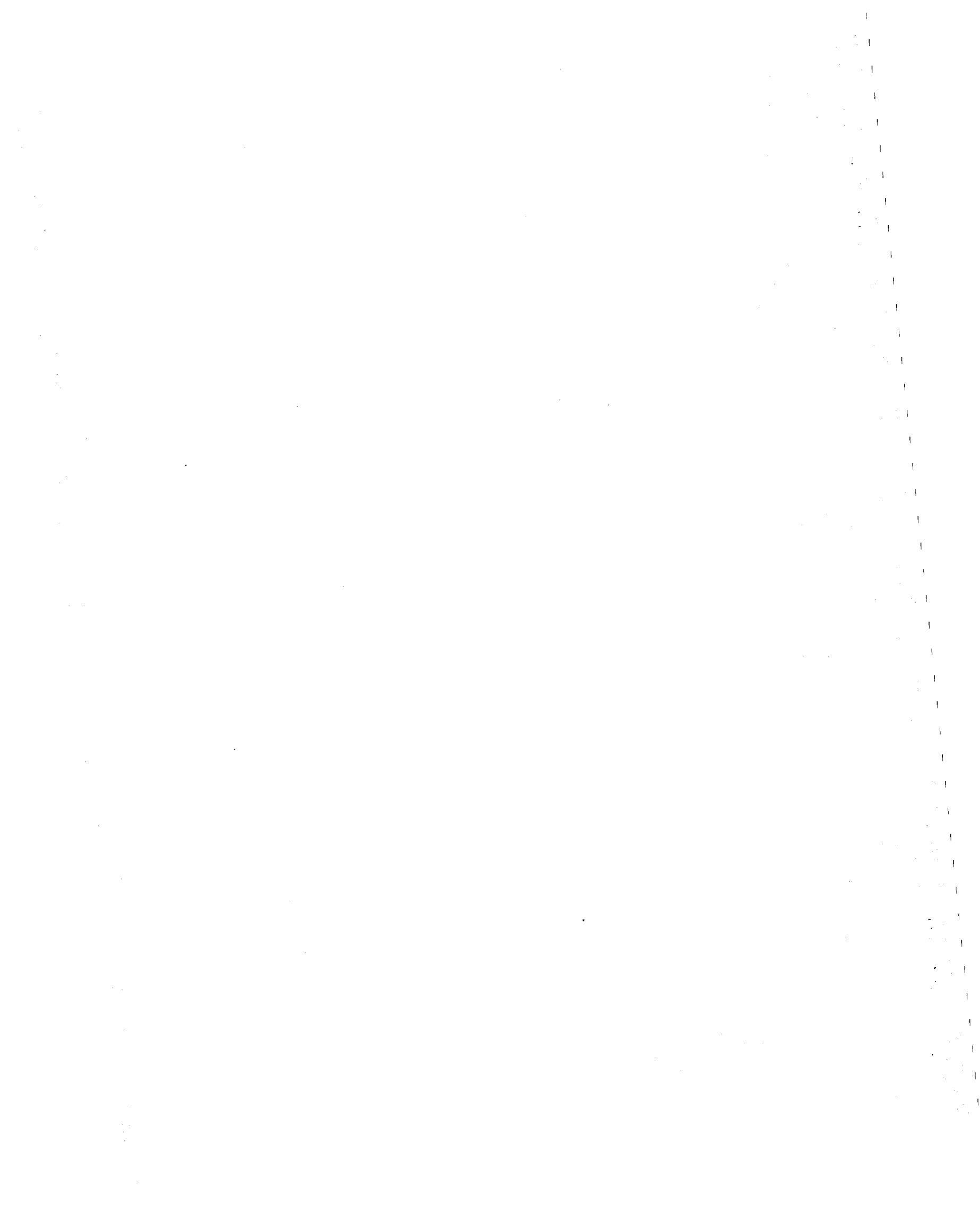




## Acknowledgments

The author wishes to acknowledge the significant contributions of the members of the hearing panel for their penetrating questions and subsequent review and comment on the analysis. Special thanks are also due to the following members of the staff of the NIST Office of Standards Services for their help in studying and digesting the voluminous record associated with the hearing: Maureen Breitenberg, Patrick Cooke, John Donaldson, Albert Tholen, Terrance Troy, and Eric Vadelund.

Finally, we are all indebted to the very large number of members of the standards and conformity assessment communities whose thoughtful comments and suggestions will contribute to improvements in standards-related processes and improved acceptance of U.S. goods in foreign markets.



## Government's Role in Standards-Related Activities:

### Analysis of Comments

#### BACKGROUND:

In view of the growing importance of international standards in commerce among nations, and recognizing the rapid changes taking place in the European Community and elsewhere throughout the world, the National Institute of Standards and Technology (NIST) on November 27, 1989, announced a hearing to be held in Washington, D.C. on April 3, 1990. As described in the Federal Register notice (see Appendix A), the primary purpose of the hearing was to gather information, insights, and comments related to improving U.S. participation in international standards-related activities and to identify possible Government actions.

The notice posed a number of topical questions to stimulate discussion of U.S. standards, testing, certification, and other practices that affect the acceptance of products in foreign markets. In particular, NIST sought information concerning weaknesses that require strengthening, suggestions for improvement, and expressions of views on potential models for government-private sector interactions, such as the Standards Council of Canada or any others. The notice specified a deadline of March 22, 1990, for requests to present views at the hearing or for submittal of written comments by those who might be unable to attend the hearing in person.

A large number of inquiries were received concerning the Standards Council of Canada and the nature of potential models for the United States. A letter (See Appendix B) was prepared on December 20, 1989, and given wide distribution, stating "... the following general model is put forth as but one possibility; it is presented as a concept to aid those wishing to comment or to serve as a basis for modification." A menu of functions suggested items that might be included in a "Standards Council of the United States of America" should such a council be established. Many recipients of the letter apparently assumed that this was a specific proposal offered by NIST for the formation of "SCUSA."

Due to the large number of requests to make oral presentations, NIST published a second Federal Register notice on April 2, 1990 (see Appendix B), to announce that the hearings would extend from April 3 through April 5, 1990, and that the record of the meeting would be held open for sixty days following (to close of business June 5, 1990) to allow all interested parties the opportunity to comment.

Oral presentations were made before a panel of Government standards experts from NIST, the Department of Commerce's International Trade Administration, the Departments of State and Agriculture, and the

Food and Drug Administration. (See Appendix C for a listing of panel members.) A total of 65 individuals and representatives of organizations spoke before the panel: each was allotted 10 minutes for the presentation. Panel members, bringing technical perspective based on their specific expertise, then raised questions to elicit any necessary clarifications. Panel participation was aimed at assisting NIST in acquiring adequate information on which to base recommendations for possible Government actions.

Three volumes of transcripts of the hearing<sup>1,2,3</sup> were prepared; they are individually available for purchase from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, (703/487-4650) and have also been deposited for review in the U.S. Department of Commerce Central Reference and Records Inspection Facility, Room 6628, Hoover Building, Washington, DC 20230, (202/377-3271). Supplementary materials submitted by some presenters and written comments from other interested parties are also available for review in the Departmental Central Reference and Inspection Facility.

In addition to listening to the oral presentations, professional staff members of the NIST Office of Standards Services carefully reviewed the transcripts, supplementary written submissions, and all other written comments. The ensuing analysis is summarized in this report. The following sections describe the nature and numbers of respondents, the extent to which each group addressed standards and conformity assessment issues, needs for improvement expressed by respondents, and recommendations for action.

#### THE COMMENTERS

A total of 70 requests were received from those interested in making oral presentations; of these, 65 appeared at the hearing. Due to the extension of the hearings to three days, it became desirable to group presentations in accordance with similarity of function rather than follow the chronological order of receipt of requests or other arbitrary arrangements.

Changes to scheduled days and/or particular times for appearing were permitted upon written request and acquiescence of all affected parties. The only such change was in response to a

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<sup>1</sup>Transcript of Hearing on Improving U.S. Participation in International Standards Activities - First Day: April 3, 1990, NTIS Order PB# 90204702, \$31.00.

<sup>2</sup>Transcript of Hearing on Improving U.S. Participation in International Standards Activities - Second Day: April 4, 1990, NTIS Order PB# 90207150, \$31.00.

<sup>3</sup>Transcript of Hearing on Improving U.S. Participation in International Standards Activities - Third Day: April 5, 1990, NTIS Order PB# 90204694, \$31.00.

request by the American National Standards Institute (ANSI) to the American Society for Testing and Materials (ASTM) to make the first presentation. ASTM acceded to ANSI's request and spoke second; the Society of Automotive Engineers (SAE) agreed to take the later slot previously assigned to ANSI.

Five requesters did not appear to make their presentations as scheduled, but they all took advantage of the opportunity to place their statements into the record through written submissions. It should be emphasized that the substantive merit of the comments of all submissions, oral and written, were given equal consideration.

Consideration was given to substantive merit in the same important due process sense that every consensus standards committee treats the substance of negative votes. In the search for possible improvements and for identification of potentially useful Government actions, no views were minimized by reason of the identity or size of the source. Since the hearing was not intended for votes, whether weighted or not, on specific issues, care should be exercised when viewing the statistics presented in subsequent tables. The columns have been structured by types of individuals and organizations, each of whom volunteered to submit comments, hence the data are not commensurate nor necessarily representatives of the larger population. As a consequence, the right-hand columns labelled "Totals" should be used to obtain an overall sense of the opinions offered only when the intercolumnar variability is low.

Written submissions were received from 257 individuals and organizations. However, one was retracted since its author recognized a conflict in his identification with his corporate employer while speaking only for himself. Five other written submissions duplicated earlier material received from the same organization, one from the same individual. On the other hand, comments received from separate major operating divisions of large parent corporations were considered to be independent of one another.

Table 1  
Types and Numbers of Commenters

Standards Developers	22
Committees/Technical Advisory Groups	14
Trade and Professional Organizations	104
Private Companies	115
Laboratories and Certifiers	13
Individuals	40
Newsletters	2
U.S. Government Agencies	7
<hr/>	
Total submissions	317*
*Does not include 4 duplicates, 1 withdrawn	

Table 1 shows the number of commenters in several categories, but the distinctions between listed types are not clear-cut. For example, many organizations fit into two or more categories, such as standards developers that are also certifiers or testers, and trade or professional associations that are major producers of standards. For the purposes of this analysis and discussion, all organizations with a substantial standards development activity have been grouped as standards developers.

It was also difficult to determine whether each of the various associations, private companies, or laboratories is small, medium, or large. In general, the standards developers and the trade and professional organizations have very large memberships. Lacking evidence to the contrary, we assume that the speakers and writers expressed views for their groups. There was more difficulty in discerning whether other commenters spoke for themselves or for their organizations. It was assumed that a set of comments received on company letterhead was an official organizational submission unless, as was sometimes the case, the writer or the company issued a disclaimer and characterized the submission as that of the individual.

Testing laboratories and certifiers were considered together, as shown in Table 1. For ease of presentation, results will be presented in subsequent tables and discussions for standards developers and committees grouped in the same column, but with separately identifiable inputs. Data from the newsletters are similarly presented in conjunction with those from individuals.

It is noteworthy that ANSI conducted a vigorous campaign to solicit comments from its members, utilizing memoranda and press releases from its Washington office. This campaign was productive and is to be commended for evoking a sizable response and a clear enunciation of the sentiments of a substantial number of individuals and organizations concerned with standards matters. Their views were fully considered for the purposes of the ensuing analysis. Expressions of support for ANSI and opposition to "Government takeover" of U.S. standardization activities were often stated in identical phrases and word-for-word sentences in different letters.

#### SUBJECTS OF COMMENTS

As can be seen from Table 2, more than 90% of all commenters, essentially in all categories, addressed the standardization process. Less than one-third of the total expressed opinions about conformity assessment, defined here as any or all of the functions of testing, certification, quality assurance, or other demonstration of product conformance to applicable standards. The higher percentages of comments on conformity assessment came from standards developers, associations, and laboratories and certifiers.

**Table 2.**

**Comment  
Profile**

	Standards Developers: Organizations/Comm.	Trade & Professional Associations	Companies	Laboratories & Certifiers	Individuals/ Newsletters	Government Agencies	"Totals"
Number of Commenters	22/14	104	115	13	40/2	7	317*
Comments on Standardization Only	12/14	57	85	2	27/1	4	202
Comments on Standards and Conformity Assessment	10/0	39	24	10	5/0	1	89
Total Comments on Standardization	22/14	96	109	12	32/1	5	291
Comments on Conformity Assessment Only	0/0	4	3	1	0/0	1	9
Comments on Conformity Assessment and Standards	10/0	39	24	10	5/0	1	89
Total Comments on Conformity Assessment	10/0	43	27	11	5/0	2	98
Miscellaneous Comments Only	0/0	4	3	0	9	1	17

\*Does not include four duplicated submissions nor one withdrawn.

Almost two-thirds of all commenters discussed only standardization, whereas only nine spoke to conformity assessment without commenting on standardization.

Seventeen submissions, about half from individuals, addressed neither the standardization nor the conformity assessment process. The subjects of those letters, referred to in Table 2 as "Miscellaneous Comments Only," concerned metrication or such topics of parochial interest to the writers as the conduct of special studies or other thoughts that do not bear directly on international standards-related or trade-related activities.

#### THE STANDARDIZATION PROCESS

Considering the comments on the standardization process, as shown in Table 3, two-thirds of the commenters (207 of 291) endorsed "the voluntary process" for developing standards in the United States, with strong support manifested in almost all categories. "The system ain't broken" was a frequently encountered statement. The comments were not always clear regarding the object of the support: only some of the commenters specified the current system; others referred to the private sector or to a voluntary process in which both Government and the private sector participate; and still others named ANSI or specified standards developers.

Relatively small numbers opined that the "system is broken" and needs replacing; that it needs fixing, but that changes should come from within; or that ANSI's performance is inadequate. A few commenters spoke in favor of a strong Government role or Government oversight of the standards development process.

The data in the upper portion of Table 3 indicate that about half of the supporters of "the voluntary process" also expressed support for ANSI as the coordinator of standards-writing in the U.S. and/or its performance as the U.S. Member Body in the International Organization for Standardization (ISO) and its companion role in supporting the U.S. National Committee (USNC) for the International Electrotechnical Commission (IEC); 15 specifically announced support for "ANSI's position" with respect to the hearings. Of the standards developers, only two specifically endorsed ANSI.

Approximately one-third of the commenters stated strongly that Government experts should participate in the standards development process as experts, but not as controlling forces, and more than 20% encouraged governmental cooperation with the private sector.

The comments categorized above have been segregated in the table since there is considerable evidence that a large number of commenters participated in what they perceived to be a plebiscite on whether the U.S. standardization process should remain voluntary or be taken over by the Government.



**Table 3.**

**Comments on Standards Process**

	Standards Developers: Organizations/Comm.	Trade & Professional Associations	Companies	Laboratories & Certifiers	Individuals/ Newsletters	Government Agencies	"Totals"
Number of Commenters on Subject	22/14	96	109	12	32/1	5	291
Endorse "Voluntary System;" "Not Broken"	19/7	74	80	7	17/0	3	207
Pro-ANSI	2/5	39	34	2	11/1	1	95
Endorse ANSI Position	0/0	5	9	0	1/0	0	15
Encourage Government Cooperation with Private Sector	8/0	27	25	0	3	2	66
Encourage Government Expert Participation	12/0	36	39	3	10	4	104
Any or All of Foregoing Expressing Only Support of the Status Quo	2/6	29	48	0	17/1	2	106
Present System Needs Fixing from Within	2/0	2	10	1	1/1	0	17
Voluntary System "Is Broken"	2/1	0	4	2	1/0	0	10
Anti-ANSI	2/1	1	4	2	2/0	0	12
Governmental Role is Needed	4/0	8	3	2	4/0	0	21
Government Oversight is Needed	1/1	3	2	4	3/0	0	14

Many letters arrived as the June 5, 1990, deadline was approaching, a substantial number of which in effect stated only that the writer supported the voluntary system and/or ANSI's role. Some of these added comments on Government expert participation or cooperation. Several of the near-last-minute commenters presented critiques and refutations of comments critical of ANSI that had been submitted by others prior to the March 22, 1990 deadline and deposited in the Central Reference and Records Inspection Facility.

#### STANDARDS PROCESS: NEEDS FOR IMPROVEMENT

Slightly more than 60% of those who commented on the standards process identified specific problem areas and needs for improvement. Table 4 reveals that virtually all the standardizing organizations, as well as the laboratories and certifiers, gave thoughtful comments on problems faced by actual or potential participants in international standardization activities.

The difficulty most frequently reported relates to the cost of participating, including travel and dues. One-third of those making substantive comments on the process favored Government subsidies through grants to participants or payment of dues to international organizations. Almost one-fourth of those commenting on improvement needs proposed tax credits or other tax incentives to organizations that participate in international standards activities. About 10% expressed the opinion that Government should pay its "fair share" when its experts participate in the process. These three views of Government payments are not mutually exclusive: some respondents expressed more than one of those views.

To some extent, the opinions on financial underwriting by the Government to increase participation in international activities are at variance with the idea that the present process is working well and should not be tampered with by the Government. Moreover, some commenters specifically cited the dearth of Federal funding under current budgetary restrictions as precluding any attempt by the Government to play a larger role, and some specifically opposed governmental funding lest it lead to controls. Additional comments suggested the need for business and industry to develop more or better mechanisms for private sector funding.

There was considerable recognition of the Government's role in setting policy and negotiating with foreign governmental entities. For example, many commenters spoke specifically of the Government's participation in the GATT Standards Code Committee and efforts to minimize or eliminate technical barriers to trade related to standards. About 10% of those commenting substantively on the subject of conformity assessment addressed the need for greater coordination among Government agencies.

**Table 4.**

**Improvement Needs:  
Standards Process**

	Standards Developers: Organizations/Comm.	Trade & Professional Associations	Companies	Laboratories & Certifiers	Individuals	Government Agencies	"Totals"
Number of Commenters on Process	20/8	67	61	11	15	3	185
Government Should Subsidize	10/5	18	16	6	4	0	59
Government Should Pay Fair Share as Participant	4/0	6	6	1	0	0	17
Tax Credits or other Tax Incentives	6/3	15	15	2	0	0	41
No Government Subsidy - No Controls	3/0	2	2	0	0	0	7
Government Should Serve as Negotiator Abroad	5/2	20	12	3	1	0	43
Government Sets Policies	2/1	4	4	0	1	0	12
Government Should Coordinate Intra-Govt.	4/0	7	4	1	2	1	19
Increased Educational and Informational Programs	7/0	23	15	2	3	1	51
U.S. Should Adopt International Standards	1/1	11	9	1	1	1	25
U.S. Should Harmonize Domestic and International Standards	3/0	6	10	0	0	0	19
Government Should Increase its Use of Voluntary Standards	6/0	7	3	0	1	0	17
Less Domination by Large Organizations	1/2	1	6	1	5	0	16
Government Should Promote U.S. Standards Abroad	4/0	2	2	0	0	0	8
Need for a New Commission on Process	2/0	2	0	1	4	0	9
Need Better Coordinating Mechanism	1/0	1	2	2	2	0	8
Government Should Recognize ANSI	2/0	1	2	0	2	1	8

The need for increased efforts in disseminating information and conducting educational programs was stressed by approximately 25% of those commenting on possible improvements in the standardization process. Responsibility for these efforts was variously assigned to Government, the private sector, or both, with particular attention to the necessity of convincing high level corporate management of the desirability of supporting participation in international standards activities.

About 15% of the associations and private companies supported the concept that the United States should adopt international standards in lieu of distinctive domestic standards. Approximately 10% of all commenters on improvement needs enunciated the desirability of harmonizing domestic standards with international standards; about the same percentage believe that the Government should increase its use of standards developed by the private sector; and about 5% favor governmental promotion abroad of standards developed in the United States.

Almost 10% of this group complained about domination of the process of standardization by large companies. Five percent called for the establishment of a new commission to study the system and recommend changes; a comparable number proposed that the Government officially recognize ANSI, but an equal number proclaimed the need for a better coordinating mechanism than now exists.

#### THE CONFORMITY ASSESSMENT PROCESS

Table 5 summarizes the pertinent thoughts of almost 100 commenters on the process of conformity assessment; about 80% addressed the roles of Government and the private sector. In sharp contrast to the comments on the standardization process, about 50% of each category of commenters on conformity assessment stated that Government must play a major role, and another 12% favored private sector cooperative support for Government's role. The remaining 20% of those commenting on this subject expressed the view that the conformity assessment process should be conducted within and by the private sector.

As the lower portion of the table indicates, commenters cited a need for a coordinating mechanism for testing and certification; almost as many expressed the view that coordination of all conformity assessment functions is required. A few respondents recognized the need for a quality system for testing and certification, and a like number proposed establishment of a Government program for registration of quality systems.

**Table 5.**

**Comments on  
Conformity  
Assessment Process**

	Standards Developers: Organizations	Trade & Professional Associations	Companies	Laboratories & Certifiers	Individuals	Government Agencies	"Totals"
Number of Commenters on Subject	10	43	27	11	5	2	98
Government Must Play Major Role	4	19	11	7	4	2	47
Government Role with Private Sector Participating	1	6	4	1	0	0	12
Private Sector Function	1	8	8	0	0	0	18
No Comments on Roles - Miscellaneous Comments Only	4	10	4	2	1	0	21
Coordinating Mechanism Needed for Testing and Certification	1	8	4	5	4	0	22
Coordination Needed for all Conformity Assessment Functions	1	6	2	4	1	0	14
Quality System Needed	1	2	1	1	0	1	6
Government Registration of Quality Systems Needed	0	2	2	1	1	0	6
International System Needed	0	0	1	1	0	0	2

## CONFORMITY ASSESSMENT PROCESS: NEEDS FOR IMPROVEMENT

As shown in the upper portion of Table 6, many of those who commented on conformity assessment problems referred to the "uneven playing field" abroad, that is, the fact that U.S. products are faced with added difficulties in marketing in other countries in contrast to the conditions applied to local products. Moreover, difficulties are alleged to stem from the mismatch of foreign regulation of products to which only voluntary standards apply in the United States. (Conversely, some U.S.-regulated products are not regulated in other countries.) The four commenters who remarked on the fragmentation of the attestation system in the United States echoed a thought frequently heard from foreign exporters and Government officials, namely that the plethora of Federal, state, and local code authorities throughout the United States makes it extremely difficult to ascertain and follow all the relevant rules for selling in the U.S. market.

Comments on the need for U.S. Government negotiation and consummation of bilateral agreements were frequently registered. Most foreign governmental entities require attestation of conformity by Government-accredited laboratories and certifiers within their own borders, hence also from U.S. manufacturers and exporters. In fact, very many of the commenters raised the question of "notified bodies," European testing or certification entities officially recognized by the national governments of EC member countries. Particular interest was expressed on the subject of whether domestic testing and certifying organizations in the United States might attain recognition from the EC.

As was observed with respect to the standardization process, a few commenters complained about domination by large firms and suggested that action be taken to protect small and medium-sized laboratories. Other suggestions included development of a U.S. certification mark, Government subsidies or tax incentives, and an increase in educational and informational programs. Five submitters proposed a Federal Commission to study needs for new coordinating mechanisms.

## CONCLUSIONS AND NIST PROPOSALS FOR ACTION

After thorough examination of the hearing record and consideration of the merits of comments made by the many and varied parties who volunteered their opinions, the NIST Office of Standards Services has drawn the conclusions listed below and, as shown in bold-face type, makes the following proposals for actions that may be taken by the executive branch of Government or by the private sector.

**Table 6.**

**Improvement Needs:  
Conformity Assessment**

	Standards Developers: Organizations	Trade & Professional Associations	Companies	Laboratories & Certifiers	Individuals	Government Agencies	"Totals"
Number of Commenters on Process	10	43	27	11	5	2	98
"Uneven Playing Field" Abroad	1	7	5	3	0	0	16
Mismatch in U.S. & Foreign Systems	2	6	7	2	0	0	17
U.S. System is Fragmented	0	4	0	0	0	0	4
Government Should Set Policies	1	0	0	0	0	0	1
Government Should Negotiate	1	9	3	0	0	0	13
Government Should Develop and Sign Bilateral Agreements	1	8	3	1	0	1	14
Reduce Domination By Large Organizations	0	1	0	3	0	0	4
U.S. Certification Mark is Needed	0	0	0	2	1	0	3
Government Should Provide Funds or Incentives	2	0	0	0	0	0	2
Increased Educational and Informational Programs	0	2	1	0	0	0	3
New Commission Should Study Subject	1	2	0	0	2	0	5

## A. STANDARDIZATION

- o The magnitude of the response and the intensity of expression of sentiments about the U.S. voluntary standards process clearly indicates that the private sector opposes any significant changes to the current standards development system. At the same time, many commenters recognized a need for improvements but stated a desire to take internal steps necessary to correct any weaknesses.
  - \* The private sector should establish (a) oversight mechanisms to monitor performance and (b) permanent quality management systems.
  
- o The increasing worldwide use of international standards has been acknowledged, along with the recognition of need to participate actively in international standardizing activities.
  - \* The Government and the standards-writing community should develop a close working relationship on policy matters in which the Government has a clear role to play.
  - \* Government and the private sector should increase informational and educational efforts to convince business executives of the value of participating in domestic and international standards-related efforts.
  - \* The U.S. standards community should consider appropriate private organizational actions to meet the increasing competition for volunteers to participate in domestic and international standardization activities and to compensate for losses anticipated in sales of domestic documents.
  - \* The Interagency Committee on Standards Policy should further improve intra-governmental coordination, encourage increased participation by Government experts in domestic and international standards committees, and establish policy for agencies to pay a fair share of expenses for such committee participation as may be appropriate.
  - \* The Government and the private sector should take steps to implement the policy of using international standards when available.



- o Funding constraints deter participation in international standardization activities, especially for small and medium-sized companies. Some associations pool resources to prevent domination by monied interests and to assure the best possible expert representation.

- \* **The private sector should intensify its efforts to achieve broader support from its own constituency.**

#### **B. CONFORMITY ASSESSMENT**

- o There is widespread recognition of the need for government-to-government negotiations and bilateral agreements for mutual acceptance of the results of conformance assessment activities.

- \* **The Government should (a) intensify negotiating efforts to ensure foreign acceptance of products based on testing and certification performed within the United States; (b) obtain acceptance of U.S. products abroad under the principle of "national treatment";<sup>4</sup> and (c) seek implementation of the concept of EC recognition of notified bodies in this country.**

- o Many private companies, trade associations, laboratories, and certifiers see a need for coordinating mechanisms for testing, certification, laboratory accreditation, quality systems, and/or other methods of conformity assessment. However, the nature of appropriate mechanisms is not clear, nor may a single mechanism suffice for different sectors of the economy.

- \* **The Government should sponsor or co-sponsor with interested parties from the private sector a series of workshops with various industry sectors to specify more precisely the needs for coordination and representation of U.S. conformity assessment interests abroad. Then appropriate systems should be developed to meet those needs and to promote effective application of these mechanisms in behalf of U.S. manufacturers and exporters. Particular consideration should be focussed on the division of responsibilities between Government and the private sector in a cooperative mode of operation.**

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<sup>4</sup>Under national treatment foreign entities are dealt with on the same basis as domestic entities.



### National Institute of Standards and Technology

#### Improving U.S. Participation in International Standards Activities; Opportunity for Interested Parties to Comment

**AGENCY:** National Institute of Standards and Technology, Commerce.

**ACTION:** Notice of hearing.

**SUMMARY:** This is to advise the public that the National Institute of Standards and Technology (NIST) will hold a public hearing to gather information, insights, and comments related to improving U.S. participation in international standards-related activities and to possible Government actions.

**DATE:** The hearing will be held at 9:30 a.m. on Tuesday, April 3, 1990.

**FOR FURTHER INFORMATION CONTACT:** Dr. Stanley L. Warshaw, Director, Office of Standards Services, National Institute of Standards and Technology, Administration Building, Room A-603, Gaithersburg, MD 20899; (301) 975-4000.

**SUPPLEMENTARY INFORMATION:** The Secretary of Commerce is required to oversee and promote U.S. participation in international standards activities under Section 413 of the Trade Agreements Act of 1979. That legislation also authorizes the Secretary of Commerce to make appropriate arrangements to ensure adequate representation of U.S. interests as necessary.

Consistent with the Secretary's responsibilities and the growing importance of international standardization to the United States, NIST will hold a public hearing to solicit views and recommendations concerning the Government's role. The central purpose of the hearing is to assess the current situation and to seek suggestions for improvement, especially regarding mechanisms for coordinating U.S. participation in international standards activities. Government policy is to improve the acceptance overseas of U.S. technology and manufacturing practice and to promote more effective U.S. contributions to international standardization, certification, quality assurance, and testing activities.

The hearing is expected to include expressions of views on potential models for government-private sector interactions, such as the Standards Council of Canada or any others. Views are solicited with respect to currently experienced effectiveness and the likely improvements from possible changes in procedures or areas of responsibility.

The following representative subjects may be discussed by participants in the hearing. They are offered as general guidelines to stimulate contributions from interested parties, but are not intended as limitations on subject matter or documented points of view.

#### Overview

Does the U.S. standards system, as presently constituted, adequately serve the Nation's trading needs in today's international climate? Identify any weaknesses that require strengthening.

Is there adequate participation by representatives of the public and private sectors? In other countries governments play a more formal role in standards. Are their systems more effective than ours? What should be the U.S. Government's role? If more coordination is needed among the many U.S. interests concerned with standards and trade, what changes might be beneficial? Is the Standards Council of Canada a model which the United States should consider?

#### Standards Participation

Does your organization send representatives to participate in international standards committee meetings? On a regular and continuing basis? Cite mechanisms which permit such participation and describe deterrents and possible techniques for improvement.

Who in your organization has responsibility for international standards activities? Describe the degree to which committee organization and procedures facilitate or hinder adequate participation and compare with efforts from other countries. Is the current U.S. standards infrastructure sufficiently supportive of and adequate for your organization's interests? Suggest any mechanisms that might improve the situation for your organization.

Are you an active participant in one or more technical advisory groups (TAGs)? Is there broad and adequate representation from the various U.S. interests? Describe the success or failure of the TAG in providing the needed forum for developing the U.S. position, and the ability of U.S. delegates to gain international acceptance of a U.S. TAG position. What factors contribute to success and/or failure?

How can we best ensure appropriate technical and financial support for international standardization activities? Should the Government help finance

participation, especially by small and medium-sized companies?

#### Standards Usage

What is the relative utility of domestic and international standards for your operations? What standards do you use for trading in foreign markets? Describe any problems you encounter with language, units of measure, obsolescence, etc.

Have you encountered any standards-related trade barriers? Document experiences.

#### Testing and Certification

Describe any problems associated with acceptance of your products in foreign markets, including any burdensome testing or re-testing that you have experienced. Do you rely on any existing agreements for acceptance of U.S. test data? Do you use the services of domestic testing and certification bodies, and have you relied on self-certification for either domestic or foreign sales?

Describe any barriers to the acceptance of your product in foreign markets, including the role of testing. What is the impact of the cost of testing and/or certification on your gaining produce acceptance? What strategies do you recommend for improving export potential?

The information and comments obtained from the public hearing will be used to make recommendations to the Secretary of Commerce to improve the effectiveness of U.S. participation in international standards-related activities, coordination with the private sector, and delegation of any appropriate responsibilities to achieve these objectives.

The hearing will be held at 9:30 a.m. on April 3, 1990, in the Auditorium at the U.S. Department of Commerce, 14th Street and Constitution Avenue, N.W., Washington, DC 20230. Persons who wish to participate in the hearing must submit a written request to Dr. Stanley L. Warshaw, Director, Office of Standards Services, National Institute of Standards and Technology, Administrative Building, Room A-603, Gaithersburg, MD, 20899. Requests should contain: (1) The person's name, address, telephone and facsimile numbers, and affiliations; (2) the number of participants; (3) the reason for attending; and (4) a list of points to be discussed. Oral presentations will be limited to topics specified in the written requests. Individuals who are unable to attend the hearing may submit written comments

to Dr. Stanley Warshaw at the above address. Both requests and comments must be received by March 22, 1990. Those persons wishing to appear at the hearing will be notified of the time allotted for their presentations.

Dated: November 21, 1989.

Raymond G. Kammer,

*Acting Director.*

[FR Doc. 89-27000 Filed 11-24-89; 8:45 am]

BILLING CODE 2610-12-M

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assessment of the return on investment expected by IITL.

**DOC Position:** The Department considers the free use of POSE by the GOS to constitute a dilution of the distributorship rights provided CSA. Therefore, the free use of POSE, minus the royalty percentage which would have been paid IITL, was considered in our calculations to be part of the financial return to IITL.

**Comment 8:** Respondents argue that the Department's use of "best information available" in the preliminary determination was inappropriate. Respondents contend that because both the original proposal and the revised business plan were submitted prior to the preliminary determination, the Department was provided with all information requested.

**DOC Position:** The Department disagrees with respondents and believes that the use of best information available for the preliminary determination was justified. Prior to the preliminary determination, the Department issued three deficiency questionnaires. The third deficiency questionnaire was issued two weeks before the preliminary determination thereby providing respondents with one final opportunity to provide information repeatedly requested previously. In each of these questionnaires, we specifically asked for certain critical information necessary for our preliminary determination. Respondents either did not answer our questions or provided superficial answers which were of little use to the Department. Consequently, the Department was forced to use the best information available in its preliminary determination.

**Comment 10:** Respondents argue that the Department erred in its preliminary determination by using the prime rate plus a spread in the present value calculation. Respondents contend that the 12-month interbank rate plus a spread of 1/8 percent should be used in the present value calculation in the final determination.

**DOC Position:** The Department disagrees. The Department used in its calculations for this determination a commercial long-term interest rate (i.e., the prime rate without any spread) in its calculations. This rate is the most appropriate measure on the record of this investigation of an average long-term commercial interest rate. No spread was added to the prime rate because statistical information on an average long-term rate was unavailable and because information obtained at verification indicated that long-term interest rates are both above and below the prime rate.

**Comment 11:** Petitioner argues that through the National Information Technology Plan, which is being implemented by NCB, the GOS has effectively targeted the computer and software industry with a number of export-oriented programs. Petitioner contends that the IITL development of POSE is an export program in accordance with the National Information Technology Plan.

Respondents argue that IITL is not an export promotion department of NCB. Respondents contend that it is the Industry Development Department (IDD) of NCB that has the export promotion function. Respondents further argue that the Department in its verification report erroneously links IDD with IITL to give the impression that IITL shares in the export promotion function of IDD. Furthermore, IITL did not impose an export requirement on CSA as a condition for receiving POSE, but that the need to export was mutually recognized as a prerequisite for ensuring commercial success.

**DOC Position:** Information on the record demonstrates that one objective of the National Information Technology Plan is the development of a strong export-oriented information technology industry. Furthermore, it is also clear from information on the record that it is IITL's intention to share its results in applied research with the local industry so that they can be commercialized into products for export.

#### Verification

We verified the information used in making our final determination in accordance with section 778(b) of the Act. During verification we followed standard verification procedures including meeting with government and company officials, examining relevant documents and accounting records, tracing information in the responses to source documents, accounting ledgers and financial statements, and collecting additional information that we deemed necessary for making our final determination. Our verification results are outlined in detail in the public versions of the verification reports, which are on file in the Central Records Unit (Room B-099) of the Main Commerce Building.

#### Suspension of Liquidation

In accordance with section 703(d) of the Act, we are directing the U.S. Customs Service to terminate suspension of liquidation on all entries of CASE software from Singapore and cancel the continuous entry bond which covered the lump sum equivalent of the

estimated net bounty or grant calculated in the preliminary determination.

#### ITC Notification

Since Singapore is not a "country under the Agreement" within the meaning of section 701(b) of the Act, and the merchandise under investigation is dutiable, section 303 of the Act applies to this investigation. Therefore, the ITC is not required to be notified.

This determination is published pursuant to section 705(d) of the Act (19 U.S.C. 1671d(d)).

Dated: March 28, 1990.

Eric L. Garfinkel,

Assistant Secretary for Import Administration.

[FR Doc. 90-7448 Filed 3-30-90; 8:45 am]  
BILLING CODE 3510-05-M

#### National Institute of Standards and Technology

U.S. Participation in International Standards Activities; Opportunity for Interested Parties To Comment for the Record

AGENCY: National Institute of Standards and Technology, Commerce.

ACTION: Notice of meeting.

**SUMMARY:** On November 27, 1989, the National Institute of Standards and Technology announced a meeting to gather information, insights, and comments related to U.S. participation in international standards-related activities and to possible government actions. (See Federal Register, Vol. 54, No. 228, November 27, 1989, page 46785.) Due to the large number of requests to make presentations, the National Institute of Standards and Technology announces that the meeting will be extended from one day, April 3, 1990, to three days, April 3, 4 and 5, 1990. The record of the meeting will be held open for sixty days following the meeting to allow all interested parties the opportunity to comment. Comments must be received by close of business June 5, 1990.

**DATES:** The meeting will be held on three days, April 3, from 9:30 a.m. to 5 p.m., and April 4 and 5, from 9 a.m. to 5 p.m.

**FOR FURTHER INFORMATION CONTACT:** The written comments received regarding the April 3-5, 1990, hearing on U.S. Participation in International Standards activities will be on file after April 5, 1990, in the U.S. Department of Commerce Central Reference and Records Inspection Facility, Room 6828, Hoover Building, Washington, DC 20230.

(202/377-3271), for the individual's perusal or copying. Copies of the text of the hearing can be obtained from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, (703/487-4650); a copy of this text will also be made available in the same DOC Reference and Records Inspection facility after April 25, 1990. Additional written comments should be sent to Dr. Stanley L. Warshaw, Director, Office of Standards Services, National Institute of Standards and Technology, Administration Building, Room A-600, Gaithersburg, MD 20899, (301/975-4000).

**ADDRESSES:** The meeting will be held in the Auditorium at the U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230.

Dated: March 28, 1990.

John W. Lyons,  
Director.

[FR Doc. 90-7492 Filed 3-30-90; 8:45 am]  
BILLING CODE 3510-40-M

National Oceanic and Atmospheric Administration

Conservation Plan for Northern Fur Seals

**AGENCY:** National Marine Fisheries Service, NOAA, Commerce.

**ACTION:** Notice of availability and request for comments.

**SUMMARY:** The National Marine Fisheries Service has completed "A Conservation Plan for Northern Fur Seals, *Callorhinus ursinus*", as required by section 115(b) of the Marine Mammal Protection Act, and is requesting public comments.

**DATES:** Comments must be submitted on or before May 2, 1990.

**ADDRESSES:** Written requests for copies and comments on the Conservation Plan should be mailed to Dr. Nancy Foster, Director, Office of Protected Resources and Habitat Programs, NMFS, 1335 East-West Highway, Silver Spring, Maryland 20910.

**FOR FURTHER INFORMATION CONTACT:** Georgia Cranmore, 301-427-2289.

Dated: March 27, 1990.

Nancy Foster,

Director, Office of Protected Resources and Habitat Programs, National Marine Fisheries Service.

[FR Doc. 90-7501 Filed 3-30-90; 8:45 am]

BILLING CODE 3510-22-M

Marine Mammals NMFS, Southwest Fisheries Center (P77# 33); Modification No. 2 to Permit No. 680

Notice is hereby given that pursuant to the provisions of §§ 216.33(d) and (e) of the Regulations Governing the Taking and Importing of Marine Mammals (50 part 216) and § 220.24 of the regulations on endangered species (50 CFR parts 217-222), Scientific Research Permit No. 680 issued to the NMFS, Southwest Fisheries Center P.O. Box 271, La Jolla, California on August 18, 1989 (54 FR 35221), as modified on December 18, 1989 (54 FR 52975), is further modified as follows:

The following species are added to Section A.1:

Species	Maximum total take
Blainville's beaked whale ( <i>Mesoplodon densirostris</i> )	240
Hubbs' beaked whale ( <i>Mesoplodon carl-hubbsi</i> )	240
Gray's beaked whale ( <i>Mesoplodon grayi</i> )	240
Peruvian beaked whale ( <i>Mesoplodon peruvianus</i> )	240
Unidentified beaked whales ( <i>Mesoplodon</i> sp.)	240
Bottlenose whale ( <i>Hyperoodon</i> sp.)	240
Baird's beaked whale ( <i>Berardius bairdii</i> )	240
Cuvier's beaked whale ( <i>Ziphius cavirostris</i> )	240
Dwarf sperm whale ( <i>Kogia simus</i> )	240
Sperm whale ( <i>Physeter macrocephalus</i> )	240
Pygmy sperm whale ( <i>Kogia breviceps</i> )	240
Minke whale ( <i>Balaenoptera acutorostrata</i> )	240
Bryde's whale ( <i>Balaenoptera edeni</i> )	240
Blue whale ( <i>Balaenoptera musculus</i> )	240
Fin whale ( <i>Balaenoptera physalus</i> )	240
Sei whale ( <i>Balaenoptera borealis</i> )	240
Humpback whale ( <i>Megaptera novaeangliae</i> )	240

Section B.1 is replaced by:

1. This research effort shall be conducted by the means, in the areas and for the purposes set forth in the application and the modification request.

Section B.2 is replaced by:

2. If one endangered animal is killed or two nonendangered animals are killed as a result of the biopsy procedure, or if usable samples are not obtained from at least 75 percent of the animals darted, the Holder shall suspend his research and the experimental protocol shall be reviewed and, if necessary revised to the satisfaction of the Service, in consultation with the Commission.

Issuance of this modification, as required by the Endangered Species Act of 1973, is based on the finding that such modification: (1) was applied for in good faith; (2) will not operate to the disadvantage of the endangered species which are the subject of the modification; and (3) is consistent with the purposes and policies set forth in

section 2 of the Act. This modification was also issued in accordance with and is subject to parts 220-222 of title 50 CFR, the National Marine Fisheries Service regulations governing endangered species permits.

This modification becomes effective upon publication in the Federal Register.

Documents in connection with the above modification are available for review by appointment in the following offices:

Office of Protected Resources and Habitat Programs, National Marine Fisheries Service, 1335 East West Highway, Room 7324, Silver Spring, Maryland 20910 (301/427-2289); and Director, Southwest Region, National Marine Fisheries Service, 300 South Ferry Street, Terminal Island, California 90731 (213/514-6196).

Dated: March 27, 1990.

Nancy Foster,

Director, Office of Protected Resources and Habitat Programs, National Marine Fisheries Service.

[FR Doc. 90-7502 Filed 3-30-90; 8:45 am]

BILLING CODE 3510-22-M

Marine Mammals; Issuance of Permit to Mr. Mats Amundin (P460)

On February 16, 1990, notice was published in the Federal Register (55 FR 5644) that an application had been filed by Mr. Mats Amundin, Zoologist, Kolmarden Zoo, 618 00 Kolmarden, Sweden, for a permit to export one (1) baby sperm whale (*Physeter catodon*), including all soft tissues for scientific purposes.

Notice is hereby given that on March 23, 1990 as authorized by the provisions of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361-1407), the Regulations Governing the Taking and Importing of Marine Mammals (50 CFR part 216), the Endangered Species Act of 1973 (16 U.S.C. 1531-1544), and the regulations governing endangered fish and wildlife permits (50 CFR parts 217-222), the National Marine Fisheries Service issued a Permit for the above taking subject to certain conditions set forth therein.

Issuance of this Permit, as required by the Endangered Species Act of 1973, is based on a finding that such Permit, (1) was applied for in good faith; (2) will not operate to the disadvantage of the endangered species which are the subject of the Permit; and (3) is consistent with the purposes and policies set forth in section 2 of the Endangered Species Act. This Permit is issued in accordance with and is subject to parts 220 through 222 of title 50 CFR.



APPENDIX B

December 20, 1989

**TO WHOM IT MAY CONCERN:**

A recent Federal Register notice (Vol. 54, No. 226, dated Monday November 27, 1989, pp. 48795-6) announced a public hearing\* for April 3, 1990, on approaches for improving U.S. participation in international standards-related activities and recommendations for Government actions. It is likely that various potential models will be presented for government-private sector interactions, including something based on the Standards Council of Canada (SCC). The National Institute of Standards and Technology has received a number of requests for more detailed information about possible U.S. counterparts to the SCC. Since the public hearing is specifically intended to receive a broad spectrum of views, the following general model is put forth as but one possibility; it is presented as a concept to aid those wishing to comment or to serve as a basis for modification.

**Standards Council of the United States of America**

**Purpose:**

To enhance U.S. international commercial interests by creating an infrastructure to sustain a cohesive National Standards System, with oversight by a Board of Governors comprised of representative public and private interests.

**Scope:**

1. Encourage Government participation in the development and use of voluntary standards for regulatory and procurement purposes.
2. Provide information to U.S. interests on specific standards, product certification and testing programs of the United States, other nations or regions, and treaty or non-treaty international organizations; and operate the U.S. GATT "Inquiry Point."
3. Effect agreements through the Secretary of Commerce with foreign governmental entities (national and regional) for transparency in standards development and the acceptance of conformity assessment results (product certification, quality system recognition, laboratory accreditation, type approval, etc).
4. Provide financial assistance for U.S. representation in foreign national, regional or international standards fora.

5. Promote and coordinate U.S. technical and management assistance to the standards programs of developing and middle-income countries.

6. Coordinate within the United States the harmonization between the United States and Canada of Federal, provincial, state and local standards related requirements.

7. Accredite National Standards Developers and U.S. Member Bodies to International or Regional Standards Development Organizations.

8. Recognize National Conformity Assurance Programs, including product certification, laboratory accreditation, and quality system assessment registration.

\* Both requests to testify at the hearing and submission of written comments must be received at NIST by March 22, 1990.



STANLEY I. WARSHAW  
Director, Office of Standards Services

Tel: (301) 975-4000

FAX: (301) 963-2871



**APPENDIX C**

**PANEL MEMBERS**

Dr. Stanley I. Warshaw  
National Institute of Standards and Technology

Mr. Walter G. Leight  
National Institute of Standards and Technology

Mr. John L. Donaldson  
National Institute of Standards and Technology

Mr. John McCutcheon  
U.S. Department of Agriculture

Mr. Phillip B. White  
Food and Drug Administration

Mr. Earl S. Barbely  
U.S. Department of State

Ms. Wendy Moore  
U.S. Department of State

Mr. Charles Ludolph  
International Trade Administration  
U.S. Department of Commerce

Mr. Tom Crider  
U.S. Department of Agriculture



APPENDIX D

LIST OF COMMENTERS

1. ORAL TESTIMONY

James Pearse, Manuel Peralta, Jeff Smith  
American National Standards Institute

Joseph O'Grady  
American Society for Testing and Materials

Oscar Fisher, Melvin Green  
American Society of Mechanical Engineers

Marco Migliaro, Andrew Salem  
Institute of Electrical and Electronics Engineers

William Calder  
Instrument Society of America

Ben Johnson  
Industry Applications Society

James Decker  
American Society of Civil Engineers

Richard Alley  
American Welding Society

Russell Hahn, Robert Lanphier  
American Society of Agricultural Engineers

Anthony O'Neill, Arthur Cote, Daniel Piliero  
National Fire Protection Association

Michael Miller, Dennis Stupak, Robert Flink, Mort Levin  
Association for the Advancement of Medical Instrumentation

James Bihr, Richard Kuchnicki, William Tangye, Paul K. Heilstedt  
Council of American Building Officials

Thomas Flint  
American Plywood Association

David Grumman, Frank Coda, Jim Heldenbrand  
American Society of Heating, Refrigerating and Air  
Conditioning Engineers

Harry Sheetz, Jim French  
American Institute of Aeronautics & Astronautics

John Mason  
Society of Automotive Engineers

Ronald Reimer  
U.S. Natl. Committee of the IEC

Tom Castino, Joe Bhatia  
Underwriters Laboratories

Herbert Wilgis, Milton Bush  
American Council of Independent Laboratories

Richard Schulte  
American Gas Association

Walter Poggi  
Retlif Testing Laboratories

Richard Feigel  
Hartford Steam Boiler Inspection & Insurance Co.

Leonard Frier  
MET Electrical Testing Company

Peter Guzman, James Tucker, Earl Gmozer  
ETL Testing Laboratories

James Johnson  
Amador Corporation

Chester Grant  
American Association for Laboratory Accreditation

Jim Mayben  
Aerospace Industries Assn. Quality Assurance Committee &  
Nat'l Security Industrial Assn. Quality & Reliab. Comm.

W. A. Simmons  
National Conference of Standards Laboratories

George Moran  
American Society for Nondestructive Testing

Stephen Cooney  
National Association of Manufacturers

Bernard Falk  
National Electrical Manufacturers Association

Raymond Attebery, Ralph Taylor, Warren Pollock, Bruce McClung  
Chemical Manufacturers Association

Walter Cebulak, Tom Stark, Barbara Boykin  
Aerospace Industries Association

Morgan Cooper, Herbert Phillips, Donald Mackay  
Air-Conditioning and Refrigeration Institute

C. Reuben Autery, John P. Langmead  
Gas Appliance Manufacturers Association

William Miller, Dennis Eckstine  
Construction Industry Manufacturers Association

David King, William Bradley, Susan Herrenbruck, Peter Lamb  
American Gear Manufacturers Association

William Montwieler  
Industrial Truck Association

David Martin  
Plumbing Manufacturers Institute

John Martin  
Automotive Industry Action Group

Peter Censky, William Ives  
Water Quality Association

Jim Brown, Dale Fox  
National Association of Underwater Instructors

Edward Rozynski, Robert Flink  
Health Industry Manufacturers Association

Gerald Ritterbusch, L. D. Baker, P. L. Bellinger, J. K. Hale  
Equipment Manufacturers Institute

Gregory Gould  
Gould Energy

Marilyn Wardle  
E.I. du Pont de Nemours & Co.

Steven Hellem  
U.S. Advanced Ceramics Association

John Pickitt, Oliver Smoot, William Hanrahan  
Computer and Business Equip. Manufacturers Assn.

Bruce DeMaeyer  
Exchange Carriers Standards Association

L. John Rankine  
Consulting Services

Marv Patterson, Don Loughry  
Hewlett-Packard Company

Kenneth Ingram, Dennis Thovson  
AT&T

Kenneth Hutcheson  
ANSI ASC X12 - Electronic Data Interchange

Samuel Cheatham  
Storage Technology Corporation

Wayne Davison  
Research Libraries Group

G. J. Handler  
Bellcore

Erick Duesing  
Infolink Solutions

Chet Sturgeon  
Product Data Exchange Specification

Jo Williams  
American Speech-Language-Hearing Association

Eileen Healy  
Pacific Bell

Peter Yurcisin  
Department of Defense

Charles H. Piersall, Jr.  
U.S. TAG to ISO TC 8  
Shipbuilding and Marine Structures

G. Willard Jenkins, Russell Hahn  
U.S. TAG for ISO TC 23  
Tractors and Machinery for Agriculture and Forestry

John Hedley-Whyte  
U.S. TAG for ISO TC 121, SC 3  
Anaesthetic and Respiratory Equipment, Lung Ventilators and  
Related Equipment

C. Edward Eckert, Gerald Ritterbusch  
U.S. TAG for ISO TC 127  
Earth-Moving Machinery

## 2. WRITTEN SUBMISSIONS

Nat Kronstadt	NKA
John W. Kopec	Riverbank Acoustical Labs
Raymond W. Monroe	Steel Founders' Soc. of America
George Vander Voort	Carpenter Steel Div.
Peter R. Gerdeman	The MITRE Corp.
Brian Hoover	Micro Motion, Inc.
Jonathan Gilbert	AMOT Controls Corp.
Helmut Hellwig	Chm., SCC27; NIST
Foster C. Wilson	
A. Lowenstein/G. Winter	Prospective Computer Analysts, Inc.
Allen Davis	Corhart Refractories Corporation
Paul Ware	Kiddie Products Inc.
Daniel Chaucer	Consultant
N. J. Sladek	Amphenol Corporation
Alex Alden	
Ralph McCullough	Texas Instruments
H. Steffen Peiser	
Albert Batik	Albert Batik Consultants
Jerome Halperin	U.S. Pharmacopeial Convention
Robert Kleinhans	Tile Council of America
S. Rabinovich	
G. Bassani	NCR Corporation
William Donlon	Niagara Mohawk Power Corporation
Dieter Bergman	Inst. Intercon. & Packag. Electr. Cir.
Donald Vierimaa	Truck Trailer Manufacturers Assn.
Darrell Wolbers	J. I. Case
David Nelson	Acoustic Systems
Charles Rose	Charles Rose Consultants
Michael Bohlman	Sea-Land Service
John Bergen	Nat'l Committee for Clinical Lab. Stds.
T. A. Pickett	General Electric Company
D. J. McDonald	Nat'l Bd. of Boiler & Pres. Vessel Insp.
Jack Wells	Pass & Seymour
Stan Jakuba	S. R. Jakub Associates
Susan Rapp	ANSI ASC X12 (Pittsburgh Nat'l Bank)
Mike Moyer	Rank Taylor Hobson Inc.
James Dolphin	
Lawrence Eicher	
Harry E. Lunt	
Gordon Baker	NewAge Industries
James Noble	Mech. Contractors Assn. of America
David Swankin	Swankin & Turner
Norman Siefert	White-Rogers Div., Emerson Electric
Donald Schap	College of American Pathologists
Patrick Misciagna	Citibank
Thomas Nickel	Arrow International
A. Raeburn/R. Brett	Intl. Electrotechnical Commission
Jody Goodman	A.M. Castle & Co.
M. W. Allen	US TAG for ISO TC 104
Robert Belfit	Omni Tech International

E. K. Pentimonti	American President Lines
Gerald Kessler	Kessler Products Co.
Rajni Mehta	Wiremold Company
Vincent Grey	Container Information and Services
J. Hans Kluge	Automatic Switch Co.
J. B. Woods	Hughes
Charles Marvin	Refractories Institute
Albert Moore	NMTBA
I. Otis Berkhan	Southern Company Services
James Converse	Eastman Kodak Company
Joseph Sears	Consolidated Rail Corporation
Donald Peyton	Peyton Associates
Peter Perkins	Tektronix
D. L. Flamm	Honeywell Inc.
Cal Clemons	Fire Suppression Systems Assn.
J. F. Pacuit	Tire and Rim Assn.
Brian McGregor	U.S. Department of Agriculture
William Roorda	Alcona Associates
B. E. Morriss	National Communications System
Michael Gibbonsd	National Systems Corporation
Bernard Whittington	IEEE Subcom-Fire Hazard Asses. & Tox.
C. T. Sawyer	American Petroleum Institute
Ricky Barron	McDonnell Douglas
Harriet Rusk	ANSI ASC X12--Elec. Data Interchange
R. H. Bierly	Unisys Corporation
Robert Hung	Marble Institute of America
R. E. Miller	Columbia Gas System Serv. Corp.
John Condon	Am. Soc. for Quality Control
Earl Hess	Lancaster Laboratories
C. E. Quentel	Square D Company
R. D. Grotelueschen	Deere & Company
William MacMillan	Pencil Makers Assn. Inc.
D. Lance Lockwood	Hill-Rom Company
T. M. Jankowski	(Counsel for) Outdoor Power Equip. Inst.
William McCredie	National Particleboard Assn.
Donald Vincent	Robotic Industries Assn.
Douglas Kliever	(Counsel for) Sporting Arms and
Ammunition	Manufacturers' Inst.
Robert Parks	ISO TC 172 SC 1-Optics
Joseph Coyle	Burlington Industries Inc.
Ted Manakas	Strategic Marketing Group Ltd.
Thomas Dufficy	Nat'l Assn. of Photographic Mfrs.
W. E. Herring	Nat'l Engine Parts Mfrs. Assn.
Sue Wolk	Assn for Information & Image Mgt.
Andrew Sharkey	Steel Service Center Inst.
A. C. Rousseau	Philips Lighting
G. H. Ritterbusch	Caterpillar Inc.
Patrick O'Shea	(Counsel for) NYNEX Corporation
Norbert Johnson	3M Company
Robert Geiseman	Micro Switch (Div. of Honeywell)
Kenneth Bleakley	U.S. Department of State
Charles Bedell	Int'l Assn. of Drilling Contractors
Sheldon Bentley	ADAPSO Standards Committee
Arthur Michael	Product Safety International



William Ruxton	Nat'l Tooling & Machining Assn.
H. James Harrington	Harrington, Hurd & Rieker
Ernst Marburg	Columbus McKinnon Corp.
Howard Brandston	H.M. Brandston & Partners
John Talbott	Talbott Engineers
J. M. Pollitt	Baltimore Gas & Electric Co.
James Brodrick	American Society of Safety Engineers
Frank Wilcher	Industrial Safety Equip. Assn.
Kurt Fischer	International Compliance Corp.
Joseph Sears	Consolidated Rail Corp.
Raymond Wright	Seaview Petroleum Co.
C. Marshall Smith	Puritan Bennett
Eugene Kielb	Melroe Company
R. W. Dalzell	Mine Safety & Health Admin., U.S. DoL
George Ockuly	Bussmann
Robert Kaminski	ASC X9 - Financial Services
R. E. Pritchard	Inst. for Intercon. & Packag. Elec. Cir.
Stephen Channer	Business & Inst. Furniture Mfrs. Assn.
Michael Moore	Michael Moore Law Office
Ronald Tye	ISO TC 163-Thermal Insulation
William Anton	American Architectural Mfrs. Assn.
Frank Lyon	Rockwell International
David Soffrin	Edison Electric Inst.
John Berg	Futuretech, Inc. (Elsevier Sci. Pubs.)
Alexander Anselmo	R. Stahl, Inc.
Ann Gosier	American Mining Congress
Edward Wooley	Inst. of Intl. Container Lessors
Jean Stanford	American Dental Assn.
John Rennie	Factory Mutual Research
Delano Wilson	Power Technologies
Bea Schutz	Midwest Clearing Corp
Raynal Andrews	
Thomas Cole	Rubber Manufacturers Assn.
Richard Hendricks	Mountain Fuel
Stuart Nightingale	Food and Drug Administration, HHS
Robin Carroll	National Safe Transit Assn.
Mary Good	Allied Signal
Walter McGee	Nat'l Standards Educators Assn.
William Westerhold	Nat'l Assn. of Chain Manufacturers
D. D. Tiede	J. I. Case
Kenneth McK. Eldred	Acoustical Society
Grace Hazard	Hazard Engineering
Peter Adelstein	ANSI ASC IT9 - Image Permanence
Kathleen Hennessey	Texas Tech University
P. A. Johnson	
Glen Dash	Dash, Straus & Goodhue, Inc.
Paul Lahr	U.S. TAG for TC 115
Gerhard Leo	ASTM Committee C-18 on Dimension Stone
Kenneth Schmaltz	Otter Tail Power Company
W. C. Bentinck	Bird Products Corporation
John Alpar	St. Luke Eye Institute
Benjamin Bolusky	American Association of Nurserymen
Deborah Fanning	Art & Craft Materials Institute, Inc.
Robert Shaw	Opticians Association of America

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Industrial Fasteners Institute  
Howard Forman Law Offices  
Cooling Tower Institute  
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Product Assurances Consulting  
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Castle Metals  
Devine Design  
Whirlpool Corporation  
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National Academy of Opticianry  
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Research & Trading Corporation  
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Power Technologies, Inc.  
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Builders Hardware Mfrs. Assn.  
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Associated Wire Rope Fabricators  
Kessler Products Co., Inc.  
National Printing Equip. & Supply Assn.  
Specialty Vehicle Institute of a  
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Edwin Smura	TC X3V1, Task Group 10
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