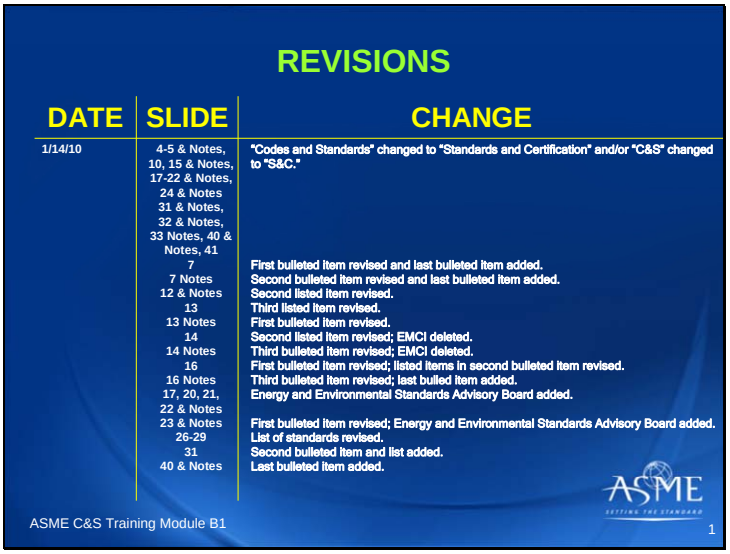
Slide 1

Slide 2


REVISIONS
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4-5 & Notes, 10, 15 & Notes, 17-22 & Notes, 24 & Notes 31 & Notes, 32 & Notes, 33 Notes, 40 & Notes, 41
"Codes and Standards" changed to "Standards and Certification" and/or "C&S" changed to "S&C."
7
First bulleted item revised and last bulleted item added.
7 Notes
Second bulleted item revised and last bulleted item added.
12 & Notes
Second listed item revised.
13
Third listed item revised.
13 Notes
First bulleted item revised.
14
Second listed item revised; EMCI deleted.
14 Notes
Third bulleted item revised; EMCI deleted.
16
First bulleted item revised; listed items in second bulleted item revised.
16 Notes
Third bulleted item revised; last bulled item added.
17, 20, 21, 22 & Notes
Energy and Environmental Standards Advisory Board added.
23 & Notes
First bulleted item revised; Energy and Environmental Standards Advisory Board added.
26-29
List of standards revised.
31
Second bulleted item and list added.
40 & Notes
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ASME
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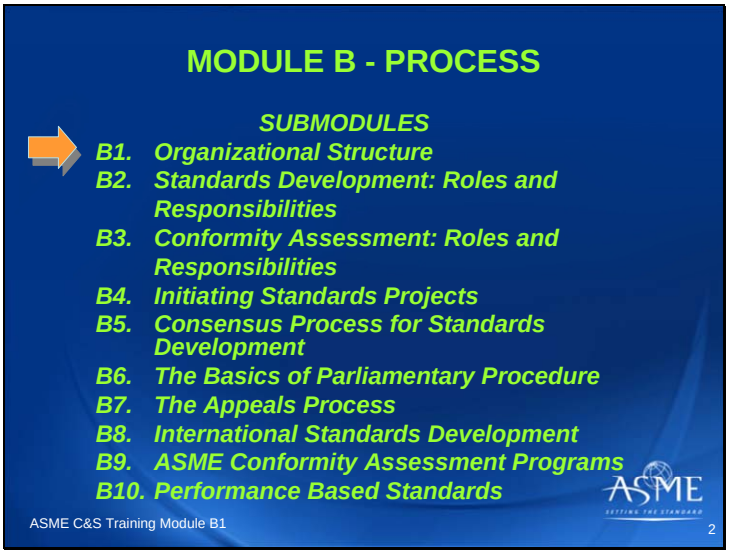
Slide 3



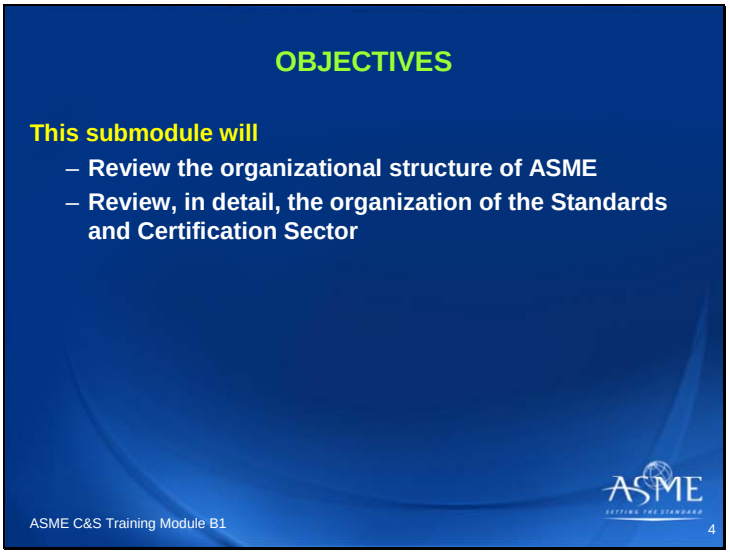
Module B - Process

Module B contains nine submodules. We will start with B1 - Organizational Structure.

Slide 4

Submodule B1 – Organizational Structure

Slide 5



Objectives

This submodule will

Review the organizational structure of ASME

Review, in detail, the organization of the Standards and Certification Sector

Slide 6

Agenda

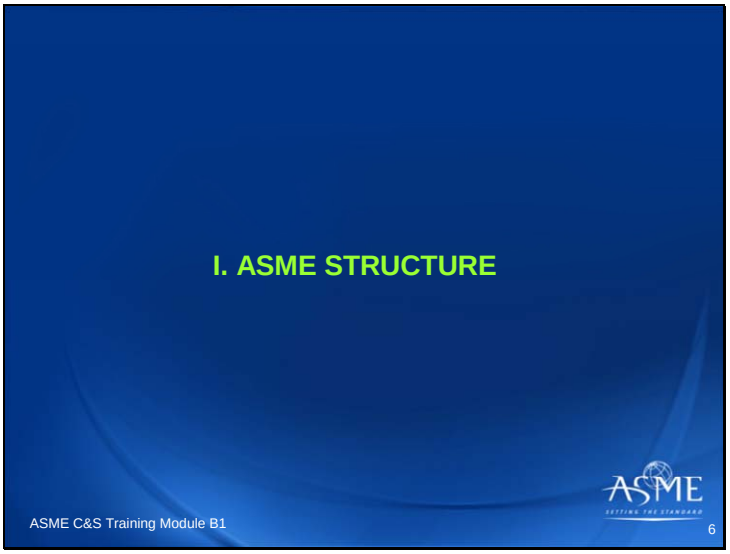
We will:

Begin by looking at the structure of ASME as a whole

Focus next on Standards and Certification and take a detailed look at its structure

End up by examining how the Standards and Certification organization actually creates a new standard

Slide 7



Part I - ASME Structure

Slide 8

ASME

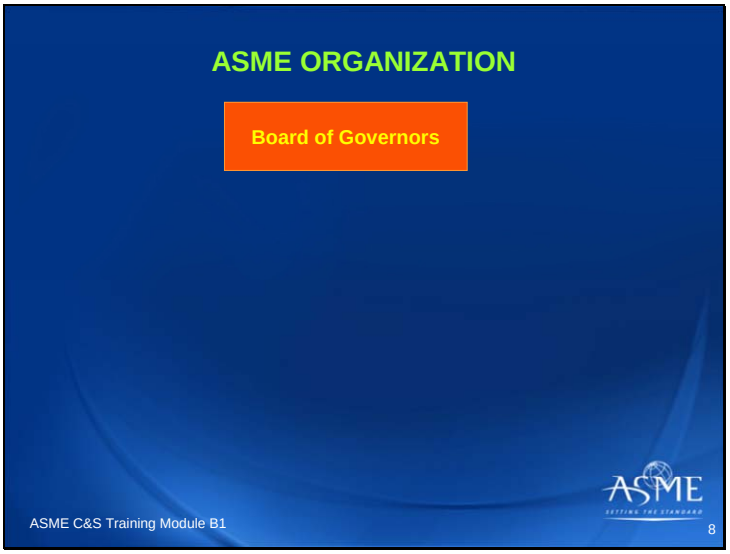
Mission Statement:
The Society's Mission Statement is the point of departure for this discussion because ASME's organizational structure is designed to implement this mission.

Objectives:
In implementing its mission, ASME strives to accomplish the following:
Assuring and advancing technical competence
Enhancing professional well-being
Conducting quality programs and activities

Areas of Strategic Priority
Energy – ASME will serve as an essential energy technology resource and leading advocate for balanced energy policies.
Global Impact – ASME will deliver locally relevant engineering resources to advance public safety and quality of life throughout the world.
Engineering Workforce Development – ASME will achieve a broader, competent, vibrant and more diverse engineering workforce for all career stages.

Let’s see how the organization in its main components embodies these intended services to the engineering profession.

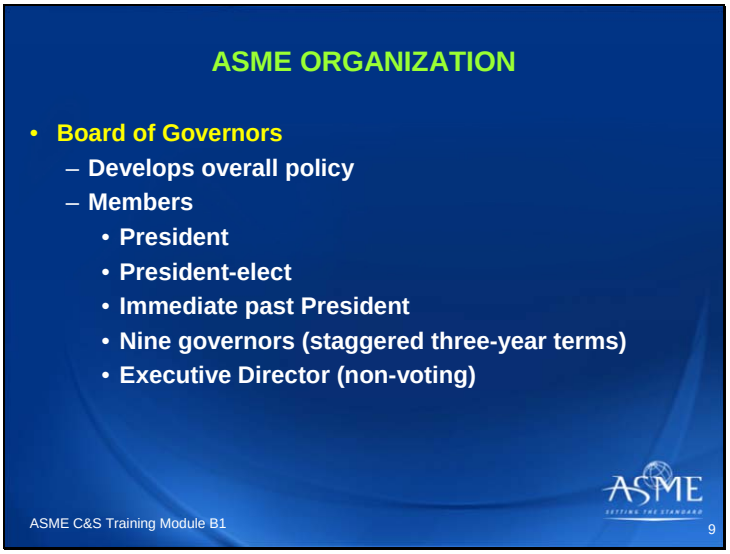
Slide 9



ASME Organization

At the top of ASME's organizational structure is the Board of Governors.

Slide 10



ASME Organization

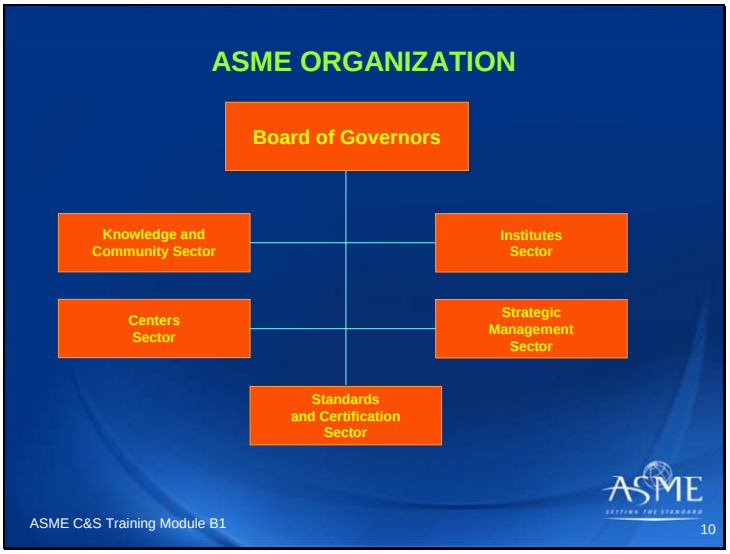
The Board of Governors:

Is the guiding body which develops overall policy for the Society

Delegates responsibility to subsidiary bodies to ensure fulfillment of the three key objectives

Is made up of twelve voting members and the Executive Director of the Society, who is non-voting

Slide 11



ASME Organization (cont'd)

The Sectors:

Reporting to the Board of Governors are five groups called "Sectors." Each of these sectors:

Has responsibility for a specific area

Carries out activities designed to further the objectives of the society

Let us briefly take a look at each of these Sectors in light of the three objectives, starting with the Knowledge and Community Sector.

Slide 12

ASME Sectors

Knowledge and Community Sector:

Sector is responsible for the activities of the Society relating to engineering communities in the promotion of the art, science, and practice of multidisciplinary engineering and allied sciences by providing member-focused products, services, technical knowledge, and networking opportunities

An objective of the Sector is to make ASME indispensable to engineering students and early career engineers

The Sector is responsible for promoting, developing, and growing a continuum of member-unit groups serving the needs of engineers and allied professions. These include technical divisions, sections, student sections, affinity groups and committees, self-forming groups, and communities of practice

The Sector will also provide for member-initiated research, publishing outlets, and venues for dissemination of technical knowledge

The Sector also contributes to the identification, training, and development of future Society leaders.

Slide 13

ASME Sectors (cont'd)

Strategic Management Sector:

Serves as the focal point for the identification, capture, and transfer of knowledge that will support ASME's strategies for technical innovation and advocacy of public policies that are important to advancement of industry and the profession. Units of this Sector include Board on Government Relations, Industry Advisory Board, Strategic Initiatives and Innovation Committee, and Strategic Issues Committee.

The Sector will collaborate with other Society units to leverage the intellectual property, skills and competencies of ASME to plan, develop and implement new market-focused products and services.

The Sector provides insight through internal and external sources for initiatives and breakthrough innovation that further ASME strategic objectives.

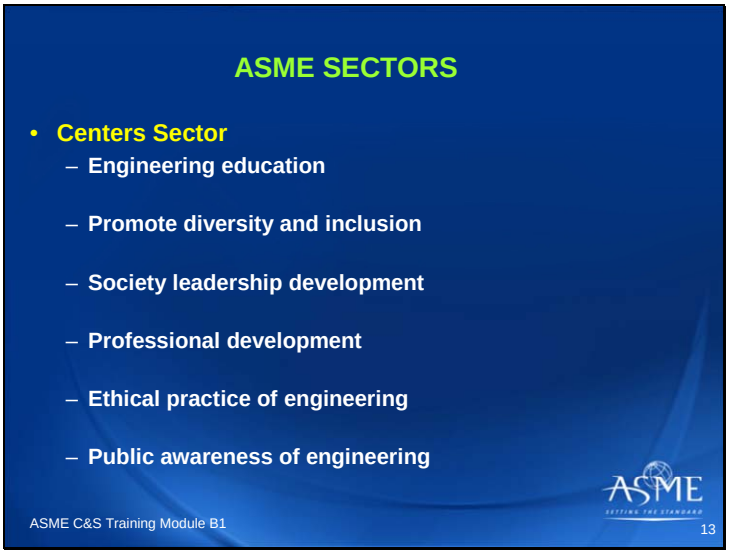
The Sector will provide insight through internal and external services to support environmental scanning, competitive intelligence and benchmarking, and keep the Society informed on

strategic issues, opportunities, trends and initiatives.

The Sector will facilitate programs and interactions on issues at the state and federal levels of government that are of interest to ASME.

The Sector will provide a voice for industry within ASME through the communication and advocacy of industry needs.

Slide 14



ASME Sectors (cont'd)

Centers Sector:

The Centers Sector is responsible for the activities of the Society relating to ASME's obligation to support the growth, vitality, and diversity of mechanical and multidisciplinary engineering, to cultivate future leaders, and to celebrate the contribution of engineers to the well-being of humankind. Units of this Sector include Center for Public Awareness; Center for Career and Professional Advancement; Center for Education; and Center for Leadership and Diversity.

The Sector is responsible for:

promoting quality and innovation in the education of engineers

representing the profession to students, educators and the public-at-large

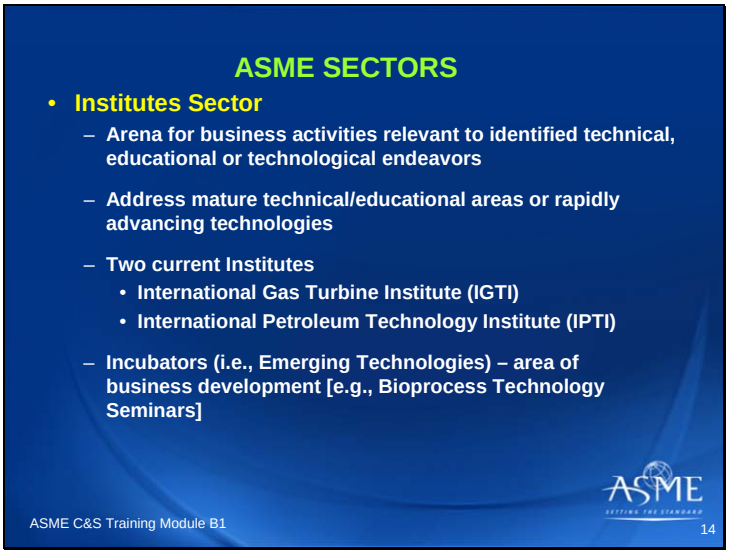
promoting diversity and inclusion throughout the Society

supporting the development of future leaders

activities of the Society that relate to the professional development of engineers and engineering students, the advancement of professional practice and the ethical practice of engineering

activities of the Society that relate to public awareness of engineering

Slide 15



ASME Sectors (cont'd)

Institutes Sector:

The underlying purpose of the Institutes Sector is to provide a focused arena for business activities relevant to identified technical, educational, or technological endeavors.

Institutes will be involved with mature technical or educational areas, which still afford room for innovation, or rapidly advancing technologies where implementation strategies are still developing.

ASME currently has two Institutes – International Gas Turbine Institute (IGTI) and International Petroleum Technology Institute (IPTI). IGTI and IPTI both serve well-defined markets in their respective technology/industry sectors.

The Institutes Sector will also include an area for business development or "incubator" (i.e., emerging technologies) area. Incubators will help expand its portfolio in the emerging fields of new technology as well as expand market share and relevance to specific customers in existing sectors. Current programs in the Incubator area include ASME's Nanotechnology, Fuel Cell,

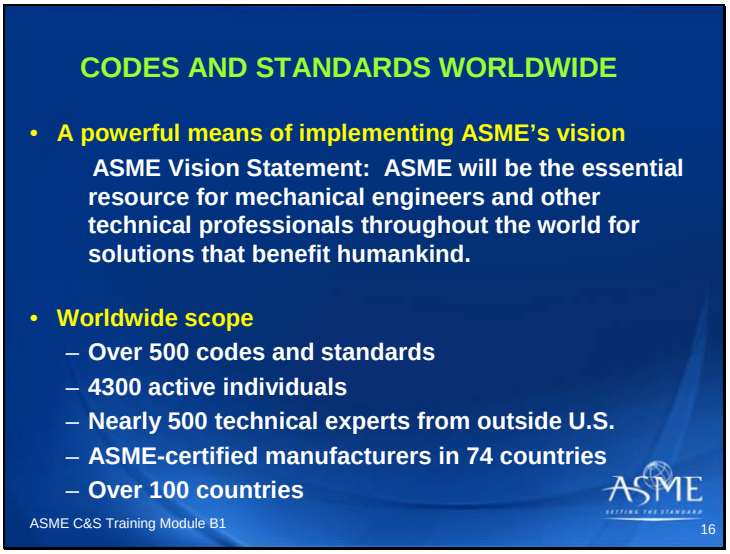
and Bio-Process Seminars.

Slide 16

Part II - Standards and Certification Structure

The remaining Sector administers “Standards and Certification.” This body—and the portion of ASME’s organization which is its administrative domain—is naturally of special interest to us. We will now take a look at the organizational structure of Standards and Certification.

Slide 17



Codes and Standards Worldwide

A powerful means of implementing ASME's vision:

Perhaps the single most important development within ASME during the Twentieth Century was the emergence of Codes & Standards as a powerful means of projecting the Society's concerns worldwide and implementing its Vision Statement. The issue of standards was far from absent in the minds of ASME's founders, though they naturally may not have anticipated its profound implications for a globalized competitive economy a century later. In fact, standardized sizes for screw threads were discussed at the very first ASME meeting in 1880.

ASME currently has over 500 codes and standards in print.

The Standards and Certification activity involves about 4300 individuals, mostly volunteers and mostly engineers and related scientists. Nearly 500 of these individuals reside outside the U.S. Not all active individuals are ASME members, though membership in—and thereby support of—ASME is encouraged.

Worldwide scope:

ASME standards are used in over 100 countries around the world.

ASME has certified manufacturers of products related to ASME codes and standards in 74 countries.

Slide 18


STANDARDS AND CERTIFICATION ORGANIZATION
Standards and Certification Board of Directors
Board on Standardization and Testing
Board on Pressure Technology Codes and Standards
Board on Nuclear Codes and Standards
Board on Safety Codes and Standards
Board on New Development
Board on Conformity Assessment
Board on Codes and Standards Operations
Energy and Environmental Standards Advisory Board
Board on Hearings and Appeals
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Slide 19

Standards and Certification Sector

Members:

This slide and the next show the composition of the Sector.

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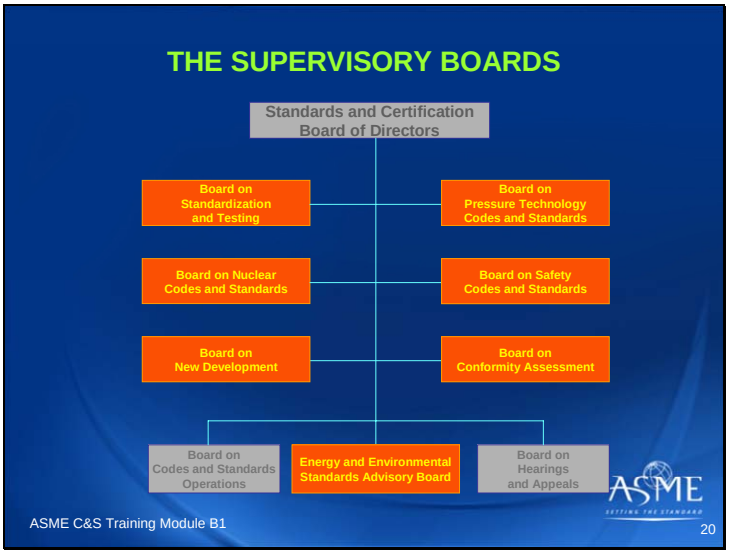
Standards and Certification Sector

Members (cont'd):

Slide 21


THE SUPERVISORY BOARDS
Standards and Certification Board of Directors
Board on Standardization and Testing
Board on Pressure Technology Codes and Standards
Board on Nuclear Codes and Standards
Board on Safety Codes and Standards
Board on New Development
Board on Conformity Assessment
Board on Codes and Standards Operations
Energy and Environmental Standards Advisory Board
Board on Hearings and Appeals
ASME
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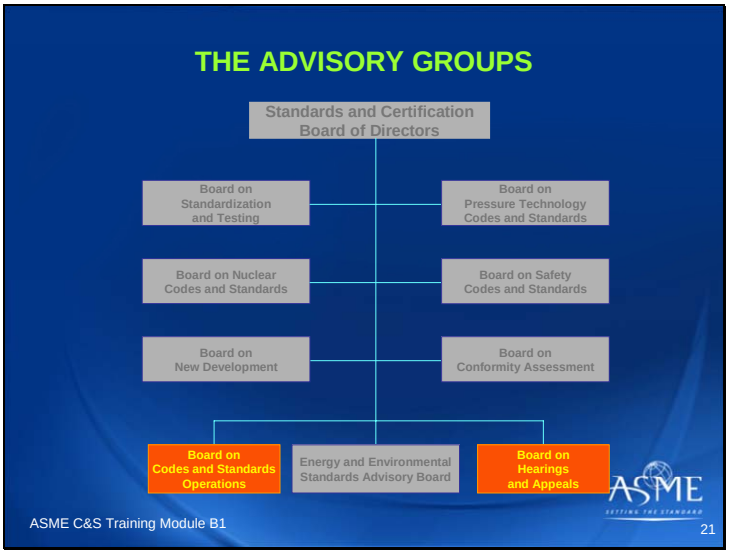
Slide 22


THE ADVISORY GROUPS
Standards and Certification Board of Directors
Board on Standardization and Testing
Board on Pressure Technology Codes and Standards
Board on Nuclear Codes and Standards
Board on Safety Codes and Standards
Board on New Development
Board on Conformity Assessment
Board on Codes and Standards Operations
Energy and Environmental Standards Advisory Board
Board on Hearings and Appeals
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Standards and Certification Boards/Committees

The Advisory Groups:

Are primarily forums for discussion of issues associated with standards development

May and do make recommendations for Standards and Certification Board of Directors action in their respective areas or take action on items delegated by the Board of Directors

These are the advisory groups:

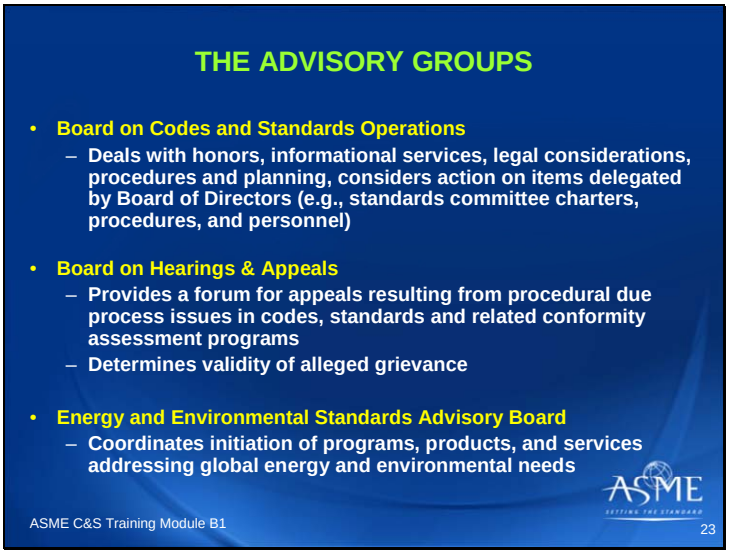
Board on Codes and Standards Operations

Board on Hearings & Appeals

Energy and Environmental Standards Advisory Board

Let’s take a closer look at them.

Slide 24



The Advisory Groups (cont'd)

Board on Codes and Standards Operations:
Deals with honors, informational services, legal considerations, procedures and planning; considers action on items delegated by Board of Directors (e.g., standards committee charters, procedures, personnel)

Board on Hearings and Appeals:
The Board provides a forum for appeals resulting from alleged grievances related to procedural due process in codes, standards and related conformity assessment programs.
The Board will first evaluate the validity of the alleged grievance to determine whether a hearing should be scheduled.

Energy and Environmental Standards Advisory Board
Coordinates initiation of new standards development, workforce development, certification programs and related products and services addressing global energy and environmental needs.
Interfaces with other ASME sectors, governments, industries, and academia for identification and prioritization of needs.

Slide 25

The Supervisory Boards

Now let us turn to the Supervisory Boards.

Responsibilities:
The Supervisory Boards are responsible for creating and supervising the committees that actually develop new and revised standards. This includes:
Assessing the need for S&C activity
Structuring the necessary committees
Ensuring procedures for due process
Approving and discharging committee personnel
Approving codes and standards for ASME
Hearing appeals
Recommending the disbanding of a committee

Slide 26

The Supervisory Boards (cont'd)

Areas of Responsibility:

Each supervisory board focuses on a particular area. The six areas are:

Standardization and Testing

Safety Codes & Standards

Pressure Technology Codes & Standards

Nuclear Codes & Standards

Conformity Assessment

New Development

We will describe these in turn.

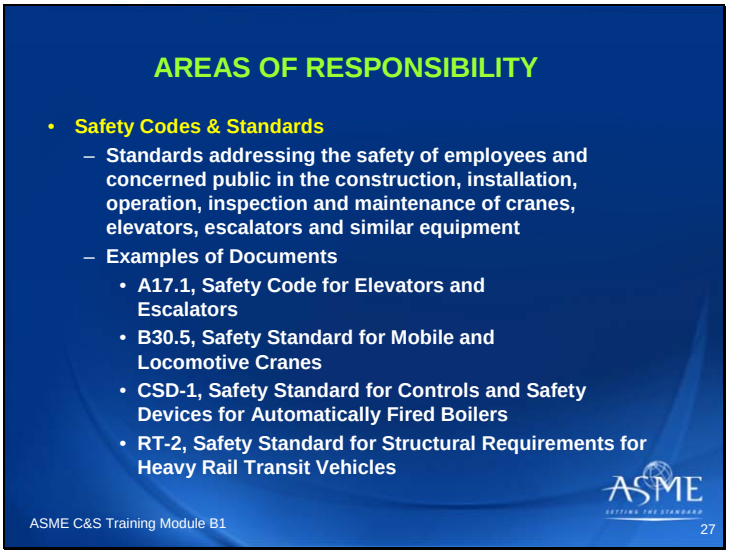
Slide 27

Areas of Responsibility (cont'd)

Standardization and Testing:

Standardization and Testing covers dimensional, design, application, drafting and other standards, and determination of performance of mechanical equipment designed to meet specified criteria of performance and operability.

Slide 28

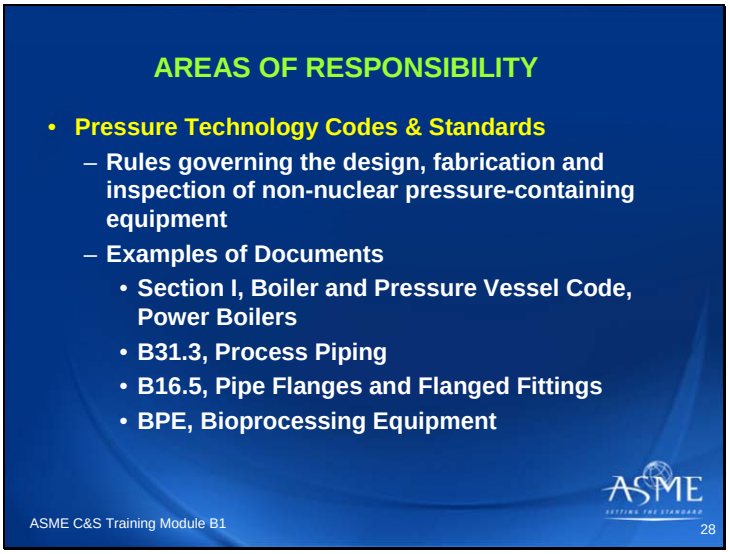


Areas of Responsibility (cont'd)

Safety Codes & Standards:

Safety covers standards addressing the safety of employees and the concerned public in the construction, installation, operation, inspection and maintenance of cranes, elevators, escalators and similar equipment.

Slide 29

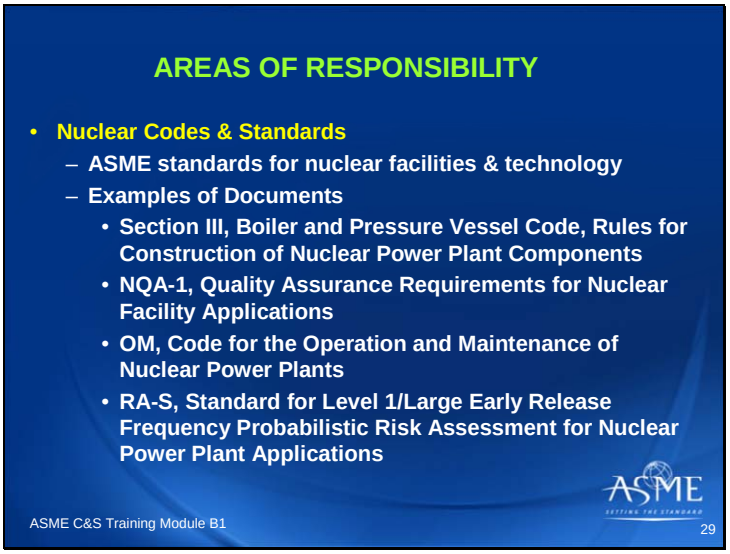


Areas of Responsibility (cont'd)

Pressure Technology Codes & Standards:

Pressure Technology covers rules governing the design, fabrication and inspection of non-nuclear pressure-containing equipment.

Slide 30



Areas of Responsibility (cont'd)

Nuclear Codes & Standards:

Nuclear covers standards for nuclear facilities and technology.

Slide 31

Areas of Responsibility (cont'd)

Conformity Assessment:

Although the Board on Conformity Assessment supervises a few Standards Committees, its main role is to oversee the operation of accreditation, product certification, personnel certification, and management system certification programs established by Standards Committees under the jurisdiction of other Supervisory Boards and the ISO 9000 Registration Program.

Slide 32

Areas of Responsibility (cont'd)

New Development

Evaluates potential new Standards and Certification products or services. Primarily evaluate and assist in forming project teams and standards committees for projects in new or expanded areas of technology and application not covered by the traditional Standards and Certification supervisory board organizational structure.

Slide 33

Part III - Standards and Certification Organizational Dynamics

We'll complete this submodule by taking a look at the way S&C organizes itself to actually create a new standard.

Slide 34

Organizational Dynamics

The Supervisory Board:

Each Board presides over a sphere of Standards and Certification activity which has somewhat different administrative procedures.

In general, however, the Supervisory Board determines the need and suitability of a proposed project… [see next slide]

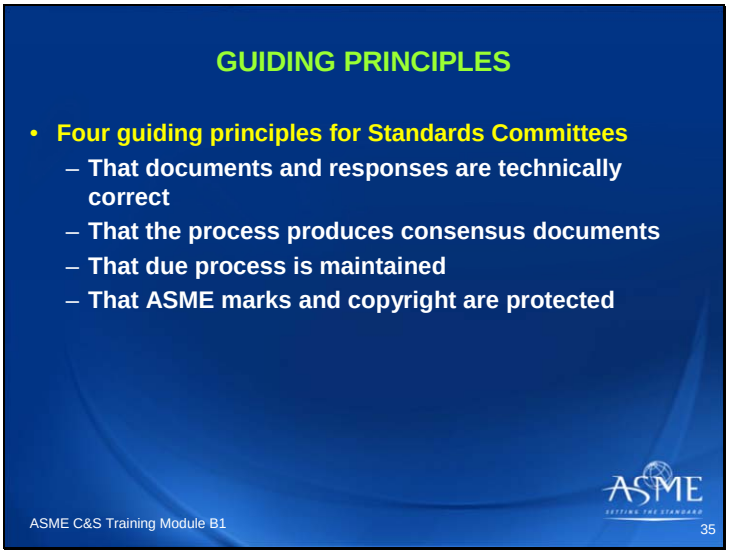
Slide 35

Organizational Dynamics (cont'd)

… then assigns it to the appropriate Standards Committee, which develops the document.

The Standards Committee:
Under the normal course of development—absent aberration such as violations of procedure or an unexpected appeal process, which may require the intervention of the Board—the Standards Committee remains responsible for developing the document into its final form.
The Standards Committee is the group where the relevant technical expertise resides, the group within Codes and Standards that is responsible for developing consensus on proposed standards actions.

Slide 36



Guiding Principles

Four guiding principles for Standards Committees:

The responsibility of the Standards Committee extends beyond assembling of technical detail and procedure. The Standards Committee must also ensure:

That documents and responses are technically correct

That the process produces consensus documents

That due process is maintained

That ASME marks and copyrights are protected

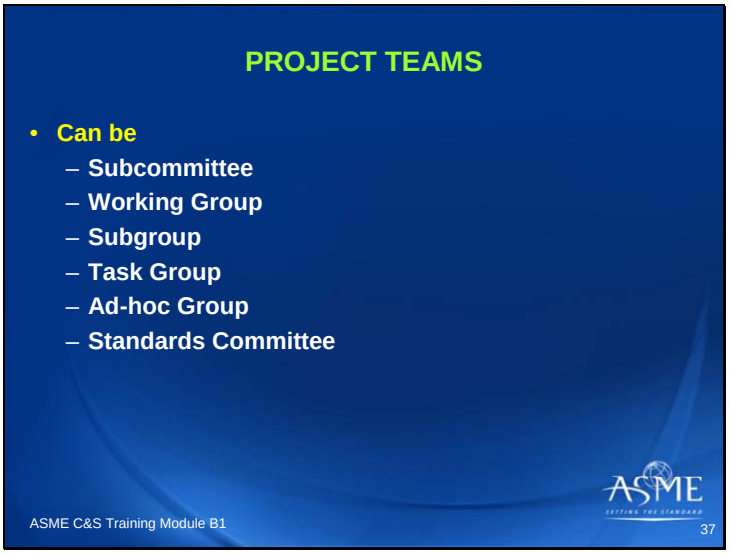
Slide 37

Organizational Dynamics (cont'd)

Project Team:

While the responsibility for achieving these formidable goals rests primarily with the Standards Committee, the Standards Committee may make the task more manageable by creating one or more "Project Teams" to develop specific proposals for the Committee's formal consensus consideration.

Slide 38



Project Teams

A Project Team may be constituted in any one of several forms. These include:

Subcommittee

Working Group

Subgroup

Task Group

Ad-hoc Group

Standards Committee

As you can see, the Project Team may even be constituted as a Standards Committee.

Each form may have slightly different procedures.

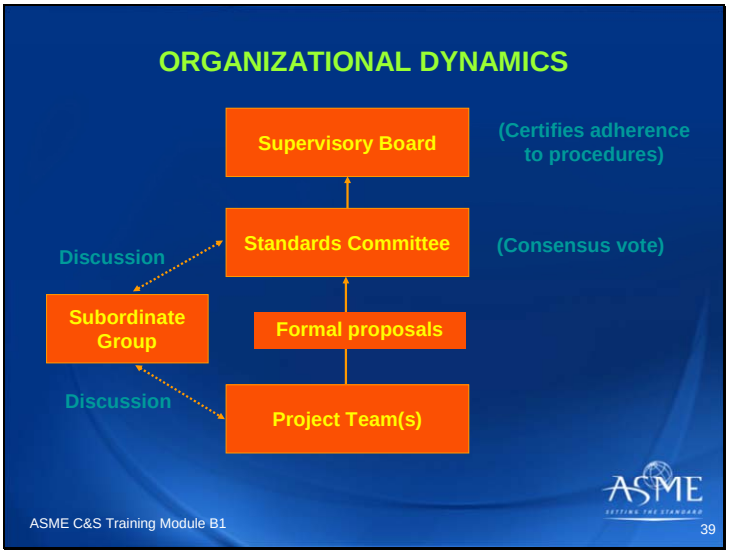
Slide 39

Organizational Dynamics (cont'd)

Subordinate Groups:
A Project Team may draw on the expertise of individuals who may not be members of the Standards Committee. This enables the Standards Committee to access expertise unencumbered by requirements of formal membership which may not be possible for all interested individuals.
The general term for such informal conduit of expertise to the Project Team is "Subordinate Group."

A Subordinate Group consists of individuals with technical expertise in specific areas. Its purpose is to provide technical resources to a Project Team. Subordinate Groups may either provide direct technical input or work in tandem with other Subordinate Groups.

Slide 40



Organizational Dynamics – Actions

Once the committee and its various Project Teams and Subordinate Groups have been formed, the process proceeds like this:

The Project Team develops a formal proposal.
Technical discussion may occur in related Standards Committees, Subordinate Groups, or with others with necessary expertise.
The Standards Committee processes the vote on the proposal for consensus approval.
The appropriate Supervisory Board certifies that the procedures have been followed and procedural requirements met.

For the sake of faster development of documents, some of these actions may take place simultaneously.

Slide 41

ASME Standards Technology, LLC (ST-LLC)
The ASME Standards Technology, LLC (ST-LLC) is a not-for-profit Limited Liability Company, with ASME as its sole member.

The ASME ST-LLC will meet the needs of industry and government by providing new standards-related products and services, which advance the application of emerging and newly commercialized science and technology.

ASME ST-LLC maintains a close relationship with ASME especially the Standards and Certification organization. ASME ST-LLC will provide the research and technology development needed to establish and maintain the technical relevance of codes and standards.

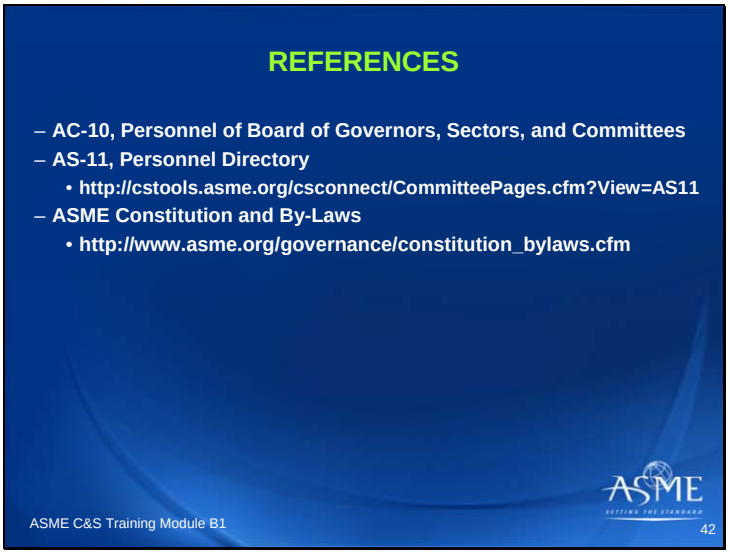
New ASME ST-LLC products and services include government contracting, collaborative research projects, pre-standards offerings, industry/consortia standards and technical services for standards implementation.

All S&C Committee web pages contain a link to “Guidelines for Requesting Research Projects and Contracting for ASME Codes and Standards Development.” Provides guidelines to Committees on how and when funding for research projects may be requested for standards development projects and standards related projects.

Slide 42

Summary

Slide 43



References