

# NIST

Global Standards Information



## ***Standards Setting: The Warm-up Act***

*Pat Harris*

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Standards  
development  
is not for  
sissies!



# Standards Development landscape

A competitive environment

Engages thousands of professionals

Once bitten by the “Standards Bug” people stay with it

It is also a big business:

# Standards By the Numbers

> 700,000 standards and technical regulations worldwide

400+ NIST staff work on standards committees

10,714 approved ANSI American National Standards in developed  
by 229 accredited standards developers in the U.S.

Lots of people involved:

BSI - 6,000

DIN - 28,628 external experts

IEEE – 20,000+ people engaged in standards setting

| SDO                   | Scope  | Standards                         | TCs | Subcommittees/<br>Working Groups | Volunteer<br>Members                       | Revenue                            |
|-----------------------|--|-----------------------------------|-----|----------------------------------|--|------------------------------------|
| <b>IEEE</b>           | Electrical and computer sciences, engineering and related disciplines.     | 900 Standards, 577 in development | 100 | 700 committees                   | 407,541<br>20,000 in standards development | \$383 million (2011 annual report) |
| <b>ASTM Interntl.</b> | Characteristics and performance of materials, products, systems & services | 12,400 standards                  | 142 | 1,888                            | 34,602                                     | \$55 million (2011 annual report)  |
| <b>ISO</b>            | All disciplines except electrotechnical and telecommunications             | 19,023 standards                  | 224 | 3325 technical bodies            | 163 member countries                       | \$39 million (2011 ISO in Figures) |

## Top reasons to be a standards setter (rather than stay on the sidelines)

- Influence
- Support safety and product performance
- Early awareness of new trends and developments
- Protect my industry's interests
- Network
- Risk avoidance
- Improved quality and effectiveness
- Market access
- Cost savings

# What is a Standard

**Common and repeated use of rules, conditions, guidelines or characteristics for products or related processes** and production methods, and related management systems practices. (NTTAA of 1995 and OMB Circular A-119 of 1998)

**Market-driven technical specification for a product, service, person, process or system** with which compliance is voluntary. (Anonymous)

# What is a STANDARD?

Document, **established by consensus** and approved by a recognized body, that **provides for common and repeated use, rules, guidelines or characteristics** for activities or their results, aimed at the achievement of the optimum degree of order in a given context. Note. Standards should be based on the consolidated results of science, technology and experience, and aimed at the promotion of optimum community benefits. (ISO/IEC Guide 2:1996)

Document, approved by a recognized body, that **provides for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory.** It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method. (WTO TBT Agreement of 1995)

# Types of Standards

- **Basic - General  
Vocabulary/Terminology/Classification**
- **Testing/Test Methods**
- **Product Requirements/Specifications**
- **Process standards**
- **Service Standards**
- **Health and Safety Standards**
- **Interoperability Standards**

# How does the process work: Key Concepts in Standards Development

## **Openness**

All stakeholders may participate; no single interest may dominate

## **Transparency**

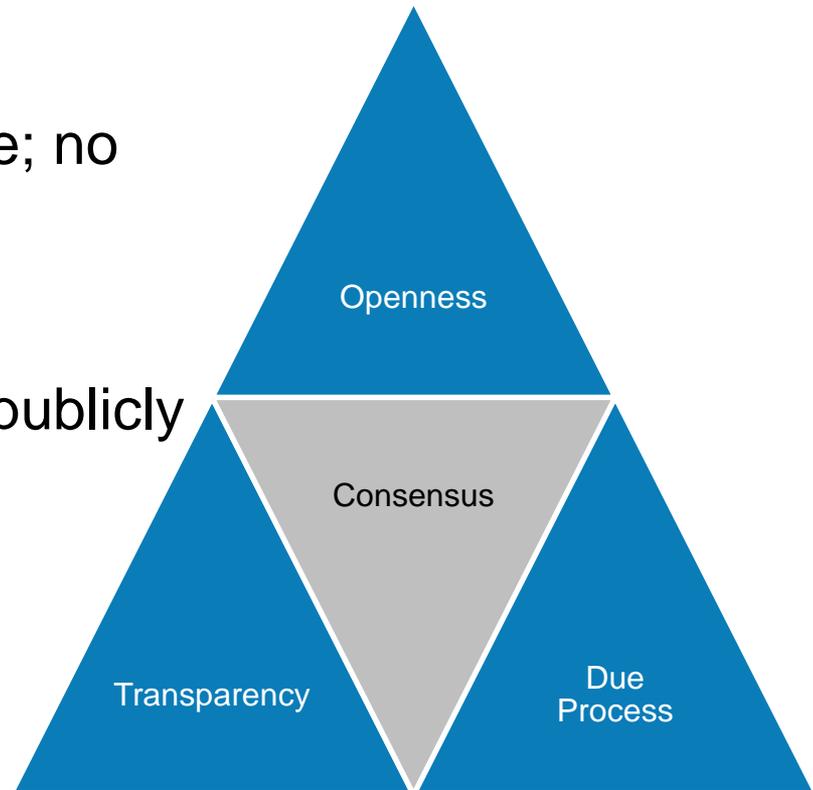
Records/ processes open and publicly available

## **Due Process**

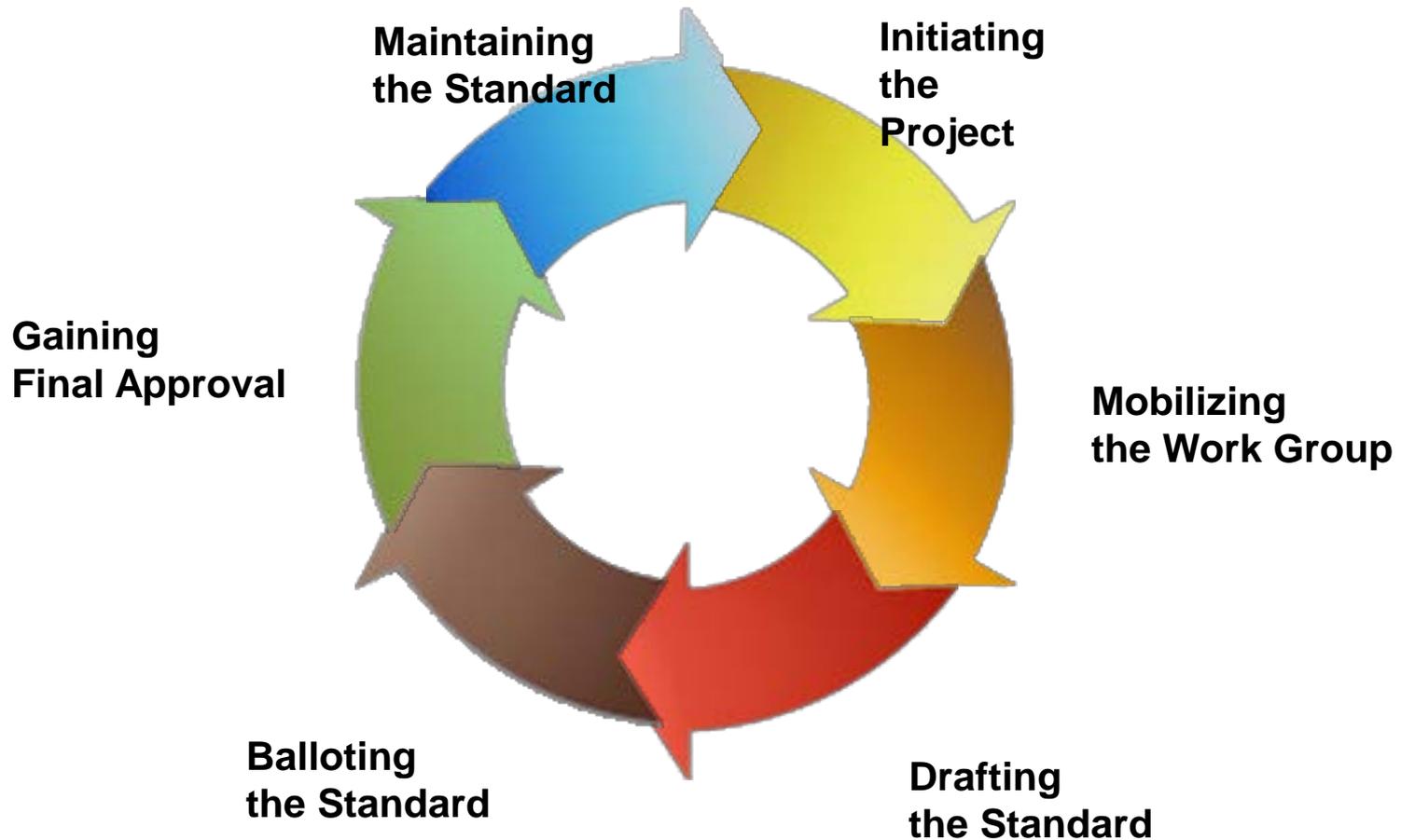
Appeals mechanism

## **Consensus**

Decisions require more than a majority but not unanimity



# Standards Development Life Cycle



# Standards Setters are a Diverse Group

Academics

Administrators

Architects

Association members

Consultants

Consumers

Engineers

Government enforcers

Government reps

Lab managers/technicians

Labor organizations

Lawyers

Manufacturers

Marketing professionals

Non-profit interest groups

SDO employees

Installers

Producers

R&D people

Retailers

Retirees

Scientists

Suppliers

# Committee Leadership

- Chair of the Standards committee
- Committee vice-chair
- Secretary
- Staff liaison

# But, what's really going on around the table?

Brainstorming

Collaborative authoring

**Competitive collaboration**

Compromising

Consensus building

Data gathering/fact finding

Disagreeing

Editing

Environmental scanning

Information sharing/transfer

Modeling

**Negotiation**

Planning

Problem defining

Problem solving

Proposal developing

Requirements clarification

Requirements setting

Resolving conflicts

Socializing

Strategizing

Visioning

Writing

# How to succeed as a standards setter

- Show up – attend the meetings
- Do your homework – prepare
- Follow-through on assignments
- Contribute – share your viewpoints and expertise

# How to succeed as a standards setter

- Collaborate - Build alliances with other committee members
- Bring the facts to the table
- Demonstrate your expertise
- Be persistent

# Life outside the Committee is as important as what goes on around the table



Standards  
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# Review

- Standards development is not for the **unprepared**
- **Above all, enjoy the day and have fun!**

Thank You

## **Standards Simulation: The Warm-up Act**

Pat Harris

[pat.harris@nist.gov](mailto:pat.harris@nist.gov)

T: 301-975-8409