

API Standards and the Standards Development Process

Roland Goodman

Manager, Upstream Standards

American Petroleum Institute



API Standards and the Standards Development Process

Discussion will cover:

- API history and organizational structure
- Standards development process
- Standards committee structure and organization
- Format and style guide
- Global standards update



API History

- 1919: API founded as non-profit national trade association, New York City
 - ✓ Taxes
 - Statistics
 - Standards (equipment and operations)
- 1923: Standards Department formed; first standard published in 1924 (drill pipe threads)
- 1980s: API relocates to Washington, DC
- 2007 2010: Opened three international offices in Beijing,
 Dubai, and Singapore



API Mission

- Influence public policy in support of strong US oil and natural gas industry
- Engage in legislative and regulatory advocacy
- Provide a forum to develop consensus industry policies
- Work collaboratively with other associations
- Develop industry standards that ensure reliability address safety, and codify best work practices



Other API Roles

- Gather statistics
- Conduct research
- Inform government and public
- Implement and manage industry certification programs
- Provide education and training



API Structure

- Over 500 member companies involved in all aspects of the oil and natural gas industry
- Over 700 committees and task forces covering various advocacy and technical issues
- Staff of ~240 led by board of directors who are the CEO's of API member companies



API Standards Program

- All industry segments active in standardization:
 - Exploration and Production
 - Refining
 - Petroleum measurement
 - Marketing
 - ✓ Pipeline Transportation



API Standards

- API now publishes and maintains ~600 standards covering all aspects of the oil and natural gas industry
- Foundation of self-supporting industry programs
- Basis for company's worldwide operations
- Developed by industry volunteers



Standards Development Process

- API is accredited by the American National Standards Institute (ANSI)
 - Openness, balance, consensus, due process
 - Periodic program audits (conducted by ANSI)
- Transparent process
- Any interested party can participate on committees and comment on API standards
- All comments must be considered
- One vote per company



Standards Development Process

- Developed by consensus (does not mean unanimity)
- Committee balance between users, manufacturers and contractors/consultants
- Standards developed using ANSI-approved API Procedures for Standards Development
- API corporate membership is not a requirement for participation on API standards committees



API Standards Committees

Committee on Standardization of Oilfield Equipment & Materials

Committee on Petroleum Measurement

Committee on Refinery Equipment

- Marketing/Aviation
- Pipeline Transportation
- Safety & Fire Protection

Drilling and Production Operations Subcommittee



API Document Designations

- Specifications
- Standards
- Recommended Practices
- Bulletins and Technical Reports



API Document Designations

- Specifications Documents that are written in such as way as to facilitate communications between purchasers, manufacturers, and/or service suppliers
- Standards Documents that combine elements of both specifications and recommended practices



API Document Designations

- Recommended Practices Documents that communicate recognized industry practices; RPs may include both mandatory and non-mandatory requirements
- Bulletins & Technical Reports Documents that convey technical information on a specific subject or topic and are generally issued on a one time-basis



Expression of Provisions in a Standard

- shall indicates that a provision is mandatory
- should indicates that a provision is not mandatory, but recommended as good practice
- may signifies permission and indicates a provision is optional
- can used for statements of possibility or capability



Common Mistakes

- Scope contains information that is unrelated to what the standard covers and/or contains requirements
- Dated vs. undated references to other standards
- Definitions contain requirements or are too lengthy
- Defined terms or abbreviations are not used in the document
- Annexes are in the wrong order
- Hanging paragraphs



Scope

- Appears at the beginning of each document and define without ambiguity the subject of the document and the aspects covered
- Indicates the limits of applicability of the document and cannot contain "shall" or "should" statements
- The scope should be brief so that it can be used as a summary for and the API Publications Catalog



References to other Documents

- Undated references may be made to a complete document or a part thereof
- Dated references are references to a specific edition, indicated by the year of publication
- References to specific sections or subsections, tables, and figures of another document should be dated



Definitions

- Only terms used in the document can be defined
- Cannot contain requirements
- Should be a brief, self-contained description of the term in question (one sentence)
- Any term that is not self-explanatory or commonly known and which can be differently interpreted in different contexts should be defined



Annexes

- Must be referenced at least once in the text
- Must appear in the order in which they are cited in the text
- Their presence is optional
- Annexes must be identified as "informative" (FYI) or "normative" (required)



Annexes

- Normative annexes give provisions additional to those in the body of the document
- Informative annexes give additional information intended to assist the understanding or use of the document
- Informative annexes may contain optional requirements
- An annex's normative/informative status must be made clear by the way in which it is referred to in the text



Hanging Paragraphs

Incorrect

5 Designation

The quick brown fox jumps over the lazy dog.

5.1 XXXXXXXXXX

The quick brown fox jumps over the lazy dog.

5.2 XXXXXXXXXX

The quick brown fox jumps over the lazy dog.

Correct

5 Designation

5.1 General

The quick brown fox jumps over the lazy dog.

5.2 XXXXXXXXXXX

The quick brown fox jumps over the lazy dog.

5.3 XXXXXXXXXXX

The quick brown fox jumps over the lazy dog.



- API has ceased its interactions with ISO due to sanctions concerns
 - Participation/information sharing
 - ✓ sublicensing
- API's Executive Committee (subgroup of the Board of Directors) requested Global Industry Services Committee develop recommendations



- Executive Committee endorsed five guiding principles at June 2012 meeting:
 - ✓ Need for single set of standards
 - Global acceptance and wide use
 - Regulatory acceptance
 - ✓ Build on existing API standards infrastructure
 - Legal compliance
- Requested API work with OGP on long-term plan for industry standardization (meeting held on August 1st)



- * API/OGP Standards Task Force established
- Purpose: determine a process for the continued development of globally accepted international standards for the oil and gas industry, given the current US and EU trade sanctions
- Deliverables: recommend a process for global standards development with options, including roles of API/OGP/others, resourcing requirements, and a recommended timeline and transition process to implement



- Task Force has ten representatives (five from each organization) from BP, Cameron, Chevron, ConocoPhillips, ExxonMobil, Halliburton, Pemex, Shell, Qatar Petroleum, and Total
- Goal is to provide recommendations by the end of the 1st quarter 2013
- Four face-to-face meetings, bi-weekly conference calls



- API, OGP, and ISO/TC 67 Chair presented at September 26th IRF meeting – focus was on current status and API/OGP Standards Task Force
- August OFAC response to ANSI petition response limited to existing law
- API Law Committee approved filing of supplemental request on October 4th

