



International  
Organization for  
Standardization

# The ISO standards process

*A look at behind the curtain at how the PDF standards are made*

**OctoberPDFest**  
**ONLINE**

# Who am I?



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# Standards

- A successful standard is one which:
  - Meets a need
  - Eases interoperability
  - Continues to be maintained
  - Gets referenced by other standards
- What prevents standards from being used or widely adopted?
  - Lack of need, consensus
  - When there's a barrier to entry



# The ISO

- ISO stands for International Organization for Standardization, and it's one of the most renowned and well-established entities for setting and maintaining standards in the world.
- ISO's standards have been implemented by companies and organizations of all sizes and industries throughout 164 countries since its founding in London, 1947.



# Committees & Working Groups



- Each area of development at the ISO is a Technical Committee (TC)
  - TC 171 – Document Management
  - TC 130 – Graphic Arts/Technology
  - TC 42 – Photography
  - TC 211 – GIS
  - etc.
- Within each TC are Subcommittees (SC), Working Groups (WG) and Task Forces (TF)
  - TC 130 WG 2 TF 2 – PDF/X
  - TC 171 SC 2 WG 5 – PDF/A
  - TC 171 SC 2 WG 8 – ISO 32000

# The process

- As an international standards body, any country (recognized by the UN) can become a “member body” (MB) of a given standard
  - Participating (P) Members
  - Observing (O) Members
- At the international level, each P-level MB has a single vote
  - That vote is determined through meetings of the Technical Advisory Group (TAG) of a given country
- Each country has its own national standards body (or bodies) that defines country-centric standards and manages international efforts
  - ANSI – US, BSI – UK, DIN – Germany, JIS – Japan, etc.

# Process (cont.)

- Companies and/or individuals participate at the country/MB level, based on where each Subject Matter Expert (SME) lives.
  - I represent the US, Dietrich represents Germany, Peter represents Australia
  
- Liaisons establish different types of relationships between organizations
  - The PDF Association is a Class A liaison to TC 130 WG 2 and to TC 171 SC 2
    - Enables our members to fully participate in the activities of those groups

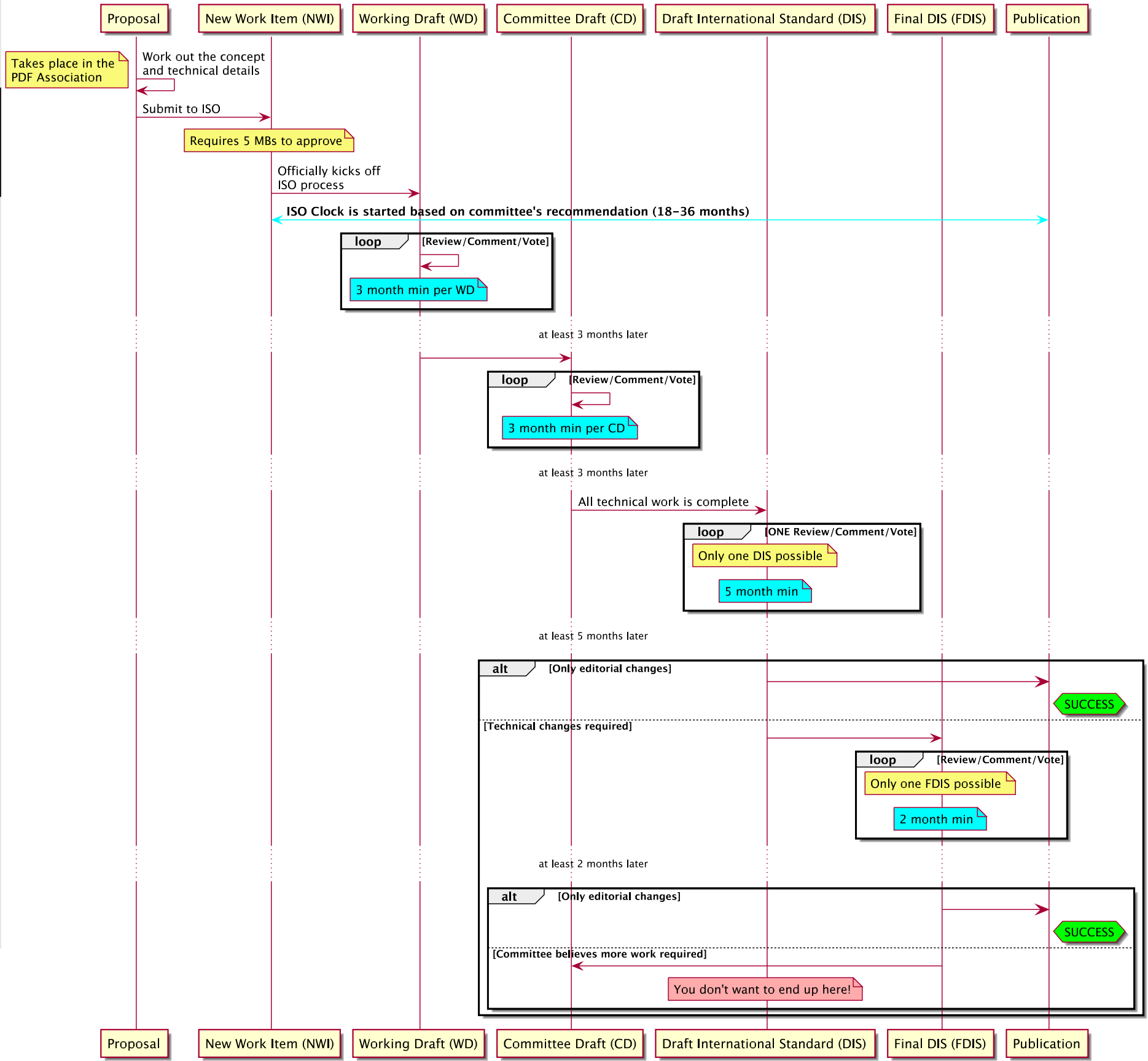
- For each International Organization for Standardization (ISO) Technical Committee (TC) or Subcommittee (SC), one member country holds the Secretariat, providing administrative leadership for the activity.
- The PDF Association is the secretariat for ISO TC 171 SC 2 (on behalf of the US).
  - Since this is where the majority of PDF-related standards are, this enables the Association to ensure that the work of the committee is aligned with the industry and our members.



# Jobs/Roles at ISO



- Convener
  - Volunteer from some MB who is responsible for running a specific WG
  - Does not officially represent a country
- Project Leader or Project Editor
  - Volunteer from some MB who is responsible for all technical work & document editing
  - Does not officially represent a country
- Committee Member (aka Subject Matter Expert/SME)
  - Individual who attends meetings and reviews & comments on documents



# Review/Comment/Vote



- The most important (and therefore repeated) part of the process
- A document “goes out for ballot”
  - You will either receive this directly from your MB or the Association (for members)
- SMEs are asked to put their comments into the “Comment Template”
- Each MB (or liaison in PDFa’s case) submits one Comment sheet + vote
  - So all SME comments are aggregated (and may be pre-filtered by the MB)
  - Vote is either Approve, Approve w/comments, Abstain or Negative w/comments

# The Comment Template

## Template for comments and secretariat observations

Date:2019-03-08

Document: N 3870

Project: NP 15930-9

MB/ NC <sup>1</sup>	Line number	Clause/ Subclause	Paragraph/ Figure/Table	Type of comment <sup>2</sup>	Comments	Proposed change	Observations of the secretariat
		06.06.2.1	1 & 2	Ed	Para 2 appears to at least partially duplicate the 3 <sup>rd</sup> and 4 <sup>th</sup> sentences of para 1.	Delete sentences 3 and 4 of para 1	
		06.06.2.1	Par 1	<u>Te</u>	The paragraph specifies that the Alternate key shall be ignored but does not require the PDF/C-6 processor to use and support the specified ICC profile.	Replace the requirement with: “A PDF/X-6 conforming processor shall use the ICC profile specified by the <u>DestOutputProfile</u> key and shall not use the <u>colour</u> space specified by the Alternate key (similar to 6.6.3.3)	
		06.06.2.1	Para 6	Ed	The parenthetical reference to the ICC web site URL duplicates Note 2 in the same section.	Delete the URL in para 6.	

# Cancelling & Restarting

- What happens if you don't make your date?
  - If you let the clock run out, then the project is (pretty much dead)
- Instead, if you know you won't make it (eg. PDF/UA-2) – you cancel it.
  - Allows work to continue w/o a clock
  - Allows the project to be restarted when you think it's ready to try again
  - You can only do this once (per project)





# Are all documents Standards?

- **INTERNATIONAL STANDARDS (IS)**

- An International Standard provides NORMATIVE rules, guidelines or characteristics for activities or for their results, aimed at achieving the optimum degree of order in a given context.

- **TECHNICAL SPECIFICATION (TS)**

- A Technical Specification addresses NORMATIVE work still under technical development, or where it is believed that there will be a future, but not immediate, possibility of agreement on an International Standard. A Technical Specification may be used as a means to obtain feedback.

- **TECHNICAL REPORT (TR)**

- A Technical Report contains information (INFORMATIVE) of a different kind from that of the previous two publications. It may include data obtained from a survey, for example, or from an informative report, or information of the perceived “state of the art”.

- **OTHER**

- PUBLICLY AVAILABLE SPECIFICATION
- INTERNATIONAL WORKSHOP AGREEMENTS
- GUIDES



# Changes to PDF standards process



- ISO 32000-1 is the ISO-ization of PDF 1.7
  - Meaning that we had 15 years of implementations to base the work on.
  - Most of which was Adobe documenting their implementation
- ISO 32000-2, however, allowed for new features to be defined WITHOUT implementations
  - This has made it difficult to ensure interoperability
- Beyond 32000-2, new features
  - will be done as separate “PDF Extensions” (either TS or IS)
  - will require 2 implementations + sample documents

# PDF Extensions “in progress”



- Non-rectangular Links (ISO 24654, WD TS)
  - STEP 3D Data (ISO 24064, AWI TS)
  - Extensions to PDF Encryption & Hashing (ISO 32001, NP TS)
  - Extensions to PDF Digital Signatures (ISO 32002 NP TS)
- 
- Raster Image Formats
  - Variable Width Strokes
  - DeviceN/N-Channel Transparency Blending



# Wrapping up

- There are many parts to the process – but the Association is here to help!
- Becoming a member of the Association gives you full access
  - Access to all documents (past, present and future)
  - Ability to comment on documents in process
  - Ability to attend (and participate in) meetings
  - Bring your own ideas to the idea for incubation

**GET  
INVOLVED!**



**Questions**



