

All Who Wander Are Not Lost: Implementing an XML Workflow in a Standards Environment

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Management

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Technical Documents



160+
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IEEE Standards Association

Global standards sustain products and services for implementation and use by customers in a globalized world

Examples:

- Aerospace Electronics
- Broadband Over Power Lines
- Broadcast Technology
- Clean Technology
- Cognitive Radio
- Design Automation
- Electromagnetic Compatibility
- Green Technology
- LAN/MAN
- Medical Device Communications
- Nanotechnology
- National Electrical Safety Code
- Organic Components
- Portable Battery Technology
- Power Electronics
- Power & Energy
- Radiation/Nuclear
- Reliability
- Transportation Technology
- Test Technology

Improving Personal Health Device Communications Through Consensus Building



Expanding the Adoption of Wearable Devices through IoT and Consensus Building

Smart Eyewear
IEEE 802.11™
IEEE 802.15.4™



Augmented Reality
IEEE P1589™



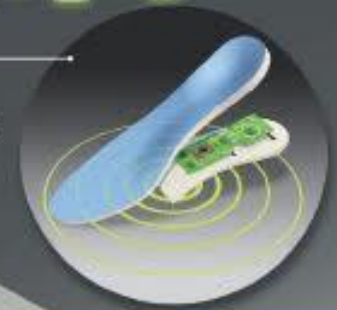
Mobile Devices
IEEE 802.11
IEEE 802.15.4
IEEE 802.15.6™
IEEE 2200™
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Smart Fabric
IEEE 802.15.4
IEEE 1451™ Series
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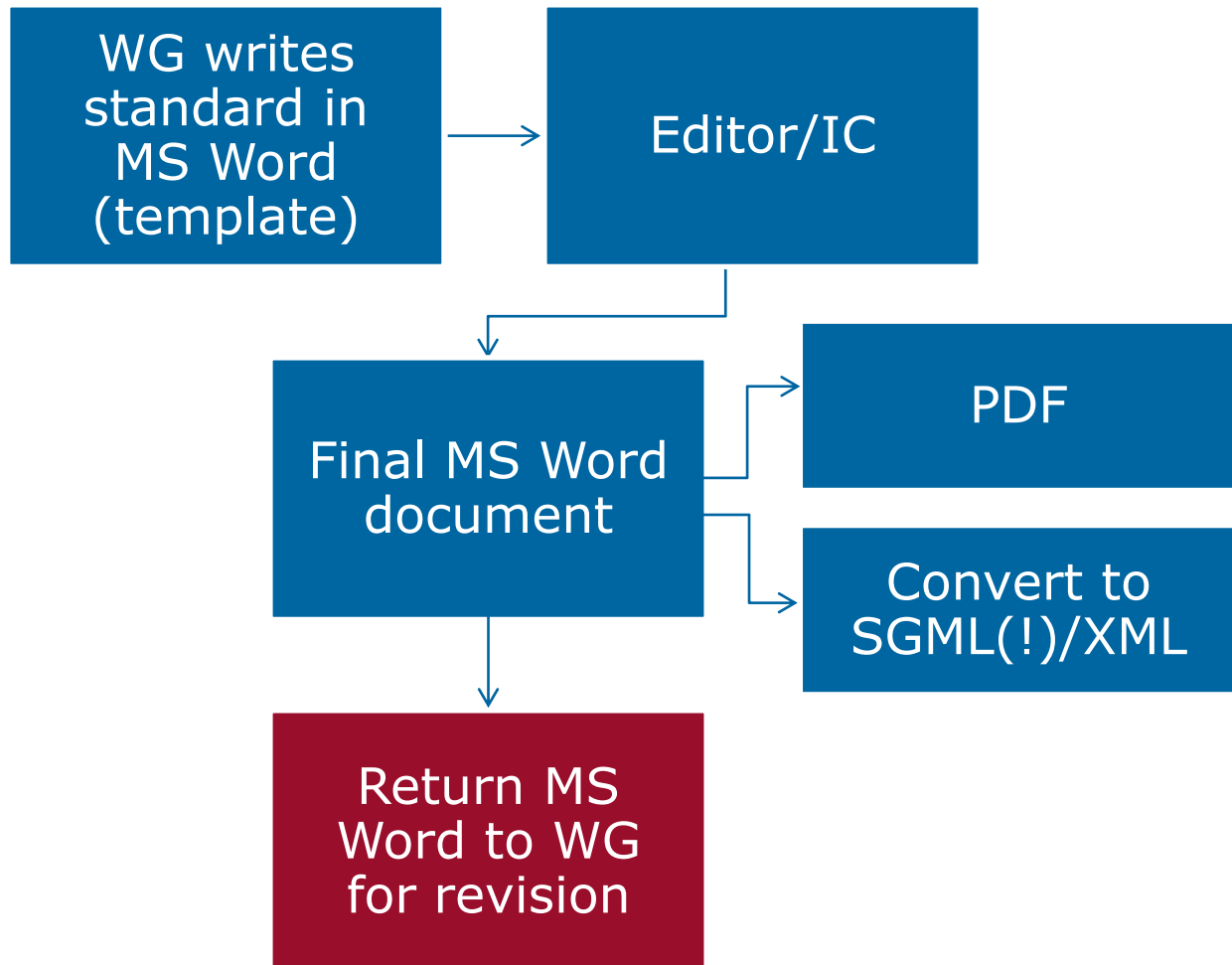
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Wearable Devices
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IEEE 802®
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IEEE-SA Publishing

- Over 1,100 active standards
 - Publish about 120 standards/year
 - 5 – 5000+ pages; typically about 100 pages
 - Support 500 active working groups
 - Knowledge of standards developing process (consensus, risk, legal)
 - Standards professionals who do publishing vs. publishing professionals who do standards
-
- NOT a part of IEEE Publishing (journals, transactions, etc.); coordination between the two groups.
 - Compatibility with IEEE Xplore.
 - A very small part of IEEE published content, but vitally important.

The Old Way



Institute-wide Commitment to XML

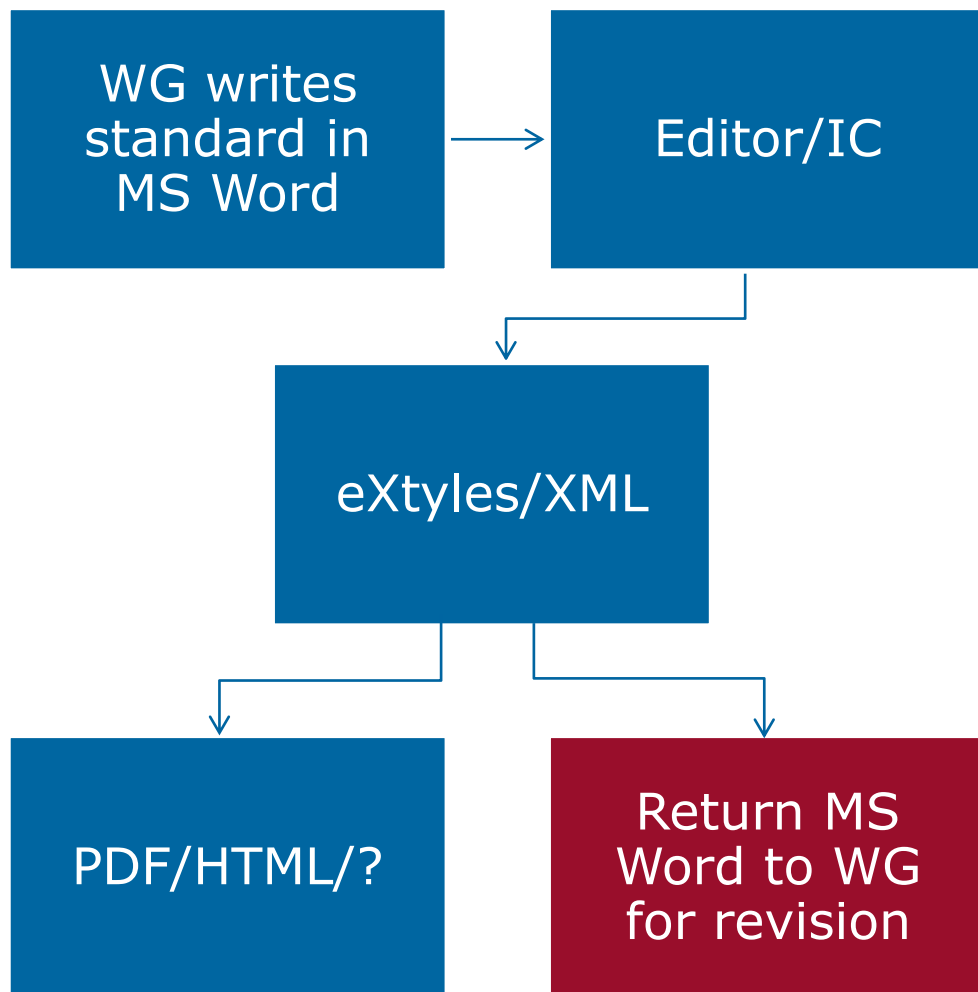
Business/product reasons:

- IEEE-wide commitment to XML; legacy conversion; simultaneous delivery of PDF and XML for display in HTML in IEEE Xplore (same day availability).
- Provide the infrastructure on which future SA products and services can be developed, built, and provided (apps, epub, etc.).
- Data mining of content for IEEE use and potential sale of IP.

And, while we're at it...

- Reduce inefficiency—quicker time-to-market standards development cycle.
- Streamline IEEE-SA's production and publishing processes and improve level of service provided to standards writers and participants.

The (almost) New Way



Still figuring out...

How much should the IC's format the document?

How much should they edit? Redundancy with autoredact and Schematron. Retraining needed.

Return document is less-than-ideal...

Expected challenges

- Cultural. People hate change.
- Turnaround document/round trip. A bit of a “PR” problem.
- Skills gap.
- Coordination with larger IEEE efforts. Timing is everything...and usually off.

Unexpected challenges

- Cultural.
 - People *really* hate change.
 - A different skill—Move from making the document “look good” to imposing structure; abstract.
 - Not always seeing the big picture.
- Software: Missing ribbons; MathType
- Figures/Art. More rigidity in file types. Just looking OK is not enough. No more Word drawings, jpegs, screen shots, etc.
- Time/Labor intensive as we learn the new way

Questions?