

Computer Society Standards Webinar

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Types of Standards

- Two basic types
 - Product
 - Process
- Standards codify
 - Existing best practices or procedures
 - Emerging technologies (e.g., WiFi)
 - Regulatory policy
 - Weights and measures

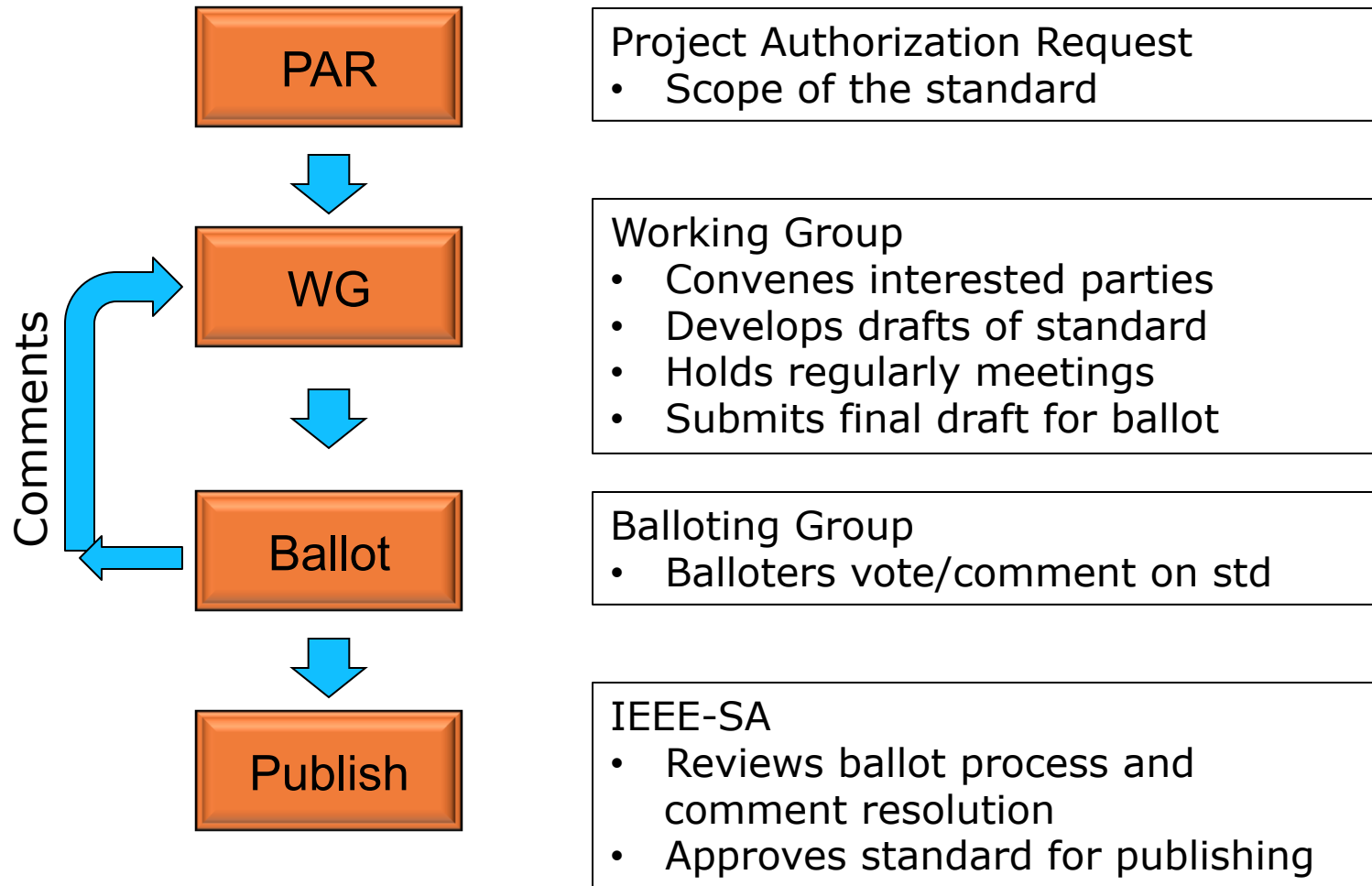
Benefits of Standards

- Promotes economic commerce on a global scale
- Supports new products and services to interoperate with existing products and services
- Establishes:
 - Quality for food, air, water, and environmental factors
 - Interoperability in communications protocols, device interfaces, software data exchanges, electrical values, mechanical tool measures, etc
 - Standardization of acceptable business practices (GAAP), regulatory policy (safety, security), signage symbol and color meanings, technology formulas and definitions, etc
- Affects daily lives of humanity

Computer Society Standards

- Computer Society has over 300+ world-class standards
 - Systems and Software Engineering
 - Systems Life Cycle Process Standard (ISO/IEC/IEEE 15288)
 - Software Life Cycle Process Standard (ISO/IEC/IEEE 12207)
 - Software Quality (IEEE 730)
 - System, Software and Hardware Verification and Validation (IEEE 1012)
 - Software Configuration Management (IEEE 828)
 - Software Reviews and Audits (IEEE 1028)
 - Local and Wide Area Network
 - IEEE 802 family of standards
 - Cloud Computing
 - Storage Technology
 - Information Assurance
 - Simulation Interoperability
 - Test Technology

Standards Development Life Cycle



The Art of Writing Standards

1. The software requirements shall define the performance functions of the desired solution.
2. Each requirement shall correct, unambiguous, testable, feasible, and complete.

VS

1. The software requirements shall define the performance, interface, quality, safety, security, reliability and maintenance functions of the desired solution.
2. Each requirement shall correct, unambiguous, testable, feasible, and complete.
3. Each requirement shall define the subject of the requirement, action desired, object of the action, destination of the action, frequency of the action (if applicable), and conditions for the action to occur (if applicable).