

Public Working Groups

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Election Standardization

- Election technology standardization is about ***election process*** and ***technology independence***
- Essence of the guidelines and testing, cert process is to support elections

If a Voting System is...

- ***A voting system is ...***
 - ...any configuration of technology and process that can support the essential functions of the election
- and ***Manufacturers***
 - Create systems
 - Use different combinations of technology and process to achieve these functions

Then...

- Every election technology
 - does not necessarily need to support all of the functions of an election
 - Only needs to support
 - the portions of the election process they do implement
 - can be combined and be interoperable with other systems

What do we need?

- Define election processes – *Pre-Voting, Voting, Post-Voting*
- Ensure that crucial technical properties addressed throughout (usability, accessibility, security, interoperability)
- Stable basis for guidelines in new / emerging areas
- Ability to develop and adapt guidelines for critical areas in a nimble fashion
- Orient guidelines to most stable basis over time: *The Election Process*
- Support ***Election Speed → Technology Speed***

What do we need?

- Consistent access to overall process for diverse stakeholders
- High-level principles – organize the essence of the standard into most important themes
- Map technology properties to overriding principles: usability, accessibility, and interoperability
- Low-level assertions – connect the standard to observable, testable conditions
 - Traceable upward to high-level principles
 - Traceable downward to concrete technologies

New Structure Must...

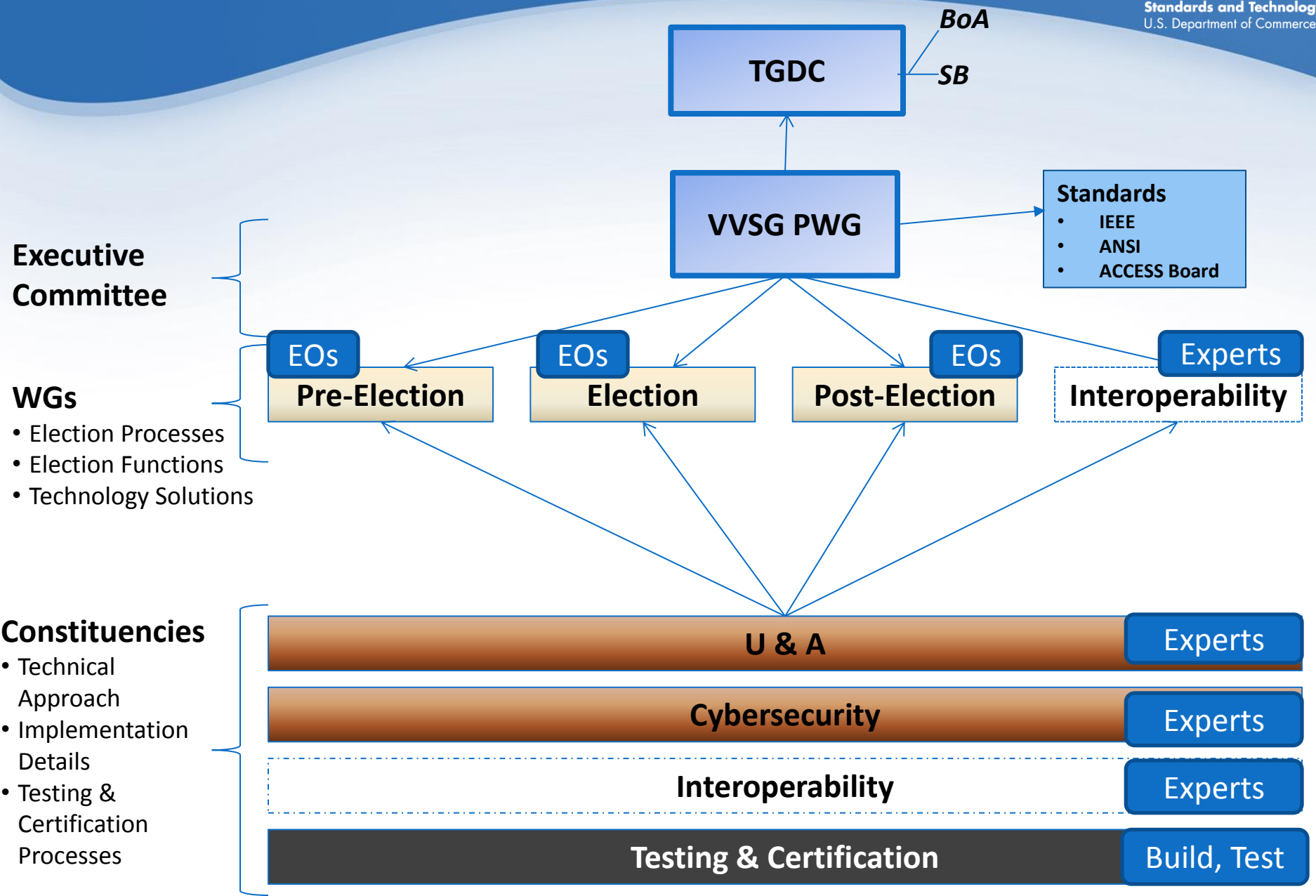
- Allow VVSG development, testing, and certification to be efficient and cost-effective
 - Can focus on functions and combinations of functions
 - Component-based construction and cert
 - Builds in important elements at atomic, functional level (U/A, security), ensuring their incorporation throughout the system

How do we move forward?

- Need a wide variety of expertise
- Need a process to resolve:
 - What is a voting system?
 - Consistent, holistic interpretation at all levels
 - Map high-level principles -> low-level assertions
 - New basis for interoperability

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- Apply similar process to on-going NIST efforts in SmartGrid, Cyber-physical systems, and BIG DATA
- Large number of stakeholders to develop a collective understanding of election processes, functions, resulting data flows, and their mapping to emerging technology
- Develop a consensus around these concepts, and a shared understanding of the essential roles of human factors, cybersecurity, interoperability.
- Public Working Group (VVSG PWG) is open to all to foster and capture inputs from those involved in Voting



Next Steps

- Establish leadership
- Initial thrusts – define process, functions, map to technologies
- Public e-mail lists for all groups
- Public document sharing
- Get the word out
 - Federal Register Notice
 - EAC/NIST Website
- Work will be conducted via teleconference/F2F meetings
- Output will be discussed at next TGDC meeting -
December