STANDARDS DEVELOPMENT PROCESS—BEST PRACTICES

Exoskeleton Standards Technical Interchange Meeting

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Overview

Federal policy on standards development

Characteristics of effective standards development activities

Brief example

Office of Management and Budget Circular A-119

- Guidance to U.S. federal agencies from in support of the National Technology Transfer and Advancement Act (NTTAA) – Public Law 104-113
- Provides guidance on:
 - Choosing and using voluntary consensus standards in lieu of government-unique standards;
 - Participation in standards development activities;
 - Choosing methods of conformity assessment;
 - Considering international standards and obligations.
- Broad in scope applies to regulatory activities, procurement activities, and programs.

Use of Voluntary Consensus Standards

- Preference for use of existing voluntary consensus standards over government-unique standards where feasible (unless inconsistent with law or otherwise impractical).
- Also permits agencies to consider other types of standards to meet the missions and priorities of the agency.
- Focus on the attributes of the standards development process:

Openness Balance Due Process

Appeals Process Consensus

Landscape for successful standardization

Who are the stakeholders, what do they need?

✓ Current and future users

Buy In

✓ Manufacturers

Interest & Resources

✓ Research and testing

Process Driver

Balance

What is the state of the technology?

✓ Ready for standardization?

Prioritization

Roadmap

What is needed from standards development

✓ Areas of common development

organizations?

✓ Related experience

✓ Process and infrastructure

Consensus

Publication

Dissemination

UTILIZATION AND SUSTAINABILITY

Example: Harmonization of Body Armor Standards

3 United States (U.S.) Federal Agency Partners:



Army Program Executive Office – Soldier (Department of Defense):

Body armor for military



National Institute of Justice (Department of Justice):

Body armor for law enforcement



National Institute of Standards and Technology (Dept. of Commerce):

Research and standards development in support of military and law enforcement body armor

Example: Harmonization of Body Armor Standards

NIJ:

Performance Standard (performance requirements & test methods)

US Army:

Performance Specifications, Purchase Descriptions, Test Procedures

Overlap in Methods

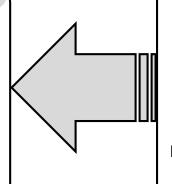
Example: Harmonization of Body Armor Standards

Maintained NIJ & US
Army unique
documents

Test Threats

Test Item Requirements

Performance Requirements



Harmonized Standards, Test Methods and Procedures, and Practices

Standard Terminology for Body Armor

Clay Block Backing Material Specification

Test Range Configuration

Hard Armor Conditioning Procedures

Backface Deformation Measurement

Procedure for Clay Build Up Behind Nonplanar Soft
Armor for Females

Procedure for Clay Build Up Behind Hard Armor Plates

V50 Ballistic Limit Test

Perforation-Backface Deformation Test

Projectile Velocity Measurement

Labeling Specification

Visual Examination

Carrier Specification

Parting thoughts...

- Federal policy provides characteristics of preferred standards development processes.
- Effective, sustainable standards development is hard work.
- Stakeholder engagement and discussion is the critical first step.

Questions?

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