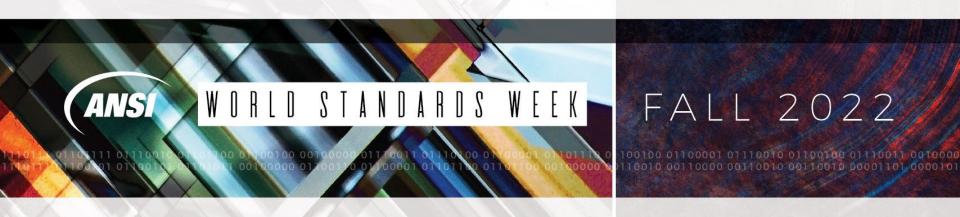
Advances in Measuring the Impact of Voluntary Consensus Standards on Health and Safety

October 11, 2022



Agenda

- Welcome & Introductions
- Stakeholder Motivations
- Key Concepts
- Case Study
- Panel Discussion including Q&A

Stakeholder Motivations



Stakeholder Motivations

- Different stakeholders may have different priorities when assessing impact
- For the results to be accepted by all stakeholders, the assessment must meet all these multiple priorities
- Engaging stakeholders in the process early on, and keeping them engaged throughout, is critical to addressing these multiple priorities

Key Concepts

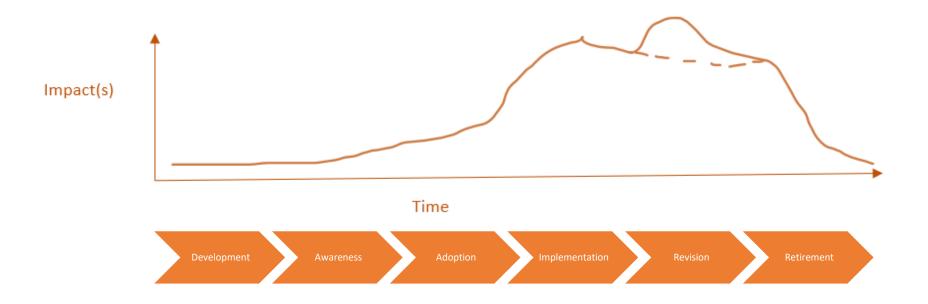


A Working Definition of Impact

$$I = E * C$$

$${}^{lmp_{\partial Ct}} {}^{Eff_{e_{Ctive_{ness}}}} {}^{Conform_{\partial n_{Ce}}}$$

The Impact Curve



When Assessing Effectiveness, Remember...



Incident data is limited



It is difficult to attribute effects to the standard

Conformance

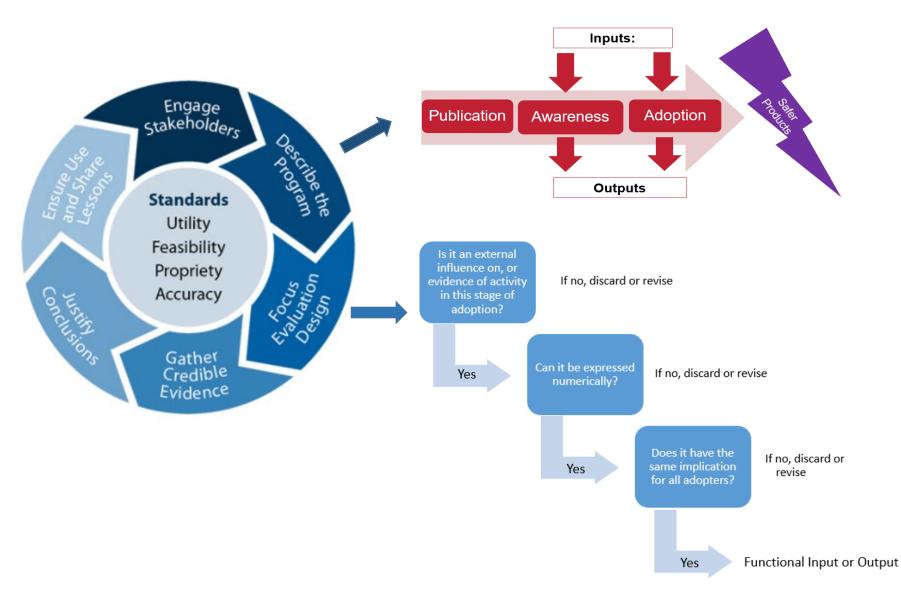
Working definition - an attestation that products, systems, services, and processes "in the hands of the end users" meet the specified requirements of the standard.

- Users of the standard are not considered end users!
- Non-dimensional from 0 to 1 (or 0% to 100%) and is made up of a series of factors
 - Conformance motivation Why does the manufacturer want to meet the standard? Is it mandated? Required by industry? Because the manufacturer believes it is the right thing to do?
 - **Conformance assurance** How is conformance assured? Is it inspected regularly and by who? Is a third party certifying to it? Is the manufacturer self-certifying?
 - **Knowledge and abilities of those involved** Are people involved knowledgeable and do they have the time to thoroughly review the standard? Pertains specifically to assurance, but anywhere where people are involved.
 - **Product lifetime** Is time dependent. How long does it take for the end user to get a conforming product in their possession? Some products have short lifetimes and are replaced frequently; others take a long time to be replaced.
 - Other factors
 - It is up to the industry to weight each factor high, medium, or low. This may greatly vary based on industries

Case Study



Assessing the Health and Safety Impacts of UL 325



Discussion

