

PR3 Framework for Equity in Standards Development

Standards touch everyone

Standards serve as building blocks for the world's commercial, social, and regulatory systems. They are used across sectors and across the world to help ensure the quality, safety, and functioning of everything from air travel to plumbing codes to management practices. Industries rely on standards to create system efficiencies and reduce costs, provide certainty to operators and investors, protect people from unsafe products and practices or fraud, promote environmental performance, and enable scale. ISO (the International Organization for Standardization) has over 24,000 published international standards¹ and the American National Standards Institute (ANSI) is just one of many national organizations that oversee the development of tens of thousands of national standards around the globe.² **Whatever the product or service is, there's a good chance it works the way it does, at least in part, because of standards.**

"Together, standards and technical regulations impact up to 93% of global trade."

- *ANSI.org*

"ISO International Standards touch everyone. From enabling you to use your bank card overseas to ensuring your child's toys don't have sharp edges, they are used everywhere."

- *ISO.org, ISO and consumers*

Openness and inclusion are essential to standards development

Because they have such a broad effect on people, business, and systems, the process of setting standards is generally meant to be inclusive and actively solicitous of diverse viewpoints. This principle is enshrined by major standards developers and accreditors, including Principle 4 of ISO's Code of Ethics³ and ANSI's Essential Requirements.⁴

But in practice, equitable and broadly inclusive standards development can be challenging to achieve. These processes are meticulous. The development of a single standard can take months or years and require hundreds of hours from the individuals involved. And, for the most part,

¹ <https://www.iso.org/about-us.html>

² <https://ansi.org/>

³ <https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100011.pdf>

⁴ <https://ansi.org/american-national-standards/ans-introduction/essential-requirements>

individuals on consensus bodies are volunteers – there may even be a fee to participate. Such barriers can, and arguably do, skew participation in standards setting toward individuals with the tools, time, and resources to join these scrupulous undertakings, including the time to learn the technicalities of the topic. This challenge is reflected in recent reports from ISO and ANSI, both of which named broadening engagement and increasing inclusivity as a priority.⁵ The challenge is also reflected in mounting critique of the trend to assess the quality of a standards-setting or rule-making project based on its process rather than outcomes.⁶

Potential barriers to participation in standards development

Intentional or unintentional exclusion
<ul style="list-style-type: none"> • Structural (e.g., an individual does not see themselves reflected in the interest categories⁷ or they were not invited to participate) • Insufficient outreach (e.g., news of the process did not reach an interested party) • From process design (i.e., invited to participate in the process, but not to shape the process) • Language or cultural differences • Time zone challenges
Resources
<ul style="list-style-type: none"> • Time, money, energy (e.g., some able to participate as part of their job, while others participate outside of/in addition to their job)
Relational or power dynamics
<ul style="list-style-type: none"> • Imbalance of interest categories • Regional/geographic imbalance • Organizational and/or personal power imbalances (e.g., a large company's perspective outweighing a small company's or a very assertive person crowding out less assertive voices) • Perceived lack of expertise (especially technical) • Disconnectedness (e.g., not knowing or feeling welcomed by fellow collaborators)
Procedural
<ul style="list-style-type: none"> • Meeting time, length, cadence • Complex or unclear workflows (e.g., participant does not understand the process) • Technology proficiency • Unconstructive disagreement • Lack of mechanisms to collect and respond to process feedback from participants • Consensus thresholds defined such that significant minority views can be easily overruled

⁵ ISO Strategy 2030 & ANSI's Annual report 2021-22

⁶ Loconto, A. and Fouilleux, E. (2014), Politics of private regulation. Regulation & Governance, 8: 166-185. <https://doi.org/10.1111/rego.12028>

⁷ "Interest categories" are commonly used in standards setting to define the types of parties relevant to the topic area. Often these categories require participants to self-select.

The standards community faces a wicked question: How to reconcile the need for broad inclusion in standards development with the intensity of the task?

There is need for exploration and innovation within standards setting to produce more models that center equity and encourage broad, meaningful participation.

Case example: PR3 & Reusable Packaging Systems

Improving our current packaging paradigm is imperative. The plastic pollution crisis fueled by single-use packaging is well documented.⁸ Packaging production, and especially plastic packaging production, provides striking examples of environmental racism in the U.S. and around the world. Over 40% of the petrochemicals produced today are used for packaging. The oil and gas extraction sites and chemical plants used in this process emit byproducts that are hazardous to the people and ecosystems that surround them. In the United States, the “fenceline communities” next to industrial facilities like chemical refineries are predominately low-income and people of color.⁹ A poster region for this phenomenon is the 85-mile stretch between Baton Rouge to New Orleans, Louisiana dubbed “Cancer Alley.” The stretch is home to over 150 chemical plants, and the predominantly Black communities around them have significantly elevated cancer rates, among other ailments, connected to emissions exposure.¹⁰ And this only speaks to the upstream impacts. The downstream impacts of our global single-use packaging crisis are evident in our landfills, littered streets, and choked waterways and oceans. The world needs a new approach to packaging.

Through its PR3 initiative, RESOLVE, an ANSI-accredited standards developing organization, is developing standards to help grow reusable packaging systems around the world. At scale, reuse has the potential to become an environmentally, socially, and economically superior replacement for single-use packaging for most consumer goods.

A fundamental goal of our work is to ensure that our standards-setting process is equitable and open. We’ve invited in workers and communities affected by packaging production and disposal, so that new systems are better for people, businesses, and the planet. Our approach draws heavily on [Liberating Structures](#)¹¹ and is informed by the principles of [Liberatory Design](#).¹²

⁸ The Pew Charitable Trust. (2020), [Breaking the Plastic Wave](#)

⁹ National Association for the Advancement of Colored People & Clean Air Task Force. (2017), [Fumes Across the Fence-Line: The Health Impacts of Air Pollution from Oil & Gas Facilities on African American Communities](#).

¹⁰ Kimberly A Terrell and Gianna St Julien 2022 Environ. Res. Lett. 17 014033. DOI 10.1088/1748-9326/ac4360

¹¹ <https://www.liberatingstructures.com/home/>

¹² <https://www.nationalequityproject.org/frameworks/liberatory-design>

Our framework is built around four principles: **1) Radical inclusion; 2) Investing in relationships and trust; 3) Sense-making precedes decision-making; and 4) Continuous improvement.** We view all these principles as important and use them as guiderails for our standards development process, but they are not all equally relevant at every moment. Application of the principles is fluid and we lean into each more or less depending on the on the topic, situation, and group. We also recognize that these principles make an already hard endeavor harder! It's more difficult to find consensus among a more diverse group. Relationship building and sense-making take time on top of the time it takes to write a technical normative document. Calibrating processes can feel like a regression in the moment. We do not submit these ideas as a way to develop standards more efficiently. We submit them as steps on a journey – incomplete as it is – to develop standards that scaffold equitable, environmentally superior, and financially viable packaging systems, and avoid unintended consequences down the line.

We're also honest about when our approach may be in tension with common or traditional standards-setting procedures.

It is important to note that RESOLVE and PR3 are new to the standards development field. In sharing our approach, we are not suggesting that we've developed a perfect or superior model. Rather, we're sharing our attempt at a fundamental goal of standards: to include and benefit all affected parties. We invite others to do the same, so we might learn and improve together.

Principle 1: Radical Inclusion

Ways we practice radical inclusion:	Ways this might be in tension with common standards-setting practice:
<p>Creating inclusive procedures within and beyond ANSI's Essential Requirement</p> <ul style="list-style-type: none"> ANSI requires that no single interest category on a consensus body constitute more than 50% of the group. PR3's consensus body, our Standards Panel (SP), defines "industry" as a single interest category, rather than dividing industry into multiple interest categories (e.g., manufacturers, retailers, service providers). We aim to prevent having a body which, while still technically ANSI compliant, enables industry participation to outweigh non-industry participation. Given the global nature of packaging and food supply chains, we have also adopted a geographic balance requirement. At least three of the five UN global regions must be represented on PR3's SP. Applications to join PR3's SP are accepted on a continuous basis. We are constantly identifying knowledge and experience gaps and new stakeholders interested in participating. To date, no applicant has been denied a place on PR3's SP. If accepting the applicant as a voting member would violate our balance requirements, they are invited to participate as a non-voting member. There is no fee to participate in PR3's standards process. We actively connect organizations and individuals who would otherwise be unable to participate to philanthropies that provide participation stipends. 	<ul style="list-style-type: none"> Participation fees: It is not uncommon for SDOs to assess fees for participating in standards development. ANSI allows ASDs to charge a "reasonable fee for participation." Even on a sliding scale, fees (in addition to personnel time) can present a barrier to entry for less-resourced constituents. Technical knowledge is an ANSI-recommended prerequisite for participants in a standards process, which could bar "non-experts" from participating, if defined too narrowly. PR3's consensus body includes members with little knowledge of packaging systems, but who do have lived experience of how packaging production and waste impacts communities and the environment. Participation limits: Some SDOs set limits on the size of their consensus body. Naturally, a size limit will narrow the number of perspectives that are represented in the development process.
<p>Offering different levels and modes of participation</p> <ul style="list-style-type: none"> Often, important voices from impacted communities do not have the time to dedicate tens of hours a month over multiple years to a standards process. We maintain several working levels which allow stakeholders to calibrate their time commitment while still contributing meaningfully - panel level (multi-year process), workgroup level (active for 6-8 months), and subgroup level (2-6 months). We use a variety of discussion and input modes (e.g., large group discussion, small breakouts, chat questions, Mural boards, surveys, Google documents) to accommodate different styles and allow for synchronous and asynchronous collaboration. We vary meeting times and often hold duplicate sessions (the same topic with different people) to accommodate time zones around the world. <p>More intentional public comment</p> <ul style="list-style-type: none"> Even with multiple working levels, there are many groups interested in our standards that cannot dedicate the time to participate directly in standards development. We proactively reach out to these groups during the public comment period to ensure they are aware of the opportunity. 	<p>Where we're falling short and welcome ideas:</p> <ul style="list-style-type: none"> Language barriers: PR3's standard setting process is only conducted in English, which inherently excludes a global majority. For us, this is a resource constraint. We welcome examples of innovative ways others navigate this challenge. Time zones are challenging. We do record all sessions and sometimes hold repeat sessions to account for global participants. Still, our meeting times tend to favor North American participants. Time commitment: Although we strive to minimize the commitment, this work still uses a lot of people's time. We recognize this advantages people in roles that have time explicitly dedicated to participating in standards projects. Explaining the influence of standards: We've realized many people do not understand the influence standards have on their lives. Standards are subtle, behind-the-scenes power centers. We've strengthened our case for participating in standards processes, but often still find we are unable to elevate this work among the priorities of important stakeholders.

Principle 2: Investing in Relationships and Trust

Ways we invest in relationships and trust:	Ways this might be in tension with common standards-setting practice:
<p>Relationship building is the primary goal of plenary meetings</p> <ul style="list-style-type: none"> When we convene the full SP, relationship building and spreading exposure to different points of view is always a primary goal of the meeting and a key lens through which we drive meeting design. This can mean that 40, 50, sometimes even 100% of the meeting time is dedicated to getting to know other group members and their interests - be it through paired sharing, storytelling, or other exercises. Work on content happens mostly at the subgroup level and asynchronously. We always open meeting at least 15 minutes early to make space for informal chat and “human talk” before meetings. Before any standards work commenced, the SP created participation guidelines, which describe how members agree to treat and interact with each other in their work. Liberatory Design encourages the co-creation of protocols as a way to create power within (rather than over) a group. The SP’s guidelines include: <ul style="list-style-type: none"> Embrace co-creation: Welcome, listen to, and use differing opinions, viewpoints, and experiences. Take space, make space: Everyone’s voice is critical to the discussion and our success. Be human: give grace and empathy to yourself and others. Hold the room: Everyone is responsible for making this a constructive experience. <p>Buddy System</p> <ul style="list-style-type: none"> We give our participants the option of joining a “buddy system,” which assigns participants to at least one other designated group member to bounce ideas off of, catch up with if they miss a meeting, reach out to about having a “middle space” conversation, etc. in an informal, off-the-record capacity. Having a “buddy” is shown to increase engagement and accountability to a project or goal. We try to pair folks who are likely to have quite different points of view. <p>Trusted Conveners</p> <ul style="list-style-type: none"> We endeavor to build trust in ourselves (RESOLVE and PR3) as a convener. We brought in experienced external facilitators and equity consultants. We work with them to shape engaging, balanced sessions and use our own words and actions to model consciousness, curiosity, respond to new information in the moment, and interrupt oppressive behavior. We also create space for 1-on-1 and small group conversations with participants to strategize on how to achieve their objectives within the standards. 	<ul style="list-style-type: none"> Urgency from industry, policy, or buyers: There are many reasons SDOs may feel pressure to complete a standard quickly, including being first to market, the reputation of being an SDO that delivers, and insistence from industry or regulators. These pressures may crowd space for trust building out of the procedural timeline. <p>Where we’re falling short and welcome ideas:</p> <ul style="list-style-type: none"> All virtual interactions: All our official standards meetings are held virtually. We believe this makes the process more accessible to a global group AND it is certainly harder to build relationships virtually, especially among participants representing sectors and stakeholders with a long history of mistrust. The bread breaking and hallway talk and humanization that comes with meeting in-person cannot be fully replicated online. Full-time work in bite-sized increments: Both the relational work and technical work are big tasks and we try to fit an element of both into every meeting. That is a lot to wring from an hour or two, and no doubt at times we get the calibration wrong. Trusted conveners: As noted, we strive to earn trust in ourselves as conveners. And we know there is always more we can do. Trust is not static, but a constantly fluctuating relationship. Trust in one arena or situation may not transfer to another. We’re also a new SDO and therefore not only building trust as conveners but building trust in our ability to execute a standards-setting process.

Principle 3: Sense-making precedes decision-making

Ways we allow sense-making to precede decision-making:	Ways this might be in tension with common standards-setting practice:
<p>Liberatory Design encourages practitioners to embrace complexity. It challenges the impulse to treat decision-making as a linear process: present information, connect information, draw conclusion. In our work, we distinguish between information exchange (which is the act of bringing new data into a space) and sense-making (which is a communal process of deciphering what that information means to the work). Sense-making is something a group does together, and it happens continually. It values and incorporates hard data as well as lived experience, feeling, purpose, and belief. We invest time in arriving at a, if not shared, at least jointly explored sense of a topic or issue before moving to decision-making.</p> <p>Sense-making tactics</p> <ul style="list-style-type: none">• PR3 meeting agendas are untimed and loosely structured, which reflects an openness to respond to the interests of participants and needs of the discussion. We regularly restructure meetings in real time in response to the group.• We use the virtual whiteboard software Mural to collect initial input on a standard. The open and dynamic platform provides transparency to all participants and enables asynchronous contribution.• Whether written or verbal, we ask participants to explain the “why” behind their comments.• When in areas of low agreement, we help participants stay low of the Ladder of Inference, checking assumptions and interpretations before taking action.• We use Liberating Structures’ “What, So What, Now What” to harness generative conflict. The exercise helps participants process information in steps - from collecting facts about What Happened to making sense of these facts with So What and finally to what actions logically follow with Now What. The shared progression eliminates most of the misunderstandings that otherwise fuel disagreements.	<ul style="list-style-type: none">• Urgency from industry, policy, or buyers: Again, internal and external pressure to complete a standard quickly can crowd space for exploration and sense-making out of the procedural timeline.
	<p>Where we’re falling short and welcome ideas:</p> <ul style="list-style-type: none">• Tension between non-linearity and perception of progress: Slower, non-linear meetings and processes are not the norm in Western culture, especially in work settings. We have heard (and at time ourselves feel) a sense of “let’s get moving” from group members at certain points in the work. We’re always trying to better balance sense-making and the desire for “results.”• Cultural blind spots: Related to the point above, though the group is global, participants are predominantly North American. Because of that, the way we introduce, approach, and analyze concepts likely carry that bias, which may distance people from other cultures or parts of the world.

Principle 4: Continuous Improvement

Ways we practice continuous improvement:	Ways this might be in tension with common standards-setting practice:
<p>We evolve the way we approach standards setting - everything from meeting length and time to the online tools we use to workgroup structure - as we go along, and we were explicit about our intention to do this with the SP from the outset. Experimenting, prototyping, and learning from feedback and experience are central to Liberatory Design, as is designing “with” rather than “for” the people involved.</p> <p>Barometer</p> <ul style="list-style-type: none">• Participants are surveyed biannually using a barometer tool, which gauges members’ impression of whether we’re focusing on the right topics, their relationship to other members, and their engagement with the process and how it could be improved. The barometer is not an evaluation, but rather a snapshot that is used to correct and improve course as needed. Barometer results are shared with all participants (your data is your data) as are the adjustments made in response to those results.	<ul style="list-style-type: none">• Conformity and Consistency: Perhaps unsurprising in the field of standardization, process consistency is often held as a virtue. While transparency and shared expectations are certainly valuable, over-fidelity to consistency may prevent SDOs from responding to participant feedback and adapting processes to better engage members.
	<p>Where we’re falling short and welcome ideas:</p> <ul style="list-style-type: none">• Inconsistency can hinder participation: We recognize that familiarity with process can ease participation. The less people are thinking about the how, the more they can focus on the what. And it’s hard to become comfortable with the how if it’s in constant flux. It can be challenging to respond to some participants’ feedback without unmooring others.• Feedback fatigue: Providing feedback on process – what’s working, what’s not - is another ask of participants, another requirement of brain power. As we attempt to lower the bandwidth barrier to participating in standards setting, being overly solicitous of feedback may be counterproductive.