



THE IMPORTANCE OF GENDER DIVERSITY IN INTERNATIONAL STANDARDS DEVELOPMENT

- Ms. Sonya Bird

Consider the protective equipment that does not quite fit properly. Perhaps it is a pair of gloves worn by a female firefighter with small hands, or a vest intended to protect police officers from bullets. If this protective gear does not fit correctly, its protective nature may be negatively affected. The glove may not provide the needed protection from fire and heat, and although the vest may fit across the female chest, it may provide a gap in coverage from fitting too loosely across the rest of the torso.

Also, consider the differences between men and women that exist beyond physical sizing dimensions. Other physical differences may include body fat percentage, peripheral vision, sensitivity to sound, pain tolerance, hormones, or various strength characteristics such as upper body strength and grip strength. Each of these conditions could have an impact on the suitability of requirements contained in a standard. Add to that mixture the traditional differences around roles played by men and women,

and the evolving roles of women today, and it is clear that needs—with respect to standards—are changing.

Establishing gender-responsive standards

Recognizing the physical, emotional and societal differences that exist between men and women, two international standards organizations created a group to focus on the development of gender-responsive standards. The International Electrotechnical Commission (IEC) and the International Organization for Standardization (ISO) recognized the need for gender-responsive standards and created a Joint Strategic Advisory Group (JSAG). The mandate of the JSAG is to create tools for ISO and IEC committees that ensure standards are gender responsive.

Preliminary work within the JSAG reinforced the need for a plan to establish gender-responsive standards. According to early feedback, many technical committees, which have historically been

made up of male contributors, had not deliberately considered specific needs of women in developing standards. The thought process seemed to be that the standards were sufficient for all.

There are several outcomes anticipated by the work of the JSAG. These include development of the following:

- A checklist to help committees understand and assess how a new work item or revision project for an IEC or ISO standard may be affected by gender
- Guidance and recommendations on the use of non-biased/gender-responsive data in standards development, and what to do when the appropriate data is not available
- Recommendations for committees on how to incorporate gender diversity and inclusivity in the work and language
- A comprehensive communications plan on how to achieve gender-responsive standards
- A baseline for measuring progress. This deliverable will build on the others, but will likely suggest KPIs that IEC and ISO can use to track the effectiveness of the JSAG recommendations.

Understanding the value of gender-responsive standards

I am honored to be a member of the JSAG, and to help address this important topic on a global scale. I am also pleased to be leading the deliverable work group responsible for the development of the guidance for technical committees. In our work on the first deliverable, we realized that many standards already do consider gender, including physical considerations, as well as differences due to social or cultural norms. We also recognize that the individuals participating in the work of the IEC and ISO are experts in their respective fields, but are not necessarily experts on gender differences. As this working group develops the checklist, we want to provide guidance to help all experts understand the value of gender-responsive standards, while also encouraging them to think about gender implications for new and revised standards.

Reinforcing the need for diverse perspectives

Although the draft checklist will ask the drafting team to consider the need for diversity within the team itself, it will also clarify that a woman on a committee should not be misperceived as a representative of all women. Just as needs and experiences vary for men, so do needs and experiences vary for women, and a variety of female experiences and inputs should be taken into consideration in standards development. Diversity cannot be accomplished simply by adding a woman to a committee for the sake of appearing diverse.

The IEC began focusing on the need for gender diversity within the IEC standards system with the development of an IEC Council Board Task Force (TF) on Diversity. This TF is identifying approaches for increasing diversity based on three levels – geographical diversity, stakeholder diversity, and (most relevant to this article) gender diversity. The TF is encouraging gender diversity at all organizational levels of the IEC, from the drafting of materials at the working group and maintenance team level, to the technical committee level, to leadership roles (including convenors and TC officers), to roles on the management boards such as the Standardization Management Board (SMB) or the Conformity Assessment Board (CAB). The TF recognizes that by having more diversity within the system, the resulting standards may be more relatable for all.

Gender considerations in UL standards

Discussions around gender responsive standards are also taking place outside of the work of IEC and ISO. One example of a recently published standard which accounted for gender inclusivity is ANSI/CAN/UL 3741, the Standard for Safety for Photovoltaic (PV) Hazard Control. This standard is intended to help reduce shock hazards for firefighters responding to emergencies on homes with PV systems. In its development, considerations were provided for both male and female firefighters. As research was collected, it was noted that physical characteristics such as body weight and skin sensitivity could have a direct effect on certain threshold limits for electricity, and that women tended to have lower threshold limits than most adult men. Further, both male and female firefighters were considered in the calculations of the potential current that could pass through a firefighter's body during various firefighting interaction scenarios with a damaged PV array. As a result, for the protection of female firefighters in the U.S. and Canada, ANSI/CAN/UL 3741 uses DC body resistance data as modified for females, which is roughly 2/3 the limits for males. In addition, the requirements for hazard levels (defined criteria for reactions to exposure current) were also modified for adult females.

How you can get involved

Underwriters Laboratories is dedicated to advancing gender diversity within standards development. We rely on the input of diverse, knowledgeable experts to promote global safety through the development of consensus Standards that guide the performance and sustainability of new and evolving technologies and services. Our standards development process is open and transparent. Anyone can participate by submitting a proposal, or by applying for membership on one of our Standards Technical Panels (STPs).

Experts who participate in standards development help ensure standards are comprehensive, sustainable and focused on driving safety in line with the UL mission statement of working for a safer world.

If you would like to share your expertise and help to develop standards in your industry, please submit an application for membership through our Collaborative Standards Development System

(CSDS) at CSDS.UL.com. If you have questions about standards development, contact us at UL.org/contact or Standards@UL.org. To access UL and ULC Standards documents, or to sign up for alerts, visit ShopULStandards.com.

Underwriters Laboratories Standards Engineer Susan Malohn contributed information related to ANSI/CAN/UL 3741 to this article. ■



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She is the the Director of International Standards for Underwriters Laboratories. In this role, she is responsible for developing and implementing the international standards strategy, including leading UL's international standards outreach and relationships, and overseeing UL's international harmonization activities. She also serves as the US representative to the IEC Standardization Management Board (SMB), where she is a member the IEC Council Board TF on Diversity, the IEC Council Board TF on Sustainable Development Goals, and the IEC/ISO Joint Strategic Advisory Group on Gender Responsive Standards. Sonya holds a Bachelor of Science degree in Electrical Engineering from North Carolina State University and a Certificate in Business Management from Yale School of Management for UL Executive Leadership Program.

Readers' Feedback Abstracts on FSAI Journal

1 As usual the July-August Issue excels in content, design and layout. Enjoyed thoroughly the thematic Article on Occupation related Stress by Dr. Narendra Joshi. An exhaustive take on the subject covering all aspects of stress – physical, mental and social with clear and concise analysis of causes and how one can provide the needed environment at the work place and/or one can design one's life to stay stress free to avoid resultant mental health. Doctor has done an in depth assessment in simple language for easy understanding. The other article related to the topic on BPO employee stress by Dr. Siva Perumal and Dr. Nikhil Kulkarni is also highly informative with facts and figures from the research on the subject with suggestions to alleviate the employee behaviour resulting from working at odd hours with extensive engagement with electronic interface and absence of face to face interaction. Job Rotation, team building, and training and a motivating work space are some that can destress the psychosocial stresses.

The other articles on dampers, water mist, scientific firefighting, fire safety management and other too are all insightful and informative. Thanks to Editorial team for bringing out a highly informative journal.

Mr. Ananthraman