



UL Standards & Engagement:

# 2023 in Review

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## Overview

UL Standards & Engagement made remarkable progress in 2023. Not only was it our first full year as a separate organization with a focused mission, 2023 was also the 120<sup>th</sup> anniversary of the publication of our first standard. This reflection on our rich history served as precedent for opportunities upon which we capitalized throughout the year and brings clarity to where we will go in the future. This year's highlights show the many ways in which we are working toward our mission of a safer world.



# Improving Safety Outcomes Through Standards



Put simply, standards are the currency we use to have impact. In 2023, UL Standards & Engagement published 30 first edition standards and more than 230 new editions and revisions. We took steps to recruit new participants to our technical committees and made systems and process improvements benefiting the more than 4,000 experts already volunteering with us in standards development. Ongoing collaboration between the standards development team and engagement teams raised awareness among a broader audience of stakeholders about the importance of safety standards and prompted legislative action that will save lives and reduce injuries and property damage.

## Highlighting New and Updated Standards:



The Consumer Product Safety Commission selected <u>UL 4200A</u>, <u>Products Incorporating Button Batteries</u> or <u>Coin Cell Batteries</u>, as its choice to achieve compliance with Reese's Law. The law, named for 18-month-old Reese Hamsmith who lost her life to button cell battery ingestion, was pushed forward by her mother, Trista Hamsmith, who serves on the standard's technical committee and championed its release, saying, "We are thankful UL 4200A will better protect our most vulnerable from button battery ingestion. Since the death of Reese, we have tirelessly worked for something like this. We deeply appreciate the hard work from everyone to make this part of the solution stronger."



We published the first edition of <u>UL 3600</u>, <u>Measuring</u> and <u>Reporting Circular Economy Aspects of</u>
<u>Products, Sites, and Organizations</u>. The standard sets criteria for assessing the effectiveness of the circular economy efforts of organizations, products, and sites to help assure trust in sustainability claims.

#### Highlighting New and Updated Standards Continued:



We published the third edition of <u>UL 9540, Energy Storage Systems</u> and Equipment, to ensure our standard keeps pace with the rapid development of this technology as it becomes a key component of clean energy systems around the world.



The first edition of <u>UL 8400</u>, <u>Virtual Reality</u>, <u>Augmented Reality</u>, <u>and Mixed Reality Technology Equipment</u>, was published. It is the first standard of its type to provide safety requirements for these devices, arriving ahead of major releases in the category.



The third edition of <u>UL 4600</u>, <u>Evaluation of Autonomous Products</u>, was published, expanding the standard's scope to include autonomous trucking. The update came at a significant moment, as real-world pilots are already underway and the trucking industry evolves in the face of labor shortages.



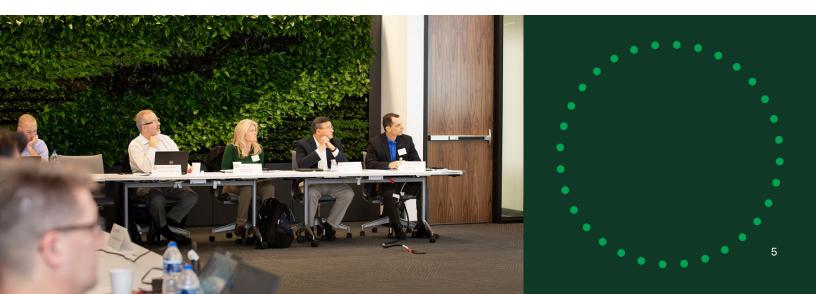
In August, UL 2034, Single and Multiple Station Carbon Monoxide Alarms, was updated to expand coverage to non-dwelling units, namely motels, restaurants, and other indoor locations that do not have more sophisticated detection systems installed. The standard is critical to ensuring more buildings protect occupants through detection systems. The change to UL 2034 was proposed by Kris Hauschildt, who founded the Jenkins Foundation after her parents, Daryl and Shirley Jenkins, lost their lives to carbon monoxide poisoning in a hotel room in Boone, N.C.



In July, we published the first edition of <u>UL 9990</u>, <u>Information and Communication Technology Power Cables</u>, which covers products including the charging cords used for cell phones, tablets, and similar electronic devices. The standard sets requirements to mitigate fire and electric shock hazards in these devices used extensively in homes and offices throughout North America and beyond, further enhancing safety in our homes and communities.



"Wear Your Life Jacket at Work Day" made a big splash as we supported National Safe Boating Week and leveraged the opportunity to promote our legacy work on standards for personal flotation devices.





# Showing the Impact of Standards

We published a whitepaper entitled, "Principles for Measuring the Impact of Voluntary Consensus Standards on Human Health and Safety," which provides insight into the impact of standards on homes and communities. The study evaluated public safety data from before and after the 1991 revision of UL 325, our standard for automatic garage doors, that began requiring doors to stop and reverse if impeded. The paper concludes that the requirement contributed to a reduction of entrapment deaths and injuries over time.

We released the inaugural <u>ULSE</u> <u>Holiday Guide</u>, showcasing consumer survey results about safety risks during the holiday season and demonstrating how relevant standards can support a safer season of celebration.

# Growing and Improving Our Technical Committees

- To boost participation of firefighters and other frontline fire service personnel in the standards development process, we joined forces with our colleagues at the Fire Safety Research Institute of UL Research Institutes to produce a video calling on firefighters to leverage their on-the-job experience in a new way.
- We launched an overhaul of our
  Collaborative Standards Development
  System (CSDS), our online collaboration
  portal for technical committee members.
  The revamped CSDS features design
  updates and increased functionality
  for an enhanced user experience by
  our committee members and other
  stakeholders.
- To recognize those who contribute to our technical committees, we began work on an appreciation campaign that highlights these volunteers and their commitment to standards development.
- We presented at key engagement events, including the 2023 National League of Cities City Summit and the Aspen Ideas Festival, to introduce our organization's work and impact to new audiences and recruit new stakeholders who can broaden and diversify the input critical to our standards development process.



# Establishing ULSE as an Authoritative Voice and Thought Leader in Safety



With more than 1.700 standards and guidance documents in our library, UL Standards & Engagement has expertise on a host of pressing safety issues. We brought that knowledge forward to reinforce our influence and leadership in the standards community and to reach new audiences that are critical to growing our impact.



#### **Expanding Our Sphere of Impact to New Audiences**

#### **Axios**

In October, we partnered with Axios on the event "<u>Pushing Forward on the</u> <u>Path to Clean Energy</u>" in Washington, D.C. More than 100 industry leaders and congressional staff attended to listen to ULSE leadership advance discussion of clean energy and the role of standards in achieving a safe, effective transition to it.

#### **Aspen Ideas Festival**

ULSE made its first appearance at the Aspen Ideas Festival, where Executive Director Dr. David Steel presented on <u>standards accelerating the clean</u> <u>energy future</u> and raise awareness of our work to position our organization as a partner to a new audience of influential thought leaders.

#### **NBDA Retailer Summit**

We built upon our partnership with the National Bicycle Dealers Association by participating in the <u>NBDA Retailer Summit</u>, delivering presentations to an audience directly involved with e-bike sales and advocacy. We highlighted our advancements in e-mobility safety in the wake of fires and other incidents occurring with these devices.

#### **NLC City Summit**

We sponsored the <u>2023 NLC City Summit</u> in Atlanta, connecting with municipal officials from across the U.S. on the role of standards in addressing fire safety concerns from e-mobility devices and their charging systems. In remarks to 3,000 attendees, David Steel encouraged the adoption of legislation similar to New York City's 2023 law requiring devices to comply with applicable UL standards as an alternative to banning them.



## Driving the Debate on Priority Issues

Our leadership on lithium-ion battery safety had a major impact in New York City in March, when Mayor Eric Adams signed a law requiring all e-mobility devices owned, rented, or leased in the city to comply with applicable UL standards. The law took effect in September, at which time the The New York Daily News published an op-ed by David Steel, "How to Fight Lithium-lon E-Bike Fires," which pointed to the lack of consumer understanding of these fires and explained how our standards can be a solution that mitigates the hazards resulting from these misconceptions. Looking beyond the five boroughs, we continue to use NYC as a model for other cities considering legislation to reduce the risk of lithium-ion battery fires.

We released a series of articles on LinkedIn to support our position in key areas, including:

NYC's New Law on e-Bikes Will Save Lives and Should be the Model



There is No Road to Autonomous Trucking Without Safety



Accelerating the Clean Energy Future



Detection is Prevention Against Carbon Monoxide Poisoning



Strengthening Safety and Preventing Tragic Battery Ingestion Accidents



Counterfeits Do More Than Economic Harm



Working for a Safer World, Building on 120 Years of Progress





Head of Insights and Policy Analysis
Lesley Rohrbaugh appeared on the
"Echo on Air" podcast to discuss data
quality and integrity best practices,
as well as the future of artificial
intelligence in market research.

### Contributing to Academic Journals and Industry Publications

International Fire Fighter Magazine
Lead Project Engineer Wil Fletcher a

Lead Project Engineer Wil Fletcher and Project Engineer Mariah Dixon published the article, "<u>ULSE Fire-Door Standards and Their Impact on the Fire Service</u>," in *International Fire Fighter Magazine*, raising awareness about how our first standard – for tin-clad fire doors – remains relevant and critical to fire safety.

02 USNC Current Standards Mana

Standards Manager Mark Ramlochan and Standards Planning Analyst Grace Callahan contributed their perspectives on the role UL standards play in achieving the United Nations' Sustainable Development Goals with an <u>article in the USNC Current</u>, a publication of the American National Standards Institute and the U.S. National Committee of the International Electrotechnical Commission. International Senior Standards Specialist Grace Roh was featured in the same publication offering her thoughts on how standards and technology can support aging in place and enable seniors to live independently. *USNC Current* also published "Setting a Higher Standard to Get Rid of Greenwashing" authored by Program Manager Caitlin D'Onofrio to discuss the potential impacts of UL 3600.

Standardization: Journal of Research and Innovation
To further our presence and leadership among industr

To further our presence and leadership among industry peers, Project Engineer Alec Krabbe, Project Engineer Wathma Jayathilake, Director of Data Science and Engineering Dr. Denice Durrant, and Caitlin D'Onofrio all published articles in <u>Standardization: Journal of Research and Innovation</u>.

IEEMA Journal

Wil Fletcher, Denice Durrant, and Regional Manager Manjunath V. published "<u>Fire Safety in an All-Electric Society</u>" in the *IEEMA Journal*, a publication of the Indian Electrical and Electronics Manufacturers Association.

Wathma Jayathilake and Caitlin D'Onofrio both published articles in the *FSAI Journal*, issued by the Fire & Security Association of India.





UL Standards & Engagement attended and presented at 159 events in 2023. From the events we convened, to the presentations we gave, our influence at industry events further cemented our position as a leading standards development organization and advocate for safety.



#### **Speed Networking Event**

In November, UL Standards & Engagement hosted a speed networking event with ANSI and National Institute of Standards and Technology at our Washington, D.C. office. In only three hours, 10 government agencies and 12 standards development organizations held 120 meetings on important standardization issues.

#### **SES Annual Conference**

UL Standards & Engagement proudly sponsored the <u>72nd Annual Conference</u> of SES, the Society for Standardization Professionals, held in Portland, Ore. This was the first interaction with many of our peer SDOs following the 2022 launch of the UL Standards & Engagement brand and identity.

At the SES conference, <u>Wathma Jayathilake received</u> the 2023 Emerging Professional Award, and Standards Accreditation Manager Tricia Sena received the 2023 Lorne K. Wagner Memorial Award.

#### **Safety 23 Conference and Expo**

Keeping with our approach to highlight ULSE to our industry peers, we sponsored the <u>American Society of Safety Professionals Safety 23 Conference and Expo</u>, where we presented the findings from our study on the impact of voluntary consensus standards. The report was developed in partnership with the U.S. CPSC, ANSI, ASSP, and others.





We hosted the 2023 TRIP Summit in Herndon, Va., in June. The event brought together airline representatives and other aviation industry stakeholders to discuss the safe air transport of lithium-ion batteries, advancing the work of the Thermal Runaway Incident Prevention program. TRIP is an initiative convened by ULSE and aviation industry partners to share information on lithiumion battery incidents to help develop best practices to mitigate future incidents.



ULSE sponsored and participated in the 2023 National Fire Protection Association Conference & Expo in coordination with UL Research Institutes and UL Solutions. The event, held in June in Las Vegas, was an opportunity to engage with fire industry stakeholders and recruit new technical committee members.



During the National Carbon Monoxide

Awareness Association's 2023 CO Safety

Summit in Wilmington, N.C., we presented on our CO safety standards and networked with industry professionals at our sponsor booth to raise awareness of our organization's work to mitigate deaths and impacts to human health from CO poisoning, while also recruiting new technical committee members.



Our participation in ANSI's celebration of World Standards Week and World Standards Day further strengthened our standards community network. Throughout the week, our colleagues attended sessions, staffed booths, and joined peers from ASTM to advance the importance of standards for safety.



ULSE partnered with INTERPOL and the Norwegian Police Service to present the International Law Enforcement Intellectual Property Crime Conference in Oslo, Norway. The event brought together global experts in anti-counterfeiting and intellectual property to share information advancing crime prevention efforts.





In 2023, UL Standards & Engagement built on our reputation as a globally influential standards development organization and convener, improving standards on the world stage while hosting events with international government leaders, industry, consumer groups, and standards bodies.



# Increasing the International Impact of Our Standards

The Bureau of Philippine Standards adopted 20 of our standards for wiring and cable in June. International adoptions signify ULSE's global influence and demonstrate trust in the rigor and integrity of our standards development process.

In June, we sponsored and staffed a plenary meeting for IEC Technical Committee 61, for Safety of Household and Similar Electrical Appliances in Copenhagen, Denmark. ULSE has had a representative serving as TC 61 secretary for over 40 years. Our participation in IEC TCs advances UL Standards & Engagement's global recognition and influence, creating opportunities for the adoption of our standards abroad.



## Convening Leaders Around the Globe

David Steel presented alongside Regional Director Kolin Low at a joint conference between ULSE and the Directorate for Standards, Metrology and Quality of Vietnam in Hanoi. Steel's presentation focused on Vietnam's clean energy goals and industrial growth through standardization, demonstrating our commitment to supporting safe innovation.

In August, we presented at the Asia Pacific Economic Cooperation Battery Energy
Storage Workshop in Seattle to an audience of policymakers from Asia, where multiple nations have established clean energy goals to sustainably meet rising energy demands. Through this event, we promoted the role of standards in achieving a safe transition to clean energy.

In Mexico City, we co-hosted the 2023
LATAM Battery Safety Summit with the
Electrochemical Safety Research Institute
of UL Research Institutes on August 8-9. We
highlighted our safety advancements in the
portable power space and expanded our
relationships with regional stakeholders to
achieve safer energy solutions.

Our expertise was demonstrated in India as we served as the knowledge partner for the FSAI Fire & Security Expo. We also collaborated with partners in the region to convene the Building Robust Safety Ecosystem for Electric Vehicles in India conference, where we discussed the unique hazards of EVs and solutions to guide their safe deployment in India. These events provided significant visibility into our work and expertise with influential leaders — including David Steel serving on a panel with India's Minister of Road Transport and Highways, Nitin Gadkari.

## **Expanding Our People and Presence**



UL Standards & Engagement grew its size and capacity significantly in 2023 by adding 48 new colleagues. Our footprint also grew, with the opening of new offices in Washington, D.C., Ottawa, Canada, and the debut of our new headquarters in Evanston, Ill. Further, our leaders took on new roles with board appointments that enhance our influence in the standards community.



48
new colleagues



### **Growing Our People**

We announced the <u>expansion of our standards and</u> <u>engagement leadership team</u> as the heads of our engagement team joined the organization to grow the organization's capabilities: Katie Denis, communications; David McKnight, partnerships; Lesley Rohrbaugh, insights and policy analysis; and John Wolfe, strategic initiatives. Additionally, Sonya Bird, international standards, and Dr. George Borlase, standards development, were promoted to vice president.









### **Establishing Roots in New Locations**

ULSE welcomed more than 130 business, standards, trade association and government leaders to our Washington, D.C., office for an <u>opening reception in May</u>. The event was an important first for ULSE's engagement teams, and offered the opportunity to discuss partnerships, advocacy campaigns, and public safety coalitions with key stakeholders. Keynote remarks were made by U.S. CPSC Chair Alexander Hoehn-Saric.

At the beginning of June, UL Standards & Engagement celebrated the opening of its <u>new office in Ottawa</u> with an event welcoming local stakeholders. The new office – which overlooks Parliament Hill, the Canadian seat of government – provides UL Standards & Engagement with a base of operations in the heart of Canada's capital and represents our commitment to Canada and its stakeholders. Keynote remarks were made by Standards Council of Canada leadership.

November kicked off with ULRI and ULSE moving into our <u>new headquarters facility in Evanston, III</u>. The move marks a new era for both organizations as we leverage UL's new enterprise structure to achieve the UL mission.

## Leading in the Standards Community

We celebrated two influential appointments in October. Mark Ramlochan was appointed Chair of the SCC's Standards Development Organizations Advisory Committee. Sonya Bird was appointed to serve as a director-at-large of the ANSI Board of Directors. Bird's term began January 1, 2024, concurrent with ULSE Senior Advisor Phil Piqueira ending his service as chair of the ANSI Board after three terms in that role.

ULSE Project Engineer Mariah Dixon was selected by the U.S. National Committee to participate in the IEC's Young Professionals program.



## Prioritizing Diversity, Equity, and Inclusion



Our efforts in 2023 to advance diversity, equity, and inclusion continued to build on UL Standards & Engagement's gender action plan and the August 2022 signing of the United Nations' Declaration for Gender Responsible Standards and Standards Development.



Denice Durrant and Wil Fletcher were both honored at the <u>Black Engineer of the Year Awards STEM</u>
<u>Conference</u> with 2023 Modern-Day Technology
Leader awards.



In July, Sonya Bird represented UL Standards & Engagement and presented our gender-responsive standards initiatives at the <u>Congressional Women in STEM Caucus in Washington, D.C.</u> She was joined by other female leaders in STEM, fielding questions and establishing our leadership on inclusive standards.



ULSE celebrated International Women's Day by interviewing female STEM professionals across Latin America, including Standards Specialist Sabrina Khrebtov, inviting them to share their perspective on how we can better recruit and retain women in these fields.



Sonya Bird was featured in the <u>USNC Current</u> promoting the global relevance of standards.



## Conclusion

As we look ahead, 2024 is positioned to be a year of even greater impact for UL Standards & Engagement. With a larger team and enhanced capabilities, we will build on 2023's strong foundation to take our work in standards development, partnership, and advocacy to new heights.



