

Public-Private Partnerships:

The US System of Standards & Conformity Assessment and UL's Role

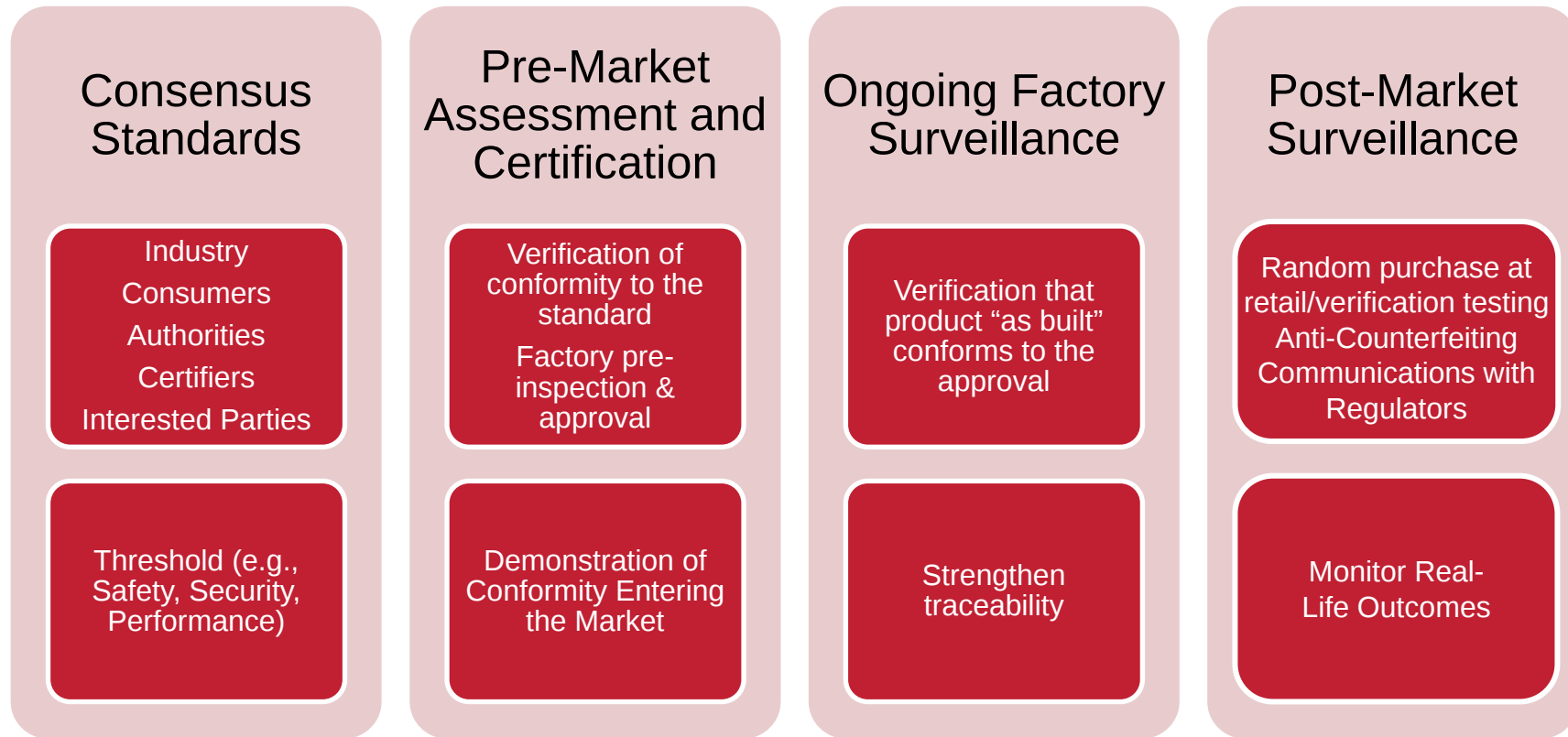


9 July 2021 | Presentation for Committee on Respiratory Protection for the Public and Workers without Respiratory Protection Programs at their Workplace – U.S. National Academies of Science, Engineering, Medicine

Big Picture – Standards & Conformity Assessment



Standards & Conformity Assessment Ecosystem



Recipe for maintaining Integrity & Trust while balancing Safety & Time-to-Market

UL Standards - Development & Harmonization



International public-private
partnership consensus
building platform



Research &
science-based
Standards



Free online
previews of full
UL Standards



Quick response to
market need and short
development time



International harmonization
and collaboration with IEC
and ISO

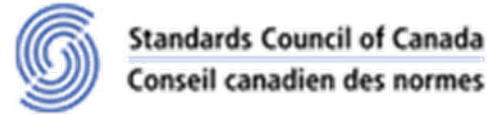


Support national/regional
development & adoption of
UL standards globally



UL Standards – ANSI & SCC Accreditation

UL is accredited as a Standards Developing Organization (SDO) in the US and Canada



- Does not develop standards
- Serves as national coordinating body/accreditor for many US SDOs
- ANSI & UL:
 - UL one of first accredited SDOs (and one of largest SDOs in the US)
 - Audited Designator
- In February 2013, UL was accredited by SCC as an SDO for Canada



From Standards to Conformity Assessment

Standards provide the foundation; conformity assessment provides a demonstration of compliance.

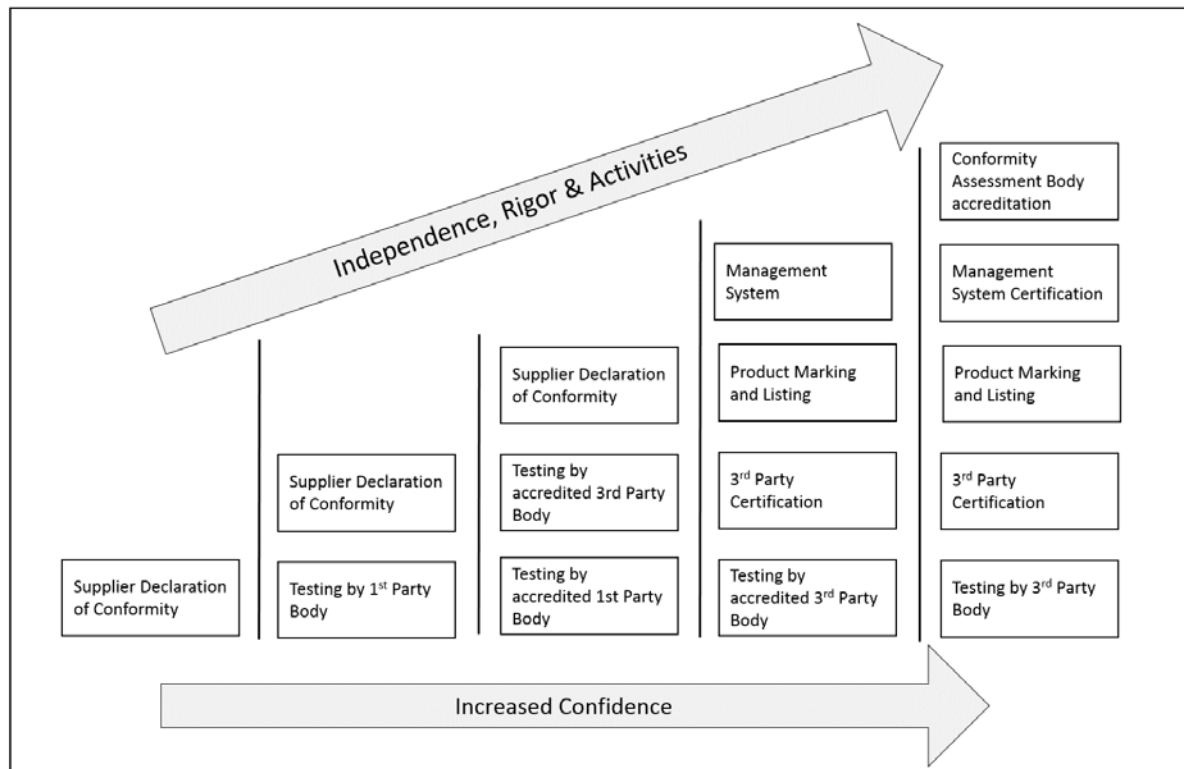


Figure 2 - Conformity assessment flexibility to meet confidence needs

NIST Special Publication 2000-02, Conformity Assessment Considerations for Federal Agencies



UL's Relationship with Government Inspection System(s)



US Federal Regulatory System: Market Acceptance



Several US federal agencies mandate conformity assessment and accredit/recognize private sector providers.

Case Study 1: Occupational Safety and Health Administration (OSHA) NRTL Program

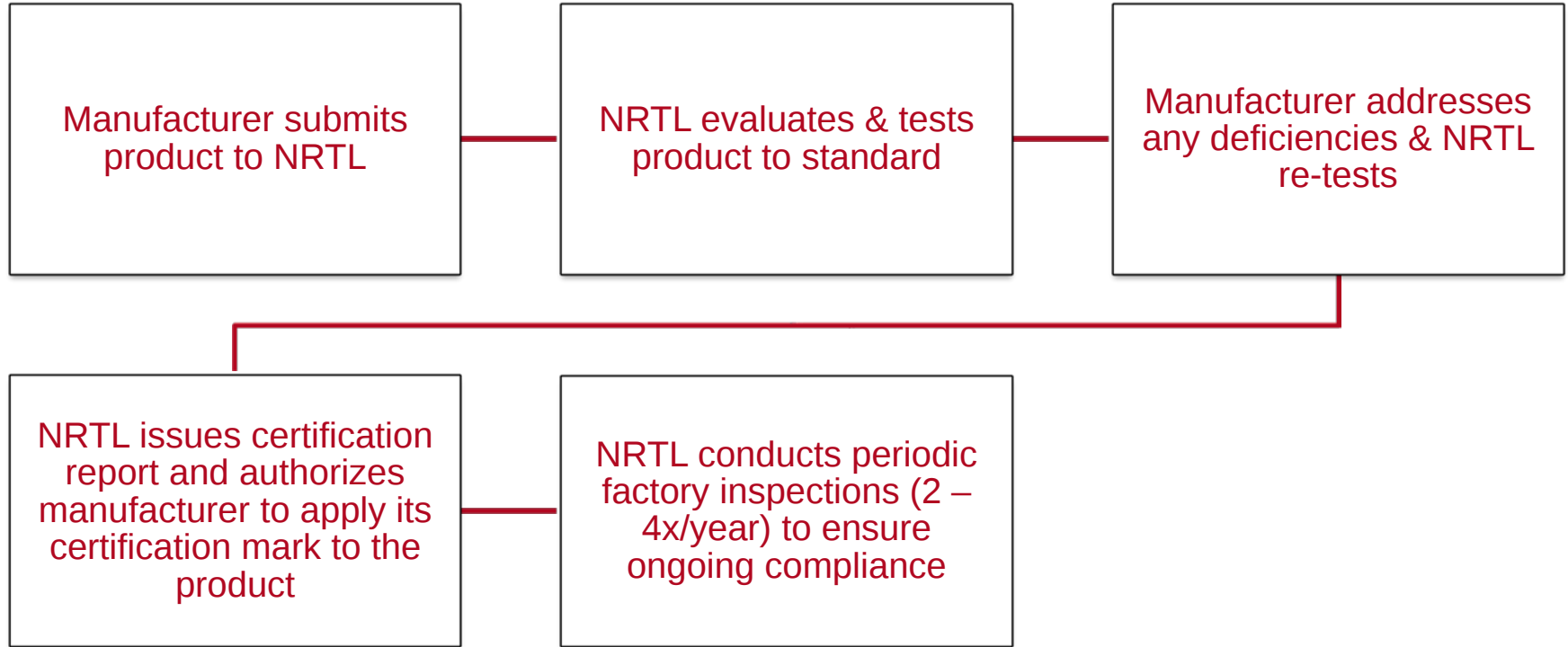


OSHA's Nationally Recognized Testing Laboratory (NRTL) Program recognizes private sector conformity assessment bodies as NRTLs to determine that certain products meet appropriate test standards to provide the assurance that these products are safe for use in the US workplace.

How does OSHA benefit from reliance on private sector NRTLs?

- Recognition process that preserves confidence
- Reduces government costs
- Lessens OSHA's market surveillance burdens
- Positively affects the development of standards
- Promotes international trade

Case Study 1: OSHA NRTL Program



Case Study 2: Consumer Product Safety Commission (CPSC)

CPSC and UL share a commitment to safety.



- Charged with protecting the public from unreasonable risks of injury or death associated with the use of the thousands of types of consumer products under the agency's jurisdiction
- Committed to protecting consumers and families from products that pose a fire, electrical, chemical, or mechanical hazard



THE PRINCIPLES AND VALUES ESTABLISHED BY OUR FOUNDER

DRIVE EVERY DECISION WE MAKE



- To promote safe living and working environments for people by the application of safety science and hazard-based safety engineering
- To support the production and use of products which are physically and environmentally safe and to apply our efforts to prevent or reduce loss of life and property
- To advance safety science through research and investigation
- To concentrate our efforts and resources on public safety in those areas where we can make valuable contributions
- To work with integrity and a focus on quality to enhance the trust conveyed by our certification marks and services
- To charge fair prices that allow us to meet our obligations, sustain our growth, and invest in safety science and education
- To invest in our people and encourage our people to invest in themselves
- To be a good example of corporate citizenship and social responsibility



Case Study 2: CPSC & Working Relationship with UL

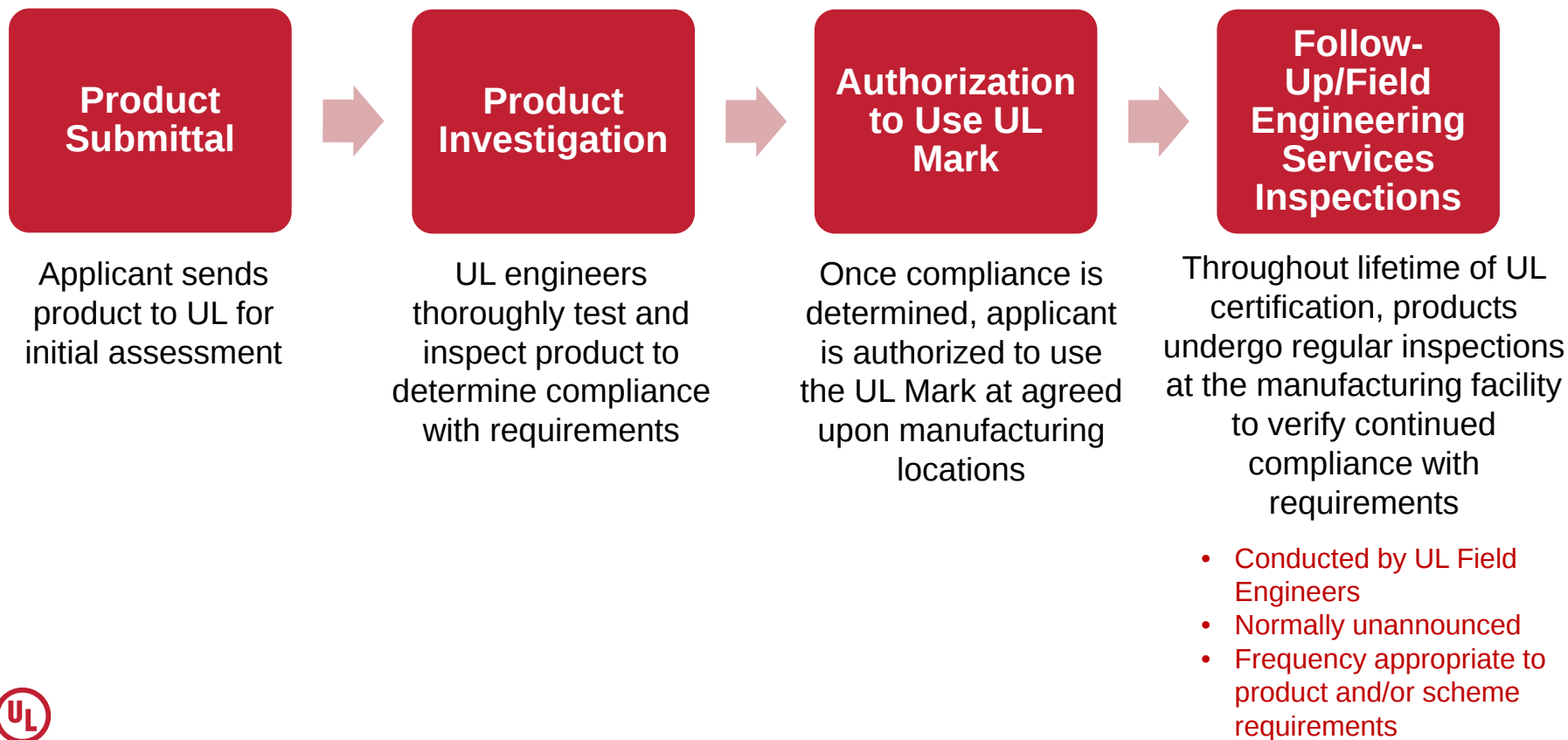
- Reliance on UL standards for electrical and fire safety
 - 15 CPSC personnel participate in 54 UL standards technical panels
 - CPSC also participates in various UL working groups and technical harmonization committees
- Participation in UL's Consumer Advisory Council
- Maintenance of ongoing technical dialogue and consultation on critical safety issues
- Co-delivery of technical and/or standards training to manufacturers, suppliers, and other stakeholders
 - Standards workshop on hoverboard safety– China (Sept. 2016)
 - Battery safety training – China (May 2017)
 - Buyers' training – China (Sept. 2019)



Post Market Management Practices: UL Follow-Up Services & Market Surveillance



UL Certification Process & Follow-Up Services



UL & Market Surveillance



As the owner of UL Certification Marks, UL conducts proactive market surveillance based on trends and compliance data to safeguard our brand and Mark.

- UL Mark Schemes build in post-market surveillance requirements
- UL investigates 3,000 incidents/reports a year and implements appropriate corrective actions
- UL conducts Market Surveys by purchasing products from marketplace and verifying their compliance with safety requirements."
- UL works with law enforcement to identify counterfeit products. These products can then be seized by law enforcement.



Post-Market Management Practices: Takeaways



All conformity assessment methods need to be paired with effective **market surveillance** efforts.



Responsibility for compliant products in the market belongs to **all stakeholders** – manufacturers, third parties, governments, and consumers.



The **method of conformity** utilized must be considered when choosing the market surveillance system:

- Self-declaration approaches place greater burden (i.e., resources, technical expertise) on regulators and manufacturers to surveil the marketplace.
- 3rd party approach incentivizes conformity assessment bodies to surveil the marketplace.

Ganesh Rao

Global Director, Supply Chain Advisory
and Audits

Ganesh.Rao@ul.com

Tel.: +1 847 664 2797

