Security is the new Safety

US-German Standards Panel 2018

Chicago World's Fair in 1893

"Working for a Safer World"

UL Standards Development - Overview

- UL Standards is part of Underwriter's Laboratories Inc., a **not-for-profit** entity with a public safety mission.
- UL has been developing standards for **over 110 years** (since 1903).
- UL has published nearly **1,700** current and active standards and Outlines of Investigation across the UL Family of Companies.

UL Standards Accreditations

ANSI
American National Standards Institute

Standards Council of Canada
Conseil canadien des normes

UL Procedures for accreditation published as *Regulations Governing ANSI/UL STPs*

- *http://ulstandards.ul.com/develop-standards/stps/stp-regulations/*
- Procedures align with WTO/TBT International Standards Principles

World Trade Organization

UL Standards Development Process

- ANSI Essential Requirements
- Consensus Body = Standards Technical Panel (STP)
- Key concepts
  - Balance
  - Openness
  - Transparency
- Collaborative Standards Development System (CSDS)

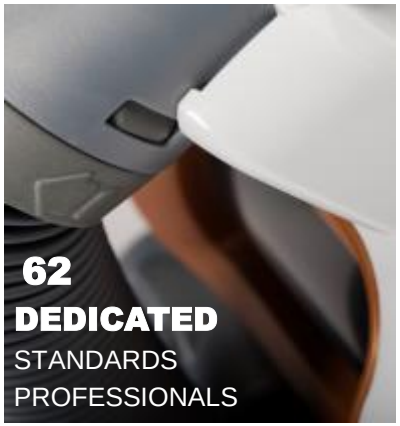
UL Standards: By the Numbers

Nearly 1,700 CURRENT STANDARDS

PUBLISHED BY THE UL FAMILY OF COMPANIES

OVER **4,000 Volunteers**

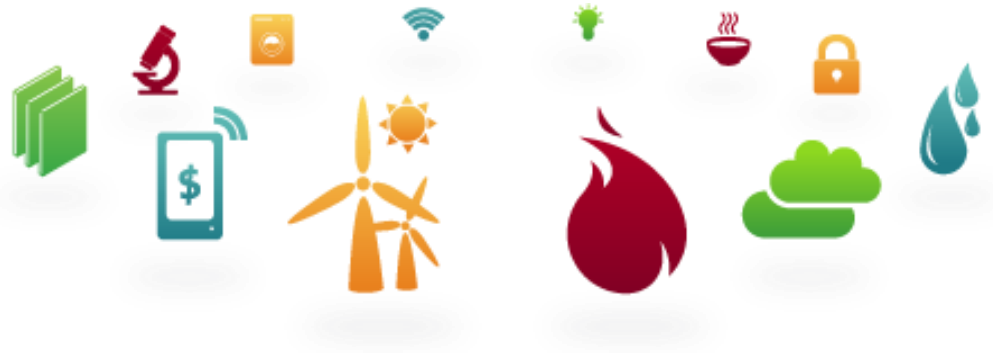
ACTIVELY PARTICIPATING IN STANDARDS DEVELOPMENT



Approximately **50,000 Registered CSDS USERS**

COLLABORATIVE STANDARDS DEVELOPMENT SYSTEM

New Challenges – New Risks – New Sciences



NEW CHALLENGES. NEW RISKS. **NEW SCIENCE.**

Widespread deployment of high-performance data networks initiated 4th Industrial Revolution

IoT is advancing into all areas of life and economy

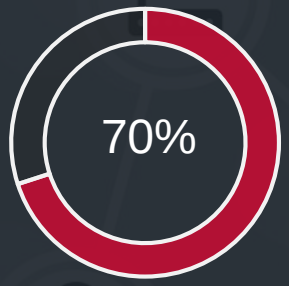
Realtime Communication and permanent exchange of large volumes of data enable new manufacturing and value creation processes

Definition of products and product safety are changing

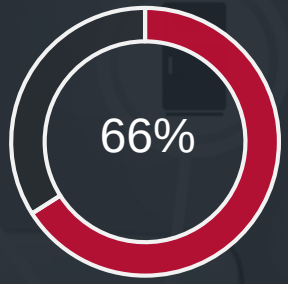
Security of internet-based products over the entire product lifecycle and ecosystem

Functional safety is increasingly contingent on its information security.

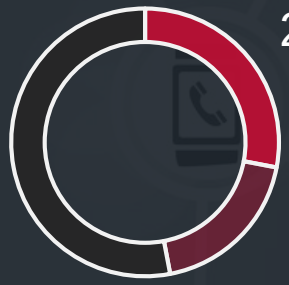
The IoT Cyber Threat



70% of IoT devices are vulnerable to attack *(Source:HP)*

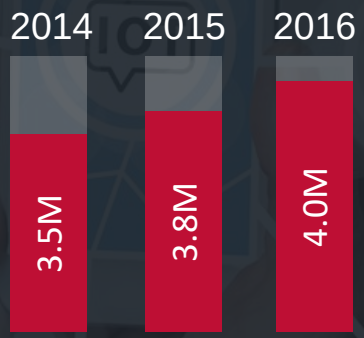


By 2018, 66% of networks will have experienced an IoT security breach *(Source: IDC Research)*



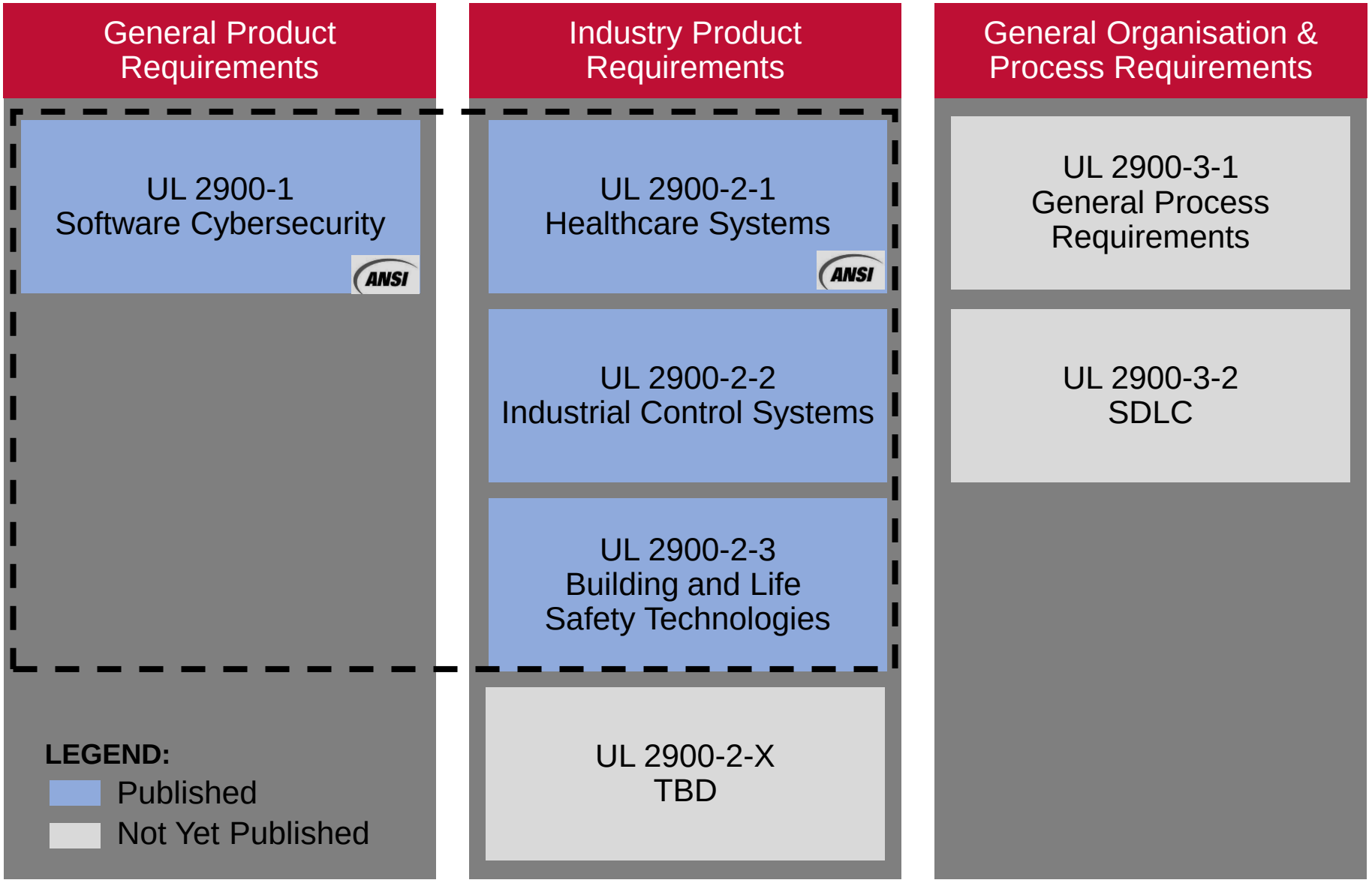
28% to 47%

28% to 47% of organizations have experienced IoT-related breaches *(Source: Forrester/CISCO)*

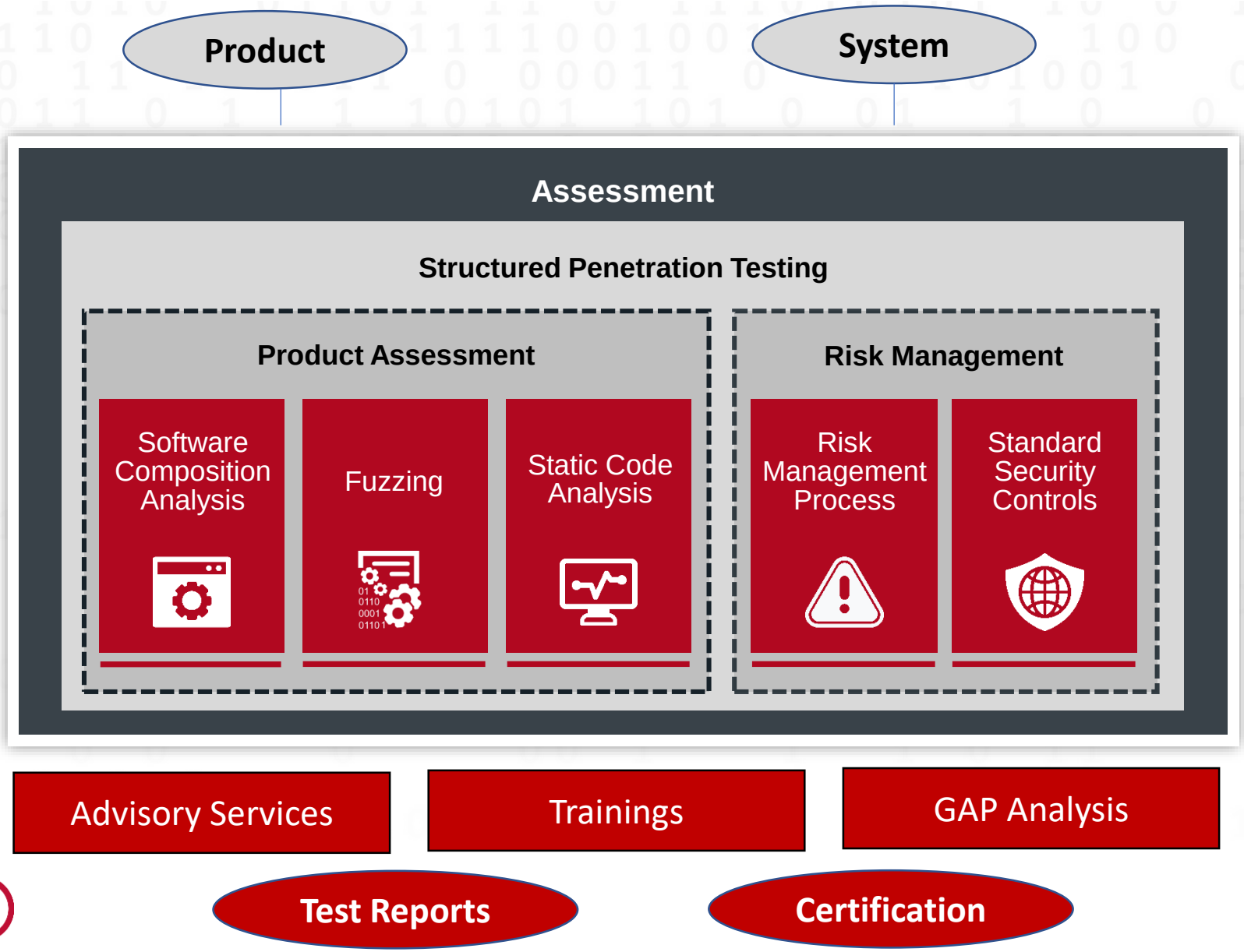


In 2016, the average consolidated total cost of a data breach was $4M USD *(Source: 2016 Ponemon Study)*

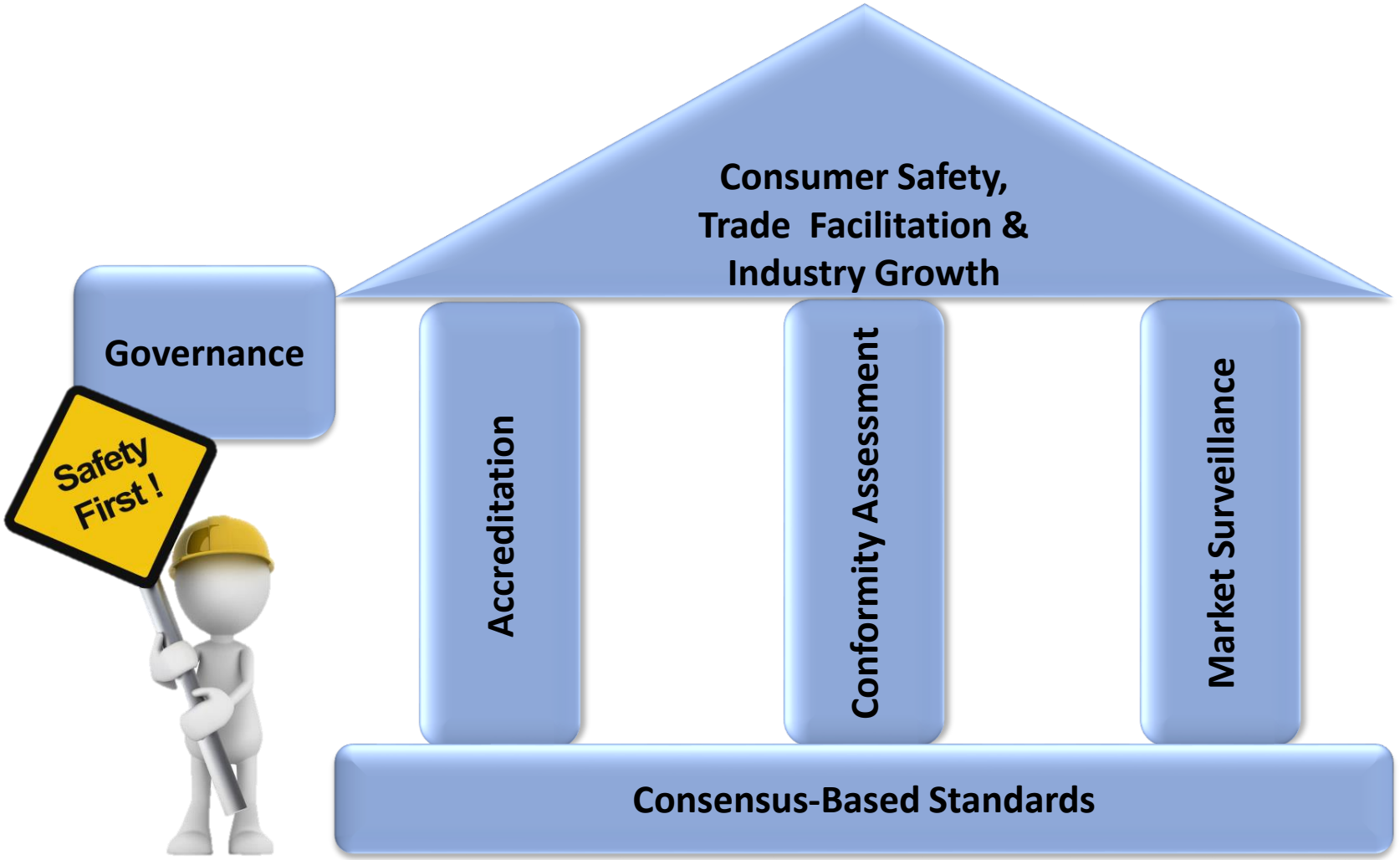
UL 2900 Standards



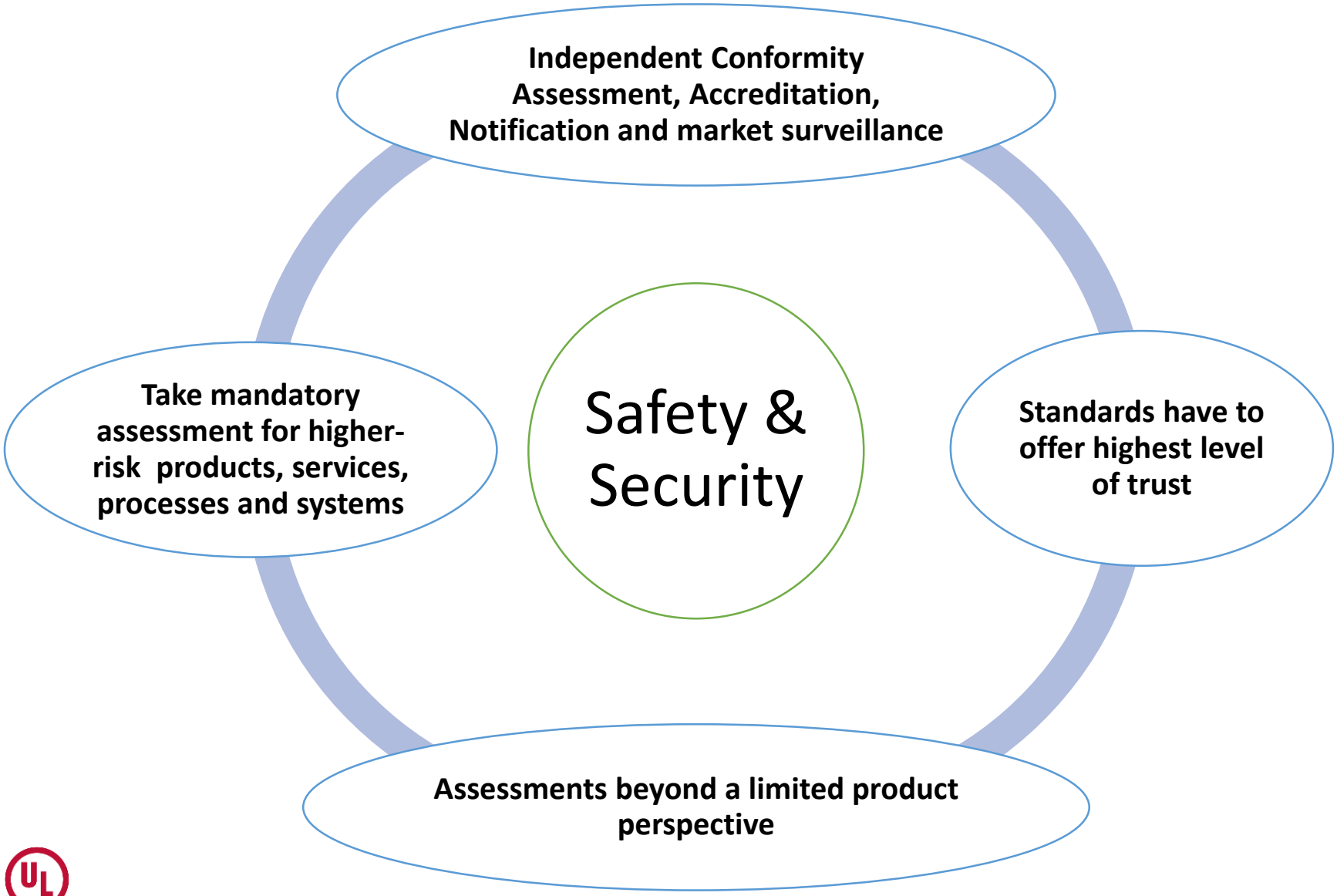
Cybersecurity Assurance Program (CAP)



Building Blocks of a Conformity Assessment System



Areas of consideration for Cybersecurity Conformity Assessment

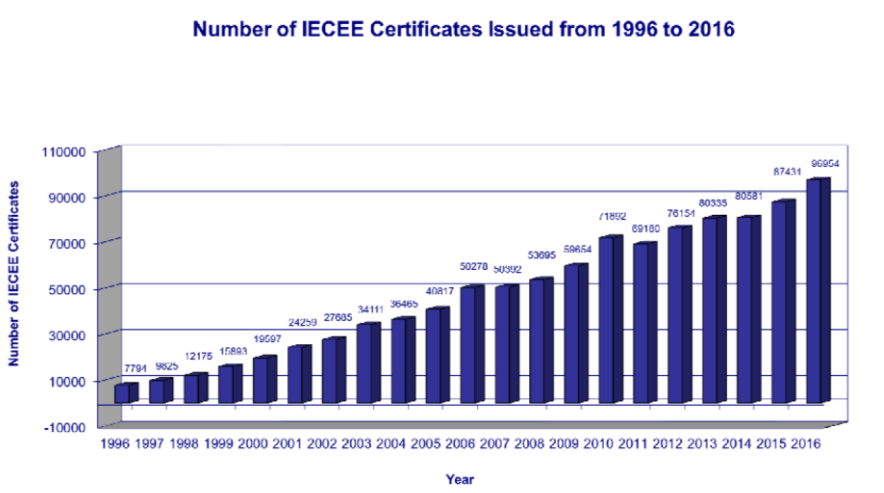


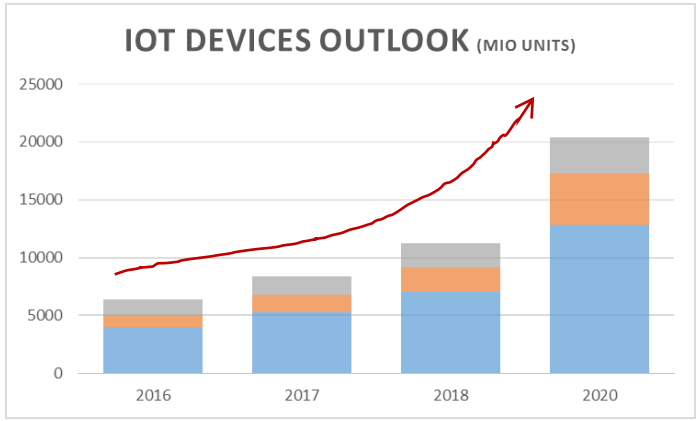
How to cope with the big numbers ?

Example Electrotechnical Equipment & Components

App.. **100.000** / yr.

IECEE scheme – certificates issued





Source: Gartner 1/2017

Machinery Industry,
Electrotechnical Equipment,
IoT, Industry 4.0,
Automotive,
Medical Devices will require

Millions of CAs

Thank you!

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