



Product Safety Engineering Society
Taipei Chapter

Standard Development: UL/CSA 62368-1, 1st Ed.

Presented by: Flore Chiang

Date: August 12, 2011



outline

1. high-level intro to IEC 62368-1
2. status of **IEC** TC108 documents
3. status of **UL/CSA** THC documents
4. **how can you get involved?**

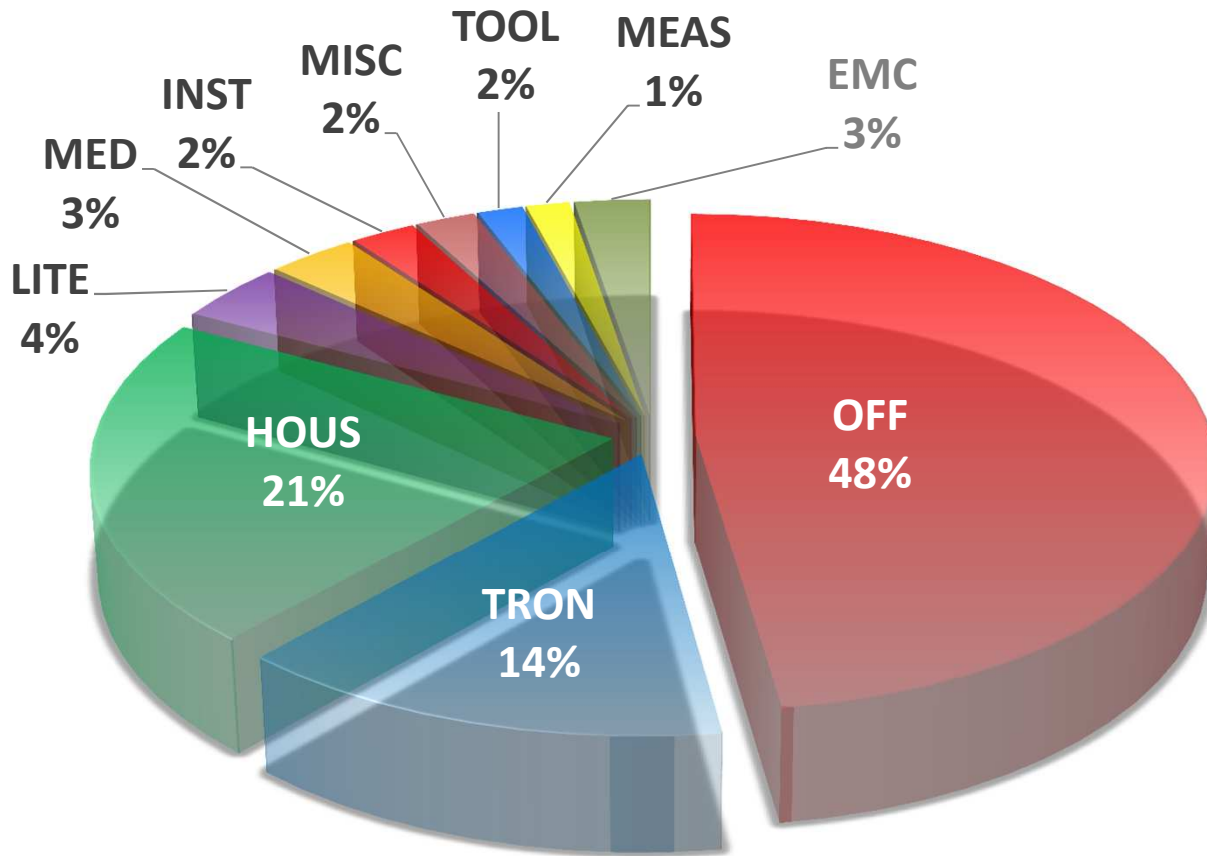


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IEC 60950-1
Incident-based
Product-specific
Construction-based
reactive

IEC 62368-1
Hazard-based
Technology independent
Performance based
proactive

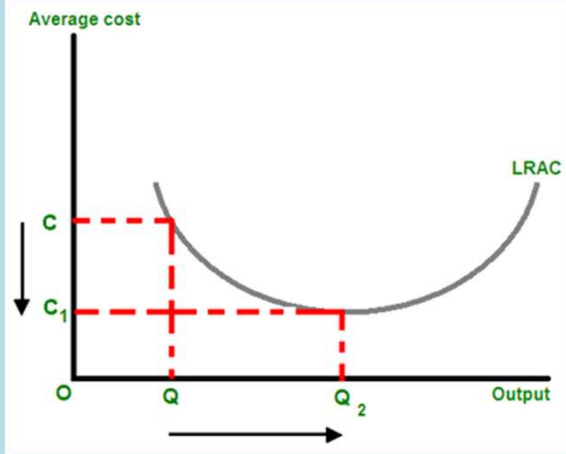


Top 10 Product Categories in 2010

Courtesy of Richard Nute,
Product Safety Consultant



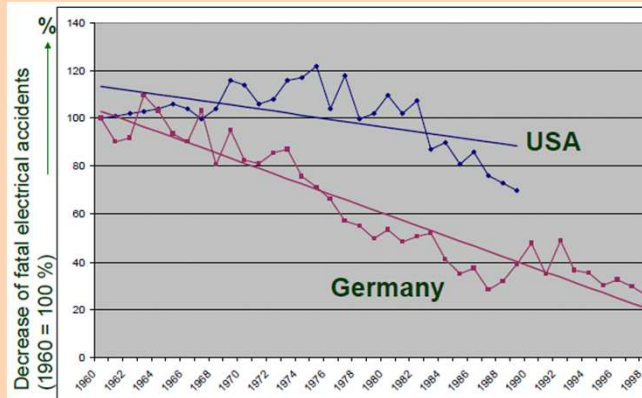
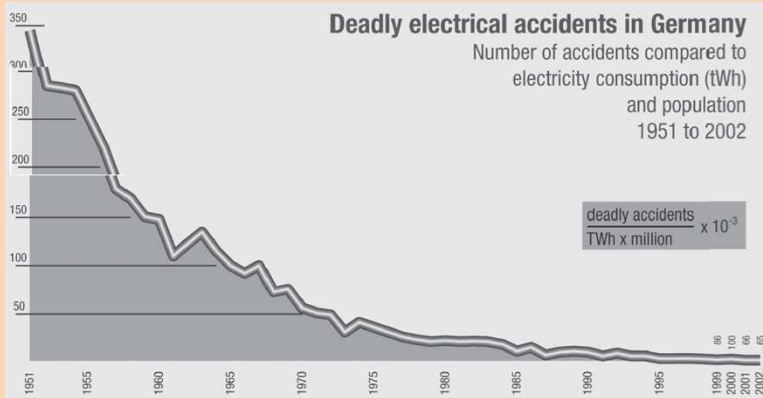
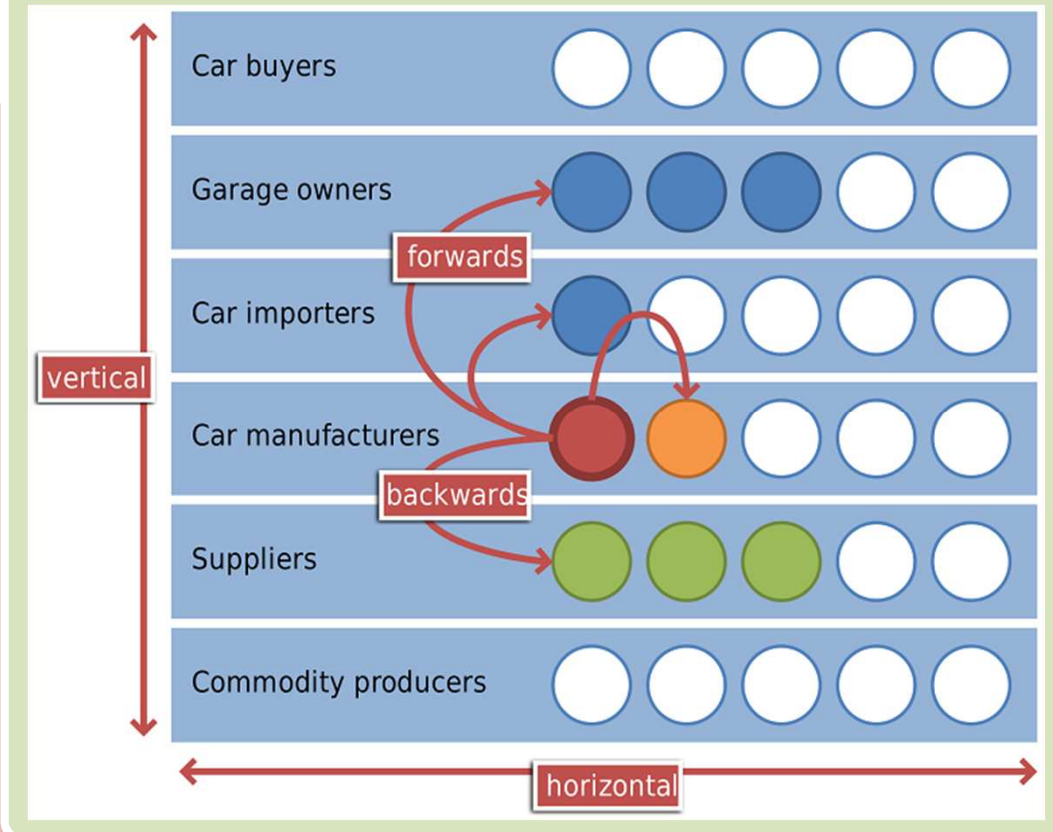
規模經濟 (Economies of Scale)



兩本變一本的好處：

- 分散管理營運的經常費用
- 議價能力
- 降低製造成本
- 降低物流成本
- 交叉銷售

垂直整合 (Vertical Integration)



產品安全標準使得產品更安全！？

IEC 950 的學習曲線

- 950:1991 = 349
- 950:1999 = 491
- 950-1:2001 = 495
- 950-1:2005 = 549

安全標準的演進

1980

描述性的
(Descriptive)
安全原理的闡述

不切實際的設計

1990

試驗性的
(Testing-based)
符合性的測試方法

測了才知道的設計

2000

結構限定的
(Construction-based)
允收結構的陳述

不用設計的設計

2010

安全性能的
(Performance-based)
關注個別安全特性

精準的設計



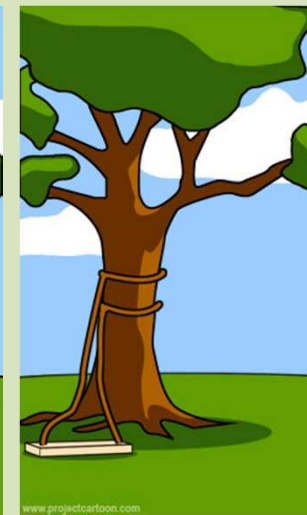
標準原本嘗試
描述的結構



標準最後被
寫成的樣子



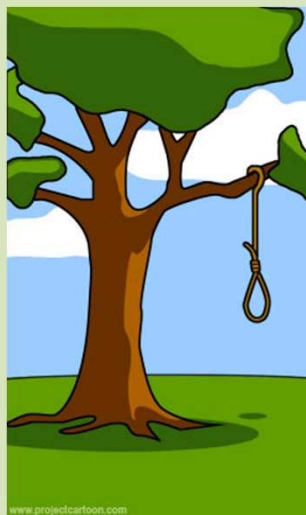
標準是如何
被詮釋解讀的



宣稱根據標準
方法所設計產品



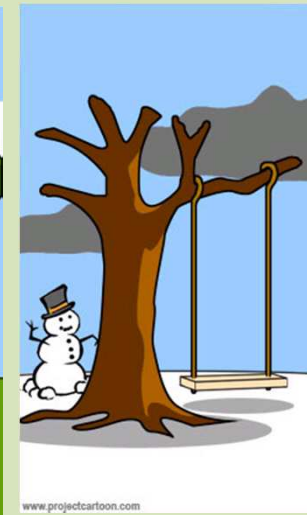
測試報告是
如何描述的



工廠所生產
產品的樣子



顧客心裡真正
所想要的產品



最後產品上市
鋪貨的時間

IEC TC108

Cisco @ Sydney, Australia

- **HBSDT:** 17-20 October
 - 108/455/CD
 - 108/458A/DC (motor tests)
 - 108/459/DC (glass flowchart)
 - 108/460/DC (stability summary)
- **MT1:** 20 October (afternoon)
 - 108/457/CD
- **MT2:** 21 October
 - 108/456/CD

In a good shape for **the first half of 2013**

- Netherlands; South Africa



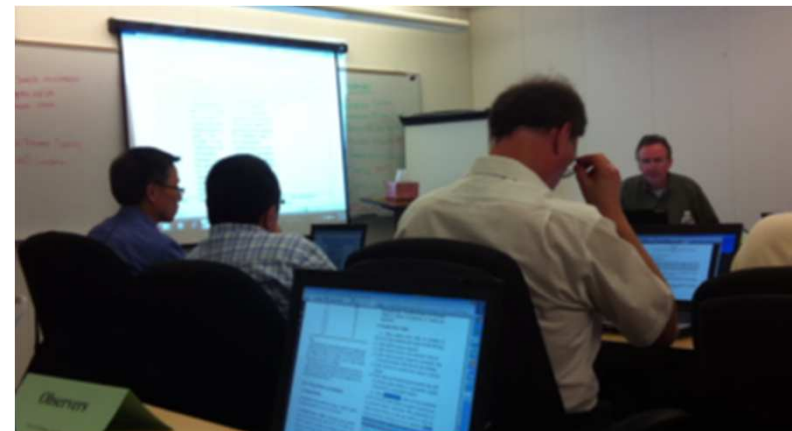
THC & UL/CSA 62368-1

12-13 July in San Jose, CA

- Technical Harmonization Committee comprises UL, CSA and individuals

UL/CSA 62368-1 is:

- a **bi-national** standard
- based on **First Edition** of IEC 62368-1, and supplemented by **national differences**
 - DR, D1 (principles), D2 (practices), DC, DE
 - scope (health care), power line cross, acoustic, electric codes, components, etc.
- anticipated to be published in **the first half of 2012**



what do we do? — **TAIWAN**'s participation

- *Optocoupler*'s temp limits under overload conditions
- IEC TC108 MT2's interpretation on *data ports* (3.5.4)
- IEC TC108 ad hoc on *SPD* (1.5.9; G.10; 108/441/INF)
- IEC TC108 ad hoc on *external circuit transients*
- IEC TC108 WG5 study on *Figure 5* of IEC 60990
- IEC TC108 WG5 study on measurements of *touch current* and *prospective touch voltage*
- IEC TC108's proposal on *high-frequency* requirements
- IEC TC108's proposal to reinstate *one-fault principle*
- IEC TC108's proposal on *rotating media*
- IEC TC108 MT2's proposal on *verification* of solid insulation
- THC *minimum length* of power supply cord



UL CSDS

CSDS = Collaborative Standards Development System

- *open to ANY* directly or materially affected by the STP topic
- one and the only restriction is due to balance constraints
- *one* voting member per organization; no proxy voting

How?

- A subscriber to **ANY** one of UL's *standards* (www.comm-2000.com)
- A member of **ANY** one of UL's **STP** (**S**tandard **T**echnical **P**anels)
- *Purchase access* to an individual CSDS Work Area
- **ANY** one creates a *user account profile* through UL's CSDS
- **ANY UL Certification Customers** (www.ulstandards.com) via their **SCCL** (**S**tandards **C**ertification **C**ustomer **L**ibrary) account



A woman with dark hair, wearing a light blue lab coat over a blue and white striped shirt, is smiling and holding a clipboard with a red pen. She is standing in a warehouse aisle with yellow shelving units filled with cardboard boxes. In the background, two other people in lab coats are working. The text "Welcome to MyHome @UL" is overlaid in the top left, and "Your single digital interface to your UL compliance work" is overlaid in the center.

**Welcome to
MyHome @UL**

**Your single digital interface
to your UL compliance work**

Instructions:

Please use this form to submit a Proposal Request to UL, ULC Standards, or UL Environment for review.

The [Hints on Developing Rationales and Proposals for UL Standards](#) provides helpful information about important elements of a Proposal Request and may facilitate proposal acceptance and processing.

Once a request is submitted to UL, ULC Standards or UL Environment for review, you will not be able to edit the request. In submitting a Proposal Request, you may be required to respond to the comments received when proposed. If comment responses are not drafted within a specified timeframe, the proposal may be considered withdrawn.

Per the agreed upon terms and conditions, the Proposal Request submitter acknowledges that all rights, title, and interests in UL Standards for Safety and UL Environment Standards for Sustainability are the sole and exclusive property of Underwriters Laboratories Inc., and that all rights, title, and interest in ULC Standards are the sole and exclusive property of ULC Standards. The use of copyrighted material from other organizations may require permission from that organization.

Note: All requests "Saved As Draft" will be deleted after 30-days of inactivity.

Note: Fields marked with an * are required for saving as a draft and submitting the Proposal Request.

To view a sample Proposal Request click [here](#).

Proposal Request				<input type="button" value="Save as Draft"/>	<input type="button" value="Submit"/>	<input type="button" value="Cancel"/>
Standard and Requestor Information						
Subject of Proposal *	<input type="text"/>					<i>subject</i>
Requested by	Chiang, Chi Hsiang					
Standard *	<input type="text"/>					<i>standard</i>
Contains Copyrighted Material	<input type="checkbox"/>					
Rationale *						
						<i>rationale</i>
Proposal Text *						
Show proposed additions to existing requirements with <u>underlined</u> text and proposed deletions with lined-out text.						
						<i>proposed texts</i>
Impact						
<input type="text"/>						<i>estimated impact</i>
Supporting Documentation						
Document Name	Document Description	Size (KB)	<input type="button" value="Add File"/>			
There are no files attached.						
				<input type="button" value="Save as Draft"/>	<input type="button" value="Submit"/>	<input type="button" value="Cancel"/>



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謝謝大家的時間！

