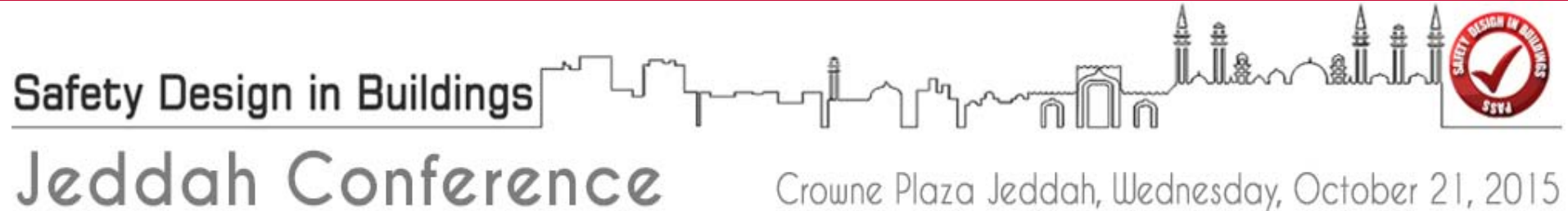


# Importance of Conformity and Certification in Life Safety



Jeddah, KSA  
October 21, 2015

Jonathan J. Gonzalez



Jeddah Conference

Crowne Plaza Jeddah, Wednesday, October 21, 2015

# Course Description

**Introduction to life safety for building materials and systems. The presentation will focus on understanding the stake holders in the built-environment, importance of conformity, certification regional best practices, learning lessons and life safety.**

# Presenter

**Jonathan J. Gonzalez**

*Project Engineer, UL -- Underwriters Laboratories Middle East*

**My Experience started as a Product Safety Engineer in Fire Protection for Building Materials and Systems at Underwriters Laboratories' Global Headquarters in Northbrook Chicago, USA and have been in the life safety industry since. I have has been involved in numerous certifications projects, while working with international, building and certification standards. I hold a Bachelors in Construction Engineering from North Dakota State University and have recently moved to the Middle East region to UL's regional headquarters in Dubai.**

# Learning Objectives

**1. Importance of Certification**

**2. Standards and Codes**

**3. Stake Holders in the Built Environment**

**4. Learning Lessons**

The purpose of this presentation is to convey technical knowledge to the conference participants.

The presentation also contains slides with text that summarises the content of the presentation and the main learning objectives.

These may be used to update CPD records for relevant organisations including the Chartered Institute of Building (CIOB).

# **IMPORTANCE OF CERTIFICATION**

# Understanding Certification

**Certification is the practice in which consumer product(s) undergo performance/quality testing to meet or exceed safety qualifications as specified by regulations, government and building codes officials, standard committees etc.**



# Third Party Certification

- **Third Party certification is required by the regulating bodies**
- **Provides Testing and Certification**
- **Allows use of trademark to indicate product compliance**
- **Requires factory visits and ongoing QA/QC program**
- **Label and trademarks used by building regulators to determine code compliance**



# Certification Scheme – Product Safety

Product Evaluation

Product Testing (fire, electrical, performance etc.)

Reporting and Certification

Marking/Identifier

Follow-Up/Inspection (QA/QC)





# Certification Marking



# Importance of Certification

The importance of certification and conformity



Increases Safety

Improves QA/QC

Monitors and Controls



# **CODES AND STANDARDS**

# Product Requirements

## Codes

- Minimum construction requirements
- Indicates where and when to install product

## Standards

- How to evaluate/test product
- Indicates non-compliance



# U.S. Codes - Development Organizations

**International Code Council (ICC)**

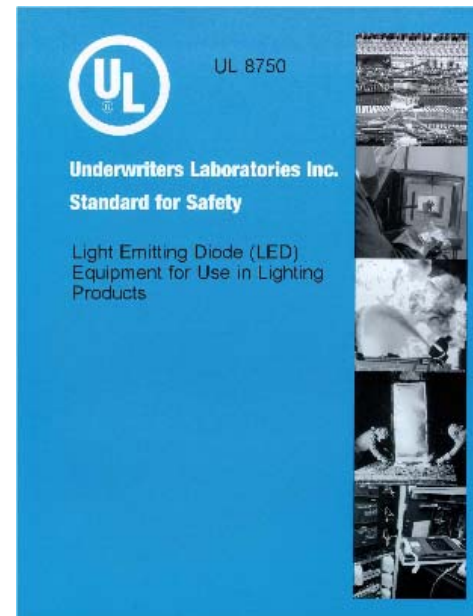
**International Association of Plumbing and Mechanical Officials  
(IAPMO)**

**National Fire Protection Association (NFPA)**



# Standards

- **Contain requirements for safety and performance**
- **Reflect the input of interested parties**
  - officials, manufacturers, end users
- **Accreditation (ANSI)**
  - Accredits standards developers
  - Ensures accurate standards
- **Code References**



# Standards' Writers

American National Standards Institute (ANSI)



American Society for Testing and Materials (ASTM)



Canadian Standards Association (CSA)



National Sanitation Foundation (NSF)

American Society of Mechanical Engineers (ASME)



American Water Works Association (AWWA)

International Association of Plumbing and Mechanical Officials (IAPMO)



National Fire Protection Association (NFPA)

Underwriters Laboratories Inc. (UL)



# SASO Standards Approval



الهيئة السعودية للمواصفات والمقاييس والجودة  
Saudi Standards, Metrology and Quality Org.





# **STAKE HOLDERS IN THE BUILT-ENVIRONMENT**

# Stake Holders For Built Environment

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**Designer**

**Manufacturer**

**Installer**

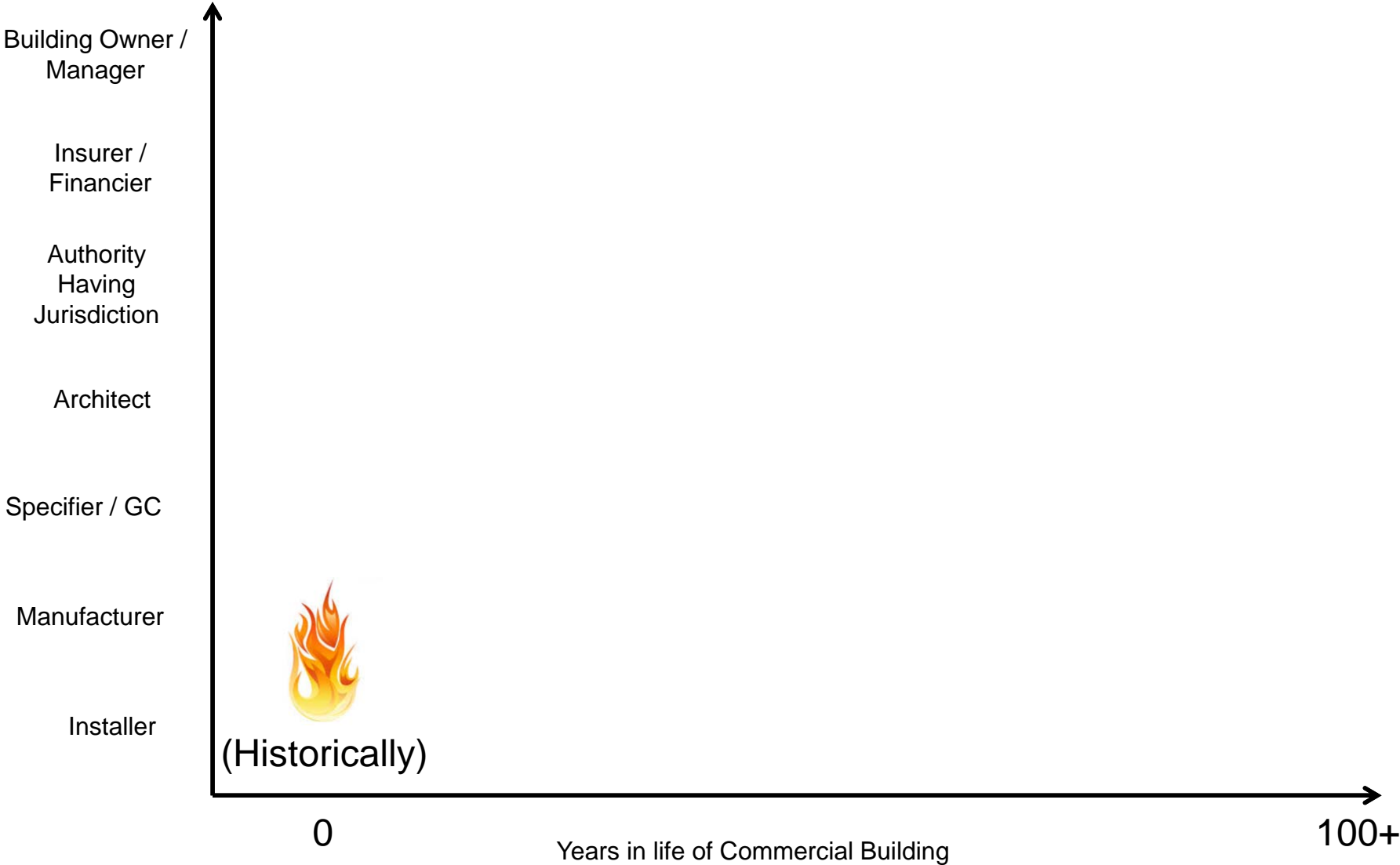
**AHJs  
(QCD/FPD)  
& insurance**

**User**

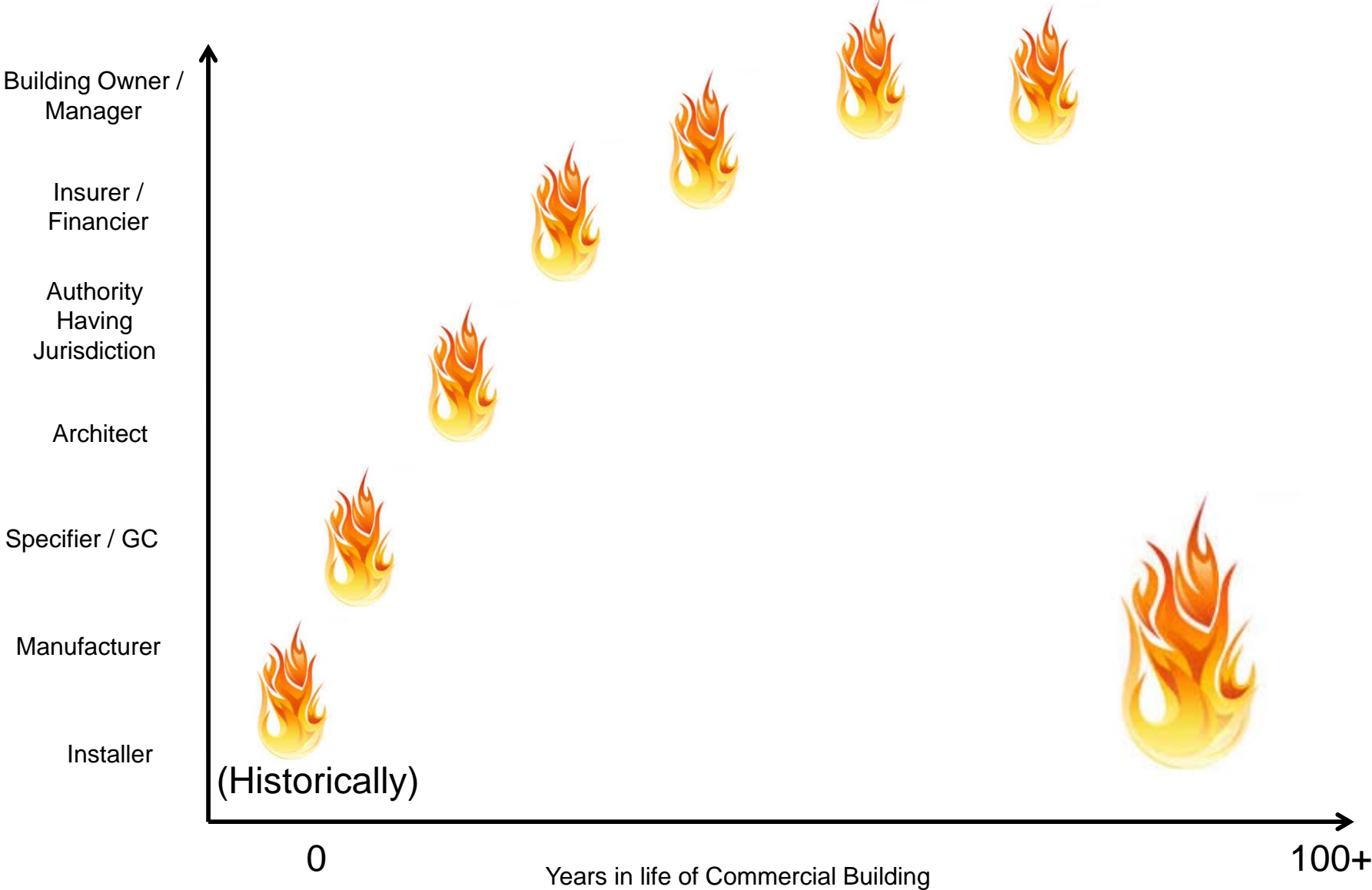
**Maintenance/  
Facilities**

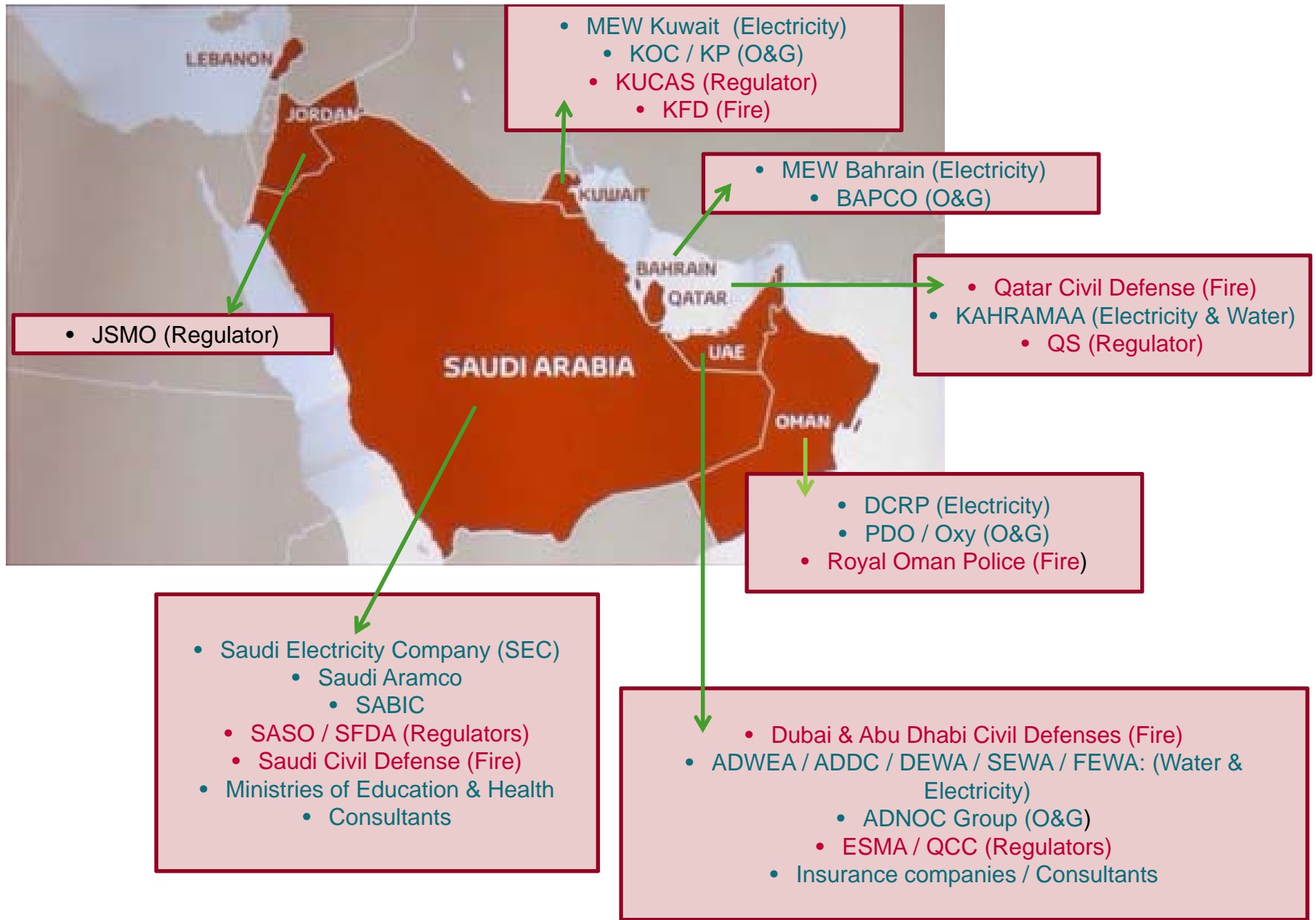


# What does this mean for Building Safety & Security?



# What does this mean for Building Safety & Security?





## Key Approvals from **Regulators** & **Authorities (AHJ's)**

# LEARNING LESSONS

# Anti-Counterfeiting Operations



*“ To protect the safety of consumers around the world from the potential hazards associated with goods bearing counterfeit UL Marks ”*



# Label Counterfeiting

Certification Mark

Holographic Label



Label Number

Serial Number





# Preventing Counterfeiting



- Identify key marking identifiers (serial number, file number, company name)
- Manufacturer to provide test report
- Manufacturer to provide Certification Certificates
- Research product online
- Report counterfeiting to 3<sup>rd</sup> Party Certification Organizations



# SASO Pre-Dispatch Inspections



الهيئة السعودية للمواصفات والمقاييس والجودة  
Saudi Standards, Metrology and Quality Org.



## 4<sup>th</sup> Annual EIPA (Emirates Intellectual property Association) Interpol conference – Anti-Counterfeiting



# UL's Market Surveillance - US



## **The Market Surveillance Mission Statement:**

*To investigate product incident reports and perform market sampling of products to protect the integrity of UL's Certification Marks.*



# Online Fire Service Training – Worldwide Partners

[www.ULfirefightersafety.com](http://www.ULfirefightersafety.com)



Lightweight Collapse



Horizontal Ventilation



Basement Fires



PV Firefighter Safety



Vertical Ventilation & Suppression



Effective Tactics with FDNY and NIST



# Fire Service Worldwide: Get Involved



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(6,000+ hits per month)

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facebook/ulfirefightersafety

youTube/ulfirefightersafety



Modernfirebehavior.com  
(30,000 hits per month)



(1.2M Impressions)



(5.4M Impressions)



(264,000+ view 1.1M min. watched)



**Jonathan J. Gonzalez** | Project Engineer | UL  
T: +971 52 9535931 | [jonathan.gonzalez@ul.com](mailto:jonathan.gonzalez@ul.com)

[gar.y.knef@ul.com](mailto:gar.y.knef@ul.com)

Or visit [www.ul.com](http://www.ul.com)



**THANK YOU!**