

# Bluetooth<sup>®</sup> Seminar Series

Tools, Techniques, and Trends

## **Qualification to Product Launch**

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# Agenda Qualification Or Certification

## Certification

# Interoperability

## **Qualification Vs Certification**

Qualification

Market Driven schemes to use appropriate logo Interoperability and performance, as in Bluetooth, Wi-Fi, PTCRB, GCF

### **Regulatory Certification**

Compliance with RF / SAR / EMC / Safety Standards Mandatory to enable product sale. Government agency dictates requirements. Used to achieve Global Market Access

Gaining one approval is not synonymous with getting the other....



### **Qualification Testing**



### What is Global Market Access?

- Global Market Access (GMA) is meeting product compliance requirements of target markets into which you wish to enter.
- How Your Testing Labs and GMA Experts can help you approach the market access:



### **Global Market Access**

Integrated solutions for safety, EMC, wireless and energy efficiency compliance



### **Regulatory Overview**

- Most countries have a level of regulatory requirements
  - o Drivers:
    - Consumer demands or consumer protection
    - Economic status of the country
    - Trade barriers
  - o Wide range of Requirements:
    - No requirements
    - Extremely rigid products testing and certification regulations
- Regulatory requirements must be met to enable the placement of products on the country market

Knowledge is key – not knowing regulations will not equal forgiveness

### Work with Your Test Lab and GMA teams

- Determine if any certifications are mandatory:
  - o Is safety certification mandatory?
  - o Is EMC/wireless certification mandatory?
    - Can we leverage module approval or is system level approval required?
    - Can we leverage existing testing?
    - What is the environment the product will be used in and is an approval mandatory in this situation?
  - Are environmental regulations mandatory?
    - Energy efficiency
    - Restricted substances
    - Electronic take-back programs







- Have a clear plan on when and where you are going to market the product!
- Define the Order of approval requirements.
- Think about the wider approvals requirements and possible acceptance of existing approvals documentation.



## What is interoperability testing?

Let's start with a definition...

*IOP can be defined as:* 

The ability of products, developed in isolation, to reliably connect and communicate with one another without specialized intervention.

## **Internet of Things – Interoperability**

#### The mobile phone is the gateway to the Connectivity

- Connection technologies ٠
- More complex networks •
- Increased expectations ٠
- Higher consequences ٠
- Ever changing landscape •

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💋 zigbee	
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NB-loT

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Why bother with interoperability? •Early problem detection •Less Call Centers traffic •Reduce customer returns •Brand Protection •Improves customer satisfaction •Increase profitability!



# Thank you!

**Questions?** 

### **Contact Information**

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