ISA100 Wireless Compliance Institute
ISA EXPO 2008

Assured Interoperability
Topics

• Overview
• Benefits
• Testing and Certification
• Roadmap
• How to Get Involved
Topics

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- How to Get Involved
Open Technology Processes

- **Standards**
  - What to do
  - Slow to Change

- **Specifications**
  - How to do it
  - Continuous Change

- **Compliance**
  - Assurance with Tools and Services
  - Continuous Improvement
ISA
(Shareholder of ASCI)

Automation Standards Compliance Institute (ASCI)
(Non-profit company owned by ISA)

ISA100 Wireless Compliance Institute (WCI)
(Interest group within ASCI with its own rules and governing board)

The WCI is Operated as an ASCI Interest Group to Lead the Wireless Compliance Initiatives
ISA100 Wireless Compliance Institute

Mission

Decrease the time, costs, and risks of developing and deploying standards-based industrial wireless devices and systems.

Provides...

- Interoperability
- Compliance
- Tools
- Technical Support
- Education
- Market Awareness

... For the ISA100 Family of Industrial Wireless Standards
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Benefits to Users

Reduced costs, time, and risk in the selection and deployment of wireless products and systems.

– Predictable interoperable performance ‘out of the box’
– Instant recognition of a product’s wireless communication
– Single forum for voicing product needs
– Technical support for deployment and configuration
– Application profile development to meet your wireless needs
– Time and cost savings for validation and verification
Benefits to Suppliers

A single product compliance framework for faster time to market and lower development costs

– Obtain interoperability with ISA100 products and systems
– Get technical support for development and deployment of products
– Substantiate clear claims of compliance to the ISA100 Standard
– Define application profiles for increased marketability of products
– Participate in shared vision for wireless communication for execution
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Scope of Testing

- Devices
  - Non-routing
  - Routing
- Backbone Routers
- Gateways
- System Managers
- Security Managers
Test Specification Development and Execution

ISA100 Wireless Standards Committee

Feedback on Gaps and Clarifications from Test Development and Execution

ISA 100 Wireless Standards

ISA100 Wireless Compliance Institute

Feedback to ISA100 Wireless Compliance Institute

ISA100 Wireless Test Specifications and Profiles

Test Execution

ISA 100 Wireless Compliant Products

Supplier Enhances Products/Systems

Feedback to Supplier

Pass

Fail

ISA100 Wireless Compliant Products

Supplier Enhances Products/Systems

Feedback to Supplier
WCI Test Kit

2 Types of Tests*

- **Stack** - Rigorous test of the ISA100.11a stack against numerous test points
- **Device** - Less rigorous test of a certified stack in a device to ensure interoperability

* Uses profiles coordinated with the ISA100.11a standard and Working Group
Certification does the following…

- **Assures interoperability** based on a test specification derived from ISA100 wireless communication standards
- **Provides instant recognition** of wireless communication characteristics
- Promotes a **key differentiator** for product or system
- **Allows equal and fair testing** for all products to gain compliance
- **Enables registration** for an easy access listing of conformant products on the web
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## Program Timeline

### ISA100 Standards Development

<table>
<thead>
<tr>
<th>Year</th>
<th>Quarter</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Q1</td>
<td>Institute Development Executive Director Assigned</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Draft ISA100.11a Standard Issued for Review</td>
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<tr>
<td></td>
<td>Q2</td>
<td>Test Points Documented Alpha Testing Technical Director Retained Test Kit Dev. Outreach Liaisons Established</td>
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<tr>
<td></td>
<td></td>
<td>ISA100.11a Standard Issued for ISA100 Ballot and ANSI Review</td>
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<tr>
<td></td>
<td>Q3</td>
<td>Test Points Completed Alpha Testing Test Kit Dev. Application Profile Development</td>
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<tr>
<td></td>
<td>Q4</td>
<td>ISAEXPO Demo 1st Product Development Course at ISA Expo Houston Test Script Development Test Kit at ISA Expo Houston Application Profile Development</td>
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<tr>
<td></td>
<td>Q1 2009</td>
<td>Beta Testing Test Kit Available Application Profile Development</td>
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<tr>
<td></td>
<td>Q2 2009</td>
<td>ISA100 Compliant Certifications Available Development for Other ISA100 Standards</td>
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</tbody>
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### ISA100 Wireless Compliance Institute

- Draft ISA100.11a Standard Issued for Review
- Test Points Documented Alpha Testing Technical Director Retained Test Kit Dev. Outreach Liaisons Established
- ISA100.11a (Release 1) Standard Published
- Work Continues on Other ISA100 Standards
- Beta Testing Test Kit Available Application Profile Development
- ISA100 Compliant Certifications Available Development for Other ISA100 Standards
Progress

- Test Points Completed
- Technical Director Retained
- Device Test Kit Development Underway
- Alpha Test Bed Established (Demo at ISAEXPO)
  - 15+ Vendors Participating, 2 Radio Platforms, 2 stacks
- Application Profile Dev. Underway
- Current Sponsors
  - Apprion
  - BP
  - Chevron
  - Fuji Electric
  - Honeywell
  - Invensys
  - NIVIS
  - Procter & Gamble
  - Shell
  - Shenyang Institute of Automation
  - Yokogawa
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Membership Categories

Two Categories

Supplier Member:
A Supplier Member is an organization that manufactures products, systems, or components used in industrial wireless offerings

Non-Supplier Member:
A Non-Supplier Member is an organization that doesn’t manufacture products, systems, or components used in industrial wireless offerings
Join Now!

Benefits for Early Supporters

- Understand and **shape the compliance program**
  - For vendors - no false starts
  - For users - ensure your needs are included ‘out of the box’
- Contribute to and **understand the testing details**
- Collaborate with end users & suppliers to **gain valuable insights**
- Become part of the ISA100 **beta tests**

How to Join

Complete a membership application form available on the ISA100 Wireless Compliance Institute website. [http://www.isa.org/ISA100Compliant](http://www.isa.org/ISA100Compliant)

Or

Contact Andre Ristaino, ASCI Managing Director
Phone: 919-990-9222
Email: aristaino@isa.org
WCI Summary

- **Assures Interoperability** for the ISA100 Standards
- **Joint Effort** Among Users, Vendors, and ISA
- Offers **Technical Support** for ISA100 Technologies
- Provides **Official Registration and Recognition** for ISA100 Compliant Devices
- **Application Profile Development**
- ISA100.11a Standard **Compliance Begins in Q2 09**

*Come See the Live Demonstration of ISA100.11a Standard Prototype Technologies*

*Booth #1100*
Questions?