

Mitre Netted Sensor Poster Session ISA SP-100 Wireless Standard Washington D.C.

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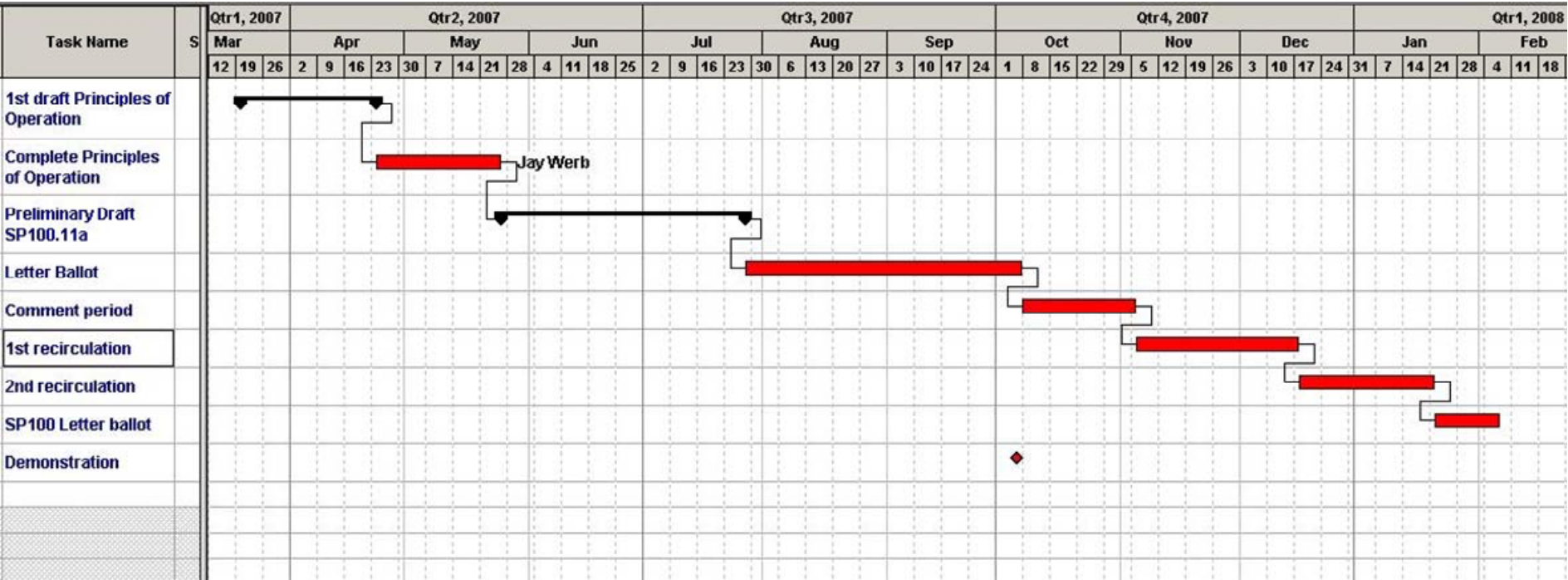
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- An international nonprofit member association of 30,000+ automation professionals engaged in the design, development, production, and application of devices and systems that sense, measure, and control industrial processes and manufacturing operations.
- Provides professional education and training, certification, conferences and exhibits, and book and journal publications.
- Accredited by the American National Standards Institute (ANSI) to develop industry standards in key areas including process safety, control system cyber security, enterprise-control system integration, engineering documentation, and wireless systems for automation (ISA-SP100).
- Headquarters: Research Triangle Park, NC. Visit www.isa.org.

ISA SP100.11a Versus Proprietary Wireless

- Interoperability
- Open
- Developed in an ANSI-accredited open process by Industry leaders
- Maintained by ISA
- Multiple Silicon Suppliers, Multiple Software Providers
- Technical growth path with ever-reducing costs and increasing capabilities

Release 1 Schedule



ISA SP100.11a Release 1 Will.....



- **Be an open standard for anyone to implement and deploy**
- **Be simple to use and deploy for end users**
- **Be focused on:**
 - **serving process industry applications without excluding factory automation**
 - **in-plant/near-plant**
 - **global deployment**
- **Provide technology to address Class 1 (non-critical) to Class 5 applications such as monitoring**
- **Assure multi-vendor device interoperability**
- **Have a draft standard ready for work group balloting by October, 2007**
- **Include only 2.4 GHz IEEE 802.15.4-2006 radios**
- **Adhere to a comprehensive coexistence strategy**
- **Use channel hopping to support co-existence and increase reliability**
- **Use a single application layer providing both native and tunneling protocol capability for broad usability**
- **Provide simple, flexible, and scalable security addressing major industrial threats leveraging IEEE 802.15.4-2006 security**
- **Offer field device meshing and star capability**

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ISA SP100.11a system architecture will:



- **Include provisions to accommodate alternate Phys in future releases**
- **Support factory automation applications**
- **Support low latency applications**
- **Not preclude low cost implementations over the life cycle of the intended deployments**

We Value Your Input



- Questions on ISA-SP100?
- Ideas / Suggestions?
- To get involved, contact:
 - Charley Robinson, ISA Standards, crobinson@isa.org

SP-100 Working Groups



- PHY/MAC – radio and low level software
- Network - routing
- Transport - connection and connectionless
- App-Gateway - wireless Gateway for legacy systems
- Security - wireless security
- Network Management - wireless net management
- Coexistence – mitigating any interference with other radios