

ISA Meeting Minutes

Meeting: **SP100**
 Chairman/Facilitator: Wayne Manges
 Recorder: Lois Ferson
 Attendees: H. Paul Andrews, Roger Barnes, *Jim Becker, Mikell Becker, Paul Berenberg, Joerg Bertholdt, *Rahul Bhojani, Rene Bishof, J. R. Bibb, Malcolm Borgendale, David Brandt, **Mike Buhr, *Richard Caro, Clinton Carter, *Alex Cervinka, Em Delahostria, *Kouji Demachi, Terry Dillahunty, Mike Dow, Jim Eldridge, *Rick Enns, Lois Ferson, *Peter Fuhr, Michael Gawronski, *Robert Gooch, **Jose Gutierrez, Bob Heile, Mike Horton, Art Howarth, **Toshi Hasegawa, Chris Herzog, *Jim Jamison, Carl Johnson, *Hesh Kagan, **David Kaufmann, *Pat Kinney, *Terry Krouth, *Greg LaFramboise, John-Paul Laglenne, John Lampe, Tomas Lennvall, J. D. Lobo, Ron Lowman, Ryan Maley, *Wayne Manges, Graham Martin, Ryan Maley, **Ian McPherson, *Michael Mets, Robert Morris, Gerry Nadler, Jay Nemeth-Johannes, Klaus Nielsen, Raju Pandey, Raymond Parks, **Larry Pereira, *Tom Phinney, Joe Polastre, David Potter, Israel Radomsky, Charley Robinson, *Nick Sands, Stan Scown, Paul Sereiko, *Ake Severinson, *Dan Sexton, James Shaw, **Robert Shear, Davis Shull, *Herman Storey, Rene Struik, Kevin Sullivan, *Werner Thoren, Kevin Towers, Robert Treadway, Martin Turon, Nick Vassilakis, *Romeo Velarde, Steven Walker, Jay Werb, Tim Whittaker, Ludwig Winkel, Darrold Wobschall, Linda Wolffe, Shuji Yamamoto, and Martin Zielinski.
 *voting member; **alternate voting member

Date/Time: Wednesday 18 October 2006 -- Friday 20 October 2006.
 Location: Reliant Center, Houston, TX
 Distribution: SP100 Members, Guests, Staff

<i>Item #</i>	<i>Description</i>
1	Call to Order Wayne Manges called the meeting to order at 1:00 pm.
2	Review & Approval of Agenda <i>Moved by Kinney, seconded by Storey, and approved that the agenda of the 18-20 October 2006 Meeting of SP100 and its Working Groups be approved. .Motion approved.</i>
3	Approval of Minutes <i>Moved by Phinney, seconded by LaFramboise, that the June 2006 meeting minutes be approved. Motion approved.</i>

4

Approval of Membership Changes and Additions

Moved by Phinney , seconded by Storey that the following membership changes and additions be approved--

Change in primary and alternate voting members from Emerson Process:

Terry Krouth (primary)	Jose Gutierrez (alternate)
Emerson Process Management	Emerson Corporate Technology
12001 Technology Drive	8000 West Florissant Avenue
Eden Prairie, MN 55344	Saint Louis, MO 63136
PH: 952-828-3415	PH: 314-553-2667
Email: terry.krouth@frco.com	jose.gutierrez@emrsn.com

Change in alternate and primary voting members from Bayer Material Science

Jim Becker (primary)	Michael J. Buhr (alternate)
Bayer Material Science	Bayer Material Science
8500 W. Bay Road	100 Bayer Road, Bldg 14
Baytown, TX	Pittsburgh, PA 15205-9741
PH:	PH: 412-777-2137
Email: james.becker@bayerbms.com	Email: mike.buhr@bayerbms.com

Addition of an alternate voting member from Apprion:

Ian McPherson
 Apprion\NASA Ames Research Park
 Building 19 Suite 1002
 Moffett Field, CA 94035
 PH: 650-964-4321
 Email: ian.mcpherson@apprion.com

Change in alternate voting member from AIC

Larry Pereira
 Adaptive Instrument Corp
 577 Main Street
 Hudson, MA 01749
 PH: 978-562-0154
 Email: lpereira@adaptiveinstruments.com

New voting member (vendor) bring new voting member (user)

Alexandre Cervinka (Vendor)
 Newtrax Technologies
 3674 Saint-hubert
 Montreal, QC H2L 4A2
 CANADA
 PH: 514-994-0633
 Email: acervinka@newtraxtech.com

Sylvain Riendeau (User-Utility)

Hydro-Quebec
 1800 Lionel-boulet
 Varennes, QC J3X 1S1
 CANADA
 PH: 450-652-8573
 Email: riendeau.sylvain@ireq.ca

Motion unanimously approved.

5	<p>Approval of Revised WG Voting Guidelines Sexton briefly reviewed the changes that the IWG had approved to clarify voting guidelines for Working Groups. <i>Storey moved and Phinney seconded that the voting guidelines presented in Attachment A be approved.</i> Motion unanimously approved.</p>
6	<p>Summary Meeting 18 October 2006</p> <p>Manges called the group to order; Kinney and Sexton briefly reviewed the results of the SP100.11/.14 session in which the Working Group had approved the merged scope, (Attachment B) process proposal (Attachment C) and project plan (Attachment D). <i>Kinney moved and Sexton seconded that ISA-SP100 approve the following SP100.11a working group scope:</i></p> <p><i>This project will define the OSI layer specifications (e.g. PHY, DLL, etc), security specifications, and management (including network and device configuration) specifications for wireless devices serving application classes 1 through 5 and optionally class 0 for fixed, portable and moving devices.</i></p> <p><i>The project's application focus will address performance needs for periodic monitoring and process control where latencies on the order of 100 ms can be tolerated with optional behavior for shorter latency.</i></p> <p><i>This project will address:</i></p> <ul style="list-style-type: none"> • <i>low energy consumption devices and also those applications that have latency and latency variability constraints, with the ability to scale to address large installations</i> • <i>wireless infrastructure, interfaces to legacy infrastructure and applications, security, and network management requirements in a functionally scalable manner</i> • <i>robustness in the presence of interference found in harsh industrial environments and with legacy systems</i> • <i>coexistence with other wireless devices anticipated in the industrial work space, such as 802.11x, 802.16x, cell phones, and other relevant standards</i> • <i>interoperability of SP100 devices</i> <p>Motion approved unanimously.</p> <p>Manges announced that there would be a Leadership Meeting at 7:00 am Thursday morning. The Leadership Meeting scheduled for Friday morning was cancelled.</p>

7	<p>Summary of Working Group and Study Group Reports Given Throughout the Meeting</p> <ul style="list-style-type: none"> • The working group chairs who were present gave reports in the joint sessions as follows; Integration Working Group Report: Sexton noted that a number of study groups are underway – RFID, Users, Architecture, and Business Study Groups several of which would meet during the week. • SP100.11/.14 Working Group: Kinney and Sexton noted that good progress had been made via conference calls and that they anticipated obtaining an approved merged scope and path forward at this meeting. • Marketing Working Group: Sereiko noted that the group continues to hold frequent calls, over 40 user-generated use cases have been completed and are available on the ftp site; a press conference and a standards theater presentation were held at EXPO and plans are in place to issue a press release on the merger of SP100.11/.14 if approved. • Co-Existence Working Group: Kinney reported that the group continues to hold weekly calls, progress is steady but not as rapid as hoped; additional volunteer resources are needed. • Interoperability Working Group: McPherson noted that Fuhr would be available later to provide a report. Bischof later provided a PowerPoint summary (Attachment E) at the closing session on Fuhr’s behalf. (NOTE: Fuhr sent a revised powerpoint to the listserve the following week). • TREC: Phinney reported that there has been little recent activity; he noted the merged requirements documents would need to be circulated for full committee review. • Network Working Group: Gutierrez announced his efforts to re-energize the group and begin a series of regular teleconference calls and meetings. • Users Study Group: LaFramboise noted that the group would meet later in the day and hoped to achieve full working group status at this meeting. NOTE: The User Working Group was approved later in the meeting. • Business Study Group: Pereira stated the effort is still in the initial stages and attempting to define their scope of future work. • Architecture Study Group: Sereiko reported he was prepared to initiate this effort but would be seeking additional input and a potential long-term chair.
8	<p>Closing Plenary Meeting 20 October 2006</p> <p>Manges called the meeting to order and asked LaFramboise to cover the results of the User Group Study Group and present their proposal to the group. LaFramboise noted that in addition to the meeting at ISA EXPO there had been several earlier teleconferences in which agreement had been reached on the scope, deliverables, timeline and purpose of the proposed User Working Group. If approved LaFramboise will serve as Chair and Caro will serve as Co-Chair. Following a brief discussion <i>LaFramboise moved and Sexton seconded that SP100 form a new Working Group (WG) within SP100 primarily intended for end users. The group is to ensure the SP100 standards provide the maximum benefit to the market by providing a single, consistent standard. The UWG will review the work of, comment upon, and provide requirements to all other working groups.</i></p> <p>Motion unanimously approved.</p>

9	<p>Future Activities Plans</p> <p>Manges presented the planned SP100 meeting dates for 2007. He noted that ISA-SP100 would meet for full days beginning at 8:00 am on Tuesday and ending at 5:00 pm on Thursday as follows:</p> <p>13-15 February 2007 – Phoenix, AZ 22-24 May 2007 – ISA, Research Triangle Park, NC 24-26 July 2007 – Hawaii (site to be announced later) 3-5 October 2007 – ISA EXPO, Houston, TX</p> <p>NOTE: Details on the 2007 meetings will be available later and posted to the SP100 web site.</p>
10	<p>Adjournment</p>

Attachment A

ISA-SP100 Working Group Voting Rules

Goals

- Encourage consistency among the working groups in ISA-SP100
- Promote wide participation in the process of developing ISA-SP100 work products
- Keep it fair, open, ethical, and professional.
- Keep it simple. Do not burden the co-chairs with keeping voting membership lists and vetting who is qualified to vote.

1. Default voting rights: One vote is allowed per company for those in attendance at the working group meeting, teleconference call, or web based meeting. Working group participation and voting is open to all parties who are present at meetings (physical or electronic). NOTE - The working group voting rights and rules defined in this document are different and distinct from the rights and rules that govern votes at the ISA-SP100 committee level.

2. Quorum: There are no quorum restrictions for votes.

3. Reporting: All votes shall be communicated to the full working group with the total number of YES, NO, and ABSTAINS. For a balloted vote, a record of how each person voted will be made available on request along with any comments submitted with the vote, but the normally reported results will not include this data.

4. Voting procedures: Votes may be done by a show of hands, by name call, or by consensus (if there are no objections). In the case of the consensus votes the attendance list of record for the meeting will be used to report the number of people present.

5. Notice: Votes can only be taken at a working group meeting, teleconference call, or web based meeting if that meeting was publicly announced to the working group's ISA-SP100 reflector email address 48 hours in advance or at a regularly scheduled event.

6. Letter or electronic balloted vote: A working group can conduct a message based vote. The same voting rights, notice, reporting, and quorum rules apply to this form of voting. The ballot will be distributed using the ISA-SP100 email reflector and representatives from companies participating in ISA-SP100 may vote. The votes shall be submitted to a member of ISA staff who will compile and report through the chair. All votes and comments submitted by email are considered public irrespective of any confidentiality notices included in the email footer.

7. Behaviors: All participants in working group discussions and ballots are required to exhibit professional behaviors that reflect a respect for different opinions and judgments, do not challenge the integrity or motives of fellow participants, and do not personalize the debate. Failure to exhibit these behaviors is the basis for immediate exclusion from further meetings and participation.
8. Working group rules approval: These rules are approved by the ISA-SP100 committee. Revisions to the rules can be proposed by working group chairs for review and approval by the ISA-SP100 committee.
9. Voting consensus: For procedural issues a simple majority is sufficient to carry the motion. For technical issues a vote of 67% is sufficient to carry the motion.

Attachment B

SP100.11a Proposed Working Group Scope

This project will define the OSI layer specifications (e.g. PHY, DLL, etc), security specifications, and management (including network and device configuration) specifications for wireless devices serving application classes 1 through 5 and optionally class 0 for fixed, portable and moving devices.

The project's application focus will address performance needs for periodic monitoring and process control where latencies on the order of 100 ms can be tolerated with optional behavior for shorter latency.

This project will address:

- low energy consumption devices and also those applications that have latency and latency variability constraints, with the ability to scale to address large installations
- wireless infrastructure, interfaces to legacy infrastructure and applications, security, and network management requirements in a functionally scalable manner
- robustness in the presence of interference found in harsh industrial environments and with legacy systems
- coexistence with other wireless devices anticipated in the industrial work space, such as 802.11x, 802.16x, cell phones, and other relevant standards
- interoperability of SP100 devices

Attachment C

SP100.11a WG Process Proposal

- ❖ WG forms an Architecture Task Group (ATG) which is responsible for the Architecture, System Goals, and the following:
 1. Define the system implications of the existing proposals and inventory from the PTG
 2. Define gaps/limitations via the use cases and expert knowledge

3. Define a high level TRD (not detailed)
4. Further develop the Evaluation Criteria
 - Particularly in the areas of disagreement and in the critical areas.
5. Group continues on to further the system architecture
 - Deliverable: Issue Report to WG by 11/15
- ❖ WG forms a compromise/collaboration Task Group (CTG) to do the following:
 1. Recommend a compromise architecture and component set/function
 2. Identify gaps & risks
 3. Perform audit to requirements and Use Cases
 4. Recommend work breakdown and form focused task groups
 5. Enhance evaluation criteria on specific areas of contention
 - Deliverable: Present report detailing above line items to WG by 12/15 (Amsterdam)
- ❖ Schedule a WG meeting in January with the agenda:
 - ⇒ If we have a consensus proposal; all Focus Task Groups will conduct workshops
 - ⇒ If we cannot reach total consensus in Amsterdam:
 - on those areas where we do have consensus we form task groups to develop those areas
 - on those areas where we do not have consensus, WG will:
 - Hear alternate proposals
 - Empower the CTG to evaluate alternatives based on the use cases, requirements, and evaluation criteria

Attachment D

SP100.11a WG Proposed Project Plan

- 12 – 14 Dec 2006: WG meeting in Amsterdam
 - Convergence proposal presentation
 - Consensus effort by CTG
 - Focus TGs (e.g. Network Mgmt, Application, etc) formed for all areas of consensus
- 8 – 11 Jan 2007: WG meeting
 - ATG starts draft of principles of operation
 - Focus TGs work on their areas
 - If there are areas of contention:
 - WG hears presentations on alternative proposals for those areas of contention

- CTG drives to consensus on areas of contention and enhances evaluation criteria
- 12 – 15 Feb 2007: SP100 Meeting
 - WG hears presentations on final proposals for any areas of contention
 - CTG presents report on contested issues along with potential resolutions using use cases, requirements, and evaluation criteria
- Mid-Mar 2007: WG Meeting
 - WG votes on proposals for any remaining areas of contention
 - CTG disbands
 - ATG releases draft of principles of operation
 - General description/overview
 - System design document
- Apr 2007:
 - Principles of operation finalized
 - First drafts from each Focus TG
- Mid-May 2007: SP100 Meeting
 - Revised Focus TG drafts are collected into first draft of standard
- End-July 2007: SP100 Meeting
 - Final review of Draft specification
- Aug 2007:
 - Workgroup ballots on draft standard and then resolves any comments
- Early October 2007: SP100 Meeting
 - Recirculation of Workgroup ballot
- Jan 2008:
 - SP100 ballots on draft standard
 - ISA ballots on draft standard
- Mar 2008:
 - ISA approves Standard
 - ISA submits Standard to IEC for approval

Attachment E-- follows

Interop-WG6 notes 19Oct06

SP100 WG6 Interop

- 19 October 2006
- Participants
 - Adalet Wireless
 - Apprion
 - Bayer
 - Shell
 - Siemens
 - Yokogawa

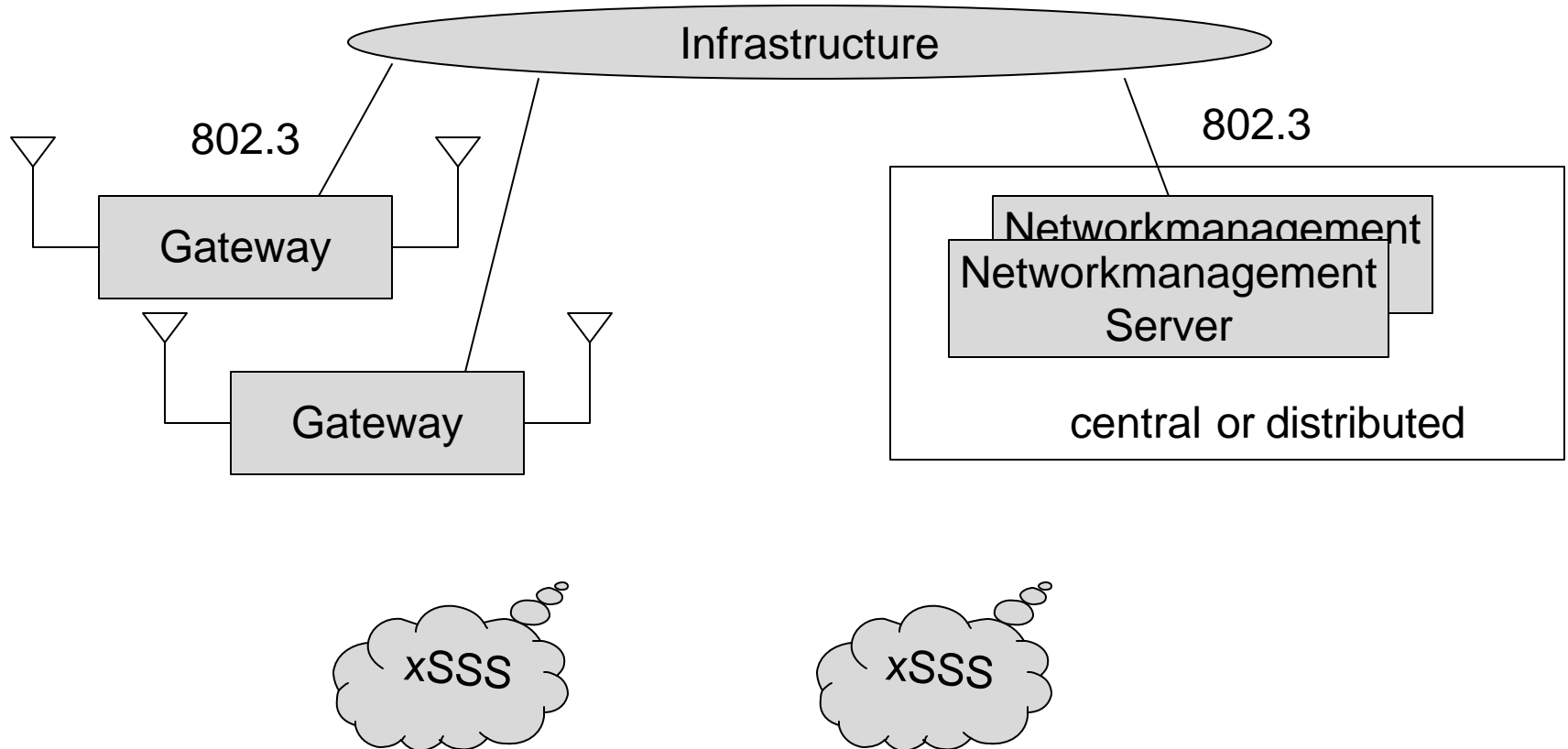
WG6 notes 10/19/06

- Sp100: synchronization of security policies with sp99 resides in WG6
 - Therefore sp100.11a security task group must coordinate with WG6
- Sp100.21 (RFID) must define same TG structure and procedures and responsibilities
- Levels of interop definitions
 - A: example sp100.11a definitions stop at the gateway

WG6 notes 10/19/06

- B: interop of sp100:11a and sp100.21 looks at data transfer and RF coexistence of these systems at the plant.
- C: infrastructure for fieldbus architectures defaults to OPC to be universal translator. Wireless gateway outputs need to rely on this.
- Interop recommends that the sp100.11a “gateway” must translate device addressing to a common form to allow protocol-agnostic data tunneling to a higher level above the gateway.

WG6 notes 10/19/06



WG6 notes 10/19/06

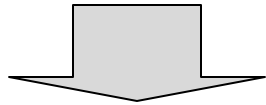
- Gateway control / monitoring functions communicate via ???
 - Gateways must provide a general interface / general primitives to build multiple network management solutions. (define a set of management functions, objects.)

WG6 notes 10/19/06

- Sp100.11/14
 - Architecture T/G



- Sp100, 99, ...
 - Arch work group

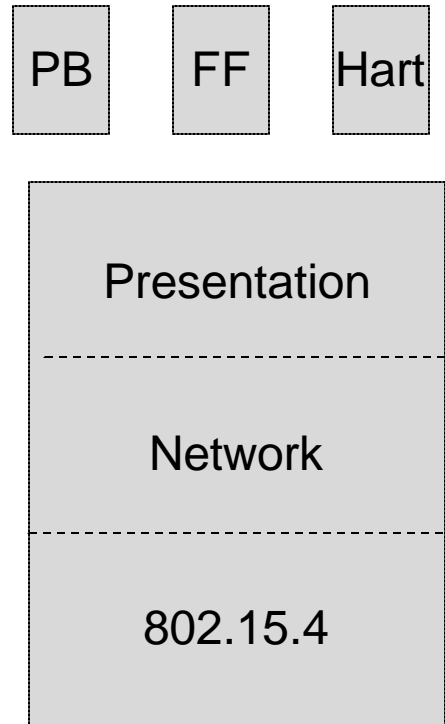


- SP100
 - OSI

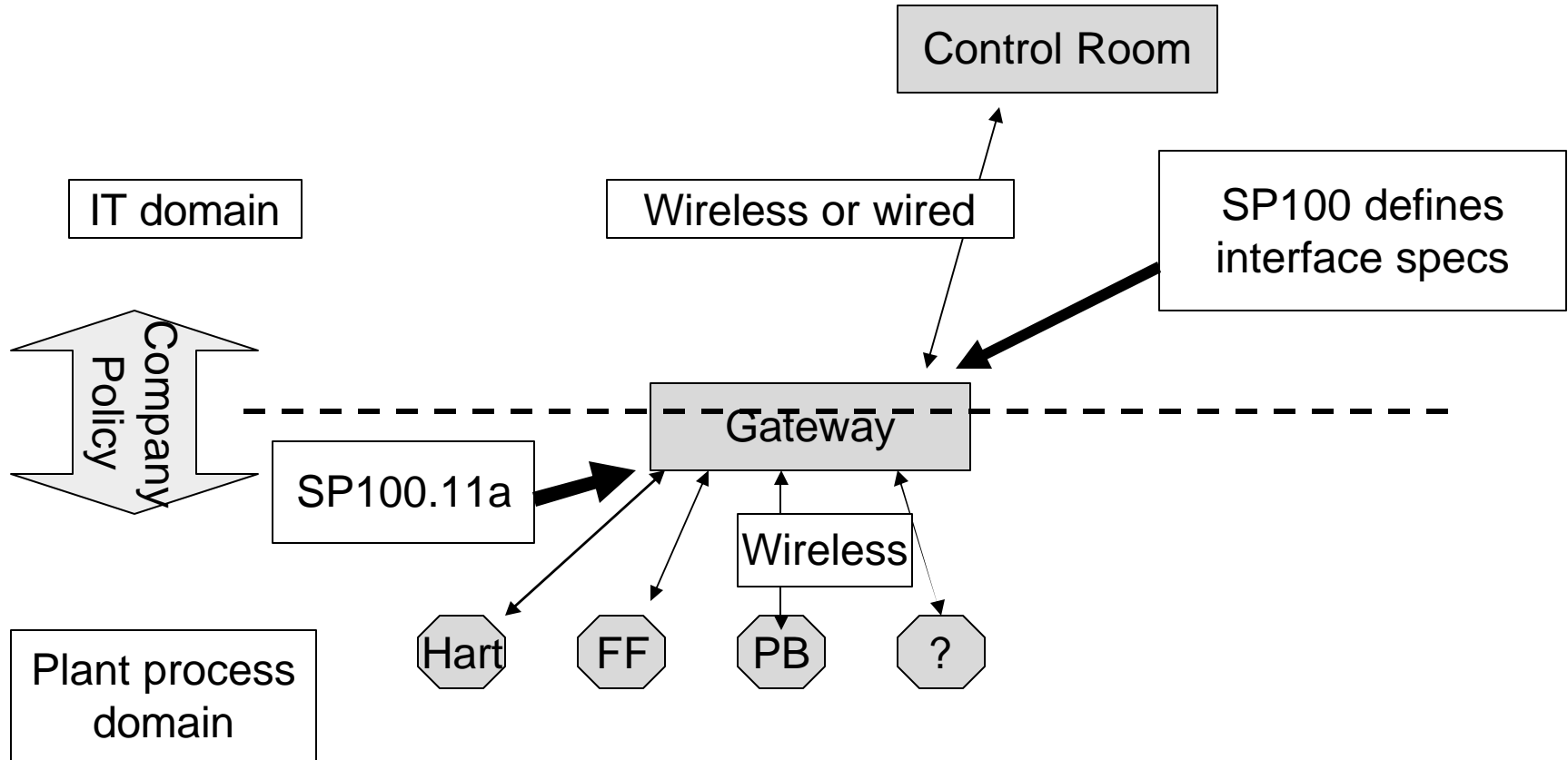
WG6 notes 10/19/06

- MAC/Phy = Infrastructure
- Transport/session = midlevel
- Presentation/application = applications

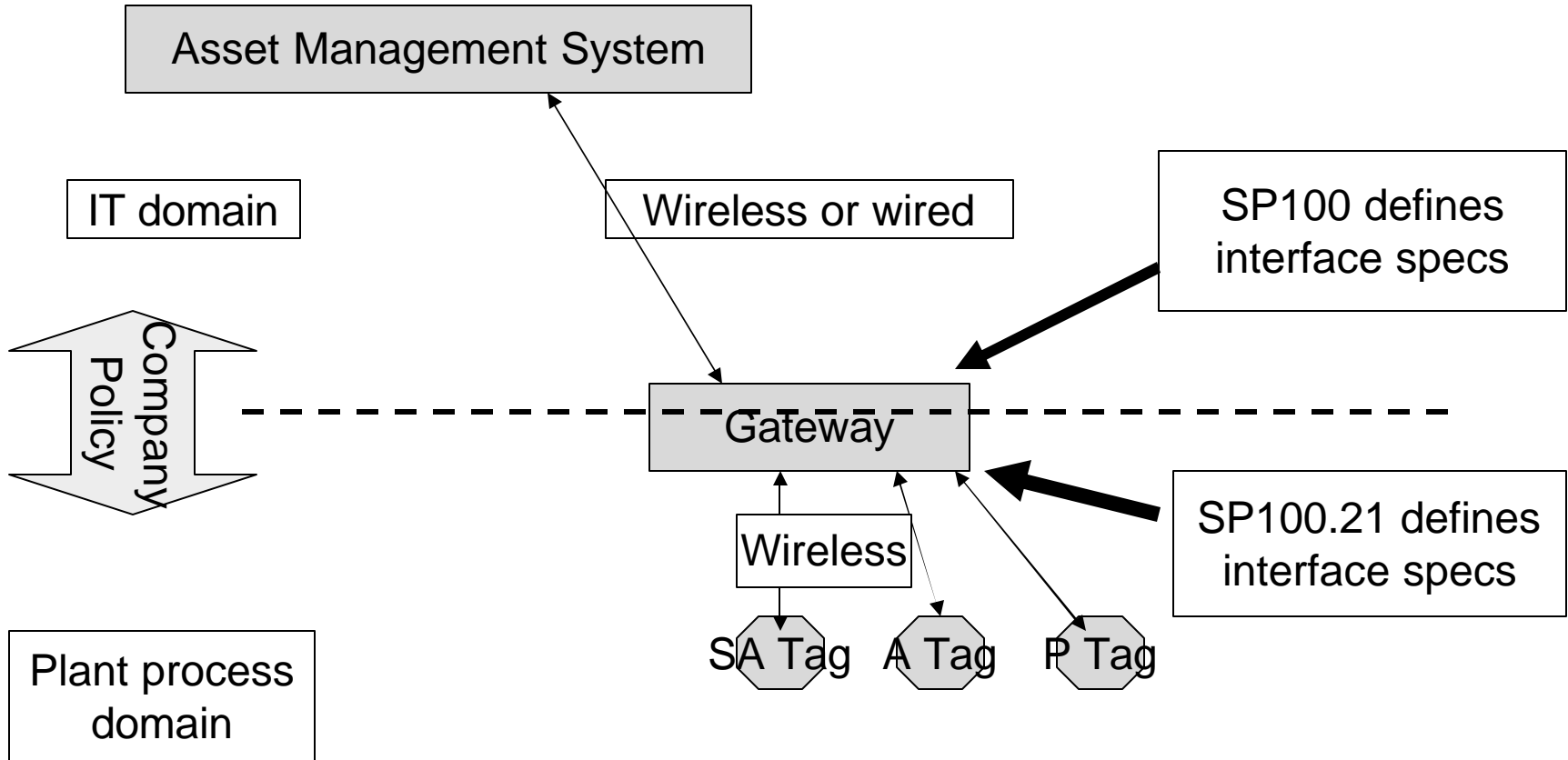
WG6 notes 10/19/06



WG6 notes 10/19/06



WG6 notes 10/19/06



WG6 notes 10/19/06

