

Software Certification Consortium

Meeting #9
May 6 & 7, 2012



Welcome & Introductions

- **Alan Wassyng**
- **Brian Larson**
- Workshop Participants
- WebEx Participants

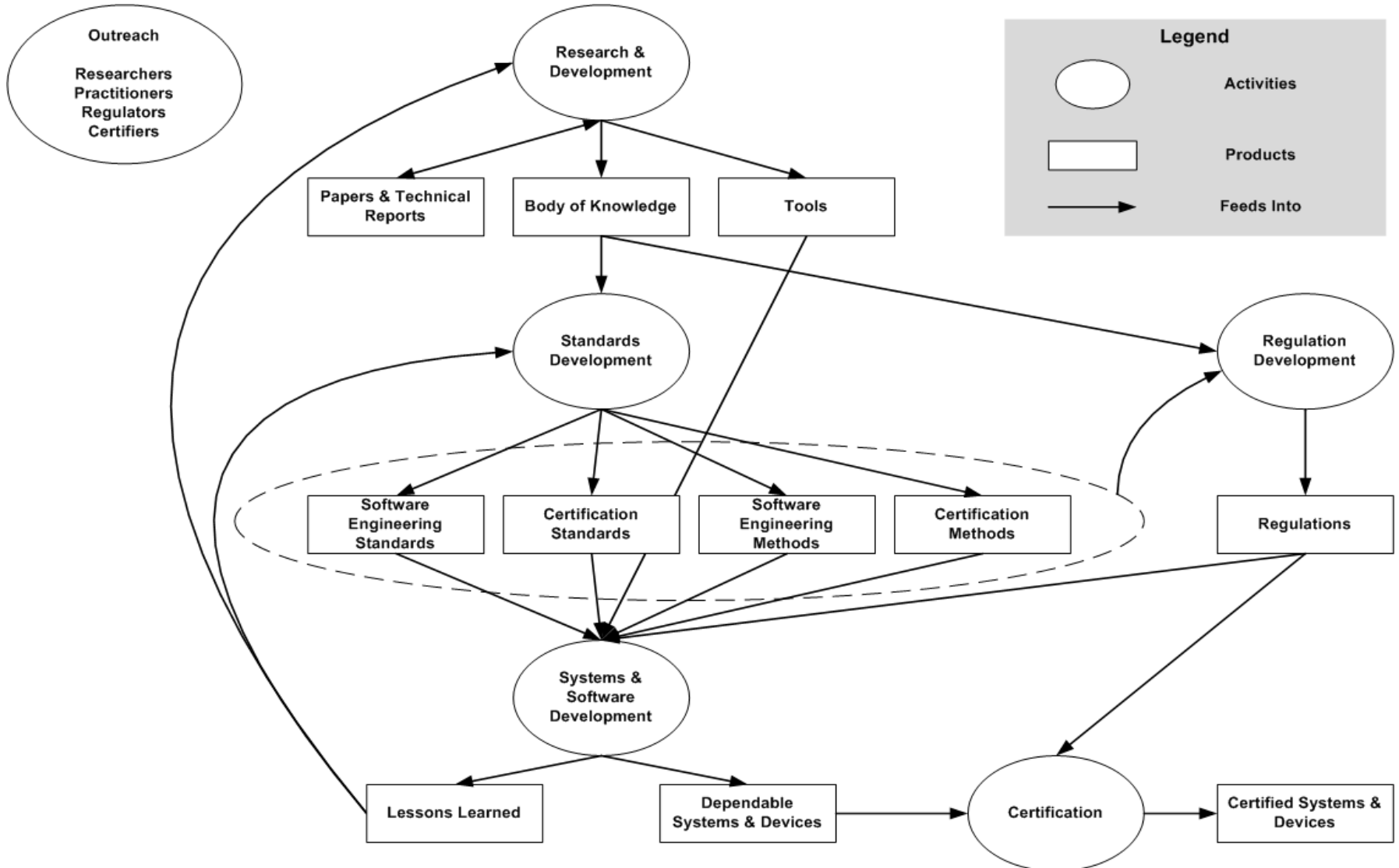
Agenda

<u>SUNDAY</u>	
11:30-12:30	Lunch
12:30-1:00	Welcome and Introductions
1:00-1:30	Nancy Leveson (MIT) - Certification and Regulation of Software-Intensive Systems
1:30-2:00	John Knight (University of Virginia) – A Standard for Standards?
2:00-2:45	Discussion 1
2:45-3:00	Coffee
3:00-3:30	Bran Selic (Malina Software) - OMG Modeling “Standards” for Model-Based Engineering
3:30-4:00	Joe D’Ambrosio (GM) - Systems and Software Engineering Standards for the Automotive Domain
4:00-4:30	Edward Griffor (Chrysler) - Specifying for Certification for Automotive Safety Systems
4:30-5:30	Discussion 2
6:00-7:00	Social
7:00-9:00	Dinner

Agenda

MONDAY	
8:30-9:00	Ed Lee (Berkeley) - Certifying Real-Time Software is Not Reasonable (Today)
9:00-9:30	John Hatcliff (Kansas State) - Rationale and Architecture Principles for Medical Application Platforms
9:30-10:15	Discussion 3
10:15 - 10:30	Coffee
10:30-11:00	Brian Fitzgerald (FDA) - Safety Certification in medical device systems
11:00-11:30	Vera Pantelic (McMaster) - Systems and Software Engineering Standards for the Medical Domain
11:30 – 12:15	Discussion 4
12:15-1:15	Lunch
1:15-1:45	Rance Cleveland (Maryland / Fraunhofer USA) - Security as an Issue for Medical-Device Software
1:45-2:15	Russell Sydnor (US NRC) – Gap Assessment of IEC and IEEE Standards for Safety Assurance of Digital Systems
2:15-3:00	Discussion 5
3:00- 4:15	Breakout – Opportunities & Needs for Improvements to Standards
4:15-4:45	Summary from Breakout
4:45-5:00	Wrap-up

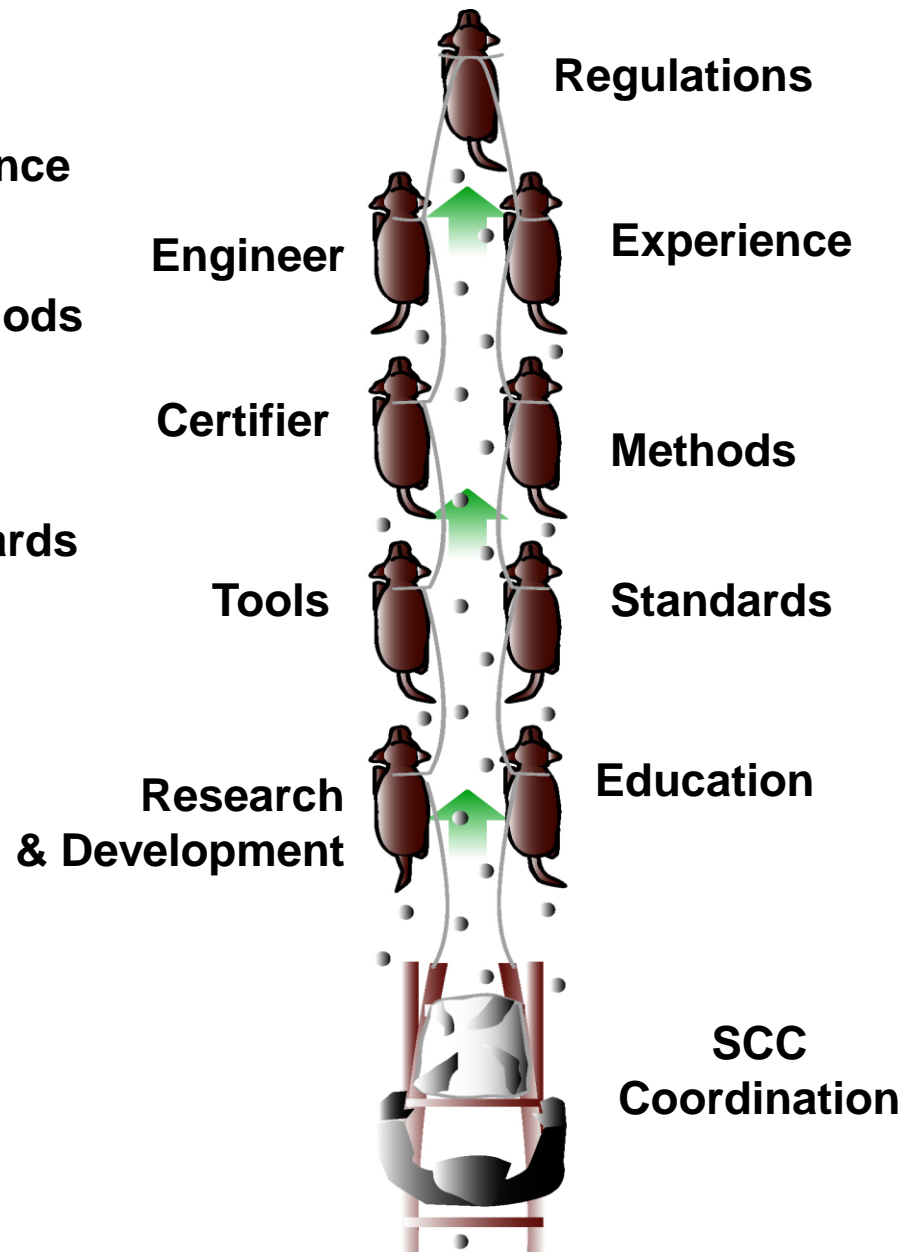
Scope & Deliverables





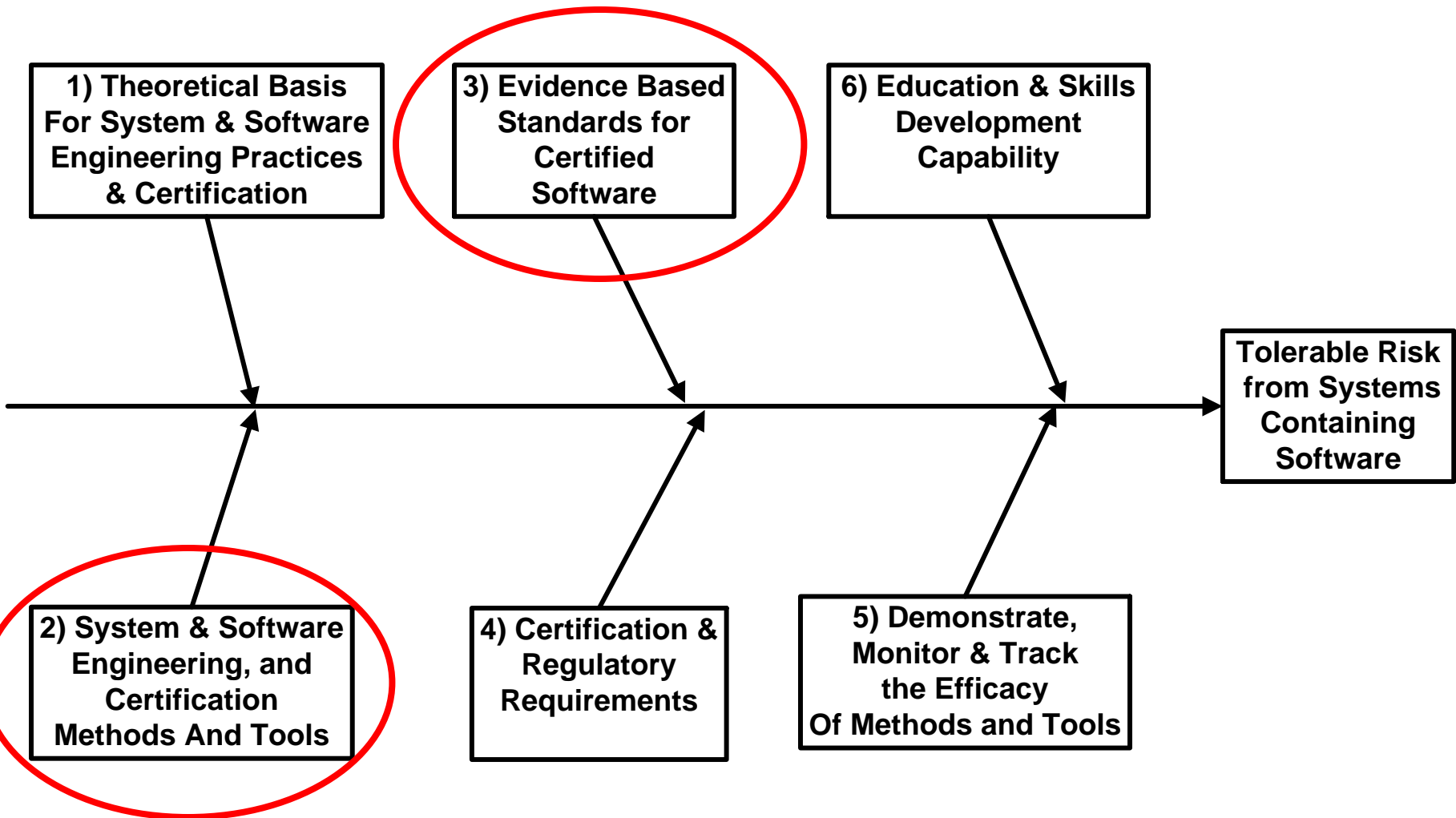
Dog Sled - Not Aligned

Same Effort but Progress



Dog Sled - Aligned

Overall SCC Outcomes



Breakout Session

Identify Opportunities & Needs for Improvements to Standards

Each table:

- Assign a scribe to capture research questions
 - Powerpoint or Word
- Assign a presenter to report results

Breakout Session

Table 1:

How are standards failing us currently?

- What anecdotal evidence is there that standards are being successfully used?
- Empirical evidence for the efficacy of standards.

Table 2:

Complexity/usability of standards

- Understandability vs duplication

Table 3:

Acceptance Criteria

- Predictable certification / regulatory approval

Table 4:

Assurance cases and their relationship to standards

Table 5:

Integrity Levels

- Domain specific vs standardization of IL definitions
- Determination of ILs
- IL requirements
- Relationship to assurance cases

Table 6:

Are standards adequately product focused?

- What product based evidence should be mandated by standards?

Breakout #2 – Report Back

- Table 1
- Table 2
- Table 3
- Table 4
- Table 5
- Table 6

- 5 minutes each