BeSSSt Working Group Goals

• Motivation
  ❖ Requirements define and scope our systems. Latent defects in requirements are the most expensive to fix.
    – They therefore represent our greatest cost savings opportunities.
  ❖ Requirements engineering practices remain relatively stagnant.
  ❖ What we teach in school about requirements is rarely reflected in practice.

• Can we do better than “shall statements” in requirements engineering?
Working Group Format

• Sample Topics for Discussion
  ❖ How can we move beyond English-language sentences to capture requirements?
  ❖ How can we harmonize our approaches to requirements engineering with modern techniques for architecture, implementation, and testing?
  ❖ Should we continue to separate requirements engineering from design, or try to integrate them more closely?
  ❖ Should we adopt agile or fluid methodologies, where requirements evolve along with the system, rather than being developed all-at-once up front? What are the implications for development and contracting models?
  ❖ How should we train the next generation of engineers?
  ❖ How many requirements is too many, or too few?
BeSSt Invited Presenters/Panelists

- **Professor Richard N. Taylor, UC Irvine**
  - Classical requirements engineering practice has failed to deliver. A way forward exists, based upon software architecture.

- **Bal An-Ani, UC Irvine**
  - Current requirements engineering approaches are inherently hubris: they do not take into account the target users’ context and environment.

- **John Farley, Lockheed-Martin**
  - Why do we focus only on the “easy” requirements?

- **Jorge Seidel, Aerospace Corporation**
  - Why do we use fixed, document-based requirements in a world of hyper-exponential change?
BeSSt Invited Presenters/Panelists

- Andrea Richards, Raytheon
  - Why do we lack a strong feedback loop from test and verification back to requirements development for the next generation of systems?

- Dale Robinson, Raytheon
  - The number of requirements should be as few as possible: this allows for a wider trade space.

- Emil White, Lockheed-Martin
  - Why do we continue to develop requirements without regard for how they will be verified, when this causes trouble for us all the time?