

Comments for the EAC's Academic Roundtable Discussion
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2. The 2005 VVSG states one of the goals for the next iteration of the VVSG was to create performance standards that promote innovation rather than design orientated standards that limit design choices for potential manufacturers.

Where does this document meet or exceed this goal? Where does the document fall short of this goal?

The performance standards are very clear with respect to summative evaluation, the actual metrics that need to be measured, calculated and the associated benchmarks. I think this is what should be in a guideline. Benchmarks, metrics and protocols ... this is good!

Is the concept of software independence as defined in the TGDC recommendations too technologically restrictive? If so how would you change it to be more expansive?

No, I think the language is just right. It clearly defines the concept of software independence and Figure 2-3 does a good job of illustrating this concept. I wouldn't change a thing at this point.

5. How can innovative systems be evaluated for purposes of certification?

I think the innovation class is clearly defined. The manufacturer must submit extensive documentation that supports the claim of innovation and then document how the innovation should be included into the guidelines. As an innovator, you should know what makes your system innovative and documenting that innovation is your job.

I think the key to certifying innovations is the review committee. The review committee must be familiar with the existing VVSG and must be an expert in the area where the innovation exists.

How do other industries deal with the testing and certification of innovative products?

From my experience, this is done on a case by case basis; however, in all cases to my knowledge a review board of experts within the area of innovation are pulled together and they establish the certification criteria relevant to any existing criteria.

How do you create a certification process for innovative systems that isn't a backdoor around the standard certification process but at the same time isn't so cost prohibitive and restrictive that it presents a barrier and a disincentive to prospective manufacturers?

The innovation class requires the manufacturer to justify why his/her technology is innovative and deserves separate certification. This is sufficient in my opinion.

Can a set of limited standards be created in order to make the path towards certification of innovative systems more clear?

I think the current innovation class is a step in this direction. After a few innovations are considered, the necessary adjustments will be made. At this point, I don't think a set of standards are necessary. The term "standards" doesn't fit with the innovation class. I think there may be performance benchmarks required of all systems and that's in the VVSG. Innovations must meet or exceed those benchmarks or have a justifiable explanation as to why they shouldn't be held to those benchmarks.

1.

How do you evaluate what is an allowable level of risk?

I think this can be done by looking at the impact of the risk. For example, one could measure risk by the total number of ballots impacted by an attack. You could create categories such as Catastrophic, Moderate, Low, None that are separated by the number of ballots impacted by the attack.

What are the essential elements of a risk assessment?

You need measures to determine the level of risk.

How can the EAC best create a risk assessment that recognizes all possible risks and assesses the plausibility and nature of such risks?

Form a committee of researchers and practitioners to determine the metric by which you will measure risk and then categorize risk.