managers who are selecting a software-dependent (“intensive” is frequently misleading) system. Based on my experience with SCEs, I would like to offer the following additional comments.

The Source Selection Evaluation Board should tailor the investigation to the particular project under consideration. If the project has more hardware development than software, the SCE should have a systems engineering flavor, and the evaluation team members’ experience should touch on all of the projected system’s domains.

The evaluators should concentrate their efforts on the most significant characteristics of contractor capability. The small number of going-in questions should be open-ended. Their answers should provoke additional questions by the evaluators.

The evaluators should spend time in one-on-one meetings with their opposite number. They should encourage interviewees to demonstrate how they use proposed tools and to show off their domain knowledge and their familiarity with the proposed software development plan. They should quiz interviewees about the projects they are working on to get some feel of whether the current work would be used on the project under source selection.

There are other commonsense tricks to running an SCE, but—as the authors pointed out quite well—success ultimately depends on the team’s competence.

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FOOLING THE TEAM IS TOUGHER NOW
To the Editor:

Emilie O’Connell and Hossein Saiedian have pointed out significant problems with the present state of software capability evaluations. As one who has been involved in several SCEs, I appreciate their candor.

It is true that one outcome of an internal SCE (which can be conducted by an external organization under contract) is a maturity level score. However, when the acquisition agency follows the SCE 3.0’s recommendation and tailors the process to meet its needs, the SCE may not produce a level rating. Even when the process covers the entire model, some acquisition agencies may not want or need a level rating. Instead, they try to evaluate the risks associated with the bidder under evaluation. While this is a commendable goal, it often degrades into the assignment of a “meets requirements” rating to all of the evaluated contractors.

On the other hand, acquisition organizations may use the threat of an SCE to limit the number of bidders. Because the acquisition process is expensive for both the bidders and the government, limiting the evaluation to the bidders who can tell up front whether or not they meet the basic qualifications can be a good thing.

A few years ago, it may have been possible to fool an SCE team. But now, some acquisition agencies are hiring consultants from companies that specialize in conducting SCEs. Fooling these experienced teams is more difficult, and it may be impossible.

Despite the problems, imposing the CM M and SCE processes on government contractors has had a positive impact. Contractors will do whatever their customers want (and will pay for). If they don’t improve their software processes, they won’t be competitive and will have to find other work. In the long run, I think these processes will succeed in eliminating poor practices. However, until we settle on the best way to develop software, SCEs may still be necessary to prevent backsliding.

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REVIZIONS IMPROVE SCE PROCESSES
To the Editor:

I read “Can You Trust Software Capability Evaluations?” with great interest. However, I am concerned that this article might add to the confusion about SCEs for readers who are not familiar with the subject.

The authors refer to the 1987 SEI Maturity Questionnaire, which was replaced in 1994 (CM U/SEI-94-SR-7). In addition, they did not refer to the current SCE method, Version 3 (CM U/SEI-96-TR-002). Version 3’s most important feature is that it complies with the CM M appraisal framework, which the SEI developed to make appraisal results compatible for both a CM M-Based Appraisal for Internal Process Improvement (CBA IPI) and SCE.

Both the DoD and the federal government now allow contractors to “reuse” SCE results if the SCE meets certain conditions. For example, the SCE must have been conducted within a designated time frame, and the evaluation must have been conducted by the organization that is bidding for the current opportunity. This means that the government realizes that these evaluations pose a burden for both the contractors and the selection teams.

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The authors respond:

The intent of our article was to point out the flaws in the application of SCEs and to discuss how those flaws allow the DoD software crisis to continue.

We do not believe the SCE method is at fault. Rather, both the evaluating acquirer and the contractor introduce problems. These problems are fostered by a lack of understanding and improper application by the SCE team, as well as an “us versus them” audit mentality that leads to misrepresentation by the contractor.

Mr. Mutafelija correctly points out the changes in the maturity questionnaires, RFP templates, and permissibility of SCE reuse. We agree that many SCEs are conducted properly and will effectively protect the government acquirer from underqualified contractors. However, the examples in our article demonstrate that in spite of its merits, the SCE technique does not guarantee such protections. Since our article was published, we have received a number of “confessions” from contractor personnel attesting that our observations are not uncommon.

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