**Script:** *SEI Podcast Series: Why Software Architects Must Be Involved in the Earliest Systems Engineering Activities*
**SME:** *Dr. Sarah Sheard*
**Interviewer:** *Eileen Wrubel*
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**Eileen Wrubel:** Welcome to the SEI Podcast Series, a production of the Carnegie Mellon University Software Engineering Institute. The SEI is a federally funded research and development center sponsored by the U.S. Department of Defense and operated by Carnegie Mellon University. A transcript of today's podcast is posted on the SEI website at sei.cmu.edu/podcasts.

My name is Eileen Wrubel. I am director of the Transforming Software Acquisition Practice & Policy directorate here at the SEI. This is the latest installment in our series of podcasts highlighting the work of women in software and cybersecurity. Today I am pleased to sit down with Dr. Sarah Sheard, a member of our technical

staff and a senior systems engineer. Welcome, Dr. Sheard.

**Dr. Sheard:** Responds.

1. **Eileen**: I would like to start by having you tell us about your your work here at the SEI. I think our audience would be interested to hear how a systems engineer came to work at the Software Engineering Institute and what types of issues you work on.

2. **Eileen:** A few weeks ago, you authored a blog post—*Why Software Architects Must Be Involved in Earliest Systems Engineering Activities*—that garnered a lot of attention and was one of the top posts on Y Combinator's Hacker News site in the days after its publication. Tell us a little bit about the inspiration for that post. Why did you feel you needed to put that message out there?

3. **Eileen:** Can you give us some examples of systems that you have seen or worked with that would have benefited from the insight of software architects?

4. **Eileen:** At one point in the post you wrote, *If the software architecture is not modifiable, the system as a whole may not be sustainable*. Can you tell us about that? How are software

architecture and system sustainability connected?

5. **Eileen**: If I'm a systems engineer working on a new or evolving system, where do I start? How do I go about involving software architects in my early systems engineering work?

6. **Eileen**: What is next for you in this area of work?

**Eileen:** Thanks so much for joining us today. We will include links to all resources mentioned in this post in our transcript.

Dr. Sheard's blog post is available on the SEI website @ insights.sei.cmu.edu. Click on Browse by Author at the bottom of the page and search on her last name.

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As always, if you have any questions, please don't hesitate to email us info@sei.cmu.edu. Thank you.