**Requirements in a long term “agile” project**

Nick Draper1,2, Jon Talyor2,3, Garrett Granroth4

1Tessella, 26 The Quadrant, Abingdon, Oxfordshire, UK

2ISIS, RAL, STFC, UK

3DMSC, ESS, SE

4NeutronData Analysis and Visualization Division, ORNL, USA

The Mantid[1] project follows and adapted “agile” methodology, developing features and enhancements in development iterations with regular releases. This approach is widely accepted and has been shown to be effective at supporting scientific projects and any other environments featuring requirements change is a frequent occurrence.

During the initial development of Mantid the standard agile approaches, with the addition of a regular scientific steering committee after each release, served the project well. This allowed for good communication between key instrument scientists and the development team. This supported rapid progress reporting and gathering new and urgent needs for development or additional functionality for upcoming experiments.

As the project matured, we discovered that the frequency and nature of this approach led to short term thinking among the scientific steering committee. Asking for input every few months, only led to requirements with a short time horizon. In order to mesh our project requirements with the scientific computing strategies of our member facilities we needed to gather and plan our developments over a much longer horizon. The additional challenge has been to do this without losing the development flexibility and the grass-root scientists as the driving force behind the project.

This talk will highlight the changes to our approaches to requirements gathering and management in Mantid, utilising the opportunity not only to gather and level requirements across multiple member facilities, but also to foster collaboration between the science divisions.

**References**

1. www.mantidproject.org

Email corresponding author: nick.draper@stfc.ac.uk Preference: Oral

Key theme: Best Practice in software engineering.