



THE SAFETY-CRITICAL SYSTEMS CLUB

Agile Development for Safety Systems

25th June 2015

DoubleTree Hotel, Southampton Row, London

Agile software development is a way of organizing the development process which emphasizes direct and frequent communication, multiple deliveries of working software increments, short iterations, active customer engagement throughout the life cycle, and change responsiveness. In contrast most established safety development standards use a strong Waterfall model, and experience in this way of working has built up over the years.

Several Agile methods are now in use for safety, e.g. Scrum (supported by practices such as Test Driven Development) and Dynamic Systems Development Method (DSDM)/Atern. Proponents claim they have already shown big benefits for safety systems; others are more sceptical and are concerned that Agile methods could lead to serious problems.

The seminar will examine what Agile methods involve; how to use Agile in safety systems development; what are the difficulties and how are they overcome; what changes need to be made to Agile to use it for safety, and what changes in safety and certification processes are needed to accommodate Agile.

The seminar will include a panel session, which will give an opportunity for delegate feedback and discussion.

Cost and registration

To Club members the cost is £195, including lunch and refreshments (no VAT). Non-members pay an extra £95 for Club membership (£15.83 VAT). Joining instructions and the programme will be sent to registered delegates about two weeks before the event. Delegates must book their own accommodation (if required).

How to utilise Agile methods safely

www.scsc.org.uk/events

This seminar will feature presentations by Agile developers. They will propose how Agile methods can be applied to safety developments and highlight some of the benefits, pitfalls and issues along the way.

Details of this and other events at: www.scsc.org.uk

Safety-Critical Systems Club: I would like to attend the seminar on 25th June 2015

Name Organisation

Address

Telephone Email Vegetarian: Yes/No

I am not an SCSC member, so need to join and pay £290 I qualify for the SCSC member rate of £195

To pay by cheque, please enclose a cheque for £195 or £290, payable to: Newcastle University (CSR)

To pay by credit card, please complete the following: MasterCard Visa American Express

Name on card Card No

Amount to be charged Expiry date Security No

Cardholder's Address

Please return this registration slip with your payment to:

Joan Atkinson, Centre for Software Reliability, Claremont Tower, Newcastle University, Newcastle upon Tyne, NE1 7RU.

Phone: 0191 221 2222 Fax: 0191 208 7995 Email: joan.atkinson@newcastle.ac.uk

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Programme

09:30 **Registration and coffee**

10:00 Introduction

10:05 **Felix Redmill**
Redmill Consultancy

*Agility Can Cause Trips and Falls
(Experiences of the problems that Agile could cause)*

10:50 **Rod Chapman**
Altran UK

Industrial experience with Agile in high-integrity software development

11:35 **Nick Hales**
MOD

Rapid Affordable Capability Evolution (RACE) – a better way to procure avionics?

12:20 **Lunch**

13:20 SCSC update

13:25 **Bertrand Meyer**
ETH Zurich and
Eiffel Software

Agile: the Good, the Hype and the Ugly

14:45 **Tea**

15:10 **Thor Myklebust**
SINTEF

Certification of safety-critical systems for the Oil & Gas and Railway domains using Agile methods – exemplified by using the SafeScrum method

15:55 **Graham Bleakley**
IBM UK

Developing safety-critical software for Automotive and Aerospace & Defence applications using an agile approach with model-based systems engineering

16:40 Panel Discussion

17:25 Closing remarks

17:30 **Close**