

Notes from a fourth meeting of the UK COSMIC SIG Friday 16th 2015

HMRC office, Euston Tower, London

Present: Peter Fagg, Graham Lawder, Bernard Londeix, Charles Symons, Chris Woodward; Allen Edwards, Mark Churm, Bhupash Patel (HMRC Telford); Andy Jelfs, Jagadeesh (SITA), Mike Eagles, Paul Hope (Capgemini)

Apologies: Carol Buttle

For papers and presentation material mentioned below and marked with **, please see the note 'IWSM 2015 COSMIC-related papers' distributed with these meeting notes.

1. Report on the COSMIC progress in general and by the Measurement Practices Committee (CS)

See CS slides sent out with meeting notes.

2. The COSMIC Guideline on how to deal with Non-Functional Requirements, and on the joint COSMIC/IFPUG Glossary of NFR terms (CS)

The collaboration with IFPUG to develop the joint Glossary went very smoothly and the results were presented at the IWSM **. The Glossary (which includes a new definition and classification scheme for NFR) is now published and available from www.cosmic-sizing.com. The COSMIC Guideline on how to deal with NFR and project requirements and constraints is almost ready for publication. This will NOT include any method aimed to measure a collective 'size' of NFR (like the VAF or SNAP) as the evidence is overwhelming that such measures have no general meaning or lasting value.

3. Automation of COSMIC sizing

One of the recurrent messages from the IWSM was the strong interest and variety of ways in which the measurement of COSMIC sizes is being automated, e.g.

- assisting the capture of measurements from text
- automatic measurement from UML diagrams, or designs in Simulink
- from executing or static Java code
- used to predict memory size, CPU capacity and communications traffic in distributed automotive electronic control systems

Peter Fagg gave a demonstration of his 'Visual FSM' tool for assisting the capture of COSMIC size measurements from text, including the use of 'measurement patterns' to speed up measurement. This relates to another theme from the IWSM – the importance of approximate methods to get a size early in a project life before the requirements are fully known, including the use of patterns. Peter's tool will output sizes in units of IFPUG, COSMIC or MKII sizes and UML diagrams if needed. For more, contact Peter at md@pentad.co.uk

4. Report on some important papers from the IWSM in Krakow

CS reviewed some of the COSMIC-related papers **

5. Future COSMIC collaborations

COSMIC is involved in the following collaborations

- Joining a NESMA initiative with the ICEAA (International Cost Estimation and Analysis Association) to establish a certification program for IT project cost estimation.
- The ICEAA in the US will establish a COSMIC SIG.

- COSMIC is presenting at the conference in Washington at which the development of COCOMO III is being planned.
- COSMIC and IFPUG are planning to work on a joint publication aimed at promoting the uses and benefits of metrics to software project leaders.

6. MkII to COSMIC and IFPUG to COSMIC convertibility

CS described the work that was undertaken jointly with SITA to develop a method of converting MkII FP to COSMIC sizes more accurately than conventional means based on seeking statistical correlations of sizes. The result was a very significant improvement in conversion accuracy **. The new approach should be applicable to conversion of IFPUG to COSMIC sizes.

7. Progress with the NIITE proposal (CS)

As a result of Chris Woodward's efforts, the proposal to establish a National Institute for IT Excellence (www.niiteproposal.net) has now found its way to the Cabinet Office, from which we have received some encouraging feedback.

8. Next meeting

To be held in 2Q16. Please send suggestions for the agenda to CS.

Charles Symons

26th October 2015