

Editorial to the Second Issue

This second issue of the Safety-Critical Systems eJournal, which is published by the Safety Critical Systems Club, clearly fulfils one of the purposes set out in the original brief for the journal. That is to provide a home for articles and papers that are too long for the Newsletter and Symposium. It illustrates two ways of presenting larger amounts of material: one paper is the first part of three, the other is a long paper, which may be built upon in later publications. They are:

- Derek Fowler (UK), in “*IEC 61508 Viewpoint on System Safety in the Transport Sector: Part 1 – An Overview of IEC 61508*”, considers how the safety assessment of new (or significantly modified) systems deployed in specific transport applications would look if it followed, as far as practicable, the safety-specification phases of the lifecycle set out in Part 1 of IEC61508.
- Nicholas Hales (UK), in “*The Layered Enterprise Data Safety Model (LEDSM): A Framework for Assuring Safety-critical Communications*”, considers the lack of advanced planning in safety-critical networks, which has made the outcomes of a number of incidents more severe than they needed to have been. He proposes a way to develop safer networks of communication of any type, verbal, telephone, internet, etc., or a mix of types, so that the risks of failures to communicate are considerably reduced. Since this paper was received, we have seen other incidents wherein poor communications has been an aggravating factor, such as a shooting at the Robb Elementary School in Texas and crowd management chaos at the Stade de France, Paris.

The editorial to the first issue of the journal said, “*You may find some of this material controversial, or you may think that it does not go far enough. Subsequent issues of this journal will have provision for readers’ letters to the Editor responding to individual papers.*” Such a letter has been received from Bev Littlewood and Lorenzo Strigini, “*A Critical Response to a Recent Paper by Daniels and Tudor*”. Also received on that topic is a short paper:

- Peter Ladkin (Germany), in “*Evaluating Software Execution as a Bernoulli Process*”, sets out to show that examples and considerations cited by Daniels and Tudor in their paper do not follow the constraints necessary for modelling any process as a Bernoulli Process, hence challenging their conclusions.

My thanks go to the authors for contributing their papers, and also to the peer-reviewers (at least three per paper) for suggesting improvements. Apologies also to those reviewers who made some recommendations that were not taken up.

It is our intention to make Issue 1 of Volume 3 a special issue addressing certain aspects of autonomous vehicle safety. More details of this in the next issue...

John Spriggs, SCSC Journal Editor

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