

Editorial to the 2023 Winter Issue

Welcome to the first issue of the second volume of the Safety-Critical Systems eJournal, which is published by the Safety Critical Systems Club (SCSC).

We have a new cover image for this volume, designed by Alex King. It has an environmental theme to mark the Club's new Working Group, which started up last Summer. The Systems Approach to Safety of the Environment Working Group is intending to apply Systems Safety practices to systems that are embedded within the natural environment, while focussing on that environment. The group aims to produce clear guidance on how engineered systems should be developed and managed throughout their entire lifecycle so as to preserve, protect and enhance the environment. If you would like to join, or find out more about this group, please go to their page on the SCSC website: <https://scsc.uk/ge>.

This issue contains three papers:

- Sanjeev Appicharla (UK), in “*The Boeing 737 MAX 8 Crashes: System-based Approach to Safety — A Different Perspective*”, contends that, despite all the literature on considering human and organisational factors in safety assessment, fewer researchers and practitioners than hoped actually do this as a matter of course. He concludes that we should be advancing models that include human, technical *and* organisational factors, *and their interactions*, when assessing the risks posed by complex systems.
- Derek Fowler (UK) and Nicolas Fota (France) build upon Derek's paper in the last issue, on using IEC 61508 in the Transport Sector, by providing a worked example, “*Safety Assessment of Point Merge Operations in Terminal Airspace — An IEC 61508 Viewpoint*”. Point Merge is a systemised method for sequencing air traffic arrival flows that was developed by the EUROCONTROL Experimental Centre in Brétigny.
- Peter Bernard Ladkin, Lou Xinxin, and Dieter Schnäpp (Germany) present a method for the semantic analysis of electrotechnological definitions appearing in IEC standards: “*The Terminological Analysis Method SemAn and its Implementation*”. The method is accompanied by a software tool, the SemAn Analyser, which provides outputs in a pretty-printed and annotated format that retains the symbol-for-symbol syntax of the original text of the *definiens*.

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 to those reviewers who made some recommendations that were not taken up.

The editorial to the first issue of this 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 was published in the last issue, which itself prompted some correspondence. Apparently, it is accepted practice that letters for publication to journal editors should be between 300 and 800 words long, and someone even suggested that the maximum should be 400 words. The published letter was over 1600 words; twice as long as people seem to expect. Not wanting to be quite so constrained, I have now adopted a limit of (about) 1000 words (not counting title, attribution or references). That would take up two pages of this journal. Note that a letter should ideally address a single concern with few, if any, external references.

John Spriggs, SCSC Journal Editor

January 2023

This collation page left blank intentionally.