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Editorial

Following the successful 3rd European STAMP Workshop in Amsterdam (5-6 October 2015), organised by the Aviation Academy of the Amsterdam University of Applied Sciences, we are pleased to present to the academic and professional community this special issue including 11 out of the 22 contributions to the workshop.

The papers concern a variety of research and application cases using the System Theoretic Accident Model and Processes (STAMP) model and associated methods, collectively representing a new systems thinking approach to engineering safer systems, first introduced by Prof. Nancy Leveson (Massachusetts Institute of Technology, Boston).

Through this special issue of Procedia Engineering, the reader will hopefully comprehend the potential of system thinking to address safety problems of modern complex socio-technical systems that traditional linear and probabilistic models and techniques cannot tackle. Authors from a spectrum of sectors such as aviation, software, process industry and maritime share research results and experiences of the application of STAMP models and methods, and provide insights and recommendations that are widely applicable.

We would like to thank the authors for their efforts that have led to high quality manuscripts, and the program review members for their professionalism and invaluable support.

Guest Editors Dr. Robert. J. de Boer, Professor of Aviation Engineering Dr. Nektarios Karanikas, Associate Professor of Safety & Human Factors Amsterdam University of Applied Sciences / Aviation Academy