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Preface

It is our pleasure to welcome you to the proceedings of the 7th International Symposium on Engineering Secure Software and Systems (ESSoS 2015). This event is part of a maturing series of symposia that attempts to bridge the gap between the software engineering and security scientific communities with the goal of supporting secure software development. The parallel technical sponsorship from ACM SIGSAC (the ACM interest group in security) and ACM SIGSOFT (the ACM interest group in software engineering) demonstrates the support from both communities and the need for providing such a bridge.

Security mechanisms and the act of software development usually go hand in hand. It is generally not enough to ensure correct functioning of the security mechanisms used. They cannot be blindly inserted into a security-critical system, but the overall system development must take security aspects into account in a coherent way. Building trustworthy components does not suffice, since the interconnections and interactions of components play a significant role in trustworthiness. Lastly, while functional requirements are generally analyzed carefully in systems development, security considerations often arise after the fact. Adding security as an afterthought, however, often leads to problems. Ad hoc development can lead to the deployment of systems that do not satisfy important security requirements. Thus, a sound methodology supporting secure systems development is needed. The presentations and associated publications at ESSoS 2015 contribute to this goal in several directions: First, improving methodologies for secure software engineering (such as formal methods and machine learning). Second, with secure software engineering results for specific application domains (such as access control, cloud, and password security). Finally, a set of presentations on security measurements and ontologies for software and systems.

The conference program featured two keynotes by Herbert Bos (Vrije Universiteit Amsterdam) and Felix Lindner (Recurity Labs GmbH), as well as research and idea papers. In response to the call for papers, 41 papers were submitted. The Program Committee selected 11 full-paper contributions (27%), presenting new research results on engineering secure software and systems. In addition, there were five idea papers, giving a concise account of new ideas in the early stages of research.

Many individuals and organizations contributed to the success of this event. First of all, we would like to express our appreciation to the authors of the submitted papers and to the Program Committee members and external referees, who provided timely and relevant reviews. Many thanks go to the Steering Committee for supporting this series of symposia, and to all the members of the Organizing Committee for their tremendous work and for excelling in their respective tasks. The DistriNet research group of the KU Leuven did an excellent job with the website and the advertising for the conference. Finally, we owe

gratitude to ACM SIGSAC/SIGSOFT, IEEE TCSP, and LNCS for continuing to support us in this series of symposia.

December 2014

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