Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering

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Preface

This volume is the result of the Sixth International ICST Conference on Mobile Networks and Management (MONAMI), which was held in Würzburg, Germany during September 22–24, 2014, hosted by the University of Würzburg.

The MONAMI conference series aims at closing the gap between hitherto considered separated and isolated research areas, namely multi-access and resource management, mobility and network management, and network virtualization. Although these have emerged as core aspects in the design, deployment, and operation of current and future networks, there is still little to no interaction between the experts in these fields. MONAMI enables cross-pollination between these areas by bringing together top researchers, academics, and practitioners specializing in the area of mobile network and service management.

In 2014, after a thorough peer-review process, 20 papers were selected for inclusion in the main track of the technical program. In addition, MONAMI 2014 hosted a well-received workshop on Enhanced Living Environments, which featured 10 papers. All in all, 30 papers were orally presented at the conference. The Technical Program Committee members made sure that each submitted paper was reviewed by at least three competent researchers, including at least one TPC member.

The conference opened with one half-day tutorial: “SDN Experimentation Facilities and Tools,” addressing one of the main leitmotifs of the MONAMI conference, organized and presented by Dr. Kostas Pentikousis and Dr. Umar Toseef (EICT GmbH, Germany) and Philip Wette and Martin Dräxler (University of Paderborn, Germany). Prof. Klaus Moessner, from the Centre for Communication Systems Research at the University of Surrey, UK, officially opened the conference day with his vision on “Networks in Times of Virtualisation.” In addition, the conference featured a panel session on “Cloudification of Mobile Networks - Expectations, Challenges and Opportunities,” organized by Dr. Andreas Maeder and with the participation of the following reputable researchers: Dr. Klaus Moessner, Dr. Dirk Kutscher, Dr. Wolfgang Kellerer, Dr. Wolfgang Kiess, and Prof. Alberto Leon-Garcia. The second day of the conference started with a keynote by Dr. Dirk Kutscher from NEC Europe Ltd., Germany, who gave a speech entitled “From Virtualization to Network and Service Programmability – A Research Agenda for 5G Networks.” This was followed by a special session on Software Defined Networking and Network Function Virtualization, organized by Prof. Wolfgang Kellerer (Technische Universität München, Germany) and Dr. Marco Hoffmann (Nokia, Germany) featuring the talk “Commodity Hardware as Common Denominator of SDN and NFV,” given by Dr. Hagen Woesner (BISDN GmbH, Germany).

The First Workshop on Enhanced Living Environments, organized by the IC1303 AAPELE COST Action, featured a keynote by Prof. Phuoc Tran-Gia (University of Würzburg, Germany) and a talk from the AAPELE Science Officer, Dr. Guiseppe Lugano.
It is worth highlighting that the attendance increased in MONAMI 2014 and all newcomers acknowledged the collegial atmosphere which characterizes the conference, making it an excellent venue, not only to present novel research work, but also to foster stimulating discussions between the attendees.

The papers included in this volume are organized thematically into five parts, starting with LTE Networks in Part I. Virtualization and Software Defined Networking aspects are discussed in Part II. Part III presents new approaches related to Self-Organizing Networks, while Part IV addresses Energy Awareness in Wireless Networks. Part V includes papers presenting avant-garde Algorithms and Techniques for Wireless Networks, and Part VI entails papers related to Applications and Context Awareness. The next three parts of the volume deal with Ambient Assisted Living systems: Part VII focuses on architectural issues, Part VIII discusses Human Interaction Technologies and, finally, Part IX closes the volume with three papers on Devices and Mobile Cloud for AAL.

We close this short preface to the volume by acknowledging the vital role that the Technical Program Committee members and additional referees played during the review process. Their efforts ensured that all submitted papers received a proper evaluation. We thank EAI and ICST for assisting with organization matters, CREATE-NET and University of Würzburg for hosting MONAMI 2014. The team that put together this year’s event was large and required the sincere commitment of many folks. Although too many to recognize by name, their effort should be highlighted. We particularly thank Petra Jansen for her administrative support on behalf of EAI, and Prof. Imrich Chlamtac of CREATE-NET for his continuous support of the conference. Finally, we thank all delegates for attending MONAMI 2014 and making it such a vibrant conference!

We hope to see you all in Santander, 2015.

December 2014

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