This volume is the result of the 7th EAI International Conference on Mobile Networks and Management (MONAMI), which was held in Santander, Spain, during September 16–18, 2015, hosted by University of Cantabria.

The MONAMI conference series aims at bringing together top researchers, academics, and practitioners specializing in the area of mobile network management, service management, virtualization and object management. Multiaccess and resource management, mobility management, and network management have emerged as core topics in the design, deployment, and operation of current and future networks. Yet, they are treated as separate, isolated domains with very little interaction between the experts in these fields and a lack of cross-pollination. Recently, new avant-garde techniques and solutions have emerged; as notable examples, network function virtualization, software-defined networking, network virtualization, and the cloud paradigm have taken roots. All in all, these techniques bring about new requirements and scientific challenges, and migration strategies are required to provide a smooth transition from today’s legacy systems to future systems. At the same time, new wireless broadband access technologies, in what has been referred to as 5G, are posing new challenges and requirements that need to be taken into account; energy efficiency, densification, and offloading are examples of the new issues the scientific community is currently addressing.

The conference started with a half-day tutorial, “HTTP Adaptive Video Streaming and Quality of Experience,” presented by Michael Seufert, Chair of Communication Networks, Julius-Maximilians-Universität Würzburg. Dr. Milos Tesanovic, from Samsung Electronics R&D Institute UK (SRUK), officially opened the conference with his vision on “5G Network Architecture Challenges - Towards Distributed, Flat, Heterogeneous Systems of the Future.” Finally, Josep Mangues, from the Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), opened the second day of the conference with his keynote entitled “Programmable Mobile Networks: Why? What? How?”

After a thorough peer review process, 15 papers were selected for inclusion in the main track of the technical program. Each paper was reviewed by at least three competent researchers, including at least one Technical Program Committee member. In addition, MONAMI 2015 hosted a well-received special session on “Future Research Directions,” which featured six papers. All in all, 21 peer-reviewed papers were orally presented at the conference. This volume includes the revised versions of all papers that were presented at MONAMI 2015 in a single-track format. All MONAMI 2015 newcomers acknowledged the collegial atmosphere that characterizes the conference making it an excellent venue, not only to present novel research work, but also to foster stimulating discussions between the attendees.

This volume is organized thematically in five parts, starting with cellular network management and self-organizing networks in Part I. Radio resource management in LTE and 5G networks aspects are discussed in Part II. Part III presents novel
techniques and algorithms for wireless networks, while Part IV deals with video streaming over wireless networks. Part V includes papers presenting avant-garde research on applications and services and, finally, Part VI features two papers introducing novel architectural approaches for wireless sensor networks.

We close this short preface to the volume by acknowledging the vital role that the Technical Program Committee members and additional reviewers 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, and the University of Cantabria for hosting MONAMI 2015. The team that put together this year’s event is large and required the sincere commitment of many folks. Although too many to recognize here by name, their effort should be highlighted. We particularly thank Barbara Fertalova, Ivana Allen, and Lucia Kisova for their 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 2015 and making it such a vibrant conference!

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