FOREWORD

Special Section on EU's FP7 ICT R&D Project Activities on Future Broadband Access Technologies in Conjunction with Main Topics of 2013 IEICE ICT Forum

As the growth of broadband services continues, improved and new transmission technologies, system and network architectures and their socio-economic implications are being investigated in order to accommodate the increasing user demand for ease of scalability and reliable broadband service. This produced a growing research interest in different communities that put efforts to design and create new technologies and services. This special issue, entitled "EU's FP7 ICT R&D Project Activities on Future Broadband Access Technologies in Conjunction with Main Topics of 2013 IEICE ICT Forum", comprising of thirteen papers (four invited and ten regular papers) focusing on the various aspects of the wireless and wireline network technologies selected on the basis of fundamental ideas/concepts. The papers are organized as follows.

The first invited paper is focusing on the characterization and new modulation schemes of power line communications within the home environment. The second invited paper is dealing with energy efficient multimedia services within LTE mobile networks. On the other hand, the third invited paper is focusing on LTE access and gives an evaluation of architectures in railway environment. The last invited paper is dealing with anatomy of optical coherent receivers. The regular papers are selected from 22 submissions by strict review process.

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Haris Gacanin (*Member*) received his Dipl.-Ing. degree in Electrical engineering from the Faculty of Electrical Engineering, University of Sarajevo in 2000. He received his M.E.E. and Ph.D.E.E. from Graduate School of Electrical Engineering, Tohoku University, Japan, in 2005 and 2008, respectively. Since April 2008 until May 2010 he has been working first as Japan Society for Promotion of Science (JSPS) postdoctoral research fellow and then as an Assistant Professor at Tohoku University. In June 2010 he joined Alcatel-Lucent Bell in Antwerp, Belgium. He is senior member of The Institute of Electrical and Electronics Engineers (IEEE) and The Institute of Electronics, Information and Communication Engineering (IEICE). Currently, he is a chair of IEICE Europe Section. He received Alcatel-Lucent's Award of Excellence for 2013, The 2010 KDDI Foundation Research Grant Award, The 2005 Active Research Award in Radio Communications, The 2005 Vehicular Technology Conference (VTC 2005-Fall) Student Paper Award from IEEE VTS Japan Chapter and The 2004 Institute of IEICE Society Young Researcher Award.