

JOURNAL OF TELECOMMUNICATIONS AND INFORMATION TECHNOLOGY

Preface

Telecommunications is a vast field of technology and science. Considering only its technical aspects, it covers areas such as, *inter alia*, signal processing, transmission, or network commutation. What is more, telecommunications also includes various types of services. This diversity is visible in the subject matter of articles published in this issue. Eight papers of the *Journal of Telecommunications and Information Technology* are dedicated to the services, and more specifically to the quality of the telecom services.

Every year, in each issue, we devote a lot of attention to these issues. It's no different this time because in the current issue of the magazine, two articles are related to the quality of video signals. The first of them by Christian Hoppe and Tadeus Uhl deals with the using DASH techniques to transmit video signals via IP networks. The second paper presents a newly designed stereoscopic video quality metrics and was written by Grzegorz Wilczewski.

Two papers share the subject of voice signals, namely the paper titled *Model-Based Method for Acoustic Echo Cancellation and Near-End Speaker Extraction: Non-negative Matrix Factorization* by Pallavi Agrawal and Madhu Shandilya, and *Genetic Algorithm for Combined Speaker and Speech Recognition using Deep Neural Networks* by Gurpreet Kaur, Mohit Srivastava, and Amod Kumar.

The four following articles also touch QoS in the area of mobile networks: *Link Quality Assessment Algorithm for Heterogeneous Self-organizing Maritime Communications Network* by Krzysztof Bronk, Adam Lipka, and Rafał Niski, *Comparative Analysis of QoS Management and Technical Requirements in 3GPP Standards for Cellular IoT Technologies* by Valery Tikhvinskiy, Grigory Bochechka, Andrey Gryazev, and Altay Aitmagambetov. The third one is *Measurements and Statistical Analysis for Assessment of Availability of Mobile Network Services* by Grażyna Kadamus and Małgorzata Langer. The last paper from this group written by Szabolcs Szilágyi, Ferenc Fejes, Róbert Katona is dedicated to a compression of the MPT-GRE software and MPTCP protocol in the Fast Ethernet. The authors compare the path aggregation capabilities of these two technologies.

This issue of the magazine is complemented by five interesting articles about other topic, yet all of them are closely related to the propagation of radio waves. P. Vimala and G. Yamuna propose a new pilot search algorithm and elaborate on it. Their article is titled: *Pilot Design for Sparse Channel Estimation in Orthogonal Frequency Division Multiplexing Systems*.

In turn, in the article entitled *An Optimized Propagation Model based on Measurement Data for Indoor Environments* by Marco Morocho-Yaguana, Patricia Ludeña-González, Francisco Sandoval, Betty Poma-Vélez, and Alexandra Erreyes-Dota the authors present a new model of adjusting the loss coefficients based on empirical data. Also, the paper written by Alessandro Calcaterra, Fabrizio Frezza, Patrizio Simeoni, and Nicola Tedeschi relates to electromagnetic waves propagation. This paper is titled: *Numerical Evaluation of Electromagnetic-wave Penetration at Normal Incidence Through an Inhomogeneous-wave Approach*.

The title of the next article: *Minimum Array Elements for Resolution of Several Direction of Arrival Estimation Methods in Various Noise-Level Environments* by Ismail El Ouargui, Said Safi, and Miloud Frikel is not very closely related to the radio transmission; however, the issues presented in it are also applicable in radio communications.

Artur Maździarz is the author of the paper titled *Alarm Correlation in Mobile Telecommunications Networks based on k-means Cluster Analysis Method*. This paper deals with very important issues from the point of view of maintaining mobile networks.

I hope that the specialist will find these papers interesting and worthwhile their attention. I wish you pleasant reading experience.

Sławomir Kula
Guest Editor