CONTENTS

TECHNICAL PROGRAM: SYMPOSIUMS & SPECIAL SESSION

SYMPOSIUM ON EMC: SAFETY ASPECTS

Assessment of Human Exposure to Power Substation Electric Field
Dragan Poljak, Nikša Kovač, Cristina Gonzales, Andres Peratta, Sasa Kraljevic 1

Multi-Monopole Model of Man for SAR Evaluations
Michele Bozzetti, Giovanna Calo, Francesco Lattarulo, Vincenzo Petruzzelli 7

Finite Element Model of the Human Head Exposed to Electrostatic Field Generated by Video Display Units
Damir Cavka, Dragan Poljak, Andres Peratta 12

Andres Peratta, Cristina Gonzalez, Dragan Poljak 17

Finite Element Thermal Model of the Human Exposed to Electric Field Generated From GSM Base Station
Damir Cavka 22

A Simple Finite Element Model of Heat Transfer in the Human Eye
Mario Cvetković, Damir Cavka, Dragan Poljak 27

Analytical Model of Human Body When Exposed to High Frequency Electromagnetic Fields
Ana Komadina, Dragan Poljak 32

Electromagnetic Effects on Transmission Lines
David Larrabee 37

Usage Limitations of Field Strength Probes for RADHAZ Survey
Antonio Sarolic 43

Modelling Radar Antenna in NEC
Boze Tokić 48

Teaching Electromagnetic Radiation Effects on Humans
David Larrabee 52

Electromagnetic Field Measurements In Student Microwave Laboratory
Krešimir Malarić, Sandra Antešević Maričić 57

Modeling Panel Antenna in NEC
Tihomir Pušnik, Dragan Poljak 61
SYMPOSIUM ON QOS IN WIRELESS MULTIMEDIA NETWORKS

SYM2/I: WIRELESS ACCESS OPTIMIZATION

Dynamic TXOP Configuration for QoS Enhancement in IEEE 802.11e Wireless Lan
Jakub Majkowski, Ferran Casadevall Palacio

Comparison of WiMAX Coverage at 450MHz and 3.5GHz
Tomaž Javornik, Gorazd Kandus, Andrej Horvat, Igor Ozimek

Cross-layer design of packet scheduling algorithm
Dung Luong Dinh, Nam H. Do

Palm's Machine-Repair Model with a Generalised Poisson Input Stream and Constant Service Time
Seferin Todorov Mirtchev

SYM2/II: QOS SUPPORT AND ADAPTIVITY FOR MULTIMEDIA APPLICATIONS

Optimizing SIP service provisioning in internet connected MANETs
Marcel Castro, Andreas Kassler

Evaluation of QoS Support for Multimedia Traffics in IEEE 802.11e
Alessandro Andreadis, Giuliano Benelli, Riccardo Zamboni

The Importance of Adaptive Applications in Mobile Wireless Networks
Michael Neofytou, Kyriakos Stavrou, Vasos Vassiliou, Andreas Pitsillides

Video-streaming Transmission with QoS over Cross-Layered Ad hoc Networks
Guillermo Díaz Delgado, Víctor Carrascal Frías, Mónica Aguilar Igartua

Quality of Service in Mesh Mode IEEE 802.16 Networks
Mehmet Sukru Kuran, Birkan Yilmaz, Fatih Alagoz

SS1 – SPECIAL SESSION ON AD-HOC AND SENSOR NETWORKS

Policy Based Data Access in Wireless Adhoc Networks
Qurban Memon

AR Modeling for Temporal Extension of Correlated Sensor Network Data
Hossein Najafi, Farshad Lahouti, Mohsen Shiva

A Hybrid Algorithm for Topology Optimization in Wireless Sensor Networks
Ali Sarrafi, Mohammad Hamed Firooz, Mahmoud Kamarei

Visualization of Mobile Ad-Hoc Laboatory Network (S-Net)
Biljana Jagodic, Ivica Cubic
Multipath Routing for Video-Streaming Services Over IEEE 802.11e Ad Hoc Networks
Víctor Carrascal Frías, Guillermo Díaz Delgado, Mónica Aguilar Igartua

S1 - MOBILE AND WIRELESS COMMUNICATIONS I

Experience-Driven Selective Scan for 802.11 Networks
Franco Tommasi, Andrea Tricco, Simone Molendini

Simulated Annealing Algorithms for Optimal Packet Scheduling in Ad Hoc Networks
Marcos Aurelio Belchior, Kyra Wulffert, Peter Zipf, Manfred Glesner

Wideband Propagation Channel Parameters Measurement Inside an University Building
Mate Mrša, Zoran Blazevic, Igor Zanchi, Ivan Mannovic

S2 - MOBILE AND WIRELESS COMMUNICATIONS II

Simulation of Dynamic Call Admission Control for CDMA Systems
Mihaly Katona, Imre Sandor

Efficient Reliable Multicast for Content Delivery
Ilka Miloucheva, Nilson Reyes, Jens Mahnke, Karl Jonas

Distributed Measurement System Based on Wireless Mobile Device and Application Repository Server
Andrea Aiello, Domenico Luca Cami, Domenico Grimaldi, Giuseppe Guglielmelli, Francesco Lamonaca

S3 – INTELLIGENT TRANSPORT SYSTEMS

GPS Assisted Alternative Path Modeling and Guidance
Tero Viitala-Kiss, Jouni Ikonen

Performance of Automotive Spread Spectrum Radars
Giorgia Righi, Susanna Spinsante, Franco Chiaraluce, Ennio Gambi

S4: INTERFACES AND COMMUNICATION PROTOCOLS

Modeling the Performance of a Distributed Application Based on Web Services
Ezudin Kurtovic, Vlado Glavinic
### Scalable and Secure Architecture for Digital Content Distribution
Valer Bocan, Mihai Fagadar-Cosma

### An Approach for Interoperable Service Mediation in Diverse Telecommunication Networks
Andreas Diehl, Kishore Angrish

### Sixrm: Full Mesh Reliable Source Ordered Multicast
Pedro Miguel Fonseca Marques Ferreira, João Orvalho, Fernando Boavida

### IMUNES Based Distributed Network Emulator
Zrinka Puljiz, Miljenko Mikuc

### S5: TELECOMMUNICATION SERVICES AND QOS

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parametric Models for Speech Quality Estimation in GSM Networks</td>
<td>204</td>
</tr>
<tr>
<td>Michele Barile, Pietro Camarda, Roberto Dell'Aquila, Nicola Vitti</td>
<td></td>
</tr>
<tr>
<td>The Role of Position Reporting Frequency in LBS QoS Establishment</td>
<td>209</td>
</tr>
<tr>
<td>Lidija Busic, Renato Filjar</td>
<td></td>
</tr>
<tr>
<td>Composite Noise Temperature at Low Earth Orbiting Satellite Ground Station</td>
<td>214</td>
</tr>
<tr>
<td>Shkelzen Cakaj, Kresimir Malaric</td>
<td></td>
</tr>
<tr>
<td>Parallel SIP Proxy Servers Using Direct Routing Approach</td>
<td>218</td>
</tr>
<tr>
<td>Viktor Matic, Ivan Franicevic, Darko Sekalec</td>
<td></td>
</tr>
</tbody>
</table>

### S6: NETWORK OPERATIONS AND MANAGEMENT

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency of Decentralized Self-Managing System for IEEE 802.11 WLANs</td>
<td>223</td>
</tr>
<tr>
<td>Hrvoje Tkalcic</td>
<td></td>
</tr>
<tr>
<td>Robust and Survivable Network Design for Entirely Uncertain Traffic Demand Patterns</td>
<td>228</td>
</tr>
<tr>
<td>Matthias Scheffel</td>
<td></td>
</tr>
<tr>
<td>Usability of Mobile Ad Hoc Networks for IP Services</td>
<td>233</td>
</tr>
<tr>
<td>Ivica Cubic, Ivan Barbarić</td>
<td></td>
</tr>
<tr>
<td>An Improved Technology for Content Matching Intrusion Detection System</td>
<td>238</td>
</tr>
<tr>
<td>Yang Wang, Hidetsune Kobayashi</td>
<td></td>
</tr>
<tr>
<td>The Management Infrastructure of a Network Measurement System for QoS Parameters</td>
<td>242</td>
</tr>
<tr>
<td>Alexandru Bikfalvi, Paul Patras, Cristian Mihai Vancea, Virgil Dobrota</td>
<td></td>
</tr>
</tbody>
</table>

### S7: NEXT GENERATION NETWORKS AND SERVICES

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Access Networks: Operating Options and Challenges of Business Logic</td>
<td>247</td>
</tr>
<tr>
<td>Matti Juutilainen, Jouni Ikonen, Liisa-Maija Sainio, Jari Porras</td>
<td></td>
</tr>
</tbody>
</table>
Regional Networks and Operator Neutrality in Finland
Tuomas Karhula, Jouni Ikonen, Matti Juutilainen

An Integration Architecture to 4TH Generation Wireless Networks
Xu Yang, John Bigham

Performance Limitation of an Inter-City Optical Ring Network with Short-Period Dispersion-Managed Fiber due to the Presence of Cross-Phase Modulation
Satya Prasad, Meer Nazmus Sakib, Md. Nazmul Alam, Redwan Noor Sajjad

S8: COMMUNICATIONS SOFTWARE

Improving Virtual Team Communication
Krešimir Pripužić, Luko Gjenero, Hrvoje Belani

MUDCOM: Cost Modeling Framework for Design of Telecommunications Software Systems
Moinul Khan

Towards Dynamic Web Service Generation on Demand
Ivan Magdalenić, Boris Vrdoljak, Zoran Skocir

Use of distributed resources in mobile environment
Tommi Kallonen, Jari Porras

S9 - SIGNAL PROCESSING AND CODING

Frequency Domain MMSE Equalization with Moving FFT for MBOK DS-UWB System
Shin Woo Kang, Se Bin Im, Hyung Jin Choi

Complexity issues in the introduction of High Definition in H.264/AVC based videoconferencing
Susanna Spinsante, Ennio Gambi, Franco Chiaraluce, Stefano Morichetti

Design of irregular LDPC Codes for flexible Encoder and Decoder Hardware Realization
Frank Kienle, Torben Brack, Norbert When

Variable Rate LDPC Codes for Wireless Applications
Marco Baldi, Giovanni Cancellieri, Franco Chiaraluce

Adaptive Noise Cancellation Based on Neural Network
Maja Stella, Dinko Begusic, Mladen Russo

Iterative Object Reconstruction from the Limited Spectrum Based on Soft Approach
Josko Radic, Nikola Rozic, Mladen Russo
S10 - INTERNET AND IP BASED ENVIRONMENTS

Internet Shopping System using Cryptographic ID Technology and ID Compression Methods
Kouichi Kikuchi, Kazumasa Takam, Shinichiro Goto

Multicast state scalability in QoS MPLS networks
Ivo Rozić

Agent Based Data Collecting in a Forest Fire Monitoring System
Ljiljana Bodrožić, Darko Stipaničev, Maja Stula

Secure Mobile IPv6 for B3G Networks
Domenico Celentano, Antonio Fresa, Maurizio Longo, Fabio Postiglione, Anton Luca Robustelli

IP Telephony Network Saving Capacity due to Substitution of PSTN by IP Network
Milutin Kapov, Damir Diaka

S11 - : RESEARCH/EDUCATION METHODOLOGY

E-Learning Platform Characterization from User Traffic
Marian Cristian Mihaescu, Burdescu Dumitru Dan

A T-Learning Platform based on Digital Terrestrial Television
Marco Baldi, Adelmo De Santis, Damiano Falcone, Ennio Gambi, Susanna Spinsante

CPM/PERT Project Planning Methods as E-learning Optional Support
Jadranka Marasovic, Tea Marasović

Italian-Croatian Remote Laboratory Distributed on Geographical Network
Mladen Borsic, Drago Cmuk, Pasquale Daponte, Claudio De Capua, Domenico Grimaldi, Tomislav Klic, Tarik Mutapčić, Maria Riccio

The Campus Satellitare del Salento: a Scalable and Transparent e-learning Application
Franco Tommasi, Antonio Campa, Simone Molendini

PS – POSTER SESSION

A Hybrid Fault-Tolerant Algorithm for MPLS Networks
Maria Hadjiona, Chryssis Georgiou, Vasos Vassiliou

REVIEWERS

AUTHOR INDEX