2010 International Conference on Communication in Wireless Environments and Ubiquitous Systems: New Challenges

(ICWUS 2010)

Sousse, Tunisia
8 – 10 October 2010
TABLE OF CONTENTS

TECHNICAL SESSION 1: NEW INTERNET TECHNOLOGIES

**EMP: a Network Management Protocol for Ip-based Wireless Sensor Networks** ........................................................... 1
    Shafique Ahmad Chaudhry, George Boyle

**HAT: HIP Address Translation Protocol for Hybrid RFID/IP Internet of Things Communication** ........................... 7
    Khalifa Toumi, Moura Ayari, Leila Azouz Saidane, Mathieu Bouet, Guy Pujolle

**The Impact of Mobile IPv6 on Transport Protocols - An Experimental Investigation** ............................................ 14
    Amine Dhraief, Zied Chedly, Abdelfettah Belghith

TECHNICAL SESSION 2: MULTIMEDIA OVER WIRELESS NETWORKS

**Window-growth Rateless Coding for Data-partitioned Video in Wireless Environments** ........................................... 22
    Hannadi Sammek, Martin Fleury, Mohammed Ghanbari

**Energy-Efficient Wavelet Image Compression in Wireless Sensor Network** ............................................................... 28
    Mohsen Nasri, Abdelhamnd Helali, Halim Sghaier

TECHNICAL SESSION 3: CODING AND CHANNEL ESTIMATION

**Error-rate Performance Analysis of Incremental Decode-and-Forward Opportunistic Relaying** ............................... 35
    Kamel Tourki, Hong-Chuan Yang, Mohamed-Slim Alouini

**Estimation of Highly Selective Channels for Downlink LTE System by a Robust Neural Network** ........................... 41
    A. Omri, R. Hamila, M. Hasna, R. Bouallegue, H. Chaieb

TECHNICAL SESSION 4: ROUTING AND MOBILITY

**Stability Routing With Constrained Path Length** ........................................................................................................... 46
    Mohamed Amine Abid, Abdelfettah Belghith

**Suitability Analysis of Mobility and Multihoming Unification** ..................................................................................... 53
    Amine Dhraief, Abdelfettah Belghith

TECHNICAL SESSION 5: MULTICAST ROUTING

**A New Multicast Routing Algorithm with Cost, Delay and Delay-Variation Constraints** ........................................... 59
    Mohamed Aissa, Adel Ben Mnaouer, Habib Youssef, Abdelfettah Belghith

TECHNICAL SESSION 6: SECURITY AND PRIVACY

**Prototyping Cost-effective Secure Application Server on a Chip (SASoC) - A Case Study for Monitoring Sensor Network** ................................................................................................................................. 67
    Zied Ben Salem, Mohamed Wassim Youssef, Mohamed Abid

**Enforcing the Security of Component-based Embedded Systems with Information Flow Control** ............................ 73
    Takoua Abdellatif, Nejla Rouis, Wafa Saidane, Taha Jarboui

**Adapting TLS Handshake Protocol for Heterogenous IP-Based WSN using Identity Based Cryptography** ................. 79
    Rania Mzid, Manel Boujelben, Habib Youssef, Mohamed Abid

SESSION 7: SHORT PRESENTATIONS

**RiSeG: A Logical Ring Based Secure Group Communication Protocol for Wireless Sensor Networks** ....................... 87
    Omar Cheikhrouhou, Anis Koubâa, Olfa Gaddour, Gianluca Dini, Mohamed Abid