WPMC'08
Lapland, Finland

eMobility

W-GREEN 2008

1st International Workshop on Green Wireless

Lapland, Finland, 8 September, 2008

organized by the e-Mobility European Technology Platform (www.emobility.eu.org/)

in conjunction with the 11th International Symposium on Wireless Personal Multimedia Communications (WPMC'08)

PAPER SUBMISSION

Papers will need to be submitted through EDAS. Papers should be in English, not exceeding 5 double-column pages, and should follow the WPMC paper templates available on the WPMC 2008 website (http://www.wpmc2008.org/).

IMPORTANT DATES

Submission deadline: 9 May 2008
Notification: 30 May 2008
Final paper due: 20 June 2008
Date of the workshop: 8 Sept. 2008

WORKSHOP ORGANIZERS

Hendrik Berndt
NTT DoCoMo Euro-Labs, Germany
Laurent Hérault,
CEA-LETI, France
Matti Latva-aho
CWC, University of Oulu, Finland
Rahim Tafazolli
CCSR, University of Surrey, U.K.

TECHNICAL PROGRAM COMMITTEE

Reijo Savola, VTT
Angeliki Alexiou, Alcatel-Lucent
Walter Tuttlebee, Mobile VCE
Ramjee Prasad, CTIF
Van der Perre Liesbet, IMEC
Luis M. Correia, TU Lisbon
Gerhard Fettweis, TU Dresden
Dajmal Zeghlache, INT
Julia Martinez, Telefonica
Marco Chiani, Univ. Bologna
Georgios Kormentzas, Agean Univ.
Ignas Niemegeers, TU Delft
Manzalini Antonio, Telecom Italia
Carles Anton, CTTC
Tanja Zseby, FhG Fokus
Antonio Manzalini, Telecom Italia
Michael Doubrava, Alcatek-Lucent
Jose Marie Cabero, Robotiker
Ville-Veikko Mattila, Nokia
Jukka Rantala, Nokia
John N. Sahalos, AUTH

CALL FOR PAPERS

DESCRIPTION

The transmitted data volume increases approximately by a factor of 10 every 5 years, which corresponds to an increase of the associated energy consumption by approximately 16 – 20 % per year. Currently, 3 % of the world-wide energy is consumed by the ICT infrastructure which causes about 2 % of the world-wide CO2 emissions (which is comparable to the world-wide CO2 emissions by airplanes or one quarter of the world-wide CO2 emissions by cars). If this energy consumption is doubled every 5 years, serious problems will arise. Therefore, lowering energy consumption of future wireless radio systems is demanding greater attention.

Another challenge of future wireless radio systems is to globally reduce the electromagnetic radiation levels to have a better coexistence of wireless system (less interference) as well as a reduced human exposure to radiations.

These needs create inter-disciplinary research challenges including semiconductor technology, hardware, networks, services, and radio transmission, where schemes have to be designed that operate with a reduced transmit power and reduced radiations.

The First International Workshop on Green Wireless (W-GREEN), organized with the support of the expert group of the e-Mobility European Technology Platform (www.emobility.eu.org/), and in conjunction with the 11th International Symposium on Wireless Personal Multimedia Communications, 8-11.9.2008 to be held in Ivalo, Finland, will focus on the inter-disciplinary research challenges associated with the design, implementation, and application of future wireless technologies aiming at environmental friendly technology deployment.

SCOPE

Original papers describing both theoretical and experimental results within the scope of Green Wireless are solicited. Topics of interest include, but are not limited to, the following:

- Holistic view of energy consumption in wireless communications
- Architectures and design of low power equipments (sensors, terminals, network infrastructure)
- Cognitive and opportunistic networks (spectrum sharing models, etc.)
- Cooperative networks
- Reconfigurable networks (geographic routing, admission control, handover, etc.)
- Cross layer and interference pollution (advanced adaptive mechanisms, MAC, scheduling, power control)
- Network load balance and smart information storage in distributed networks
- Advanced MIMO based communications