

CALL FOR PAPERS (D2D2013)

First International Workshop on Device-to-Device Communications and Networks (D2D2013)

To be held in conjunction with IEEE International Conference on Communications in China
12-14, Aug. 2013, Xi'an, China

Aim of the Workshop

As more and more new mobile multimedia rich services are becoming available to larger audiences there is an ever increasing demand for higher data rate wireless access. Device-to-device (D2D) communication is a promising concept to improve user experiences and resource utilization in cellular networks, which enables two mobile devices in proximity of each other to establish a direct local link and to bypass the base station or access point. However, many research challenges still exist, such as how to share resources dynamically (e.g. spectrum and energy) between cellular communication and ad hoc D2D communication to accommodate larger volumes of traffic and to provide better service to users. Other challenges include: identification of services for which D2D communication is useful; radio resource allocation and resource management; self-organizing direct links; proximity-based offloading, and capacity evaluation and performance comparison.

The future D2D networks cannot operate efficiently, unless these challenges are properly addressed. The aim of the workshop is to bring together both the mobile communications industry (operators, telecom vendors, and consulting firms) and academia to present and discuss the problems, challenges, directions, and state-of-art in the fields of future device-to-device communication and networks. In this workshop, the advances of wireless communications that enable device-to-device communications arising from the adoption of new technologies will be discussed. D2D 2013 seeks papers dealing with architectural issues, theoretical studies, new paradigms, enabling technologies, practical implementations, and policy issues for device-to-device communication and networking problems. Besides the technical insights, the workshop will provide a supportive environment for technical discussions between like-minded researchers and engineers.

Topics of interests

Topics of interest relating to device-to-device communications for future wireless networks are (but not limited to):

- Mobile-to-mobile channel modeling
- Device discovery and association
- Link management and mode selection
- Power control and interference management
- MIMO techniques
- Cooperative D2D communications
- Index coding and network coding
- Radio resource management (RRM)
- Dynamic frequency allocation and spectrum sharing techniques
- Self-optimization and self-healing
- Mobility measurements, modeling and management

- Multi-hop D2D communications
- Heterogeneous wireless networks
- Traffic modeling and real network traffic scenarios
- Game theory and incentive mechanisms
- Security issues
- Green communications
- Capacity off-loading and emergency communications
- New services and applications

Submission Guidelines

D2D2013 accepts only novel, previously unpublished papers in the area of device-to-device communications and networks. Submissions must include an abstract, five to ten keywords, the e-mail address of the corresponding author and should not exceed 6 pages, including tables and figures (up to two extra pages at additional cost) in standard IEEE camera-ready format (double-column, 10-pt font).

The proceedings of the workshops program will be published as the ICC2013 main conference, and will be also included by **IEEE Digital Library and indexed by EI**.

Submission of a paper should be regarded as an undertaking that, should the paper be accepted, at least one of the authors will register for the conference and present the work, and one full registration can cover up to 3 papers. Submissions will be conducted electronically on the conference website:

<http://www.ieee-icc.org/submguide.html>.

Important Dates

Paper submission: May 27, 2013

Notification: June 30, 2013

Final paper: July 15, 2013

Workshop General Chair

Prof. Xueming (Sherman) Shen, University of Waterloo, Canada

Workshop TPC Chair

Prof. Lingyang Song, Peking University, China

Workshop Industry Chair

Dr. Shaohui Sun, Datang Mobile, China

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