Future Directions in Spectrum Management Research

Workshop in conjunction with DySPAN 2015, Stockholm, September 29, 2015

Call for Participation and Contributions

The strong growth of traffic in wireless mobile and nomadic internet access is rapidly on its way to dwarf all other wireless communication applications. The demand for more capacity has to be met by a combination of different strategies: improved technology (spectrum efficiency), use of short-range communications (ultra-dense deployment of access points) and the more efficient use of spectrum in existing bands and allocation of new spectrum. Providing more spectrum has significant advantages, since existing infrastructure can be reused resulting in lower cost and lower energy consumption.

Using the spectrum more efficiently by means of flexible and dynamic techniques, has been a mainstream item in research for the last 15 years. Significant research efforts have been focused on secondary spectrum sharing using "cognitive radio"-techniques, although recent results demonstrate the limitations of spectrum sensing based access systems for large scale use. The focus is now turning towards other, novel approaches to dynamic and flexible spectrum management, approaches that are suitable to provide large amounts of spectrum in a trustworthy manner that makes large-scale investments attractive.

Ongoing research activities are being presented at IEEE DySPAN whereas this workshop focuses on future directions in research in this field. The workshop aims at being an open forum for presenting radically new concepts as well as evolutionary ideas that could be candidates for future research. The workshop addresses primarily new technical concepts with the potential to provide orders-of-magnitude efficiency gains, but also their relationship to future spectrum policies is of interest.

This ½-day workshop will be held in conjunction with DySPAN 2015, Stockholm, on September 29, 2015. The aim is to provide a mix of invited talks, poster presentations and a panel/open debate. We welcome contributions on the topics above for the poster sessions. Poster session presenters will also be invited to give a brief (2 min) oral "teaser"-presentation at the plenary session.

Proposed contributions will be judged on the basis of a 500 word/1 page abstracts outlining the key features of the idea/concept to be presented. Abstracts of poster proposals should be sent in MS Word or pdf formats to future-spectrum@wireless.kth.se not later than **August 15, 2015.** Poster presenters will be notified not later than **September 1.**

Organizing committee

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Petri Mähönen, iNETS/RWTH Aachen University, Germany
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Important dates

August 1: Workshop registration opens
August 15: Submission deadline for Poster Abstracts
September 1: Notification of acceptance
September 29: Workshop @ DySPAN2015 venue