ABSTRACT

Tactical networks aim at specific scenarios such as public safety and military operations. In these scenarios, the infrastructure may have been destroyed. Thus, it makes sense to consider adaptive and self-healing networks that do not rely on infrastructure. The scenarios have specific characteristics that should be considered for credible performance evaluations. Realistic mobility modeling is one important issue. Furthermore, there is a specific demand for reliability and robustness in tactical scenarios. Therefore, robust and adaptive protocols need to be developed. The talk will focus on recent research results concerning scenario modeling as well as deployment and adaptations of sensor applications.

BIOGRAPHY

Nils Aschenbruck received his graduate diploma and PhD in computer science from the University of Bonn, Germany, in 2003 and 2008, respectively. He continued as a senior researcher and head of the research area "tactical wireless multi-hop networks" at the communication systems group at the University of Bonn. Since March 2012 he holds a tenured professorship for distributed systems at the University of Osnabrueck. His research interests include mobile and wireless networks, especially scenario modeling as well as security.