

## Developments on self-organization in mobile access networks

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Self-organization in mobile access networks, is gaining more and more momentum as shown by extensive activities on this topic in research and standardization, notably 3GPP and the operators alliance NGMN. The main drivers for introducing self-organization, i.e. reducing OPEX and optimizing network performance and resilience, have even gained importance in the past few years due to the increasing complexity of the operations of today's networks (e.g. UMTS/HSPA and LTE, which need to support a growing number of different services), and the still increasing competition among network operators.

In the presentation we will further elaborate on these backgrounds and perspectives, and give an overview of the developments regarding self-organization in mobile access networks. Particular attention will be paid to the work and results achieved in the European research project FP7 SOCRATES (2008-2011, see <http://www.fp7-socrates.eu/>) on self-organization (self-configuration, self-optimization and self-healing) in LTE networks and the new challenges regarding self-organization in multi-layer / multi-RAT mobile network environments that will be addressed in the follow-up project FP7 SEMAFOUR (Self-Management for Unified Heterogeneous Radio Access Networks; 2012-2015).

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