

PARTNERS

- TNO Information and Communication Technology (The Netherlands)
- atesio (Germany)
- Ericsson AB (Sweden)
- IBBT (Belgium)
- TU Braunschweig (Germany)
- Vodafone (United Kingdom)
- Nokia Siemens Networks (Poland)
- Nokia Siemens Networks (Germany)

FUNDING

The **SOCRATES** project is supported by the European Union under the 7th Framework Programme.

DURATION

January 1, 2008 - December 31, 2010

BUDGET

Total cost: 4.98 million €
EC Contribution: 3.25 million €

MORE INFORMATION

www.fp7-socrates.eu

PROJECT COORDINATION

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SOCRATES

Self-Optimisation and Self-Configuration in Wireless Networks



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SOCRATES - Self-Optimisation and Self-Configuration in Wireless Networks

ABOUT SOCRATES

The **SOCRATES** project investigates the application of **self-organisation** methods, comprising mechanisms for **self-optimisation**, **self-configuration** and **self-healing**, as a promising opportunity to automate the planning and operation of **wireless access** networks in general, and the **3GPP Long Term Evolution (LTE)** radio interface in particular.

PROJECT OBJECTIVES

The overall objective of the **SOCRATES** project is to develop self-organisation methods in order to optimize network capacity, coverage and service quality, while effectuating significant OPEX (and possibly CAPEX) reductions.

More specifically, the **SOCRATES** objectives are:

- The development of novel **concepts**, **methods** and **algorithms** for the efficient and effective self-organisation of wireless access networks.
- The specification of the required **information** in support of these newly developed methods, its statistical accuracy, and the methods of information retrieval, including the needed protocol interfaces.
- The **validation** and **demonstration** of the developed concepts and methods through extensive simulation experiments.
- The evaluation of the **implementation** and **operational impact** of the developed methods.
- **Influence** on 3GPP standardisation and NGMN activities.

CONSORTIUM

Bringing together a well-suited, strong **consortium** of two of the world's largest **equipment vendors**, a leading **mobile operator**, a **company developing support tools** for network planning and operations and three renowned **research organisations** with a proven record in successful cooperation with the mobile industry, the **SOCRATES** project has a great opportunity to influence global standardisation, reinforce European industrial leadership and create new industrial and business opportunities.

Envisioned self-optimisation and configuration process in future radio access networks:



As a result of self-optimisation, service quality may be improved and network investments postponed:

IMPACT OF 'SELF-OPTIMISATION'

