The goal of the Telecommunications and Information Security Research Group is to comprehensively study corporate IT systems, networks and related data security challenges. In the future, major challenges will be the vast growth of data transfer volumes, the increasing popularity of cloud services, the emphasis of data transfer in wireless networks and the security of data flows and data repositories. From a corporate point of view, these new technologies bring great productivity gains, but also vulnerabilities, as operations migrate increasingly online. Our research group works in close cooperation with companies that develop or use new technologies. Our mission is to develop test platforms and transfer our expertise to companies.

Read more

In the field of data security, the goal of the research group is to increase general awareness of data security. In particular, the group concentrates on improving business opportunities of SMBs through the use of information and communications technology. The group also participates in national and international research projects. The operations include an annual Data Security Day for SMBs and Citizen’s IT Support Service that helps all people in Turku in everyday matters related to data security.

In the field of communications, our research efforts concentrated on digital TV technology in the early 2000s. The group has conducted research in several Tekes-funded EU-wide projects within the EUREKA/Celtic cluster. At the start of 2010s, the group shifted its emphasis to shared spectrum access and cognitive radio networks. Tekes’s Trial technology programme constructed a TV White Space test environment and spectrum observatory in Turku for long-term monitoring of the use of the RF spectrum in the Turku area. The security of communications networks is researched from the viewpoint of shared spectrum access, which poses new and significant data security challenges for wireless communications. The research, development and innovation operations of the group have attracted wide international interest.

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- Trinity College
- Joint Research Center (JRC)
- Teleste
- Satel
- Nokia
- Nokia Solutions and Networks (NSN)
- Fairspectrum
- Digita
- Elektrobit
- Renesas Mobile Europe
- Viola Systems
- QEM Software
- Helsinki Region Transport
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- Finnish Communications Regulatory Authority