

NFC – Near Field Communication: the technology and its application

Special Panel of the StoLPaN consortium

The NFC (Near Field Communication) technology is jointly developed by Philips and Sony. The technology is named 'near field', because the communication distance is usually less than 10 centimeters. This is a technology to be used in various consumer electronic equipments to ensure proximity communication but it has the greatest potential when deployed in mobile handsets.

The technology is compatible with existing contactless infrastructure, and the mobile handset that has NFC interface can emulate smart cards (ISO 14443), can act as a reader terminal or write the tags, and can even realize peer-to-peer (P2P) communication between two devices. These features allow the NFC enabled mobile handset e.g. to connect to a web page by scanning an RFID tag, can be used in payment transactions as a payment card but also as virtual payment terminal, or can even facilitate instantaneous coupling of Bluetooth or WiFi enabled devices.

The goal of the panel is to introduce this novel wireless technology and to provide a high level overview of its specifics, its functionality and the constraints of the NFC interface. It will also discuss the great potential of establishing a new multiapplication environment by coupling NFC with mobile communication and by using the handset's resources, like the screen, keyboard, and battery. New opportunities and services call for new solutions and also create new challenges that were not faced before. Mobile NFC, a complex service with diverse requirements and long value chain, needs a very complex legal framework encompassing the service and country specific regulations. The actors involved in the service provisioning are also facing new business relations and financial flows that need to be organized into a new business model.

The participants of the panel are members of the consortium called StoLPaN. The StoLPaN consortium is founded by several leading companies, universities and user groups from across Europe. A non-profit member of the NFC Forum, the consortium is co-funded by the European Commission's Information Society Technology (IST) program.

Panel Participants

- András Vilmos (Chairman of the panel) – SafePay Systems, Project manager of StoLPaN
- Péter Párkányi – Technical Account Manager Central Europe, Motorola Ltd.
- dr. Balázs Benyó – Budapest University of Technology and Economics
- Rodolfo Gomes – Customer Support Engineer, NXP Italy
- Emese Szitási – Attorney at Law, Baker and McKenzie

Presentations

- Introduction to the details of the NFC technology
- Application opportunities of NFC technology
- Multi application environment in the NFC enabled mobile handset
- Legal aspects of NFC based applications
- Business models, business players and roles, financial processes