

# RheinEnergieStadion



## Customer

- Kölner Sportstätten GmbH  
(owner of the stadium in Cologne, Germany)

## Industry

- Stadiums and sports facilities

## Challenges

- New telephone system for RheinEnergieStadion
- Networked to the telephone system of the Geißbockheim (clubhouse of the football team 1. FC Köln)

## Solution

- SV9100 telephone system for 300 extensions
- Redundant design
- Subscriber and networking over VoIP

## Results

- Redundancy
- Remote maintenance and control
- Lowered costs and power consumption

[www.koelnersportstaetten.de](http://www.koelnersportstaetten.de)

The RheinEnergieStadion was opened in 2004 and is considered one of the most beautiful football arenas in the world. It is home to the 1. FC Köln football team, but also used for other sports. Holding up to 50,000 spectators it provides the perfect framework for big events like the New Years party in 2009 with the famous German band 'Die Fantastischen Vier'.

## Challenges

When the rental contract for the existing telephone system of another brand expired, the representatives of the Kölner Sportstätten faced the choice: either to re-sign the contract or get a new communication system.

For economic reasons the management decided to acquire a new system. In cooperation with LCC International GmbH, consulting and operation company of the stadium network and telephone system, the tender and implementation of the new system was conducted.

## Solution

From offers of all known telecommunication vendors NEC was chosen after a careful selection process.

The solution now implemented, NEC's UNIVERGE SV9100, fulfills all of the requirements of Kölner Sportstätten regarding redundancy and includes the latest state of technology. The modern design and appearance of the terminals was another appealing point in the decision making process.

## Results

The offered redundancy is most important. In case of a server failure the IP telephony keeps operating, keeping the stadium always reachable by phone. Two separate system units were installed – one in the eastern and another one in the western part of the stadium – each with a primary multiplex connection and three CPUs. The stadium is double connected to the public telephone network. If one connection or unit fails, the other one takes over the functions.

There are 60 parallel trunklines for 420 extensions available (including the networked Geißbockheim). 252 IP telephones with XML interface are in service, six of them with big touch screens. A fax server and CTI software has been installed, for comfortable control of the telephony over the PC, for example dialing with the push of a button from Outlook.

## Hybrid structure

This SV9100 system in the stadium is a good example of a hybrid structure: The telephony and networking are based on VoIP, but also standard TDM functions are easily possible. For example EC cash in the fan shop or controlling the electronic noticeboard for the access regulation to the stadium is implemented by ISDN.

## Remote maintenance

Stephan Boss, technical manager of the stadium, likes especially that the telephone system can be controlled comfortably by remote maintenance through LCC International GmbH. With trainings at Skyline Communication Systems, the exclusive NEC master distributor for Germany, a LCC staff member was instructed for the installation

and maintenance. Furthermore a designated contact person, who also accompanied the installation of the system, is at his disposal for technical support. A big advantage: considerably lower power consumption – good for the environment and the purse.

## About

The Kölner Sportstätten GmbH, a 100 percent subsidiary of the city of Cologne, is the owner of six sports facilities. One of them is the stadium RheinEnergieStadion. The RheinEnergieStadion was opened in 2004 and is considered one of the most beautiful football arenas in the world. It is home to the 1. FC Köln football team, but also used for other sports.



*Stephan Boss  
Kölner Sportstätten GmbH, technical manager RheinEnergieStadion*

For further information please contact your local NEC representative or:

**EMEA (Europe, Middle East, Africa)**  
NEC Enterprise Solutions  
[www.nec-enterprise.com](http://www.nec-enterprise.com)

**North America (USA)**  
NEC Corporation of America  
[www.necam.com](http://www.necam.com)

**Corporate Headquarters (Japan)**  
NEC Corporation  
[www.nec.com](http://www.nec.com)