

Newsletter 2011-4

Trend towards Integration – Interface to Process Visualisation

SCADA systems (Supervisory Control and Data Acquisition) have become indispensable on the modern automation. More and more companies use SCADA systems (e.g. WinCC) for more increased transparency in production.

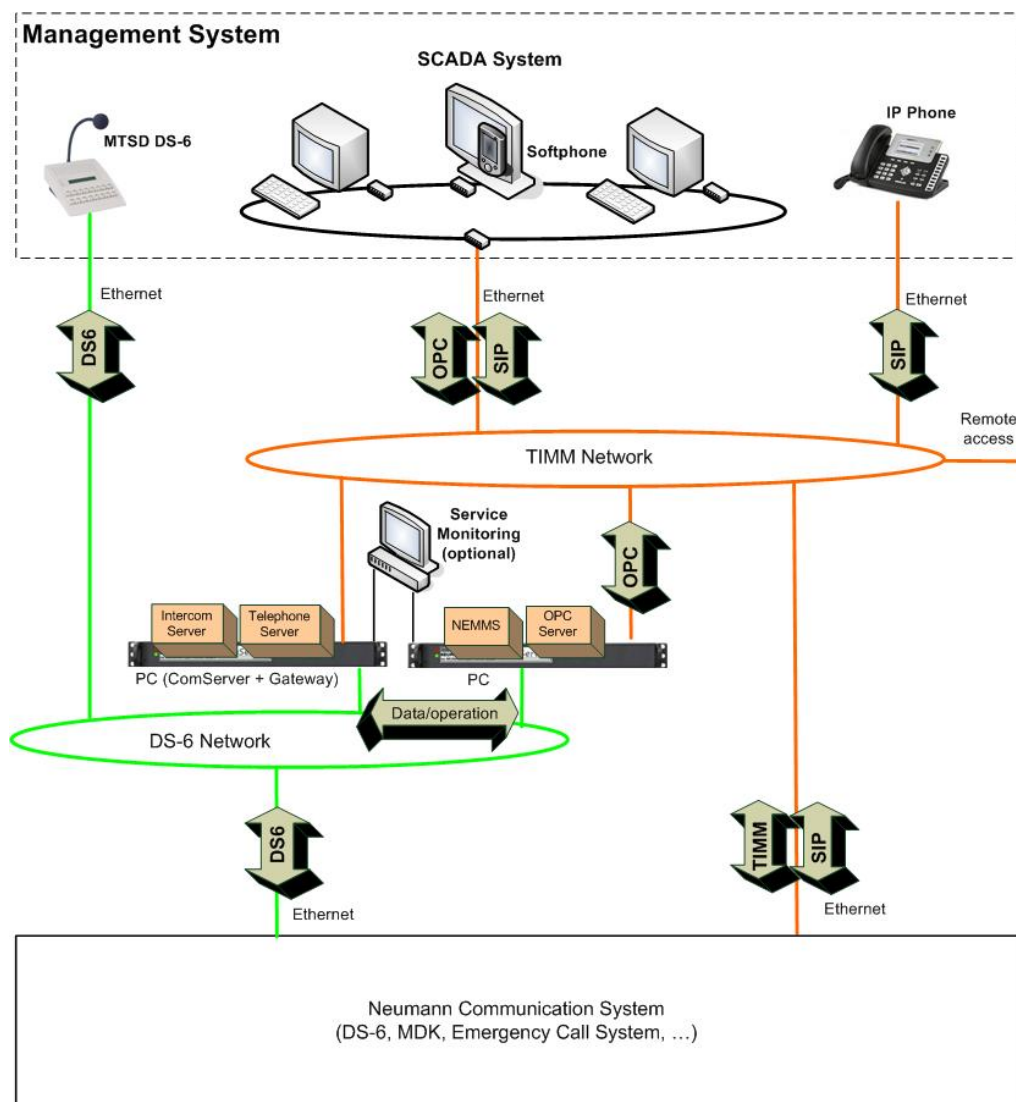


Figure: Exemplary illustration of an OPC connection to a SCADA system

A SCADA system is a **process visualisation system**, which allows the monitoring and controlling of technical processes. Typical application areas are:

- Process visualisation and controlling in power plants, oil and gas systems
- Information systems for monitoring of motorways and tunnel systems
- Management systems in production plants
- etc.

Today's standard for **manufacturer independent communication in automation** is **OPC** (OLE for Process Control). Thus, the **connection to a SCADA system** is realised by an **OPC interface**. OPC is used wherever **controlling and monitoring of different manufacturers build a common flexible, network**. It can be used for real time data (monitoring), data archiving, alert messages as well as directly for controlling (sending orders).

For the connection to SCADA systems by OPC ms Neumann Elektronik has developed a software. By using the OPC interface we provide a **standardised software interface**, which allows the **data exchange between our communication systems and SCADA systems** of several manufacturer. Thus, **all required data from ms Neumann Elektronik** are provided to the SCADA system and can be evaluated or displayed.

The new OPC interface allows **control connections to a primary management system**. It serves the **indication of failure and status messages** of our intercom, PA and emergency call systems. These messages are visualised at a display of a centralised management system or at our PC call station. Thereby, **all important components of our systems will be monitored**.

Special Features:

- Communication of different manufacturers in one common, flexible network
- Standardised interface for data exchange with SCADA systems
- Integration in a centralised management system:
 - Control connections to the centralised management system
 - Standardised visualisation of failure and status messages

Application Example: Emergency Call System N201 Tunnel Aalsmeer (NL)

The new **OPC interface** is exemplary used in the **emergency call project N201 Tunnel Aalsmeer** in Netherland. This project is realised together with Telecom systems.

The tunnel Aalsmeer is a twin-tube road tunnel where each **37 IP emergency call phones** are evenly installed. At the tunnel ends are planned each **3 IP emergency call pillars**. For security reasons, an own IP network is provided. **Three operator stations** are available for the emergency call communication:

- IP phone of the management system
- Softphone in the monitor of the management system
- IP service phone at the netnode cabinet

The management system is responsible for the monitoring of the emergency call system. If needed, the emergency communication can be switched to the operator stations of the connected communication system Siemens Hipath.

The control tasks of the emergency call system are performed by our **TIMM ComServer**, which is designed redundantly for safety reasons. It includes inter alia the complete emergency software.

Special features

- High level of voice quality at the IP phones
(> 0,6 STI; proofed by TNO/Embedded Acoustics)
- Redundant OPC interface for secure transfer of the failure messages and illustration at the centralised management system
- Service PC with NEMMS user interface in the network cabinet
- Volume adjustment of the emergency phones to the ambient noise in the tunnel
- Switching of the emergency call communication from management system to Siemens Hipath
- Detecting and forwarding of failure messages to the management system as well as to the service PC

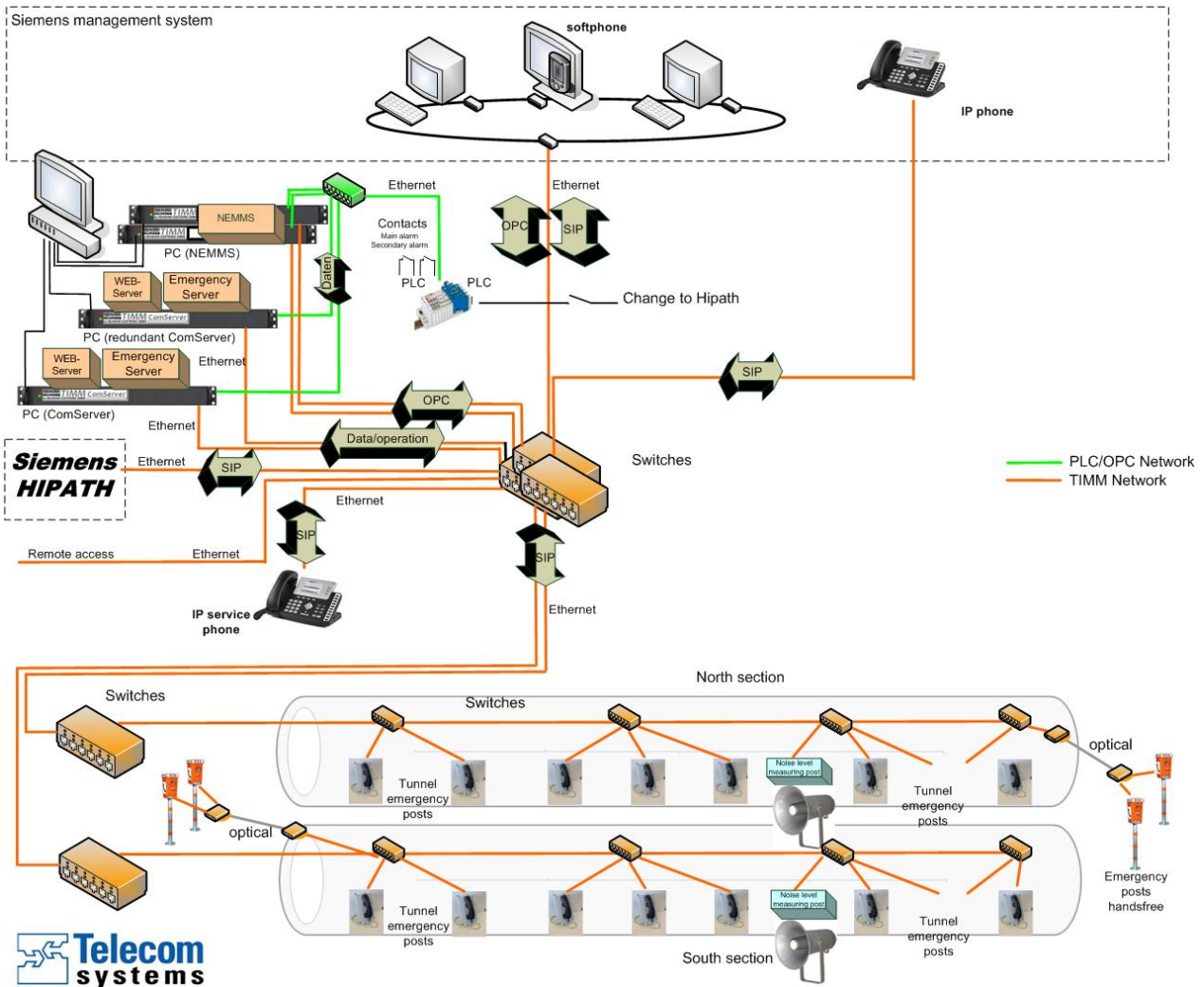


Figure: Block diagram of the emergency call system N201 Tunnel Aalsmeer

The following figure shows a system overview of the failure monitoring at our NEMMS user interface on the service PC in the network cabinet.

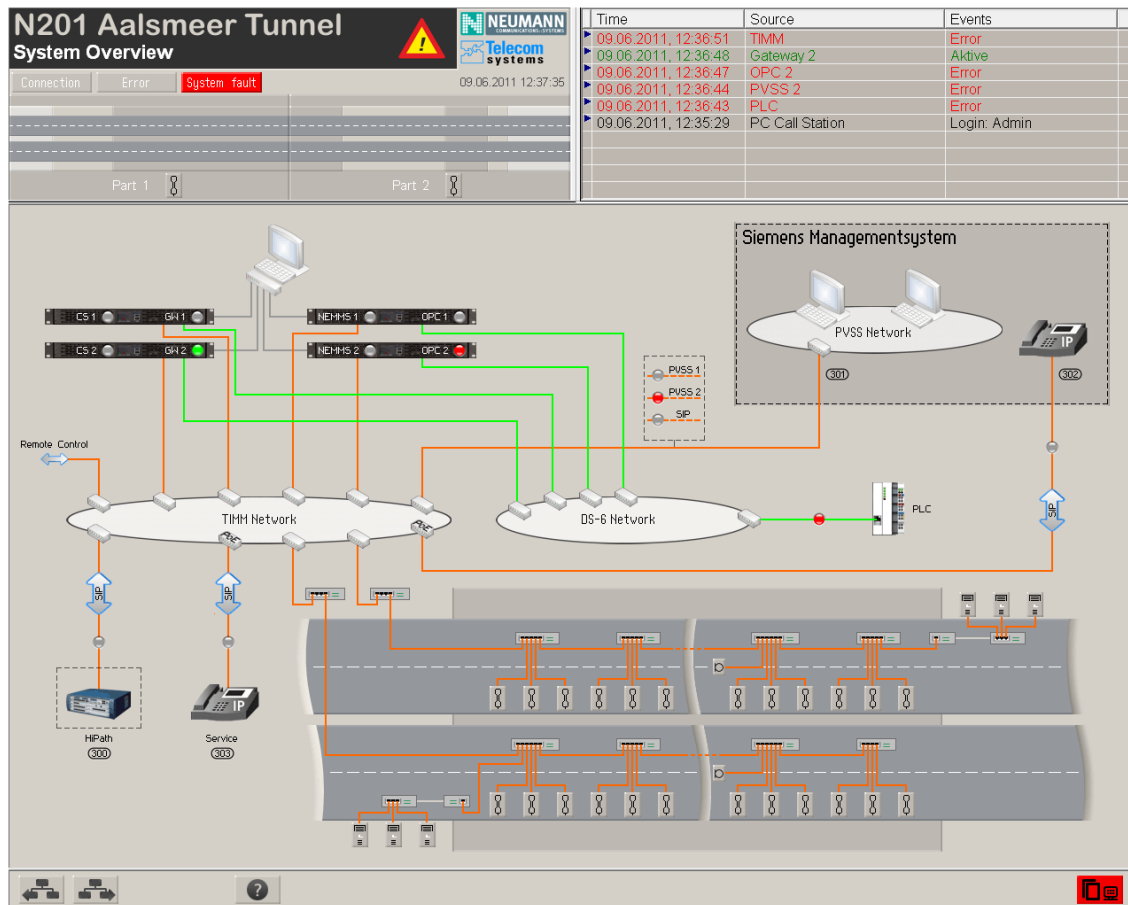


Figure: Failure monitoring of the Tunnel Aalsmeer

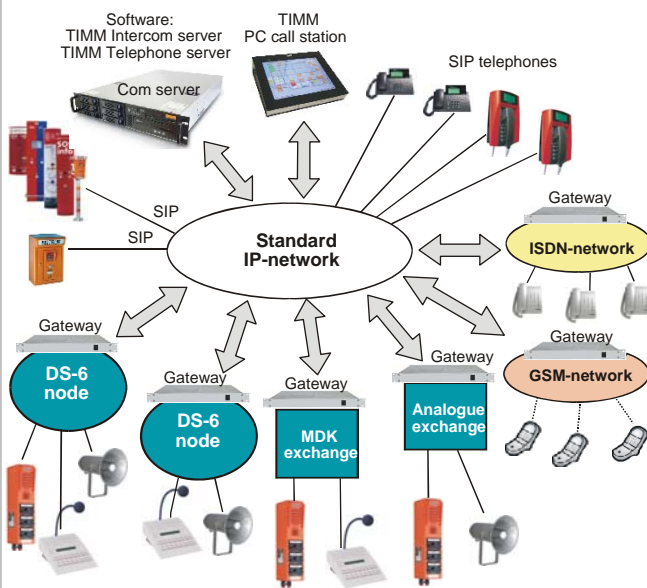
Yours sincerely

Nicole Staubes
Marketing Manager

Training courses July to December 2011 Innovative systems

“TIMM“, our communication system for common IP networks with a focus on intercom, public address, alarm, emergency call and video technology with central monitoring via communication server.

“TIMM“ IP network system with our focus



Our topics:

Information sessions

- Presentation and orientation of the company
- Introduction to our new IP solutions for intercom, PA and much more
- Introduction to the system structure
- Advantages of our new IP solutions
- System integration
- Presentation of applications, e.g.:
 - Practical examples for intercom and PA
 - Connection of a PLC
 - Connection of a fire alarm system
 - Combination of intercom and telephony
 - Video connection
 - Crane communication
 - Connection of a DECT headset system

Dates:

12. July 2011	11. October 2011
16. August 2011	15. November 2011
13. September 2011	06. December 2011

Free attendance

Basic course DS-6 and TIMM

- Introduction to the network technology
- Introduction to the decentralised and the centralised IP system technology
- Special features of the DS-6 system
- Planning and implementation of a DS-6 system
- Design of the system according to DIN EN 60849, DIN VDE 0833-4 and DIN EN 54-16
- Description of the customer specific wiring documentation
- Introduction to the configuration
- The maintenance software „DS-6 Manager“
- TIMM – the communication system for all areas of application
- System integration
 - Connection of old and foreign systems
 - Combination of different subsections like intercom, PA, video and emergency call systems
- Presentation of a demo system with practical examples for intercom, PA, alarm and telephony
- Final test with certification
- Outlook for the expert course

Two-day training courses: by request

Training charges: by request

All seminars will be held at:

: ms Neumann Elektronik GmbH
Lahnstr. 30
45478 Mülheim an der Ruhr

Trainers:

Bernhard Ripholz
Phone: +49 (0)208 5995 294
E-Mail: bripholz@neumann-elektronik.com
Nicole Staubes
Phone: +49 (0)208 5995 291
E-Mail: nstaubes@neumann-elektronik.com

“DS-6“, our decentralized communication system for intercom, PA and general alarm according to VDE 0828 and EN 60849 (electro acoustic emergency warning systems), according to DIN 0833.4 (hazard alert system) and EN 54 part 16 (voice alarm centres).

