



Conversion of the "Karlsplatz" Control Centre to IP Technology, Equipping the New "Erdberg" Control Centre

## Project "Wiener Linien"

# REFERENCE



ms NEUMANN ELEKTRONIK GmbH

Efficient solutions for information and safety



# Many Years of Experience

During previous projects, the **NEUMANN COMMUNICATIONS SYSTEMS GES.m.b.H.**, a subsidiary of the **ms NEUMANN ELEKTRONIK GmbH**, has already successfully completed projects for the Vienna Lines. For example, in the last few years the following components and systems have been integrated into the communications structure of the Vienna underground railway network:

**For example, in the last few years the following components and systems have been integrated into the communications structure of the Vienna underground railway network:**

- **47 MDK Centres** (Multifunctional Digital Communications Systems), another 17 are in planning
- **31 MZV Centres** (Microprocessor-controlled Central Exchange systems)
- **over 250 intercom stations** (MTSA, MTSD, WFA and WFD) on platforms and in control centres
- **over 500 hands-free emergency call units** (NES92 and Emergency Call-C technology) on platforms and in elevators
- **over 900 loudspeaker** circuits on platforms, at ticket machines, ticket cancelling machines and escalators, in lane dividers and in passages between building floors

## The Project

The now 30 years of development continuity of the Vienna Lines, where a diversity of the various generations of equipment and systems have been employed, give rise to the need for a new control centre as well as the necessity to systematically change over to new technologies. Based on our many years of experience as a system manufacturer and system integrator for information and safety technology, our company has the necessary know-how and expertise to successfully implement this challenging large-scale project.

**The overall project is organised into the following sub-projects:**

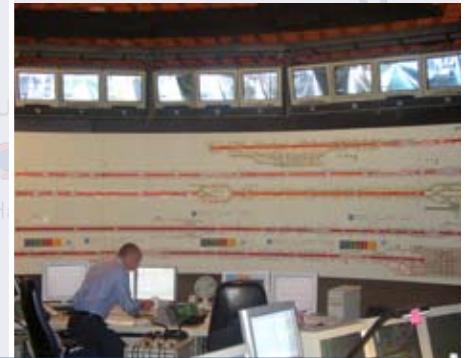
- Conversion of older MZV-technology centres including peripheral devices to digital technology; integration of new MDK Centres that use IP technology
- Equipping the new "Erdberg" control centre (to take over control of the entire Vienna underground in the future); of the old "Karlsplatz" control centre as a conversion.
- Integration of existing peripherals (call stations and hands-free emergency call equipment), train destination displays, video surveillance and building control systems (escalators and lighting control, fire alarm systems)

# Increased Safety & More Information

The goal of the conversion of the "Karlsplatz" control centre and equipping the new "Erdberg" control centre is to allow them to be remotely controlled and monitored from the new "Erdberg" centre via an IP network by adding new components, as well as by integrating existing systems now in operation at the old "Karlsplatz" site.

In the new "Erdberg" control centre, all exchange systems of the existing communications centres will be integrated via gateways into the IP network (VoIP). A ComServer will be used as the exchange for the gateways. In addition, a multiple operator system will be set up with 16 operator stations (PC workstations) using IP technology.

All PC workstations are managed by a management system software (master, slave). This management system provides integrated, homogenous user interface. It allows simple, clear operation of all of the functions needed to control the audio communications technology.



Thus allowing the following operational procedures to be optimised:

- **Wide area coverage with passenger information**
  - partially/fully automated loudspeaker announcements (digital announcement units)
  - live announcements and group/collective calls
  - audio-visual train destination displays
- **Efficient processing of intercom/PA connections and uniform operation for emergency calls**
- **Increased feeling of safety for passengers and company employees**
  - video surveillance systems
  - hands-free emergency call equipment
- **Easier operation of the control systems in the control centres**
  - Management systems
  - Remote control and remote monitoring of the control centres

