



PRAGUE MAGISTRAT

1999 – CZECH REPUBLIC
TETRA SOLUTION
COMMUNICATIONS
SYSTEM



BACKGROUND

Prague is the capital of the Czech Republic. Straddling the River Vltava, it is situated in the country's central region of Bohemia and is home to some 1.2 million inhabitants. Prague is the centre of the political, commercial and cultural activities of the republic.

The city government wanted to install an integrated communications network that would offer voice and data features to a number of users such as:

- Traffic Services (Bus & Tram Operations)
- Road Maintenance Department
- Prague Metropolitan Police
- Prague Magistrat - Crisis Management Department

Spare capacity will be used by delegations visiting the NATO Summit in November 2002. During this period, approximately 1300 users will be on the system. The initial contract for the infrastructure and the first user terminals was awarded to Motorola in 1999 by Ascom Praha on behalf of the end user. Subsequent contracts have been awarded for additional terminals.



For such a high profile system and the first to be installed in the Republic, a number of factors were significant:

- Motorola's technical leadership in TETRA technology
- Motorola's flexibility and ability to work in conjunction with the chosen integrator, Ascom Praha
- Evidence from other Motorola TETRA transport solutions
- Practical evaluation of the terminals determined that they were simple to use and reliable in operation
- Demonstrated programme of application development - in house and with Application Partners
- Technology roadmap for enhanced data applications

CUSTOMER NEEDS

As part of an overall development plan, as well as upgrading and modernising existing communication resources, the customer wanted a flexible solution for the future.

- Voice and data communications solution to assist in delivering more effective public transportation services
- Dispatcher driven group call communication
- Private (individual) and telephone calls
- Reliable and robust mobile and portable terminals
- Text based services such as Short Data Service (SDS)
- Bus and vehicle location information
- Packet Data capability for image transmission and wireless access to remote databases services

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MOTOROLA SOLUTION

A ten site network with five additional sites during the NATO Summit covers the city and airport. The integrator, Ascom Praha, has supplied microwave and fibre-optic links, antenna systems as well as UPS's and emergency generators for system resilience. Communications are managed from 9 dispatch consoles. Ultimately, the system could provide communications for up to 3000 users.

Users are currently using the following features:

- Voice – Group and Individual calls
- Text messages (SDS)
- Telephony (internal and external)
- Automatic Vehicle Location (AVL)



BENEFITS

- Benefits of TETRA (open standard with a high level of assurance)
- Very good audio clarity
- Improved punctuality and better journey information for Prague's daily commuters
- Improved co-ordination of the teams managing operations and maintenance of transport infrastructure
- More efficient use of transport resources for economic and environmental improvements
- Better reaction to traffic problems and breakdowns etc.
- Integrated communications between other organisations