

ISTANBUL METRO

AIR TURKEY SUCCESSFULLY IMPLEMENTS ON BOARD SYSTEMS FOR ISTANBUL METRO



TETRA MOBILE RADIOS, THE FIT SOLUTION FOR ISTANBUL METRO RAILWAY

Istanbul has a rich history of underground railway with the most famous being the Tunnel which opened in 1875. This is not just a beautiful city with a great history, it is also one of the most vibrant culturally with people from all over the world coming here on work or as tourists. Having efficient rail connectivity with good infrastructure is a critical factor for a city to be considered as world class.

Istanbul’s modern metro era began in the year 2000 when the city completed the north south (M2) underground line that connected 12 stations. AIR was invited to help in the modernization of the metro using the latest communication devices.

The Kadıköy – Kartal metro line is 21.6 km long, have 16 stations and is on the Asian side of Istanbul.

BENEFITS

- Announcements from control center to the train driver or to one or multiple cars of the train
- Sending text messages from control center to one or multiple trains
- Sending new or recorded text messages from the train to the control center
- Activating driver cabin microphone from the control center

Motorola equipments are not new to the Istanbul metro with the existing network already using the TETRA infrastructure and TETRA radio for communication. TETRA has been the preferred communication tool due to its reliability and ability to work well even in harsh environments.

AIR has been working with the metro operator Istanbul Ulasim A. S. to fulfill requirements of providing in-tunnel & in-station radio coverage solutions, mobile and portable terminals, maintenance and warranty services.

BENEFICIARY INFO

AVRASYA METRO GROUP

INDUSTRY

TRANSPORTATION

LOCATION

TURKEY

LOCAL PARTNER

AIR TURKEY

PROJECT'S REQUIREMENTS

The requirements from the contractor were clear in terms of achieving communication efficiency between the train driver, the control room and the cars of the train. At the same time, we were asked to provide with an easy to use interactive system which aided the driver in making calls or announcements quickly and smoothly. An on-board radio system was required to connect the Motorola MTM800 radio with the train public announcement system. Other requirements were as follows:

- Allowing announcement from control center to the train driver or to one or multiple cars of the train
- Sending text messages from control center to one or multiple trains
- Sending new or recorded text messages from the train to the control center
- When emergency button is pressed by the driver, sending a signal to the control center
- Activating driver cabin microphone from the control center

“AIR'S ON BOARD INTEGRATION SOLUTION, TOGETHER WITH MOTOROLA MTM800 MOBILE RADIOS, WAS THE PERFECT FIT FOR OUR NEEDS AND REQUIREMENTS.”

Naci Özen, Project Manager

SOLUTIONS IMPLEMENTED BY AIR

- 75 On Board Systems
- 75 Motorola MTM 800 TETRA Mobile radios
- Keyboard and an LCD display interface
- Maintenance and warranty services

AIR installed 75 On Board Systems (OBS Boxes) along with 75 Motorola MTM 800 TETRA Mobile radios and accessories. We also monitored the installation of the radio systems on the trains. The OBS was designed to work in conjunction with the MTM800 TETRA Radios and was manufactured by the in-house design team of AIR. The OBS is a microcontroller based device and has an embedded keyboard and an LCD display interface.

The multiple free relay input/ output ports along with multiple serial interfaces makes this device highly customizable with a wide range of application possibilities.

AIR is known for its industry leading solutions customer centric solutions in mobility and communications. AIR's vast expertise in telecommunication and radio solutions was one of the prime reasons why Avrasya Metro Group, the main contractor for building Kadiköy – Kartal metro line entrusted AIR with the responsibility of delivering the most cost effective and efficient solutions.



ABOUT AIR

AIR is a premier technology company distributing wireless products and solutions for an array of vertical markets. American International Radio is recognized as the Largest Motorola Distributor in EMEA.

We are a System Integrator providing Professional Communication Solutions by developing software and hardware, customized Mobility & IT applications and solutions, and enhancing the functionality of standard products.