



# Motorola Delivers TETRA to Petrom S.A. Oil Refinery in Romania



## Overview: Petrom S.A. Petrobrazi Oil Refinery

Petrom S.A. is a member of the OMV multinational oil and gas group. The Company's Petrobrazi refinery is located in an important industrial area in Romania, it employs around 2,000 people and produces a range of different kinds of products for the Romanian market.

Since 2006 there has been a major investment in Petrobrazi aimed at improving the yield structure while increasing capacity to 6 million tons, further reducing energy consumption and positioning the refinery as the biggest and most efficient in Romania.

### The Challenge: Providing Safe and Efficient Communications

Petrobrazi needed to improve its radio communication system as part of its overall investment to make the refinery the biggest and most efficient in Romania. Specifically, the Company needed to increase the capacity of the existing system to enable more simultaneous calls to be made. Petrom S.A. also needed a system which could be used flexibly to meet the needs of existing users (initially the system was to be used by the production field workers and also the fire brigade). The system also needed to be scalable so that additional user groups could be added over time.

Safety was also a key area. The existing mobile radios they were using did not have the required ATEX certification for safe use in a potentially explosive environment. Additionally, Petrobrazi workers needed a radio that could be easily operated in even the harshest environments. To ensure safety, Petrobrazi also required features such as emergency call to make sure personnel could communicate effectively in emergency situations.

### The Solution: Complete TETRA Solution Including ATEX Certified Radios

Having worked with Motorola for many years, Petrobrazi chose Motorola's Dimetra IP Compact solution to meet its communication requirements. This, coupled with a full dispatch solution and MTS4 base stations provided the resilient platform to meet Petrobrazi's challenges.

Motorola's Dimetra IP Compact solution's digital trunking capability effectively increased the system's capacity to 4 radio channels, doubling the previous capacity. This met Petrobrazi's current capacity requirements. The solution is also highly scalable, providing the capability to expand both capacity and features to meet future requirements. For example, to enable Petrobrazi to add additional base stations to the network to expand coverage or additional capacity to meet the needs of new users.

The solution provided the flexible communication capabilities which Petrobrazi required. For example, being able to support groups calls as well as individual calls (in TMO and DMO mode) and being able to make full duplex calls to both

**Organisation Name**  
Petrom S.A. Oil Refinery

**Distributor**  
CSR

**Industry Name**  
Oil and Gas

**Product Name**

- Dimetra IP Compact
- MTP850 Ex TETRA hand-portables
- MTM 800e
- Factory & Field Services

**Solution Features**

- Excellent audio
- Intrinsically safe
- Emergency call capability
- Authentication

**Benefits**

- Meets safety requirements
- Increased efficiency
- Resilient communications
- Prepared for all situations

“Having worked with Motorola for over 15 years, we are delighted with the new TETRA solution and how it meets our requirements for both safety and business efficiency.”

**Eugen George CHIVU, E&I Project Manager, Refining Project Execution Department, Petrom S.A., Member of OMV Group**

#### **TETRA provides safe and efficient communications**

As part of an overall investment to make Petrobrazi the biggest and most efficient refinery in Romania, Petrom S.A. needed to increase both the capacity and capabilities of its existing communication system as well as ensuring it met the latest safety standards.

To meet these requirements Motorola supplied a complete TETRA solution including: the latest Dimetra IP Compact switch; MTS4 base stations; a dispatch solution; MTM800e TETRA mobile; MTP850Ex ATEX certified handportable and supporting services. The MTP850Ex can be used safely in explosive gas and dust environments and was a mandatory requirement to ensure the safety of all concerned.

cellular and landline phones. Motorola's Key Variable Loader solution was also provided to help enable the secure authentication that Petrobrazi required. The solution also provided short data capabilities to support short messaging. Going forwards, Petrobrazi is looking to utilise the system's data capabilities to provide location based services. Indeed, over half the MTM800e mobile units purchased are already enabled with GPS.

As part of the solution Motorola supplied its MTP850Ex TETRA handportables. These are fully ATEX certified to work in both explosive gas and explosive dust environments and met Petrobrazi mandatory requirements for safe operation. They also feature a simplified keypad with large buttons to make it easier to use with gloved hands as well as best in class audio performance and an in-built man down alarm. To ensure safety, Motorola's solution also provided features such as emergency call to make sure personnel could communicate effectively in emergency situations.

#### **The Benefits**

Motorola's Dimetra IP Compact TETRA solution has provided Petrobrazi with the secure and resilient private communications solution that it required. Not only will the solution help to increase efficiency in day to day communications, Petrobrazi also feel that it is now well prepared for emergency situations and that the Company's workforce can react quickly and efficiently to any situation.

Motorola's MTP850Ex ATEX certified TETRA terminal enabled Petrobrazi to meet mandatory safety requirements. It also provided a fully featured TETRA phone designed to meet the needs of oil and gas workers.

Finally, having worked in Partnership with Motorola for many years Petrobrazi is very happy with both the products and the supporting services which it has received.



MOTOROLA and the Stylised M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2009. All rights reserved.

[www.motorola.com](http://www.motorola.com)

Motorola, Ltd. Jays Close, Viabes Industrial Estate,  
Basingstoke, Hampshire, RG22 4PD, UK