



# MOTOTRBO™ SECURES PALACE OF VERSAILLES

REAL-TIME PERSONNEL TRACKING ENHANCES PROTECTION OF UNESCO WORLD HERITAGE SITE



Each year, several million visitors travel south west of Paris to experience the splendour of France's renowned Palace of Versailles. This former royal residence has a rich history, told through its fine architecture and numerous masterpieces.

The palace has over 700 rooms and its resplendent gardens span approximately 800 hectares. As a museum of the history of France, Versailles is a highly-prized heritage site that requires strict security to control the large crowds of tourists and safeguard its collection of eighteenth century art and furnishings.

By combining Motorola's MOTOTRBO™ IP Site Connect, with DMRAAlert®, a solution developed by EIFFAGE ÉNERGIE COMMUNICATIONS, RÉSEAUX & SÉCURITÉ DMRAAlert® and BPG's Talk Recorder, our local Motorola partner Groupe SNEF was able to supply reliable voice and data communications and enable the real-time tracking of personnel throughout the site.

## **CUSTOMER PROFILE**

**Company**  
The Palace of Versailles

**Industry Name**  
World Heritage

**Partners**  
Distribution Partner: Groupe SNEF  
Application Partners: EIFFAGE ÉNERGIE COMMUNICATIONS, RÉSEAUX & SÉCURITÉ (ex Alsatel) & BPG

**Product Name**

- MOTOTRBO portable and mobile radios
- MOTOTRBO IP Site Connect
- Repeater Diagnostics and Control (RDAC)
- DMRAAlert®
- Talk Recorder

**Key Benefits**

- Reliable, wide area communications
- Easy to use and manage
- Cost-effective
- Flexibility to upgrade as needs change

**“The MOTOTRBO system with DMRAAlert® is easy to use and manage, giving us a reliable, cost-effective solution that has improved personnel efficiency and safety, helping us to conserve one of the world’s most important heritage sites.”**

Mr Jean-Pierre Fontes  
Deputy Technical Manager, The Palace of Versailles

## THE CHALLENGE

The Palace of Versailles needed a versatile communications solution that could offer multiple applications in real time, including the ability to locate and track personnel both indoors and across the vast grounds, log guard patrols and record voice conversations. The system is required to function in areas which are difficult to reach - such as the tunnels which run for five kilometres under the fountains in the palace gardens - and extend across multiple buildings throughout the site.

Groupe SNEF proposed a MOTOTRBO system using IP site connect to create a wide area network that would provide seamless coverage spanning the Château, Orangerie, Opera, Trianon, stables and underground tunnels. It also extends to Marly-le-Roi, the former royal estate of King Louis XIV, which is eight kilometres from the palace.

“Customers know and trust the Motorola brand. The price-competitive, feature-rich and easy-to-use MOTOTRBO digital radio system made this the ideal choice,” said Mr. Kader Touahri, Sales Director at Groupe SNEF.

## THE SOLUTION

The MOTOTRBO system is based on the DMR open digital standard that delivers improved range, higher data rates and more efficient use of the frequency spectrum. It doubles the capacity of an existing 12.5 kHz licensed channel, allowing two voice conversations or a voice and data transmission to occur simultaneously on the same channel, thereby supporting more users and lowering equipment costs.

The system is also resistant to interference caused by obstacles such as trees, buildings or tunnels and this, combined with its built-in error correction technology, provides reliable coverage over a wider area. By adding IP Site Connect, several single-site MOTOTRBO systems can be connected on a standard IP network for uninterrupted voice and data communications without geographical limitations.

The Palace of Versailles is using around 330 portable MOTOTRBO radios, as well as mobile radios installed in fire engine vehicles that are patrolling around the parks. The portable radios are IP57 rated, enabling them to withstand the potentially harmful effects of water ingress – an important feature considering the number of fountains and irrigation systems across Versailles’s famous gardens.

The functionality of the MOTOTRBO system has been expanded through DMRAAlert® and BPG’s Talk Recorder applications. DMRAAlert provides management of MOTOTRBO network. Moreover, it allows to save the activity log, send messages to a person or a group and alarm management. Talk Recorder is used to record and archive all communications. MOTOTRBO portable radios are fitted with a Man Down Option Board and a beacon. If no movement is detected, the person is located straight away via a beacon detector indoors or via GPS outdoors. The system infrastructure enhanced with DMRAAlert® and Talk Recorder applications is set up to accommodate future expansions.

## THE BENEFIT

After just six months of installing the MOTOTRBO solution with DMRAAlert and Talk Recorder, the Palace of Versailles has benefited in many ways, most notably improved reliability, widespread coverage as well as more cost-effective communications.

Personnel safety has improved through the ability to pinpoint the location of staff and track radio users throughout dedicated areas indoors and outside. This is achieved with a combination of RFID and beacons as well as GPS.

With Motorola’s Repeater Diagnostics and Control (RDAC) solution, the network can be monitored and controlled remotely, allowing a quick reaction to any problems that may arise. Management of the system is further facilitated by software that enables supervisors to see which radios are in use or deactivated. They also have the ability to override communications and broadcast voice or SMS messages in the event of an emergency.



## KEY FACTS

- MOTOTRBO IP Site Connect provides reliable, wide area voice and data communications throughout the site and has reduced communication costs. Combined with DMRAAlert® & Talk Recorder the system delivers rich functionality which has improved personnel safety and efficiency.
- The ease of use and management of the system enables supervisors to react to network problems quickly and allocate resources more effectively. This has helped them to enhance staff and visitor safety and to protect France’s acclaimed World Heritage site.

[www.motorolasolutions.com/mototrbo](http://www.motorolasolutions.com/mototrbo)

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. ©2012 Motorola Solutions, Inc. All rights reserved.  
CHÂTEAU\_VERSAILLES/CASESTUDYUK(01/12)