The city of Arequipa has acquired a video surveillance system to provide security for its citizens through a network consisting of 50 cameras strategically located in the main streets and intersections, as well as the Plaza de Armas. The implementation of the thought in terms of the specific customer needs, which involves ensuring peace in the streets, where there is high traffic and very active trade zones. Therefore, the solution includes broadband wireless communication, which has the ability to transmit real-time all incidents recorded security cameras to the Control and Monitoring Centre, which also can control each point in the system remotely.

TECHNICAL DETAILS

<table>
<thead>
<tr>
<th>Client:</th>
<th>Municipality of Arequipa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>City of Arequipa. Arequipa Region, Peru.</td>
</tr>
<tr>
<td>Solution:</td>
<td>Remote Video Surveillance System over Wireless Platform</td>
</tr>
<tr>
<td>WebSite:</td>
<td><a href="http://www.muniarequipa.gob.pe">www.muniarequipa.gob.pe</a></td>
</tr>
</tbody>
</table>

CUSTOMER DESCRIPTION

The city of Arequipa is the capital of the province and region of the same name. Its metropolitan area is established as the second most populous country after the capital city, Lima, with 749,291 inhabitants. Arequipa has an area of 3000 km2, which is divided into 19 districts. The city is famous for its natural attractions, like the Misti Volcano (5821 m.a.s.l), as well as historical monuments of the colonial era. It also highlights the cuisine, which gives the major country flag plates.

The metropolitan area of Arequipa lies between 2000 and 2800 m, being crossed by the river Chili and shares its geography with the Andes, as well as layers of volcanic lava. These elements of natural composition Arequipa have erected one of the resorts in the country par excellence.
**PROJECT DESCRIPTION**

According to the characteristics and needs of the client, it has been necessary to have a wireless solution that uses as a means of communication, the Netkrom’s Multiband MB-ROMB equipment, which has an external directional antenna, grill-type, in the 5GHz band. This segment of the system communicates with a similar device on a secondary node. Thus, each node is as a receiver of signals from all monitoring points, form a network in which each node is a receiver of information on average 6 cameras.

The communication traffic between the node and each node is transmitted via a backhaul link, using Netkrom’s Multiband MB-ROMB radios and parabolic directional antennas, for its great strength, it allows for a high capacity and high availability of equipment.

To provide optimal service for surveillance, the node of the system is located at the Headquarters of the Municipality of Arequipa, which concentrates all traffic camera video from the secondary nodes. The concentration of information is carried in an IP network switch, which distributes directly to each operator workstation, video decoders and to the video recording server.

It is in this center where management takes place across the video surveillance network, monitoring the security cameras that perform the recordings of any incident, while monitoring the status of each wireless link up the system.

Netkrom has made available to the client their team of highly qualified engineering professionals to provide telecommunications solutions, designing a flexible, secure and scalable platform, allowing the system to be prepares to new needs to be detected, so that services are integrated voice, video or data transmission, and increased surveillance camera network, functions made possible by the bandwidth implemented in the solution.

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**BENEFITS**

- High capacity and reliability video surveillance system and to operate 24 hours a day in extreme conditions
- The platform supports multiservice such as voice, data and video without quality failures.
- An IP-based broadband communications platform flexible, ideal for integrating multiple applications.
- A System Communication capable of covering any part of the district through the wireless link and high performance teams.
- Easy to expand the implemented network through the installation and commissioning of new points of video surveillance in central and peripheral areas of the metropolitan area.

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**Success Stories: AREQUIPA, Peru**

**Project Description**

Municipality of Arequipa
Location:
Latitude: 16° 23' 53"
Longitude: 71° 32' 10"