

Complete Surveillance and Wireless Connection Solution for mining area

## About WEBCOM

WEBCOM InfoTech Private Limited is an ISO 9001-2008 Certified company) Established in 1991, is a leading IT Infrastructure Solutions Company with a Core Strength of Networking and Security and Surveillance.

It is well positioned to deliver the value-added solutions and services that are identified in its business objective. Partnering with wireless solutions provider YugaeTech, WEBCOM has excellent Security & Surveillance with wireless connectivity solution.

## Security Surveillance and Wireless Connectivity

In today's automated, remote monitoring system is an immediate need for any organization, and is affordable. This surveillance camera helps in many ways, including watching the happenings at distance end and recording the incidents for later viewing. The major task is taking the video data from the camera to monitoring room and Yugae provides a wireless based connectivity.



## Outdoor Wireless Solution

### ERM Mines

The mining companies have challenge of monitoring the entire premises. At least the places where main activities take place should be kept under surveillance.

ERM mines decided to utilize the technological solutions for surveillance with complete communication solution so that they can monitor the activities of mining from the head office.



### Outdoor Surveillance Camera

Surveillance solution from WEBCOM allows you to monitor your office, warehouse, or campus from virtually anywhere.



### Outdoor Wireless Unit

Wireless connectivity provided for several Kilo Meter distance

Complete Surveillance and Wireless Connection Solution for mining area

Advantages of wireless connection

If the distance is more then we can not use network cables and fiber may not suitable commercially; where wireless connection will be the best option.

No need to dig and lay or run over head cables from camera to monitoring center.

Connection between camera and monitoring center is critical which can be provided by reliable wireless connections.

Quick installation and easy maintenance.

- Survey for wireless
- Supply of equipment and accessories
- Implementation of camera as well as wireless
- Support services.

**Why WEBCOM's solution**

**Scenario 1: Surveillance Camera**

There are two types of cameras analogous and IP camera.

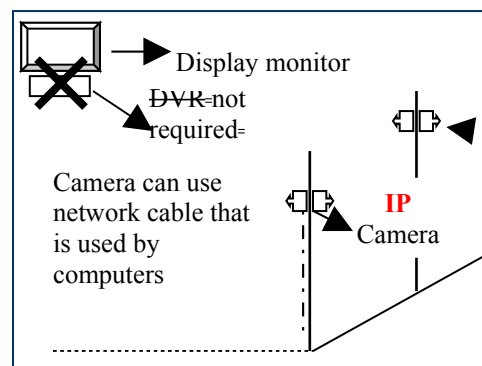
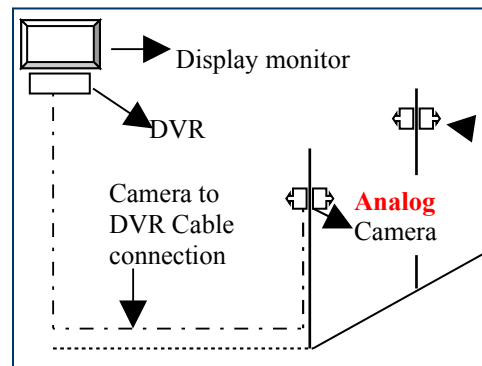
The analogous camera has to be connected through a DVR (Digital Video Recorder). The following are the typical implementation of such cameras.

For the mining company identification of right camera for various locations was the most challenging. YugaeTech provided the following services which gave the complete confidence to the customer.

- Selecting the right camera based on the requirement
- Identifying where to fix the camera
- Estimating and laying cabling for camera
- Utilizing wireless solution for connecting camera
- Surveying and installing wireless solutions

We offer the complete turn-key solution service including,

- Survey services for camera



Complete Surveillance and Wireless Connection Solution for mining area

**Scenario 2: Camera with wireless**

In most of the installations, the cabling distance between monitoring room and camera will be a time consuming and a clumsy choice. WEBCOM offers a wireless connectivity based solution which provides a neat installation.

We can combine several cameras and connect to one wireless unit to transfer the video data as shown in the diagram.

The Monitoring Center will have a Base Wireless Unit that will connect to the video server. All the cameras that are located at the given premises will be linked to the Monitoring Center using wireless.

**Surveillance from long distance**

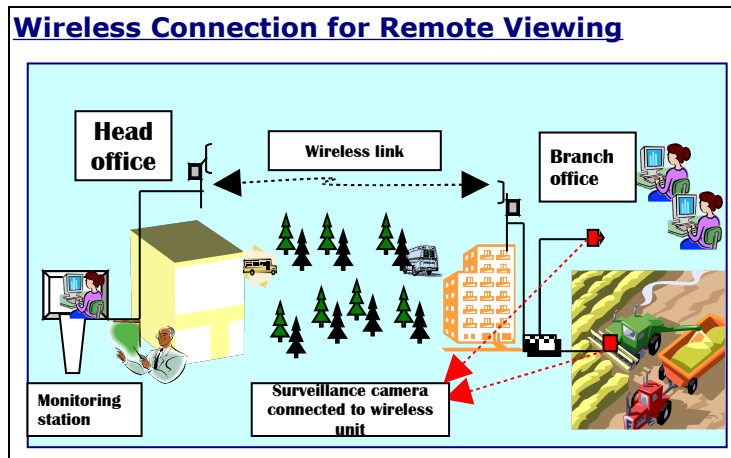
When the surveillance location is several kilo meters away, WEBCOM

can offer long distance wireless connectivity solution. By going with WEBCOM's solution, one need not worry about the solutions that need to be adopted for distance video-data sharing. WEBCOM offers the turn-key solution that provides everything that is required.

# Base W

Other major factor that we have taken care is for monitoring from their head office. The head office being in Bangalore and the mine is located at Chittradurga, we used MPLS-VPN with last

mine wireless connection, which is WVPN (wireless Virtual Private Network)



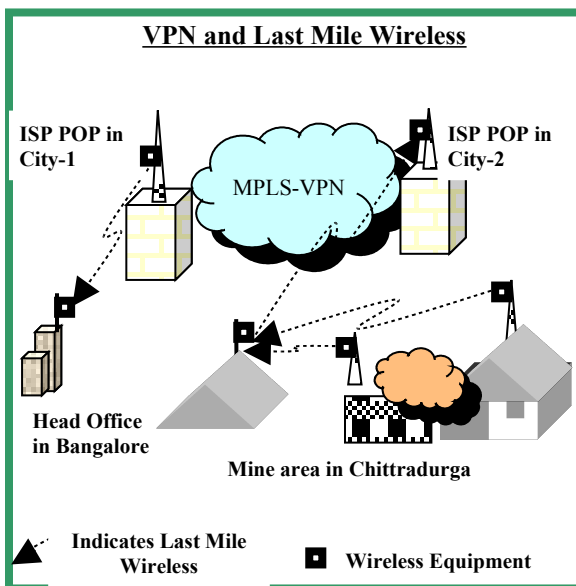
Complete Surveillance and Wireless Connection Solution for mining area

## WVPN – Wireless Virtual Private Network

### Virtual Private Network and Last Mile Wireless

This is a traditional private network that is provided for very long distance, where wireless can not be used. This is accomplished using leased lines. This can be used for branch offices (site-to-site) that are in different cities

When enterprises use VPN, they require to have leased line termination at their premises for VPN to work. The VPN Service providers (VPN-ISP) do the feasibility check for making the (last mile) connection using fiber from the ISP-POP to user location. In some cases, it may be possible but it is subject to road side damages as it is normally taken through public roads. So to have a stable link and in the cases where last mile fiber is not feasible we provide wireless connectivity between user premises and ISP-POP.



## Challenges

- The harsh environment and rough working condition was one of the challenges. The outdoor weather proof wireless units did the wonders. The outdoor camera and wireless units performed well even during the heavy raining condition.
- Wide mine area which spreads over 5 square KM needed to be covered with minimum number of cameras and wireless units to be cost-effective and with minimum maintenance. To meet this requirement we carefully surveyed the area and arrived at excellent wireless solutions and antenna and provided to the satisfaction.
- Having different supervisory levels, it has to be viewed at various locations. ERM wanted complete solution including video server, storage, tower for wireless and communication solution from one solution provider. WEBCOM's technological expertise provided a satisfactory solution.

For more details contact us at:

**WEBCOM**  
Information Technology Pvt.Ltd.

**WEBCOM Information Technology Pvt. Ltd.**  
202, Brigade Corner,  
110/72, Kanakapura Road,  
Yediyur Circle, 7th Block  
Jayanagar, Bangalore-560082  
INDIA  
Phone: +91 80 26764832 / 36  
+ 91 80 26770096 / 98  
Fax : +91 80 26770097  
URL : [www.webcomonline.com](http://www.webcomonline.com)  
Email : [info@webcomonline.com](mailto:info@webcomonline.com)