

# CRE

## Connecting Remote Enterprise



### Privately Owned, Managed GSM and Broadband Networks

**E**stablishing a communication network for industries in difficult topographies and hazardous operational environments in remote locations has always been a challenge. Mining as an industry is critically dependent on timely and reliable transmission of information. VNL's GSM and Broadband solution for mines enables a highly cost-effective, rapidly deployable and robust unified communications network that can be privately owned and remotely managed.

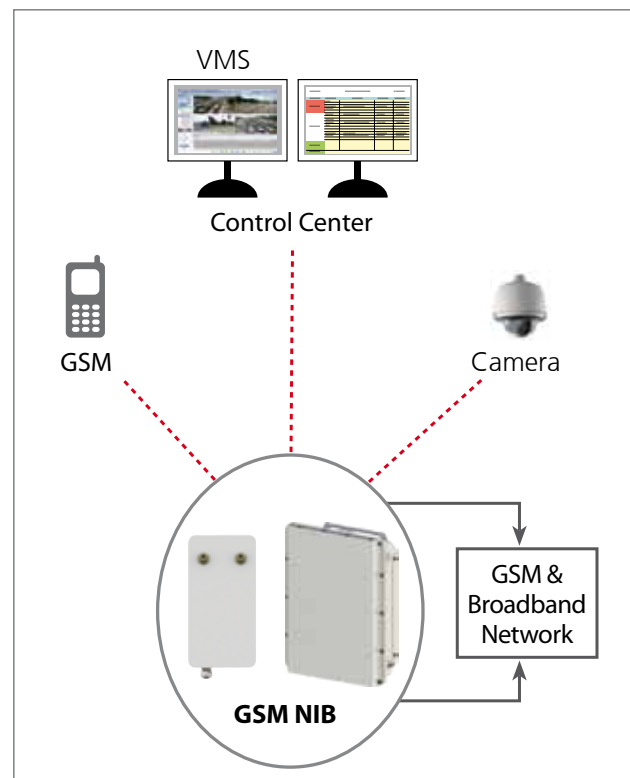
**E**stablishing a communication network for industries in difficult topographies and hazardous operational environments in remote locations has always been a challenge. The availability of the right network has direct bearing on operations management, security, health, safety, overall employee productivity, disaster management and satisfaction. One such activity is mining.

Given the level of complexity and risk in any mining operation, the ideal communication network must introduce efficiencies at all levels. VNL's GSM and Broadband solution for mines is highly cost effective, rapidly deployable and robust. This unified communication network operates as a privately owned and remotely managed network.

## WIRELESS COMMUNICATION FOR REMOTE & ISOLATED INDUSTRIES

VNL's GSM & Broadband solution for remote Industries like mining is a complete solution that integrates all aspects of the industry - from the depths of the tunnels and spread of excavations, buildings, warehouses, equipment and personnel to all the offices and homes related to the enterprise and its employees.

The solution is a reliable, efficient, rapidly deployable communication platform for quality voice, SMS and broadband services technically superior to any two Way Radio System, it operates as a privately owned and managed GSM and Broadband network that integrates with any available cellular and broadband service.



*Wireless Connectivity*

## HIGHLIGHTS

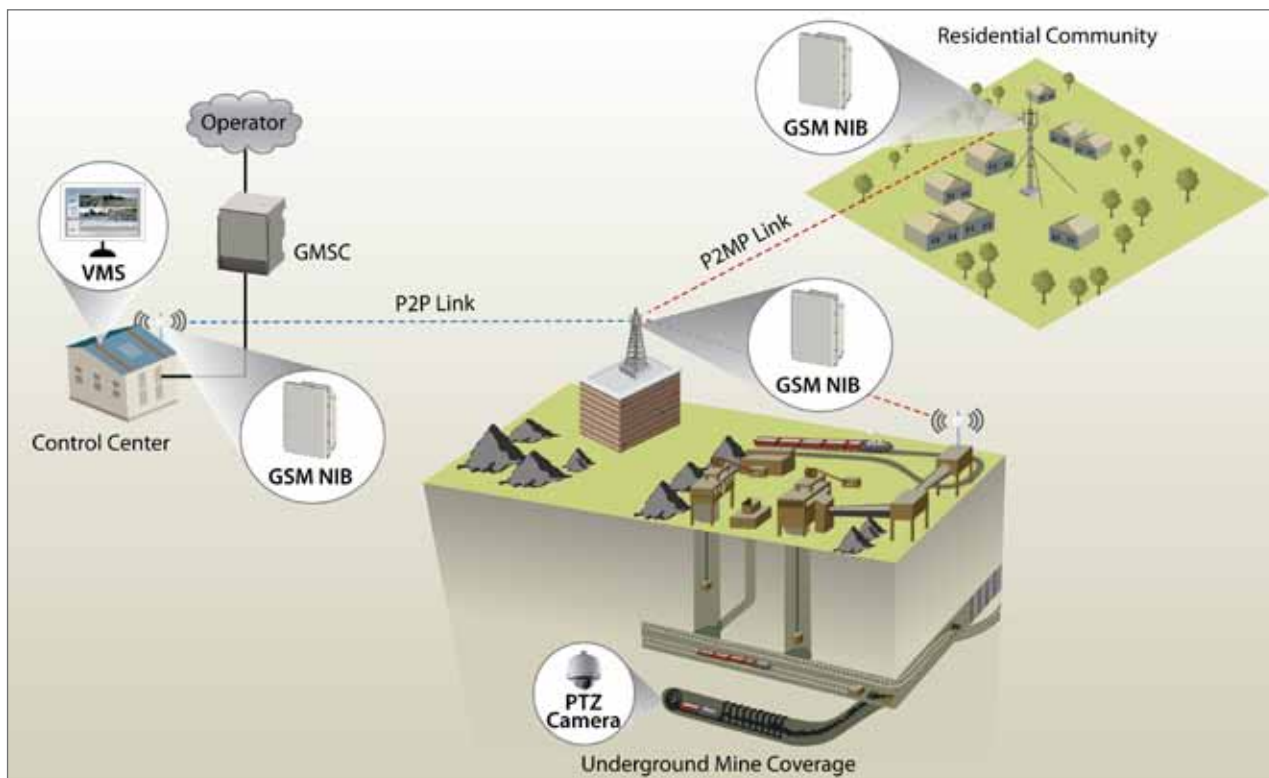
- *Quick Deployment and Privately Owned Remote Managed Network Supports*
- *Local Call Switching*
- *Extends Wireless PBX Services on GSM Network*
- *Improve on Safety Challenges*
- *Reducing and Managing Risk*
- *Reducing Equipment Operational Downtime*
- *Improve on Performance and Operational Effectiveness*
- *Reliable and Flexible with Cost Savings*
- *Helps in Retaining the Skilled Workforce*
- *Voice and Data Connectivity from Inside Tunnels*
- *Retrofit to Mine Broadcast*
- *Broadband Services for Internet, Remote Management of Automated Machines, Health Check of Mines*
- *Complete Surveillance of Mining Area, Operations and Assets with Advanced Video Management & Analytics System*

## DEPLOYMENT SCENARIOS

- *Standalone Mode*
- *Interface with Existing PBX*
- *Connected to Core Network, Providing GSM Capabilities with Roaming and Mobility*

## EXAMPLES OF DEPLOYMENT

- *Mine Sites: Open Mine, Shaft Mine, Slope Mine, Drift Mine*
- *Offices: Mine Headquarters, Remote offices,*
- *Plantations spread Across Large Areas*
- *Employee Residential Communities Around the Industry*
- *Warehouses*
- *Manufacturing Units*
- *Island Resort*



**GSM & Broadband Solution for Mines**

## ADVANTAGES

### CUSTOMER

- *Provides Wireless Communication*
- *Ubiquitous coverage*
- *Plug-and-Play Wireless Voice & Data*
- *Safety & Emergency Support*
- *Surveillance & Sensor Integration*
- *PBX Connectivity*
- *Macro Network Connectivity*
- *No Local Call Costs*
- *Disaster Management*
- *Connectivity to Employee's Family*
- *Connectivity to Outside World*
- *Enables Access to Remote Healthcare Facilities*
- *Enables Distance Learning*

### OPERATOR

- *Extend Macro Network Coverage*
- *Low Capex for Spot Coverage*
- *Low Opex*
- *Remote Management*
- *Reduced Backhaul Costs*
- *Standard Handset Support*

### GOVERNMENT

- *Regional Socio Economic Development*
- *Emergency Support*
- *Tele-medicine*
- *Tele-education*

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