

Connecting Hydroelectric Power Plants

Providing mobile and broadband in Hydroelectric Power Plants and Road Tunnels



Privately Owned, Managed GSM and Broadband Networks

Establishing a communication network for hydroelectric power plants in remote locations has always been a challenge. Hydroelectricity as an industry is critically dependent on timely and reliable transmission of information. Omoco's GSM and Broadband solution for hydroelectric power plants enables a highly cost-effective, rapidly deployable and robust unified communications network that can be privately owned and remotely managed.

AUTOMATION IN HYDROELECTRIC POWER PLANTS

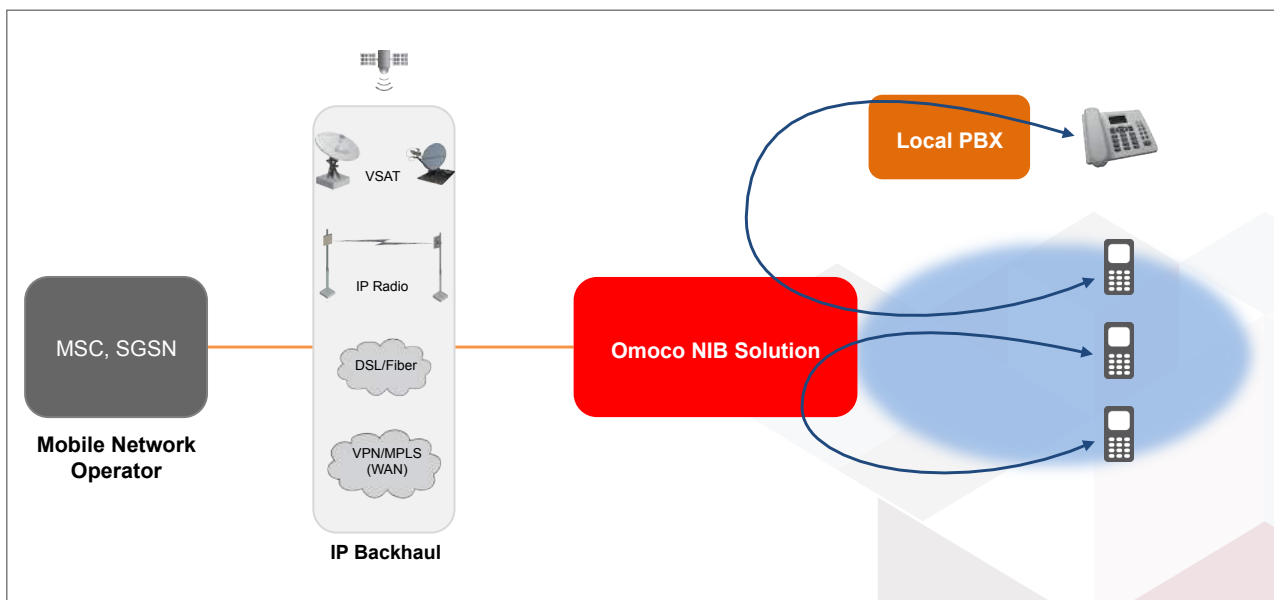
Machine to Machine (M2M) communication plays a pivotal role in providing automation to Hydroelectric Power Plants.

M2M communication is a technology that enables connected devices to exchange information over short-range and wide-range wireless/ wired networks, and performs actions without the manual assistance of humans. It will enable the plant with local and remote control; supervision, protection, regulation, synchronization and measurement of generators and transformers, turbines & hydro mechanical equipment, switchyards and power supply systems. This will empower the industry to effectively utilize the resources and improve the reliability.

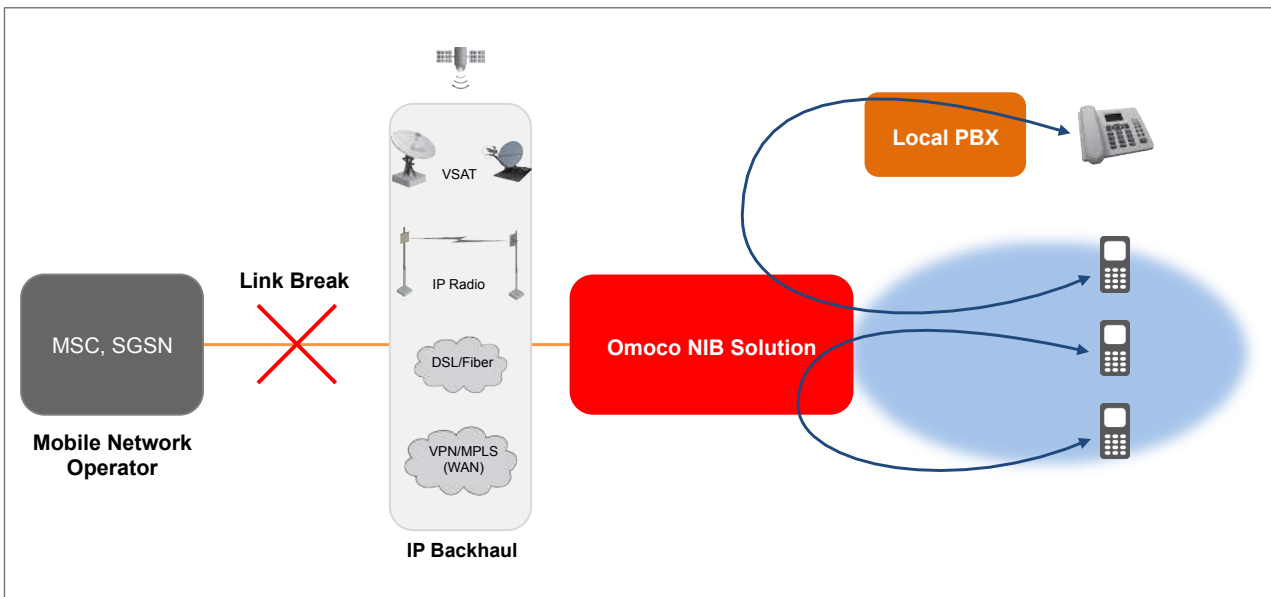
For M2M to function in the utility industry, a dedicated, cost-effective, rapidly- deployable and secure GSM network is required to meet critical machine to machine communication needs which cannot be catered by non-committed network having issues of limited data applications and inter-operability making it obsolete for M2M communication.

THE SOLUTION

OMOCO is a network-in-a-box BTS, a private mobile network that enables large capacity and coverage. It allows 100% customization as per your business requirements, without the need for depending on macro-networks. All of which means better technology, better M2M performance and customer satisfaction, combined with lower cost of ownership.



Local Switching and Local Calls from/to PBX



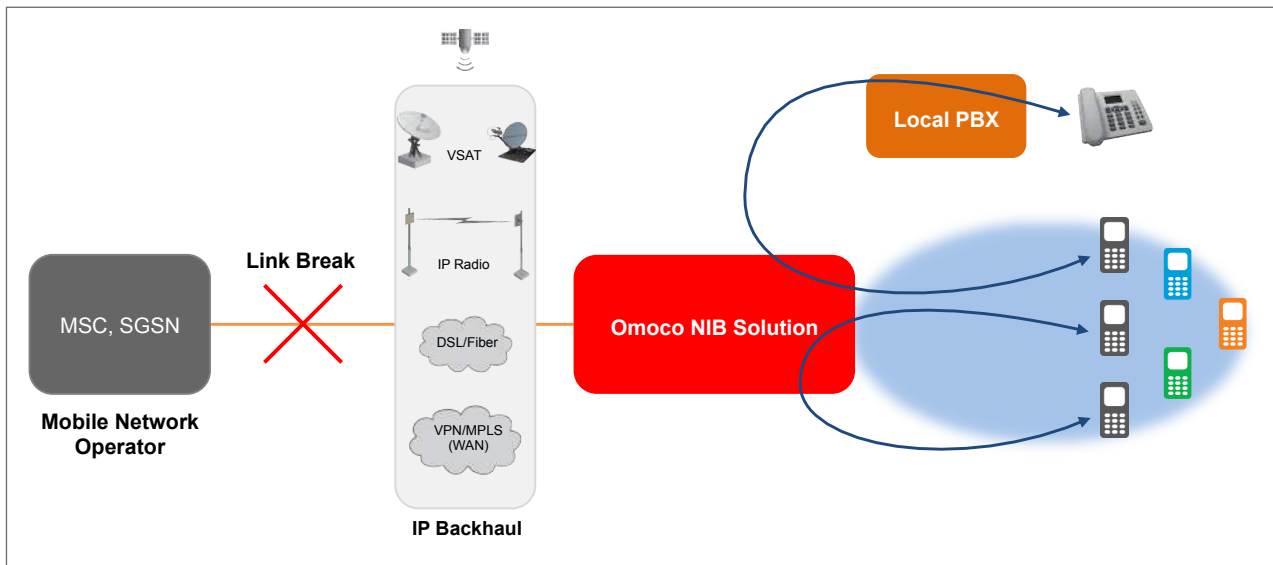
Local Calls shall continue in case of backhaul disconnect from Operator Core Network, using Local Cache functionality

WIRELESS COMMUNICATION FOR HYDRO POWER PLANTS

Omoco's GSM & Broadband solution for remotely located hydroelectric power plants is a complete solution that integrates all aspects of the industry – from the length of turbine rows and the spread of the water reservoir, equipment and personnel to all the offices and homes related to your hydroelectric plant 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.

DEPLOYMENT SCENARIOS

- Stand-alone Mode
- Interface with Existing PBX
- Connected to Core Network, Providing GSM Capabilities with Roaming and Mobility
- Hydro Plant Sites: Conventional (dams) Plants, Pumped-storage Plants, Run-of-the River Plants, Tidal Power Plants, Isolated System Plants, Grid-connected Plants
- Offices: Hydro Plant Headquarters, Remote offices
- Dams spread Across Large Areas
- Employee Residential Communities around the Plant



In case of Disaster and backhaul disconnect, Capability to provide emergency local voice services to mobiles of all Operators (Configurable)

THE OMOCO ADVANTAGE

- Quick and easy deployment
- Enhanced connectivity for machinery and personnel
- Privately Owned & Remotely Managed Network Support
- Wireless coverage across the site for large capacity
- Better precision in information and data flow
- Low Opex and Capex
- Simplified network management
- Fully standards compliant
- Better performance and inter-operability
- IP interfaces
- Local Call Switching
- Extends Wireless PBX Services on GSM Network
- Reduced Equipment Operational Down-time
- Reliable and Flexible with Cost Savings
- Voice and Data Connectivity across the Vast Spread of a Dam
- Broadband Services for Internet, Remote Management of Automated Machines, Health Check of Turbines and the Entire Plant
- Complete Surveillance of Hydro Plant Area, Operations and Assets with Advanced Video Management & Analytics System
- Surveillance & Sensor Integration
- No Local Call Costs
- Can be extended for Macro Network Coverage
- Reduced Backhaul Costs
- Standard Handset Support

ABOUT OMOCO

Omoco develops Do-it-yourself Micro Telecom Network solution, suitable for individuals, enterprises and communities who want to build their own wireless communication network.

© 2016 Omoco | All rights reserved
Omoco reserves the right to revise this document without notice.

CONTACT US

Email: sales@omoco.in
<http://www.omoco.in>

Powered by 