UNYDE® One

CASE STUDY

Safety

Worker location and man-down alerts on existing GSM and Wi-Fi

A network survey showed the deposit already had usable GSM and Wi-Fi, so worker tracking was designed on that network rather than on a new one.

MINERAL	REGION	OPERATION	STARTING STAGE
Iron ore	Chhattisgarh, India	Open pit	Stage 2: Instrumented, in silos

THE OPERATION

- An iron ore deposit of a public-sector producer.
- Workers moving between faces, haul roads and plant through each shift.
- The network survey came before any hardware was chosen.

DISCIPLINES

Safety · Command

THE PROBLEM

Presence in working areas was confirmed by roll call at the start and end of each shift, with nothing in between and no automatic alert if a worker fell.

HOW THE WORK IS PHASED

1. **Survey.** GSM and Wi-Fi coverage measured across the working area. LoRaWAN was dropped from the design as unnecessary.
2. **Equip.** Wearable bands issued to workers in active zones.
3. **Route.** Alerts sent to the control room with the worker's position.

IN DETAIL	
Network	Existing GSM and Wi-Fi, confirmed by survey
Device	Wrist band with location, SOS button and man-down detection
Alerts	Control room, with position on the site map
Records	Location history kept for incident investigation

WHAT CHANGES ON SITE	
Roll call at shift start and end	→ **Presence by zone through the shift**
Falls reported by colleagues	→ **Man-down and SOS raised by the band**
No movement record	→ **Location history for investigation**
A separate network assumed	→ **Existing coverage used where the survey confirmed it**

NEXT STEP

Discuss an operation like this one.

Tell us where your sites are today and what is installed. info@unyde.in · +91 99719 17137

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