SIGMA WIRELESS
Professional Communications Networks and Solutions.

Enterprise
Public Safety
Transport
Tunnels
Oil and Gas
Mining
Introduction

- Design, Supply and Integration of World Class Communications Systems to Public Safety and Utility Customers since 1991
- International experience deploying professional communications solutions in Southern Africa, West Africa, China, The Middle East, Seychelles, Kosovo and throughout Europe.
- Operating to the highest international standards: ISO 9001 & ISO 14001
- Leading critical communications supplier based in Ireland and shareholder in the National Tetra operator.
- Over 400 Engineering man years experience in advanced radio systems
Market Areas

• Public Safety
  - We have designed, delivered and supported mission critical communications solutions to the Public Safety market for over 20 years.

• Transport
  - Suppliers of Radio Communications and services to large transport agencies such as Airport authorities, Air Traffic Control, Railway / Tram operators

• Tunnel Communications
  - Provision of radio rebroadcast network providing for Tetra, VHF, UHF, GSM & FM spectrum
  - Full system design and RF planning for tunnel coverage

SIGMA WIRELESS
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Market Areas

Oil and Gas

- We have built, installed and commissioned numerous Trunked Radio Systems Worldwide for the oil and gas industry
- On site engineering resources dispatched to commission and SAT radio system

Enterprise

- Our customers include large multinational organisations and independently owned businesses providing site wide communication solutions for voice and data services.

Mining

- Open Cast and Underground digital radio communications solutions
- PTP and PTMP, Wi-Fi, Mesh, CCTV, Wireless LAN, Man Down, Loneworker
- Intrinsically safe radio communications
Technology Portfolio

- Tetra Radio Networks
- Digital PMR solutions
- MF / HF / Ground to Air Radio
- PTP & PTMP radio links
- Control Centre Solutions – Despatching, ICCS & CAD technology
- Enhanced Coverage Solutions (PMR & GSM)
- Voice Recording
- WiFi, enterprise and municipal solutions
- IP CCTV systems

SIGMA WIRELESS
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Engineering Support Services

System Design
- Wireless & IP System Design
- RF Planning
- Functional Design Specifications

Installation & Implementation
- System & Site Installations
- System Configuration /Commissioning
- Fully trained & certified engineers

In Country Support
- Engineering support in country supporting the installation and maintenance of RF, microwave and IP systems.
- Spares Management
- 24 x7x 365 Remote Managed Support
Key Partnerships

- Over 20 years in partnership with Motorola Solutions

- Distributor agreements with World Class manufacturers such as:

  - Rohde & Schwarz
  - Jotron
  - Frequentis
  - Axis Communications
  - CERAGON
  - Eltek
  - SATEL
  - NICE
  - Zetron

Sigma Wireless

Professional Communications Networks and Solutions.
Installation and commissioning of 600 Motorola Tetra Base stations.

Site Acquisition, Design & Construction

Supply and provisioning of over 20,000 radio terminals

Operation of the Customer Service Centre which provides the first line interface to end user customers.

The design, supply and Installation of 170 1+1 Ericsson Microwave links to provide backhaul to Tetra transmitter sites.

We provide 24x7 emergency and planned maintenance to the Tetra Sites, Base stations, ICCS and dispatcher systems.
Supply and commissioning of ground to air VHF systems nationwide

in partnership with

Supply and commissioning of the control systems for Radio Backup at:

Dublin, Cork and Shannon Airports

in partnership with
Intel

- Provision of site wide Digital Radio Voice Solution providing Lone Worker, Mandown, Voice and Data Communications

- Plant wide in building communications solution for voice and data utilising Distributed antenna system and leaky feeder

- MotoTrbo digital radio system with over 600 users
Irish Coast Guard

VHF maritime radio system covering the entire coastline

Integrated Command & Control System (ICCS)
- Resilient Switch network at three national control centres
- A national voice recording solution capturing radio and PBX audio
- Provision of Multiplexing Network
- Full integration with VHF and MF high sites
- Integration with PBX switch
- Provision and Build of Digital Selective Calling solution
Dublin Port Tunnel

- Provision of radio rebroadcast network providing for Tetra, VHF, UHF & FM spectrum
- Full system design and RF planning for 8.6km of tunnel including cross over requirement
- Supply and Installation of 18,000M OF Leaky Feeder
- Provision of master site head end amplifier and twelve remote amplifier throughout the tunnel
- Fully resilient design by means of intelligent routing of RF signal
- Provision of the RBS solution and the maintenance radio solution
Kentz

Nanhai Petrochemicals Complex (China)

- Sigma Wireless contracted to provide Trunked 1327 radio solution
- Provision of Motorola 10 channel VHF Trunked solution and six marine channels.
- 800 Atex users utilizing the 1327 voice communications system
- Multiple position dispatching system
- Infill building solutions provided
- Sigma Wireless provided a full turnkey solution
Angola LNG Soyo

- Operator of a $10 Billion LNG project in Angola
- Sigma Wireless contracted to provide Trunked 1327 radio solution
- Provision of Motorola 15 channel VHF Trunked solution and six marine channels.
- 1000 Atex users utilizing the 1327 voice communications system
- Provision of 15 position dispatching system
- Infill building solutions provided
- Sigma Wireless provided a full turnkey solution
AML Sierra Leone

- Operator of a $3 Billion Dollar Iron Ore Mine
-Sigma Wireless contracted to provide Motorola MOTOTRBO Digital solution
- Six Motorola VHF IP and Capacity plus radio sites covering delivering wide area and local communications
- Motorola DR3000 high power base stations
- 1200 Motorola DP/DM 3600 and 4800 series subscribers for voice communications and GPS positioning
- Dispatching software for the efficient management of resources and H&S requirement
- Sigma Wireless provided full turnkey solution and ongoing in country technical support
Supply and Design of Tetra dispatching system for the Motorola Tetra Network

System build, configuration and testing including all integration requirements

Sigma Wireless contracted to conduct full RF coverage study and provide technical recommendation for coverage enhancement

Sigma Wireless contracted to supply, install and commission the required coverage infill solution
Additional International Experience

Seychelles Police Service
- Supply and Build of encrypted radio system
- Engineering of all subscriber units for the network
- Supply and commissioning of NICE voice recording solution

Kosovo EULEX Special Mission (United Nations)
- Supply and Build of encrypted radio system
- Engineering of all subscriber units for the network
- Local engineering support

China Oil Refinery communications requirement
- Build, Installation and Commissioning of a Motorola 1327 Trunked Radio System
- All build works and FATS completed at our Cork facility
- Engineering resource dispatched to commission and SAT radio system