

**Delivering the operations critical communication capability that unites public services across the Voivodeship of Silesia.**



**Elektrit selected as the main Kenwood radio equipment supplier and contractor for the analogue-digital communications system for Crisis Management and Emergency Medical Services in the Province (Voivvodeship) of Silesia.**



**The Silesian Voivvodeship in Poland is predominantly an urbanised, highly developed and industrial region. Upper Silesia with 41 cities and a population of almost 3.5 million is the most densely populated in Poland.**

The province ranks fourth in terms of GDP per capita and contributes over 12% to the Polish economy with large-scale mining, energy, engineering, automotive, chemical, building materials and textile industries.

When the Silesia Regional Office made the decision to upgrade its radio communications network, it issued a tender for a digital system that would be scalable to provide coverage of

**Silesia Province**

**Area:** 12,333 km<sup>2</sup> (4,761 mi<sup>2</sup>)

**Population**

**Total:** 4,524,091

**Urban:** 3,468,527

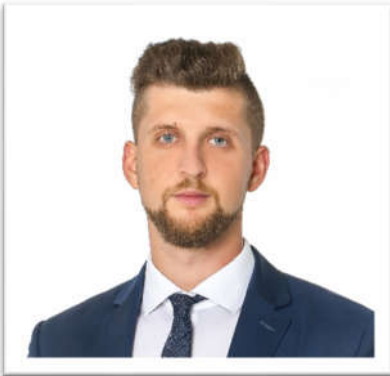
**Rural:** 1,055,564

**Density:** 370/km<sup>2</sup> (950 mi<sup>2</sup>)

the entire 12,333 km<sup>2</sup> of the province from the provincial capital Katowice to its southern borders with the Czech Republic and Slovakia formed by the Beskid Mountains. It would also need to be adaptable to the requirements of different public service user groups.

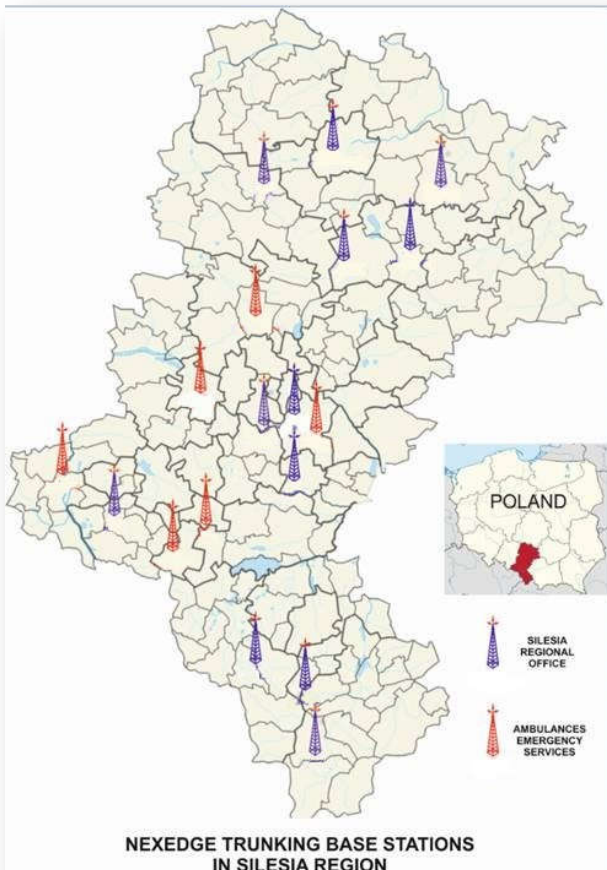
## Kenwood NEXEDGE NXDN digital trunked wide area coverage solution

**Elektrit Sp.z o.o., Kenwood's distributor in Poland for over 15 years responded to the tender with a trunked digital network based on the proven NEXEDGE NXDN air interface protocol and a plan to migrate all user groups to the network over time and with minimum service disruption.**



Piotr Łapszo, a board member of Elektrit tells us about the system: "The Silesia Voivodship wanted a scalable system to give

a reliable digital communication service and coverage throughout the entire province. With a varied topography from large conurbations to mountainous areas to cover, the key challenge was to provide cost-effective coverage of the entire area with the minimum of infrastructure.



The NEXEDGE trunked system we designed and implemented employs 17 sites located on mast or high buildings and one site within a highway tunnel with leaky feeders. These are all connected via IP by fiber optic. We also provided an additional mobile site for rapid deployment by the Regional Crisis Management Centre in emergency situations which is connected to the system by IP using LTE/CDMA450".

### Providing critical voice communication to essential public services.

The system has a current capacity of 47 channels with over 500 users including the regional Water Supplier, Ambulance Service, Hospitals and the Silesia Voivodship with the ultimate aim for all essential public services to be included.

In addition to the Regional Crisis Management Centre, there are two further control centres in the province employing a combination of DGT, Elvys and Widnet dispatch software solutions.

### An Operations Critical System is only ever as good as the support behind it.

As with all large systems delivered by Elektrit, the trunked system implemented for the Silesia Voivodship is backed by a comprehensive field and technical support service from the company, a key factor in securing the project. "After all, an operations critical communication system relies on 100% service availability and that's all about the support behind it" Piotr added.

Elektrit has built an enviable reputation in Poland for the Kenwood NEXEDGE NXDN and DMR digital systems it has developed for a wide variety of end users in both the public and private sectors including the National Stadium, Regional Fire Services, Municipal Police and Security Services and commercial enterprises. These years of proven experience came into play in the design of the Silesia Voivodship system, its largest in terms of coverage to date.

**“We are happy to recommend Elektrit as a reliable supplier and cooperative partner to our operations”.**



**Andrzej Szczeponek,  
Director of Crisis  
Management,  
Department Silesian  
Voivodeship Office in  
Katowice commented:**

“Elektrit was selected  
through a public

procurement process and  
awarded the project as the main Kenwood  
radio equipment supplier and contractor for the  
analogue-digital communications system for  
crisis management and emergency medical  
services in the Province.

It fulfilled the conditions of the project in  
accordance with the contract at the cost and  
timing stipulated.

The company's management and staff have  
demonstrated a high level of professionalism,  
both in their technical knowledge and in the  
practical implementation of the project and  
have throughout the stages from award to  
delivery always been available to provide  
support when needed.

**The relationship between the Silesian  
Provincial Office with Elektrit over several  
years confirms our trust in the company  
and we are happy to recommend Elektrit as  
a reliable supplier and cooperative partner  
to our operations”.**

## System Details



### Equipment used

#### Portables:

NX-220E, NX-200GE, NX-5200E

#### Mobile/Base:

NX-720E, NX-700E, NX-3720E, NX-  
5700E

#### Repeaters:

NXR-700E

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