



SDEE Muntenia Nord, part of Electrica Group

Imagine if we had the power to revolutionize utilities.



SDEE Muntenia Nord

Industry
Utilities

Location
Romania

Number of employees
2,000+



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Between Bucharest, the capital of Romania, and its Carpathian Mountains, powerful utilities substations dot the landscape and deliver electricity to large swathes of Romania. This imposing and varied landscape serves as the backdrop to innovation in technology and operational excellence that quietly goes about its day to great effect – powering the creative heart of Europe. Behind this power is SDEE Muntenia Nord – Romania’s core utilities company. Through its critical infrastructure and full range of substations, SDEE Muntenia Nord is actively revolutionizing how it serves its customers, leading the global industry in the digitization of utilities.

People Power

With the internet and social media now woven firmly into the fabric of society, consumers have grown to expect an immediacy in response to their needs and concerns. For critical infrastructure providers the world over, service expectations have never been higher. As the leading distributor and supplier SDEE Muntenia Nord, part of Electrica Group of electricity in Romania, this couldn’t be truer than for SDEE Muntenia Nord. Quick to recognize this, SDEE Muntenia Nord invested heavily, ensuring both responsiveness and operational performance met the needs of today’s customers.

However, to fully appreciate the size of the task they faced, you only had to look at the scale of

the operation:

- 1 million energy customers
- 6 large branches of distribution
- 216 electrical substations
- 10,126 secondary substations
- And an often-unforgiving terrain

A Brighter Future

Making change in a large organization is never easy. But change they made. The consensus was there and so too the will. SDEE Muntenia Nord’s vision had clarity:

1. First they needed to protect market share. This meant real technological innovation, adding services and capabilities that would add genuine value to the customer.
2. Security was also paramount. SDEE Muntenia Nord committed to heightening IT and operational security at a utility-wide level, minimizing intrusions that could ultimately compromise the consumer and service continuity and reliability.
3. Last, they pledged to improve the overall consistency of electricity supply to the consumer by reducing the number of planned and unplanned interruptions and their duration making unparalleled improvements in service restoration and incident response times.



Challenges

- Protect market share by increasing IT and operational security
- Improve the consistency of electricity supply to the consumer
- Reduce the number of utilities interruptions to customers



Solutions

- [Cisco 809 Industrial Integrated Services Router](#)
- [Cisco Fog Director](#)
- [Cisco Services](#)



Results

- Connected existing and new smart grid automated control for utilities distribution systems operators
- Ensured ease of management for SCADA using the Cisco Fog Director
- Delivered critical state-of-the-art security software applications

“SDEE Muntenia Nord is leading the industry by deploying this flexible solution to manage both the legacy and next generation components that make up today’s evolving smart grid – for operational excellence of the digitalized utility network.”

Choosing the Right Partner

SDEE Muntenia Nord turned to Cisco and partner Eximprod Group to create and implement the backbone of this transformation into a fully digitized utility provider. This transformation was made all the harder for the rugged and demanding environments that make up the geographical landscape. What impressed SDEE Muntenia Nord was the ‘can-do’ attitude, even in the face of such testing conditions. Their response was robust and scalable, it enabled SDEE Muntenia Nord to fulfill its three-point plan which ultimately added value to the end user.

Paving the Way

In a nutshell, what Cisco and Eximprod deployed for SDEE Muntenia Nord consisted of products using Digital Smart Grid applications. Through the latest IoT capabilities they paved the way to a fully digitized, country-wide utilities network.

This included a virtualized SCADA System, which is a software approach for Energy Distribution Automation running on a Cisco IOx IR 809G Router. In addition, distribution automation with network embedded micro-services helps to securely connect existing and new Smart Grid automated control of secondary substations scalable and automated management control for utilities distribution systems operators. Finally, IoT Security used the SCADA platform, which runs as a micro-service directly on the Cisco IoT Secured Gateway – an innovative approach that brings together security for applications, data, the network, and user access.

This virtual and programmable infrastructure solution is upgradable to meet evolving requirements like utilities industry protocols imperatives for heightened levels of industrial control and security. This includes a proliferation of devices and data with new fleet and dispatch capabilities that meet demands for smart metering programs and other utilities applications.

SDEE Muntenia Nord is leading the industry by deploying this flexible solution to manage both the legacy and next generation components that make up today's evolving smart grid – for operational excellence of the digitalized utility network.

The Future

Today, SDEE Muntenia Nord has taken its rightful seat at the head table of industry leading solutions.

Through foresight and a strong partnership with Cisco and Eximprod, SDEE Muntenia Nord has been able to modernize and add software and services for remote automation and increased distribution control.

Today, SDEE Muntenia Nord has realtime visibility of the business. Such insight enables the quick response to what is happening in the field across the whole of Romania, even in the most unforgiving terrain. More importantly, this all means they can respond quickly and correctly to their customers.

Then there is the question of security.

In the past older utilities systems have had high operational expenditures and were vulnerable to disruptions in service and terror threats – both cyber and physical. However, this program of modernization by Cisco and Eximprod has removed such vulnerabilities by creating a secure, stable and very predictable network and a cost base that is reduced and controllable.

Again, though the customer won't necessarily notice the heightened level of security (and rightly so), they will undoubtedly notice the increased level of service and technology afforded them and ultimately the value of that service.

Learn More

For more information, go here:

- Customer Stories: [cisco.com/go/customerstories](https://www.cisco.com/go/customerstories)
- Digital Utilities Solutions: [cisco.com/go/smartgrid](https://www.cisco.com/go/smartgrid)

Cisco IR 809 Router: the communications backbone

- Host multiple applications and achieve the digital utilities benefits of the multiple application network
- Deliver critical state-of-the-art [security](#)
- Incorporate embedded [software](#) applications
- Ensure ease of management for SCADA using the [Cisco Fog Director](#)