

The logo for FORRS, featuring the word "FORRS" in a bold, green, sans-serif font. A small, stylized graphic of three parallel diagonal lines in green, yellow, and red is positioned to the left of the text.

FORRS



OMNIA
THE PLURAL OF ENERGY

Supporting Transmission System Operators towards a carbon- neutral Europe

Our advisory service
cooperation



The European Transmission System Operators

Backbone of the European economy

“Our society is based on secure and efficient electricity. The power grid, and its efficient and safe operation, is the backbone of the energy system and, thereby, the European economy.”

Together 40 TSO organisations, representing 36 countries, are responsible for the secure and coordinated operation of Europe's electricity system, the largest interconnected electrical grid in the world.

The electricity transmission grid, and its secure operation, is the backbone of the power system and the functioning of our society.

FORRS & OMNIA on one Slide



FORRS

FORRS has established itself as a prominent **management consultancy** specializing in the **energy industry**, including in the field of TSOs and DSOs. With a distinguished project portfolio, FORRS has extensive experience in successfully performing IT projects. This encompasses benchmark studies to identify improvements and concrete implementation plans for IT architecture and business processes. Beyond this, FORRS designs and implements robust IT architectures down to data management and system selections together with TSOs and other participants in the energy market. FORRS staff have a long track record and successful project history in the strategy finding, design, implementation, and operation of IT infrastructures for energy clients throughout Europe. Our primary focus revolves around comprehending and designing optimal business processes, as well as selecting or developing 'fit-for-purpose' software solutions that seamlessly integrate into a client's architecture.



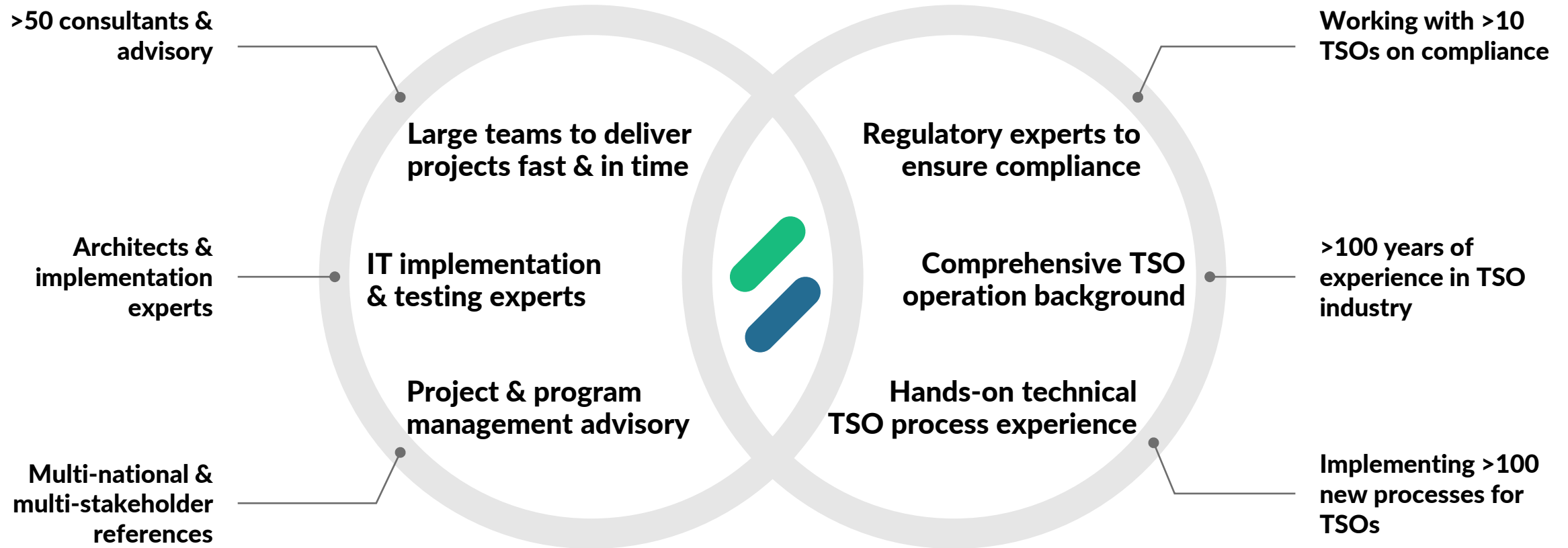
OMNIA

OMNIA is a **technical consulting** company that focuses on providing insight into **electricity market development and regulatory processes**. OMNIA has profound knowledge of current European policies, with a strong focus on the system operator industry. OMNIA's services cover consultancy support for international organisations, regulators and system operators of the energy industry at large. OMNIA has been engaged over the years in various projects supporting system operators in designing and implementing cross-border wholesale electricity markets, EU electricity regulations, and new IT solutions and processes. The work delivered ranged from designing and implementing the EU target models in the wholesale and balancing markets, the drafting of cross-border balancing models and regional methodologies, to the establishment of LFC processes, dimensioning and reserve procurement mechanisms, the design and implementation of settlement mechanisms as well as implementation of balancing market software solutions.

Our goal is to empower TSOs meeting the evolving demands of the energy landscape, ensuring a sustainable and secure energy future.

OMNIA & FORRS: Joint Forces to the Benefit of TSO Projects

Large & complex projects will be more easily implemented with our cooperation



The Vision – A Power System for a carbon-neutral Europe

Needs to be based on two interlinked strategic pillars

1 Prepare for the Future

Power System for a carbon-neutral Europe

Organise a Power System for a carbon-neutral Europe



While planning and delivering our future power system, Europe needs to continue to rely on a strong, secure and efficient electricity supply.

To ensure the balance between these two dimensions, the TSOs will need to manage intertwined and sometimes challenging and multinational projects.



2 Manage the Present

A secure and efficient Power System for Europe

Ensure a secure and efficient power system for all EU countries

The Vision – A Power System for a carbon-neutral Europe

Needs to be based on two interlinked strategic pillars

EU TSOs
Vision

Power System for a carbon-neutral Europe



Energy Flexibility System

Balance the increased weather dependency & system complexity



Operating Future Grids

To ensure a secure and efficient operation of the “system of systems”



Infrastructure & Investments

Accelerate development and financing of the grid infrastructure onshore and offshore



Market Design

Provide value to what will be needed for the energy transition



Innovation

Enable the necessary developments and uptake of solutions



Operational Excellence

Build processes and systems for an efficient, resilient and secure system operation



Market Development & Operation

Implement market mechanisms to efficiently operate the system and optimise social welfare for consumers



Regional Coordination

Coordinate national and regional actors at the scale of European regions



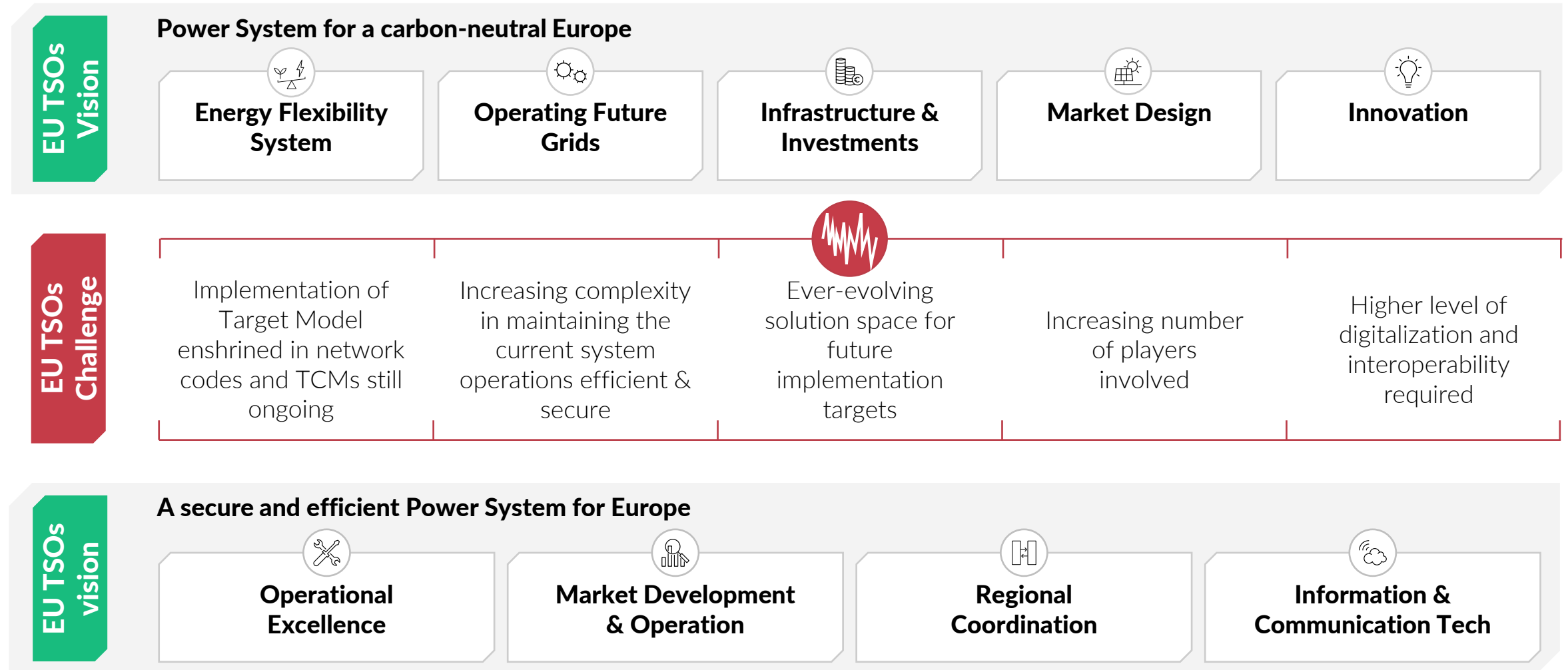
Information & Communication Tech

Design, develop and support ICT tools to manage the power system

A secure and efficient Power System for Europe

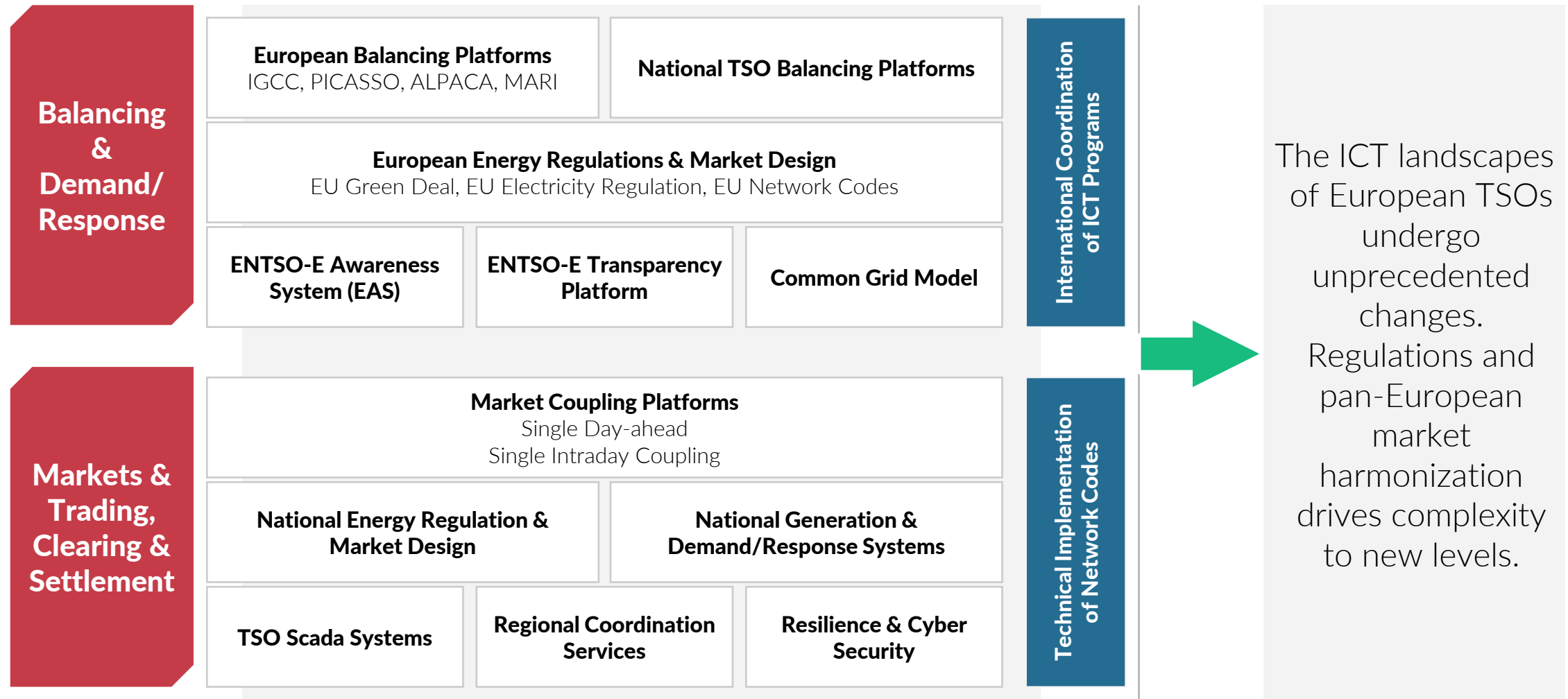
The Vision – A Power System for a carbon-neutral Europe

Needs to be based on two interlinked strategic pillars



The ICT Landscape of the European TSOs is highly complex

And needs to be in sync with EU and national regulation



A complex international Project Portfolio

Where FORRS and OMNIA can support as partners



A Power Market Design for a carbon-neutral Europe

- Implementing European Target Models & Network Codes
- Wholesale Energy Market Design & Implementation
- Regulatory Impact Analysis & Implementation
- Innovation Design & Management
- International Program & Project Management



Operated in a coordinated manner across Europe

- Coordinated Grid Operations
- TSO-DSO Alignment
- Business Process Design & Operational Excellence
- Balancing & Flexibility Management
- Aligning Cross-border Cooperation activities
- Cross-sectoral coordination



A secure and efficient Power System for Europe

- ICT & Systems Evaluation & Selection
- Critical Infrastructure & Cyber Security
- Uptake of New Technology
- IoT Applications Design
- Industrialised Data Analysis & Visualisation

A complex international Project Portfolio

Where FORRS and OMNIA can support as partners



ICT & Systems Evaluation & Selection



Coordinated Grid Operations



Uptake of New Technology

- Benchmarking ICT architectures, deriving gaps and solution designs
- Re-design of entire system landscapes, including the implementation of the target design
- Design and improvement of operating models for a resilient and robust ICT architecture
- Automation and digitalization to enhance operational efficiency and reduce operational risks
- Design and improvement of operating models for a resilient and robust ICT architecture
- Structuring and performing systems selection processes to ensure TSOs select a fit-for-purpose system based on their specific and unique requirements

A complex international Project Portfolio

Where FORRS and OMNIA can support as partners



**ICT & Systems Evaluation
& Selection**



**Coordinated Grid
Operations**



**Uptake of New
Technology**

- Coordinated Cross-border Capacity Calculation
- Optimized Allocation of Cross-border Capacity
- Cross-border Balancing Reserve Procurement & Balancing Energy Activation
- Coordinated Regional Security Analysis
- Regional Coordinated Congestion Management Processes
- Security of Supply & Flexibility Assessments

A complex international Project Portfolio

Where FORRS and OMNIA can support as partners



**ICT & Systems Evaluation
& Selection**



**Coordinated Grid
Operations**



**Uptake of New
Technology**

- Data Management & Architecture
- New Asset Management: Digital Twins, Predictive Maintenance, Digital Asset Documentation
- AI-enhanced Price & Grid Security Analyses
- AI-based Sensor Data Analyses
- AI-enhanced Operations



OMNIA
THE PLURAL OF ENERGY

Our Locations

FORRS GmbH
Office Munich
Dachauer Str. 63
80335 Munich

FORRS Office Frankfurt
Große Gallusstraße 16-18
60312 Frankfurt am Main



www.forrs.de



FORRS

Your Contacts

Martin Hiller
martin.hiller@forrs.de
+49 172 4596226
[Martin Hiller | LinkedIn](#)

Andreas Pointvogl
partnerships@omnia-energy.eu
+49 151 1171 2020
[Andreas Pointvogl | LinkedIn](#)

Our Locations

OMNIA GmbH
Sternstraße 1
85622 Feldkirchen (München)

OMNIA Office Tbilisi
Merab Kostava Street 39
0179 Tbilisi

OMNIA Office Vienna
European Sustainable Transition Centre
Gußhausstraße 23
1040 Vienna