South-East European TSO Challenges (SEETSOC)

Electricity markets in the South East European region are still in the early stages of development. While most countries have passed the proper legislation, the operation of the markets and their degree of openness varies significantly. The proposed project addresses the needs of South-East European TSOs in their effort towards harmonization and integration of the region with the rest of the European power network. Diagnostics, modeling and monitoring generate huge amounts of data that create the need for efficient storage and analysis of the collected information for better decision making and execution; under this respect the use of a common computational platform is highly recommendable and will be a focus of the proposed project.

The project objectives are:

• Creation of a toolbox of proven and future monitoring and simulation tools that can be deployed and tested rapidly and cost-effectively;

• Assist in harmonizing regulatory and commercial frameworks in South East Europe to facilitate cross-border trading of both power and grid services, ensuring that they will accommodate a wide range of operating situations;

• Development of systems and tools that will enable TSOs and other players in the energy field to utilize innovative service arrangements to improve their efficiency and enhance their services to customers;

• Develop and implement methods and techniques for capacity calculation and allocation.

• Establish corrective procedures to ensure security of power transmission and grid connections.

• Ensuring the successful interfacing of new and old methods and tools for the representation and modeling of power networks.

To those ends traditional and modern techniques will be developed to serve as the initial test bed that academics and businesses can use for experimentation and decision making. The project innovates in designing, implementing and developing state of the art methods and techniques based on current research and the expertise of the participating institutions.

The consortium has a strong representation (50%) of TSOs that take part from the initial to the final stages of the project to ensure appropriate input of information, proper use of methods and techniques and practicality of outcomes. Academic institutions with expertise and research in the field are heavily involved through their electrical engineering departments. Furthermore international cooperation is ensured with the participation of two TSOs and two academic institutions from EU neighboring countries. The results/products of the project that are in electronic form (software, data) will be publicly available (open source) to researchers and businesses for further development and implementation.