



SimNet TSGas

SimNet TSGas – Transient Simulation of Gas Networks.
A computational package for dynamic simulation of gas networks with built-in GIS support and fully customizable database expansion for inventory management.

Key Advantages of the Software:

- **Dynamic network simulation** – analyze the behavior of the gas network over a defined period. Enter the forecasted consumer demand and check whether each consumer will receive the required gas supply parameters. Without risking disruptions in the real network, simulate the effects of pressure reduction at the source or reduction station. Predict potential failures and identify which consumers may be cut off during maintenance operations.
- **Simulation of nonlinear elements** – Perform hydraulic analysis of networks equipped with valves, regulators, compressors, or multiple meters connected in a single location. Test improvements to network performance and eliminate bottlenecks by redesigning/extending pipelines or adjusting pressure values at stations—without financial consequences.
- **Ease of use** - the intuitive application interface uses mechanisms known from typical Windows programs. After a short training session, users can use the program effectively and take full advantage of its potential (*see sample interface view on the back of this page*). The program has an in-built user manual, and in the event of problems, the support team is always on hand to offer good advice.
- **Simulation without limits** - perform network calculations of any structure and size. In the network model, you can insert any number of pipes and elements such as a sources, valves, regulators, compressors, connections, or meters. You can set individual parameters for each element, which can also change during the simulation. Create different simulation variants and compare the results so that the required parameters are achieved for the actual network.
- **Relevant parameters at your fingertips** - Pressures, flow rates, velocities, calorific values, and many other indicators can be displayed according to your needs. Available forms of information viewing are, for example, database view, specific object data, display of labels on a map, display of values in the form of object color/symbol/size, display of piezometric charts with additional parameters, display of summary charts and much more.
- **Reduce metering effort** - verify simulation results by comparing them with measured results to calibrate the network model. Evaluate the quality of the telemetry system and metering equipment at critical points in the network and read the remaining data from the simulation results. Purchasing and maintaining redundant metering equipment is much more expensive than maintaining the software.
- **Built-in GIS** - display the network diagram on real underlay maps. The application is compatible with WMS, WMTS, WFS services and allows you to connect any external vector and bitmap user layers such as SHP, TAB, DXF, DWG, DNG, GIF, BMP, PNG and many others. In addition, the connected layer will be correctly embedded on the map thanks to the recognition of more than 5,000 different geographical coordinate systems.
- **Plurality of functions** - the application allows advanced filtering of the data available in the program and the creation of reports based on this data. Thanks to the built-in catalogues for pipes, control curves, consumption characteristics and more, you can quickly and easily supplement network performance parameters. The network itself can be imported from data in any vector format with just a few clicks.
- **Multilingual Support** – the application is available in 10 languages, making it suitable for users worldwide.
- **Openness to users** - we are the developers of the software and respond to the needs of our customers. The application is constantly being developed considering the needs of our software users.

Since 2019, we have been the main supplier of network simulators to all branches of PSG Sp. z o.o. (Polish DSO)!

**We invite you to schedule a program demonstration and detailed presentation
of its functionality, tailored to your needs.**

