



Bill Gates presenting the Windows World Open Award



## Customer Success Story

# Transneft Russian Pipeline Moscow, Russia



Main Screen Overview of Transneft Russian Pipeline

### About Transneft

Transneft, a joint stock Russian Oil transport company and Russia's largest oil pipeline company, manages the world's largest oil pipeline in the world. The pipeline extends from Siberia to the Baltics, and encompasses over 48,000 miles (80,000 km) of oil pipes transporting 420 million tons of oil a year through severe environments. The installation project involved installing over 400 pumping stations and 1000 holding tanks in 101 locations supplying 35 refineries.

### ICONICS Software Deployed

Transneft selected ICONICS GENESIS32™ with GraphWorX™32, TrendWorX™32 and AlarmWorX™32. This suite of software tools is running on over 500 networked PCs, monitoring over 800,000 tags. This is the world's larg-

*"Transneft selected ICONICS GENESIS32 software suite of products due to its open data-mining and OPC to-the-core technology."*

**Transneft**

est PC-based SCADA and dispatch system. The application has won Microsoft's "Windows World Open" Award.

### Key Features

The ICONICS GENESIS32 system was installed by the systems integration company, Elesy. With over 500 employees, Elesy is a developer and supplier of process control systems for Russian fuel and energy complex enterprises. The software system monitors the operation of 2,100 PLCs, including 400 pumping stations with 1,000 tanks in 101 tank farms. Transneft uses TCP/IP with satellite links to collect and transmit status data.

### Project Summary

GENESIS32 software has been deployed to monitor and control the Trans-Russian Oil Pipeline System. Transneft is responsible for transporting 99.5% of all the oil used in Russia. The system supplies 35 different refineries with their daily crude oil and provides both Europe and China with oil products.

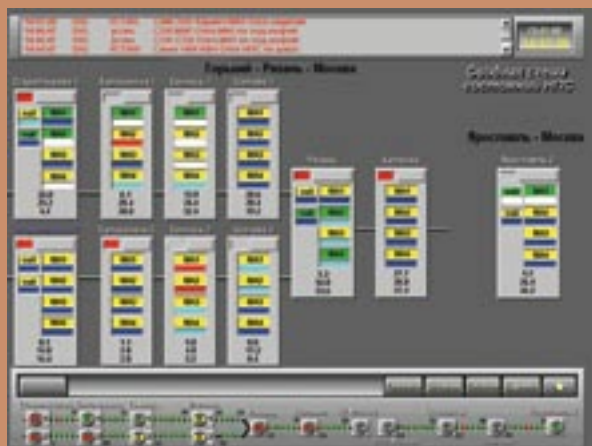
ICONICS GENESIS32 software is monitoring the 400 pumping stations, as well as 1,000 large oil tanks in 100 different tank farms along the extensive pipeline. To provide the centralized dispatch and SCADA system for this project, Transneft is using 500 ordinary P733 PCs run-

ning Microsoft Windows NT and Windows 2000. There are approximately 800,000 digital and analog tags communicating over microwave, land telephone lines and 22 satellite links using standard TCP/IP protocol. The 2,100 operator screens required to operate the pipeline have an average response time from any point in the system from between three to five seconds.

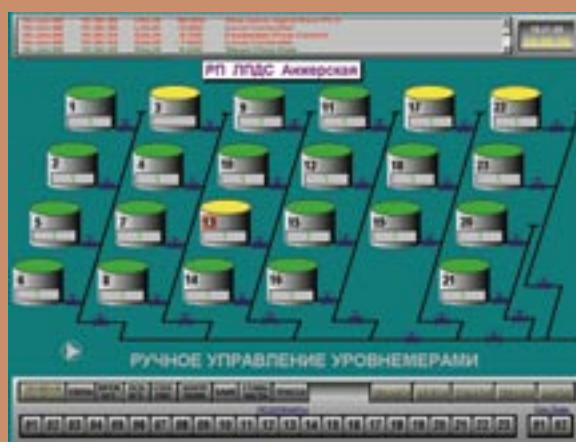
The system is using ICONICS GENESIS32 HMI/SCADA software, off the shelf PC automation technology, 2000 PLCs and Microsoft Windows NT, 2000 and XP operating systems. GENESIS32 is Web-enabled and its thin client/server architecture integrates seamlessly with Intranet- and Internet-based large network applications.

**Conclusion**

ICONICS has worked closely and successfully with Transneft and Elesy to make this Oil Pipeline management project successful in every aspect. Transneft participates in the ICONICS Large End-User Support and Maintenance program to keep their software updated.



*Pump Monitoring and Control at Transneft Russian Pipeline*



*Tank Farm Overview Screen*

**Benefits of the System**

The primary benefit that Transneft has had with the installed ICONICS GENESIS32 system is the substantial reduction in time in leakage detection and the dispatching of a repair solution.

**Product Highlight**

**AlarmWorX™32**

AlarmWorX32’s Alarm Configuration is easy with the Alarm/Event Configuration Explorer. Users can define alarms on any OPC Data and/or expression (complex combinations of OPC Data), choosing among Analog Limit alarms, Deviation, Rate-of-Change, and Digital alarms. Alarm configurations can then be saved to an Access or SQL database, adhering to GENESIS32’s open standards.