



# PROTECTING THE GIPL PIPELINE

**WATERFALL TEAMS WITH ELSIS TS TO REINFORCE CYBERSECURITY AT GAS INTERCONNECTION POLAND AND LITHUANIA FACILITIES**



Customer/ Partner	Lithuanian-based ICT and OT company ELSIS TS at GIPL sites
Customer Requirement	Protecting operational data exchange within the gas transmission SCADA system, while enabling safe visibility and exchange of operational data for both pipeline partners.
Waterfall's Unidirectional Solution	Secures control system network perimeters from external threats with Unidirectional Security Gateways, enabling enterprise-wide visibility for operations status and key performance indicators as well as safe ICS network monitoring from a central enterprise SIEM.

## CROSS BORDER PIPELINE INFRASTRUCTURE IS FACING REAL CYBER THREATS

The Colonial Pipeline incident, Russian actions in the Ukraine, targeted ransomware actors and other threats have raised serious concerns about the cybersecurity of critical national infrastructures. This deployment of Unidirectional Gateways provides the world's strongest protection from online attacks to this important natural gas interconnection.

### THE CHALLENGE

Secure the automation processes of the GIPL pipeline for the safe exchange of operational data between the gas transmission systems of the two countries, without posing risk to reliable, uninterrupted and efficient operation of the complex, transnational pipeline infrastructure. In addition, enable a central dispatch centre to remotely monitor and control process operations.

### WATERFALL SOLUTION

Waterfall integrated Unidirectional Security Gateways to unidirectionally replicate gas metering and pressure reduction data between Polish and Lithuanian sites, without posing risk to process control networks. Unidirectional Gateways replicate industrial data to a central dispatch center to enable the safe exchange of data between geographically dispersed sites.



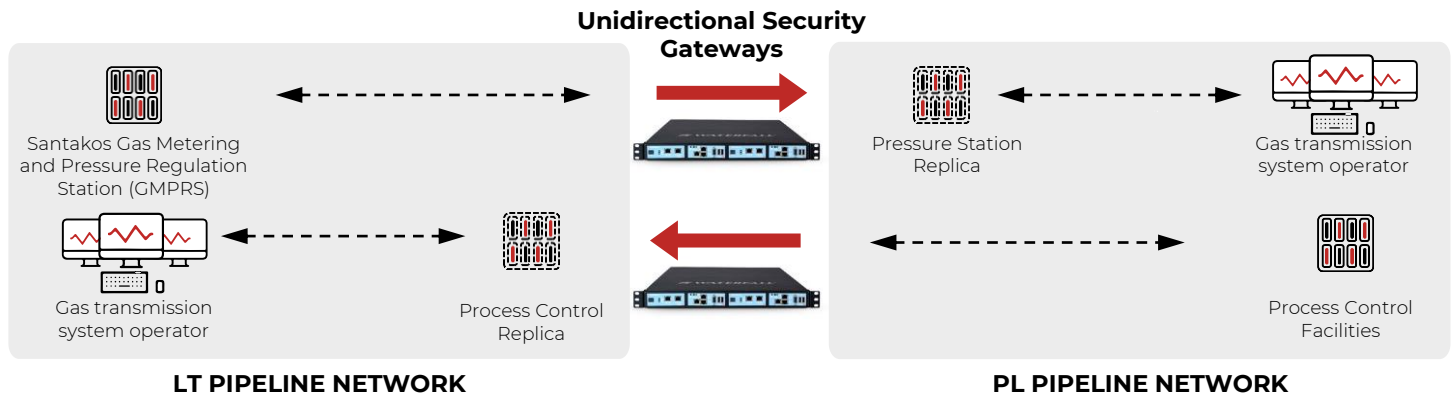
### RESULTS & BENEFITS

**Security:** Unidirectional Gateways enabled the secure exchange of multi-site operational data between countries. OT data replication provides strong assurance that no attack from the IT network can enter the operational network.

**Simplicity:** Unidirectional server replication makes the gateways easy to use. The unidirectional replicas are real-time participants in both source and destination networks

**Performance:** Safe industrial data exchange for international pipeline infrastructure, not only optimizes business efficiencies, but ensures the security of critical resources.

## THEORY OF OPERATION



Waterfall Unidirectional Security Gateways replace firewalls in industrial network environments, **providing absolute protection to control systems and industrial control networks from attacks originating from external less-trusted networks**. Unidirectional Gateways contain both hardware and software components. The hardware components include a TX Module, containing a fiber-optic transmitter/ laser, and an RX Module, containing an optical receiver, but no laser. The gateway hardware can transmit information from an industrial network to an external network, but is physically incapable of propagating any virus, DOS attack, human error or any cyber attack at all back into the protected industrial network.

This deployment used two Unidirectional Security Gateways to **enable safe control-system data exchange, external monitoring, and visibility into operations** for the GIPL sites. Unidirectional Gateways replicate servers, emulate industrial devices and translate industrial data to cloud formats. Unidirectional Gateway technology represents a plug-and-play replacement for firewalls, without the vulnerabilities and maintenance issues that accompany firewall deployments.

## UNIDIRECTIONAL SECURITY GATEWAYS BENEFITS:

- » Safe operational data exchange between geographically disparate facilities
- » Secure monitoring of operational data from less-secure, Internet-based networks
- » Strongest industrial security for automation processes and systems
- » Safe replication of critical data to enhance operational efficiencies

### GLOBAL CYBERSECURITY STANDARDS RECOMMEND UNIDIRECTIONAL SECURITY GATEWAYS

Waterfall Security is the market leader for Unidirectional Gateway technology with installations at critical infrastructure sites across the globe. The enhanced level of protection provided by Waterfall's Unidirectional Security Gateway technology is recognized as best practice by leading industry standards bodies and authorities such as NIST, ANSSI, NERC CIP, the ISA, the US DHS, ENISA and many more.

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### ABOUT WATERFALL SECURITY SOLUTIONS

Waterfall Security Solutions is the OT security company, producing a family of Unidirectional Gateway technologies and products that enable safe IT/OT integration, enterprise-wide visibility into operations, and disciplined control. The company's growing list of customers includes national infrastructures, power plants, nuclear plants, off-shore and on-shore oil and gas facilities, manufacturing plants, power, gas and water utilities, and many more. Deployed throughout North America, Europe, the Middle East and Asia, Waterfall products support the widest range of leading industrial remote monitoring platforms, applications, databases, and protocols in the market. For more information, visit [www.waterfall-security.com](http://www.waterfall-security.com).

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