SIGA

Level Zero OT Resilience

THE WATER SECTOR
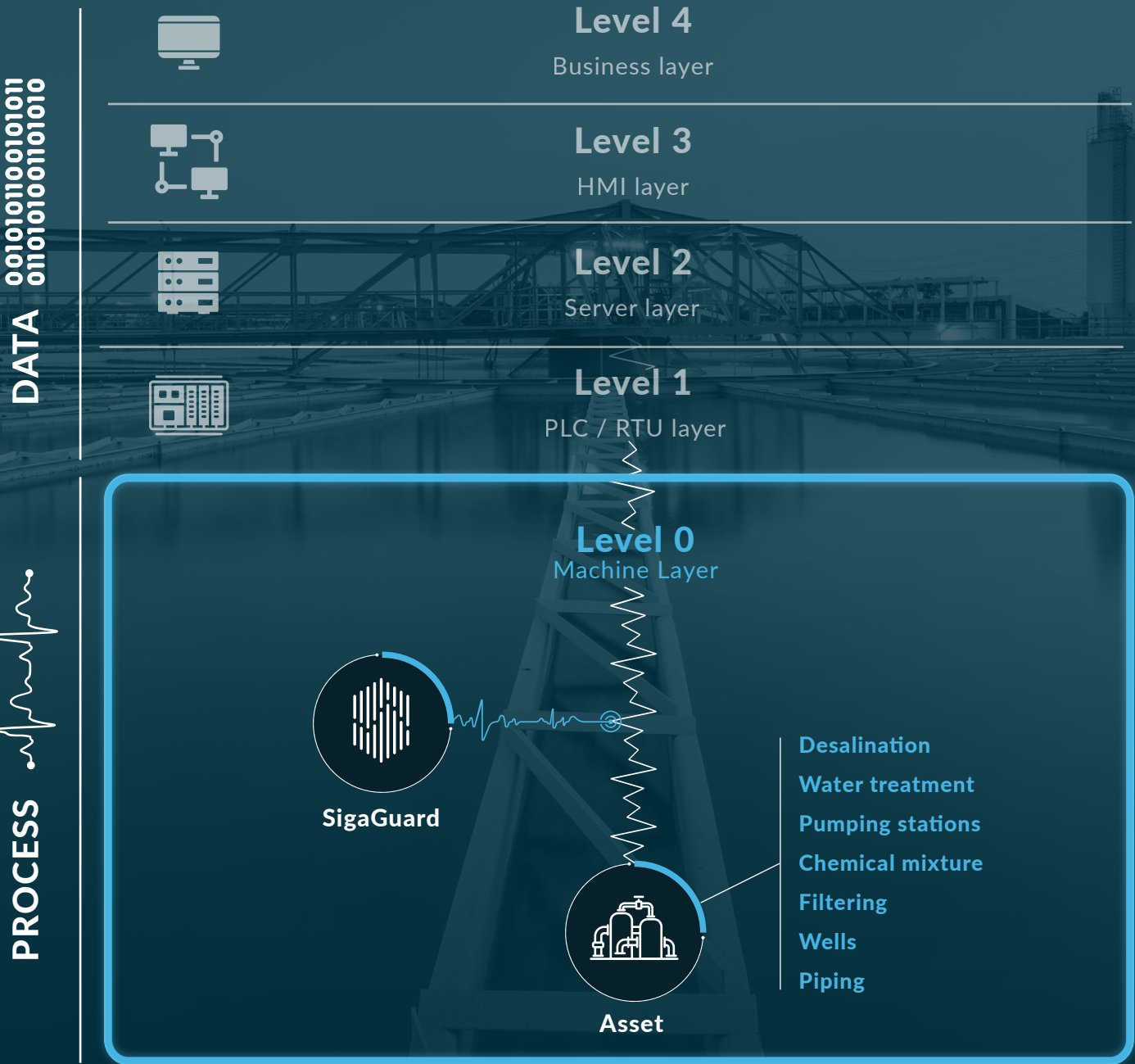
Elevating Operational
Technology (OT)
cybersecurity to Level 0

THE CHALLENGE

A safe water supply and effective wastewater management are crucial elements of modern economies. To better manage growing demand, water authorities worldwide invest heavily in automation and computerization for water purification, wastewater management, desalination, storage and delivery. Water infrastructure ecosystems have zero tolerance for downtime, human risks and operational failures. Yet, despite ever-tighter regulations and increasing public scrutiny, reliance on sensor data for decision-making leaves critical water infrastructure dangerously exposed to attack or failure.

THE ONLY OUT-OF-BAND PROCESS ORIENTED CYBER SOLUTION

DATA 0010101100101011 0110101100110110

Level 4
Business layer

Level 3
HMI layer

Level 2
Server layer

Level 1
PLC / RTU layer

Level 0
Machine Layer

PROCESS

SigaGuard

Asset

Desalination
Water treatment
Pumping stations
Chemical mixture
Filtering
Wells
Piping

BIRD
Israel-U.S.
Binational Industrial Research
and Development Foundation

Information Security Management
ISO 27001
Certified

Horizon 2020
European Union Funding
for Research & Innovation

VALUE PROPOSITION

Out-of-band monitoring
Performs 24/7 detection without interrupting your physical processes.

Feeling the machinery's pulse
Provides operators with the most reliable source of data.

Inaccessible insights
Delivers precise granular visibility with cutting-edge AI insights.

More data at higher resolution
Reads the electrical signals up to one hundred times per second.

Data archives
Improved preparedness for future attacks.

Dynamic hardware
Integrates with your preferred provider's hardware.

SigaGuard's unique positioning (Level - 0)
Serves as a complementary solution to other OT solutions.

Reduces downtime to a minimum
Unmatched visibility ensures a quick and safe recovery from downtimes.

Regulation compliant
Complies with the most stringent regulations.

THE SOLUTION

SIGA offers water infrastructure operators greater operational reliability and control over mission-critical systems – preventing service interruptions and enabling full compliance with strict regulatory regimes. With SIGA, operators can be confident that they know, anywhere and in real-time the exact status of every critical component. SIGA uses machine learning-powered predictive analytics to protect critical water infrastructure assets by monitoring the electrical signals directly from Level – 0. Unlike other solutions, SIGA tracks the electrical signals the most reliable source of data, the physical layer, as opposed to other network solutions focused on the data-packets which can be easily hacked or spoofed.

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> ...the authority's decision to work with SIGA aimed to enhance our national cybersecurity posture following cyberattacks against our water utilities in the last few years. This led us to establish a national Security Operations Center (SOC) where we incorporated the SigaGuard solution for monitoring and defending against cyberattacks in the process layer (Layer Zero) on our water infrastructure.
>
> **Danny Lacker**
> **Head of Water Security Emergency and Cyber Security Division**
> **Israel Water Authority**

ABOUT US

Founded in 2014, SIGA OT Solutions is an innovative cybersecurity company driving a paradigm shift within the world of OT cybersecurity. The company strives to expand the boundaries of OT operations with deepened security and elevated process integrity, by delivering AI enhanced monitoring and deeper operational perception to operators of critical assets.