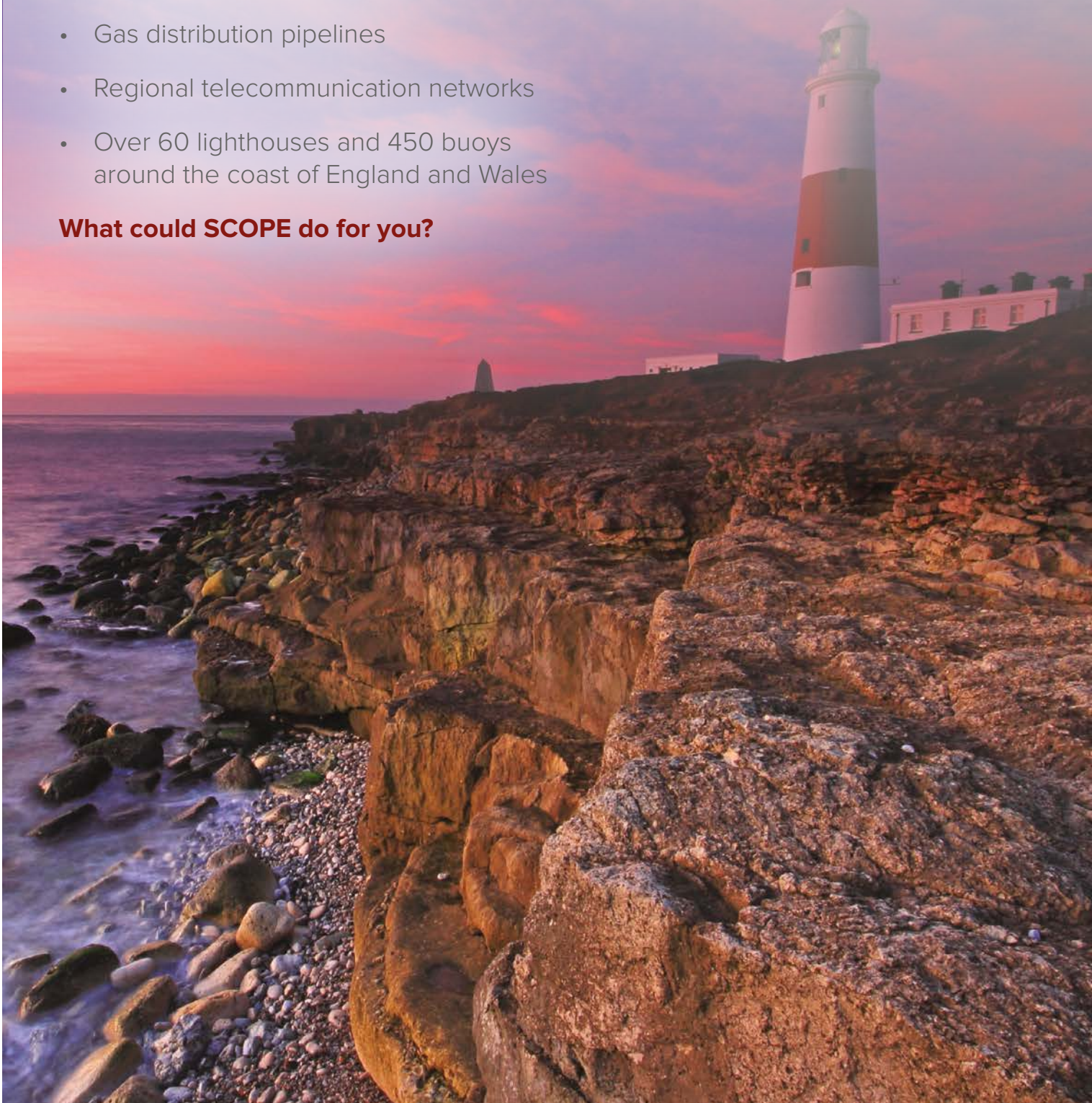# servelec technologies

SCOPE

Feature rich, enterprise SCADA
and telemetry solution for monitoring
and controlling your assets

SCOPE collects and adds value to your asset performance data by integrating with other sources of information, providing a holistic view of your operations. SCOPE's availability, resilience and market-leading security is why it is used to monitor and control:

- 17,000 water sites in the UK alone

- Major airport infrastructure

- UK digital TV and radio networks

- Gas distribution pipelines

- Regional telecommunication networks

- Over 60 lighthouses and 450 buoys around the coast of England and Wales

What could SCOPE do for you?

What can SCOPE do?

SCOPE provides a secure platform for monitoring and controlling a diverse range of assets including critical national infrastructure, from small plant installations through to the management of entire organisations' networks. SCOPE enables:

- Access to important real-time, operational data to make accurate and informed decisions.

- Optimum reliability through robust software design and high-levels of redundancy.

- Calculation of the total cost of asset ownership by integrating ERP systems.

- Over-lay of real-time data on a graphical information system.

- Flexible and modular design for speedy adaptation for future demands.

- Market-leading cyber security and cryptographic defence-in-depth protection.

What is included with a SCOPE system?

- Nexus

Nexus is SCOPE's real time data engine; whether you need to automate the simplest of processes or require an enterprise level SCADA solution Nexus makes it possible. Nexus provides a highly resilient, efficient and flexible platform to scan, control and integrate real-time data from a wide range of industry standard telemetry devices. Nexus' features include:

- Scalability with up to hundreds of separate server instances, with multiple redundant standby systems

- Inter-server communications for deployment on existing wide area networks

- Low bandwidth requirements enabling full availability across geographic regions

- Market-leading cyber security

- Time-stamped and archived telemetry data with core smart alarm functionality

- Business facing data mirrors

- Intuition

Intuition extends SCOPE's core alarm system and provides advanced features to efficiently manage and track all reported alarms from notification to resolution. Intuition provides:

- Secure access to alarm notifications in real-time

- Integration with other systems such as rotas or corporate HR

- Proactive escalation, targeted delivery and re-annunciation for out-of-hours incidents

- KPI reporting aids and operational analysis

- Mobile alarm resolution tracking

- Prism5

The Prism5 graphical user interface consists of a comprehensive control room/ supervisor interface and a lightweight mobile-ready version that is built on HTML5 and leading web technologies. Together they provide users with access to all SCOPE functionality, plant displays, tools and utilities. Prism5:

- Presents important data clearly via dedicated or web-based applications for mobile and desktop devices

- Gives access to the Prism5 Studio mimic development tool with comprehensive mimic creation and editing capabilities

- Enables intuitive user features such as drag and drop and form based tools for creating content

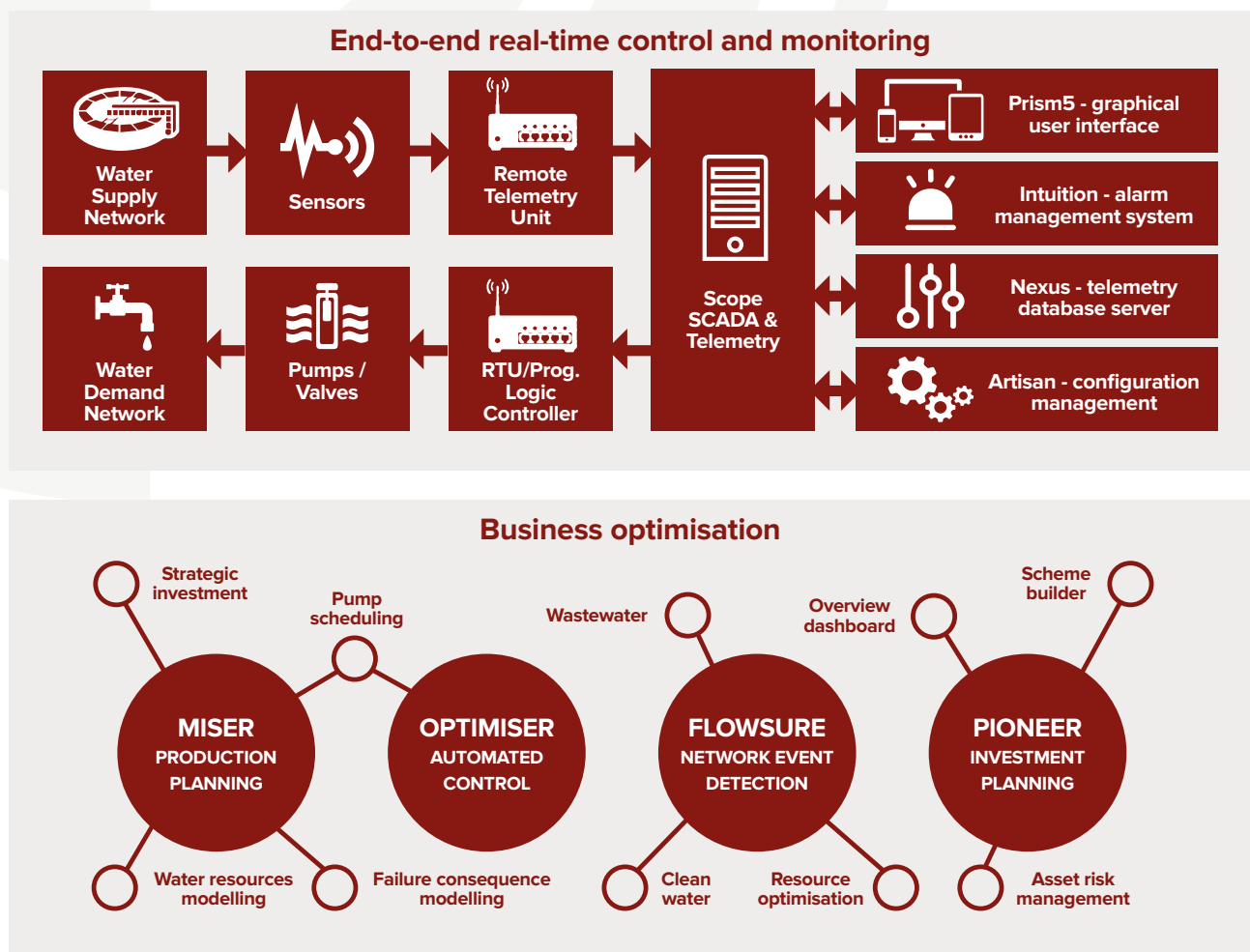- Provides customisable dynamic dashboards for holisitic views

- Artisan

Artisan is SCOPE's configuration management solution. It integrates with core SCOPE telemetry and allows configuration changes to be efficiently managed. It enforces a hierarchy driven view on assets and their associated data. With Artisan:

- Changes to configuration are made offline and applied to the online system automatically at a user-specified time

- Templates enforce business standards for configuration meaning changes to the business are reflected in the telemetry configuration

- Workflow assistance when performing changes is provided through the use of to-do tasks and structured data entry displays.

Servelec is a market-leading global provider of end-to-end hardware and software products and systems.

We deliver efficiency savings to our customers' business operations, by creating systems to collect, communicate and exploit data. Servelec Technologies can supply a true end-to-end automation and optimisation solution using our state-of-the-art RTUs, secure SCADA and telemetry platform and suite of business optimisation SaaS solutions.

Example end-to-end water network solution:

End-to-end real-time control and monitoring

Water Supply Network → Sensors → Remote Telemetry Unit → Scope SCADA & Telemetry

Water Demand Network ← Pumps / Valves ← RTU/Prog. Logic Controller ← Scope SCADA & Telemetry

Scope SCADA & Telemetry ↔:
- Prism5 - graphical user interface
- Intuition - alarm management system
- Nexus - telemetry database server
- Artisan - configuration management

Business optimisation

MISER PRODUCTION PLANNING
- Strategic investment
- Pump scheduling
- Water resources modelling

OPTIMISER AUTOMATED CONTROL
- Failure consequence modelling

FLOWSURE NETWORK EVENT DETECTION
- Wastewater
- Overview dashboard
- Clean water
- Resource optimisation

PIONEER INVESTMENT PLANNING
- Scheme builder
- Asset risk management

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