



Report of the Commissioner of Public Works
**Process Control System and Supervisory Control and Data Acquisition
Technology and Product Standardization**

1. Recommendations

Council approve the standardization of Process Control System and Supervisory Control and Data Acquisition technology and products outlined in Private Attachment 1 for a term of up to 10 years.

2. Purpose

This report is to obtain Council approval for standardization of brand name technology and products for the Process Control System (PCS) and Supervisory Control and Data Acquisition (SCADA) system identified in Private Attachment 1.

Private Attachment 1 and 2 to this report will be considered in private pursuant to Section 239(2)(a) of the *Municipal Act, 2001*, as the subject matter involves Regional property security.

Key Points:

- PCS and SCADA consist of highly specialized software, hardware, equipment and services used to monitor and control Regional water and wastewater infrastructure and are required to maintain system security and regulatory compliance
- Products listed in Private Attachment 1 are recommended as standards due to their compatibility with existing equipment and systems
- PCS and SCADA technology and product standardization complies with limited tendering provisions under applicable trade agreements supported by Procurement Review Committee (PRC) decision on November 6, 2025

- This request is to extend approval for product brands previously approved by Council in 2021, and to obtain approval to standardize additional product brands

3. Background

York Region is responsible for complying with provincial legislation to supply safe drinking water and wastewater services

York Region provides water and wastewater services to nine municipalities in York Region. The Region maintains and operates water and wastewater systems in compliance with regulations, including the *Safe Drinking Water Act, 2002*, *Environmental Protection Act*, *Clean Water Act, 2006*, and the *Ontario Water Resources Act*. All water and wastewater activities must meet requirements of York Region's Integrated Management System, which supports the provincial Drinking Water Quality Management Standard.

The *Safe Drinking Water Act, 2002* imposes a standard of care upon Municipal Council members. Council protects the people in their communities by ensuring financial sustainability, asset management, risk mitigation, and continual improvement for the Region's water systems.

The PCS and SCADA systems are the backbone of the Region's water and wastewater operations

PCS and SCADA consist of highly specialized software, hardware, equipment and services used to monitor and control Regional water and wastewater infrastructure. These systems are essential in achieving regulatory compliance, ensuring reliable operation and protecting public health in delivery of the Region's water and wastewater services.

Council approved the standardization of several PCS and SCADA product brands for up to five years through a private report in February 2021 (Private Attachment 2). This request is to extend approval for the same product brands and obtain approval to standardize additional product brands.

PCS and SCADA products are required to maintain system security and regulatory compliance

Products currently used in the Region's PCS and SCADA environment were originally selected through procurement processes that evaluated the product's capabilities against technical requirements, business requirements and value to the Region in accordance with the Region's Purchasing Bylaw.

Over time, additional procurement of equipment, devices, licenses, and services related to the original products are required to:

- Monitor and control water and wastewater systems to maintain regulatory compliance;

- Support growth, maintenance and security of the Region's water and wastewater systems;
- Provide ongoing maintenance and support through upgrades, security patches, warranties, help desk support and professional technical services; and
- Replace equipment that has reached end of life and end of support.

A SCADA Master Plan was completed in 2020 and refreshed in 2025, which reviewed current product and technology implementation and identified key projects and initiatives over the next 10 years. These projects rely upon the standardized products and services outlined in Private Attachment 1.

Certain trade agreements have specified conditions permitting the use of brand names in government procurement

The Canadian Free Trade Agreement, the Canada-European Comprehensive Economic and Trade Agreement, and the Ontario-Québec Trade and Cooperation Agreement limit use trademarks or trade names ('brand names') in the technical specifications of government procurements.

Each trade agreement includes limited tendering provisions which permits additional deliveries of a specific good or service if a change of supplier:

- Cannot be made for economic or technical reasons, such as requirements of interchangeability or interoperability with existing equipment, software, services or installations procured under the initial procurement; and
- Would cause significant inconvenience or substantial duplication of costs for the procuring entity.

A PRC was held pursuant to sections 6.1.f, 7.1.c, and 14.2 of the Procurement Bylaw and Sections 5.4 and 5.5 of Protocol 4: Non-standard Procurements and confirmed trade treaty justification for extending existing and adding new products specified in this report as Regional standards.

4. Analysis

PCS and SCADA product standardization is required to support system security, business continuity, and future growth

Each product listed in Private Attachment 1 is currently implemented within the Region's PCS and SCADA environment. Additional equipment, devices, licenses, and services added must be interchangeable or interoperable with the original product to support reliable and secure PCS and SCADA environments. If standardization was not available, replacing these products would require significant time and resources, duplicate existing investments made in current PCS and

SCADA products and may introduce unnecessary physical and operational risks to the systems. These conditions meet trade agreement provisions permitting additional deliveries of specific goods or services in these circumstances.

Standardized products will be procured in accordance with the Procurement Bylaw. This standardization will allow brand names to be specified in the technical specifications of procurements for additional equipment, devices, licenses, and services. These standards will also be applied to rehabilitation, lifecycle maintenance, and expansion projects.

PCS and SCADA technology and product standardization complies with trade agreements

All products listed in Private Attachment 1 meet requirements of limited tendering provisions under applicable trade agreements. These agreements support procurement practices that are transparent, fair and non-discriminatory, while allowing for limited tendering under specific, justified circumstances and are not an impediment to the product standardization and direct sourcing being requested.

PCS and SCADA technology and product standardization supports the Healthy Communities and Sustainable Environment Areas of Focus toward Vision

The Healthy Communities and Sustainable Environment Areas of Focus of York Region's Vision include focus on community health and safety and the need to protect and sustain the natural environment. Standardizing PCS and SCADA technology and products aligns with the 2023 to 2027 Strategic Plan priorities of Supporting Community Well-Being and Drive Environmental Stewardship, specifically the support safe communities and deliver and promote environmentally sustainable services objectives.

5. Financial Considerations

This report does not present current or anticipated financial changes to the Region's budget or fiscal position. The required funding for the products and services listed in Private Attachment 1 will be managed within approved annual capital and operating budgets.

6. Local Impact

Standardizing brand names for PCS and SCADA products enables staff to maintain and operate assets more efficiently, manage risk and minimize disruptions to water and wastewater service delivery to the local municipalities.

Regional staff are committed to providing continuous operation of water and wastewater systems to meet all applicable regulatory requirements.

7. Conclusion

York Region provides water and wastewater services to nine municipalities within York Region. Highly specialized process equipment is required to monitor and control the Region's water and wastewater systems to ensure performance limits are met. These include rated capacities, flow rates, water treatment chlorine residual management and disinfection.

Standardization of products supports compatibility with existing equipment and systems, spare parts management, system and supply chain security and integrity, staff training and knowledge, and meeting regulatory requirements for the Region's water and wastewater systems. If approved, brand names will be specified in technical specifications of future procurements for additional equipment, devices, licenses, and services.

It is recommended that York Region standardize PCS and SCADA products listed in Private Attachment 1 for up to 10 years.

For more information on this report, please contact Richard Walker, Director, Water and Wastewater, Operations, Maintenance and Monitoring at 1-877-464-9675 ext.75311. Accessible formats or communication supports are available upon request.

Recommended by:



Kyle Catney

General Manager, Operations and Services



Laura McDowell, P.Eng.

Commissioner of Public Works

Approved for Submission:



Erin Mahoney

Chief Administrative Officer

November 17, 2025

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Private Attachment 1 – Standard PCS and SCADA Products

Private Attachment 2 – February 2021 Private Report: Establishment of Standard Technology Products