TECHNICAL ARTICLE

## ISA112 SCADA Systems Lifecycle Released

*Graham Nasby, City of Guelph Water Services*

Since its kick off in September 2016, the ISA's newest standards committee ISA112 SCADA Systems has been hard at work developing a new standard to cover best practices for the design, implementation, and long term management of SCADA systems. Supervisory Control and Data Acquisition systems, commonly referred to as SCADA systems, are a critical aspect of automation technology for a wide range of industries. SCADA plays a major role in controlling/monitoring pipelines, electric transmission systems, rail/road systems, canals/tunnels/bridges and municipal water/wastewater infrastructure, along with many other industrial applications. The role and usage of SCADA technology can vary considerably depending on the specific industry and geographic area.

After several years of work, the ISA112 committee is pleased to release interim drafts of its ISA112 SCADA lifecycle and ISA112 reference model architecture, which are now available for download on www.isa.org/isa112 . The committee is expecting to have the first release of the ISA112 SCADA systems standard ready in 2022-23, which will be followed by several additional work products including technical reports. Like many of ISA's popular standards, it is expected the ISA112 SCADA systems standard will be published in several parts due to its breadth.

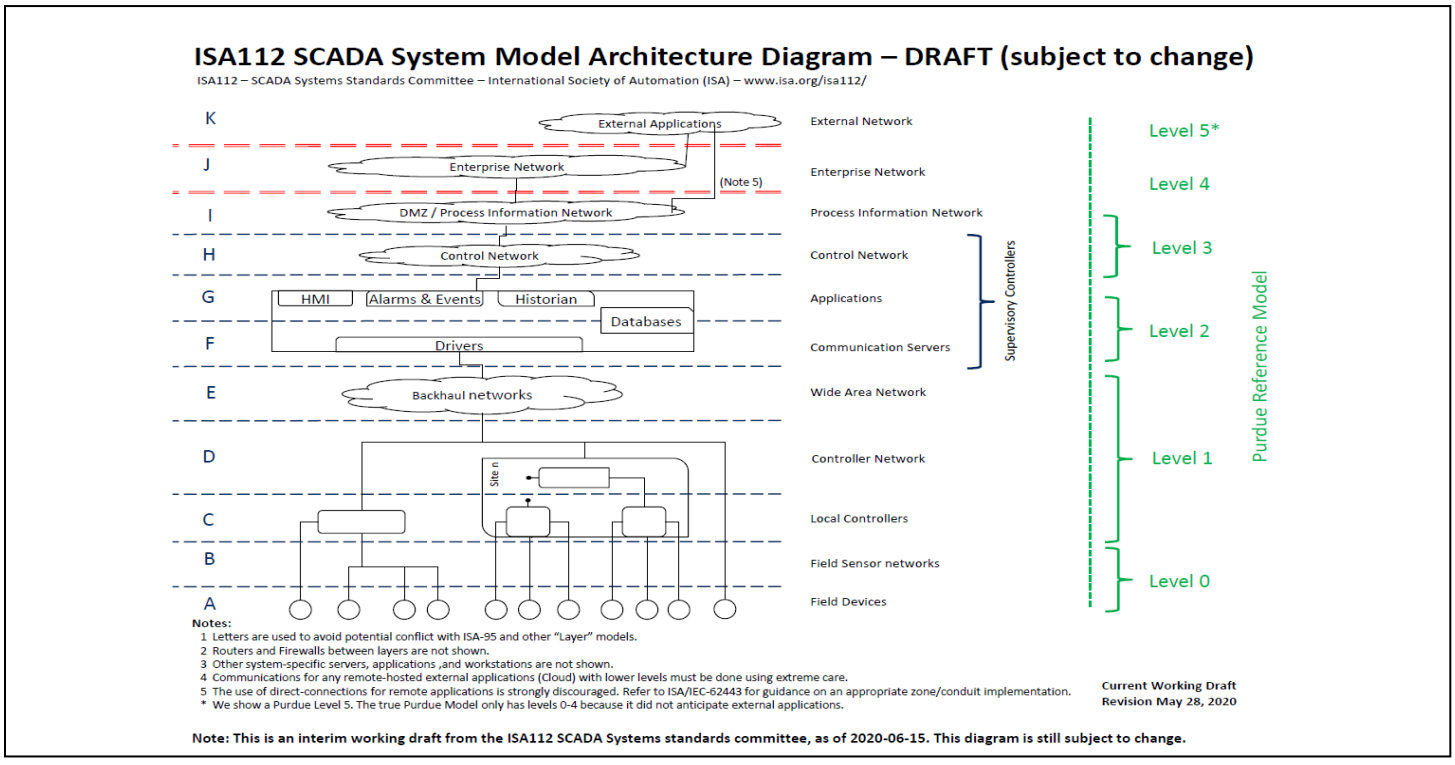
There is a strong drive by the ISA112's members to develop a set of standardized terminology that can be used for specifying, designing, implementing and managing SCADA systems. The committee has also worked hard to develop an easily applicable ISA112 SCADA lifecycle that can be applied to both large and small SCADA systems, regardless of the industry and geographic area.

Headed by co-chairs Graham Nasby and Ian Verhappen, the ISA112 committee currently has over 150 members from a wide variety of backgrounds, roles and industries. The committee has a strong cohort of members that includes end-users, operating companies, engineering firms, vendors, distributors, contractors and system integration outfits. The co-chairs, along with managing director Greg Lehmann, have worked hard to ensure the committee membership has broad representation from a wide span of sectors, including the municipal water/wastewater, pipeline, electric power, chemical, mining, environmental, and oil/gas industries.

Membership in the ISA112 SCADA Systems Standards committee is open to any interested individuals. Comments and feedback are also always welcome. You can find your more about the ISA112 committee by visiting **www.isa.org/isa112** or by contacting co-chairs Graham Nasby or Ian Verhappen.

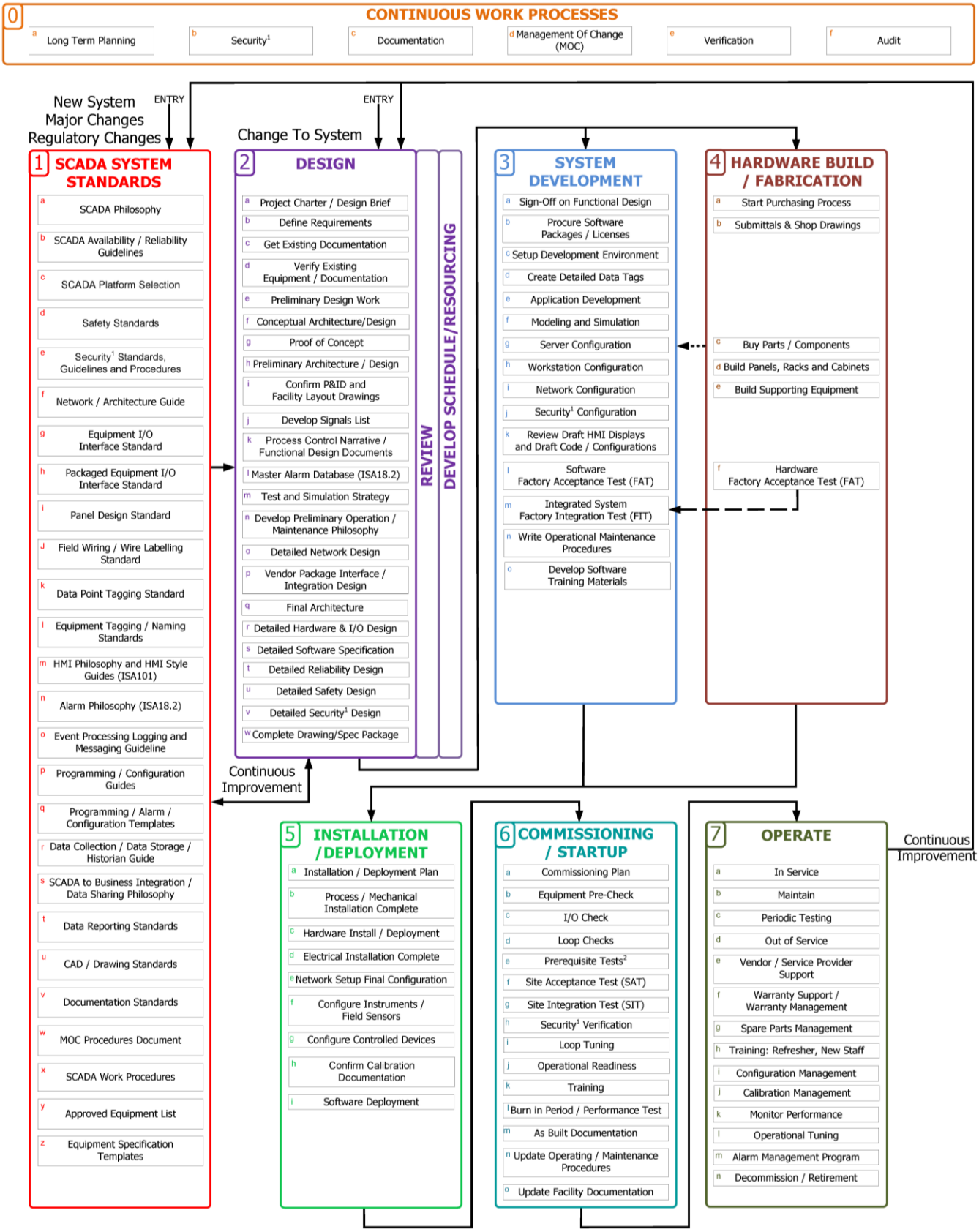
### About the Author

**Graham Nasby, P.Eng, PMP, CAP** holds the position of Water SCADA & Security Specialist at City of Guelph Water Services, a publicly-owned/operated water utility located in Guelph, Ontario, Canada. Prior to joining Guelph Water, he spent 10 years in the engineering consulting community after completing his B.Sc.(Eng.) at the University of Guelph. He is senior member of the International Society of Automation (ISA) and co-chair of the ISA112 SCADA System Standards Committee. Contact: graham.nasby@guelph.ca



# ISA112 SCADA System Lifecycle – DRAFT (subject to change)

ISA112 – SCADA Systems Standards Committee – International Society of Automation (ISA) – www.isa.org/isa112/




Notes
1) Security includes physical security, operational security and cybersecurity.
2) Prerequisite tests typically include both cold and hot commissioning or dry / wet commissioning as applicable.

ISA112 Lifecycle Diagram
Current Working Draft
Revised June 15, 2020

**Note: This is an interim working draft from the ISA112 SCADA Systems standards committee, as of 2020-06-15. This diagram is still subject to change.**