



Instruction

Demands on Purchaser

Requirements for Sale and Delivery of IEC 61850 with System 800xA

Products Concerned

IEC 61850 with System 800xA

Issued by Department

ABB Control Technologies

Description

IEC 61850 is a standard originally developed for the design of Substation Automation Systems (SAS), introduced in 2004. Since it is now possible to integrate devices with System 800xA according to the IEC 61850 standard, this introduces a whole engineering methodology and application area for System 800xA, which requires additional competence for project execution teams. To assure that these competence requirements are met before project execution, demands on organizations have been defined for sales and delivery of IEC 61850 with System 800xA.

The objective is to minimize the risk of erroneous usage of the standard and the products, and to assure efficient project execution.

1. Requirement

ABB require the following from the purchaser of IEC 61850 with System 800xA from ABB Control Technologies Delivery Center.

1.1 Requirements on sales (bid and proposal)

To ensure focused support in deploying this technology sales or proposal engineers are requested to supply the following end-user/project information to IEC 61850 Product Management for 800xA in conjunction with an order from the ABB Control Technologies Delivery Center.

- Project name
- End-user name
- End-user industry segment
(Oil & Gas, Power Generation, Minerals & Mining, Pulp & Paper etc.)
- Plant's geographical location (country, city)
- IEC 61850 application engineered by (project execution organization)
- Number of integrated IEC61850 IEDs and IED vendor
- Which IEC 61850 related products are bought from ABB Control Technologies

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- Total project order value bought from ABB Control Technologies
- Expected start-up date fully operational (mm.yyyy)
- Type of System 800xA application used in conjunction with IEC 61850 (Process Automation System, Substation Automation System, Power Management System etc)

The above information does not need to be supplied for IEC 61850 products bought only for test/demo/training etc.

Receiver of this information

Sent to: leandro.monaco@se.abb.com, horst.bueker@de.abb.com

1.2 Training/competence requirements

To ensure successful project execution the engineering team must have the following training/knowledge.

- General System 800xA training (courses T315 or T314)
- Specific IEC 61850 for System 800xA training (course T333)
- Knowledge and experience in engineering and delivery of substation automation projects, including configuration of Protection & Control IEDs (Intelligent Electronic Devices) and design of substation automation systems.

For training courses, please contact your nearest ABB University.

Should the selling organization not possess resources fulfilling stated requirements they must arrange access to required competence during sales and project execution phase through cooperation with ABB Consult IT.

Full responsibility to ensure adequate training and competence lay with the purchaser.

1.3 IEC 61850 Substation engineering tools

For IEC 61850 substation engineering, following engineering tools should be used for 800xA 5.1 FP4 onwards

- ABB IEC 61850 engineering tools like ABB CCT600 4.1.x , ABB IET600 5.x or newer.

Usage of 3rd party IEC 61850 engineering tools is allowed from 800xA 5.1 FP4 onwards. Following should be considered when using 3rd party tools:

- The usage of optional IEC 61850 features as offered by 3rd party tools need to be verified for compatibility at project start.
- Depending on the scope of the 3rd party IEC 61850 engineering tool, some additional engineering effort might be needed in 800xA.
Example for this is an empty Substation Section inside the final Substation Configuration Description file (scd-file). This part inside the scd-file is required to build up the Functional Structure in 800xA for supporting single line diagrams in the graphics on Operator workplaces.

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Concerned products

The following products are concerned with the above mentioned requirements

- 3BSE061369R1 IEC61850-Ed1 Connect
- 3BSE061370R1 Redundant IEC 61850-Ed1 Connect (Option)
- 3BSE048845R1 CI868K01 IEC61850-Ed1 Communication interface
- 3BSE054253R1 IEC 61850-Ed1 Engineering Tool for 800xA - for External use
- 3BSE054927R1 *Media:* CCT 600 4.x Communication Configuration Tool for IEC 61850-Ed1 for external use

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REVISION

Rev. ind.:	Page (P) Chapt. (C)	Description	Date Dept.
-	New	First issue, reviewed by Mark Taft, Stefan Bollmeyer and Horst Bueker	2010-04-12 Electrical Integration CoE/ Johan Hansson
A	1.1	Update, reviewed by Mark Taft and Jenny Sjö Dahl	2010-06-04 Electrical Integration CoE/ Johan Hansson
Bd1	All	Update, review by Christian Johansson, Stefan Bollmeyer	2013-03-12 DEATG- LTPF/ Horst Büker
Bd2	all	Update with review comments received via mail.	2013-03-25 DEATG- LTPF/ Horst Büker
B	all	Released version after review	2013-04-03 DEATG- LTPF/ Horst Büker
C	page 2	Changed Christian Johansson with Leandro Monaco	2015-12-09 LTPF/ Horst Büker

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