



SEK

SVENSK
ELSTANDARD

TR 63266

Documentation of communication in power
utility automation

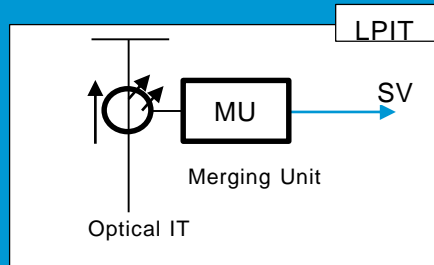
The background of the slide is a photograph of a power line tower, viewed from a low angle looking up. The tower's metal lattice structure is dark against a bright, slightly cloudy sky. A large, solid blue diagonal shape is overlaid on the left and bottom portions of the image, creating a modern, technical aesthetic.

- JWG 17
 - Members:
 - Andrea Bonetti
 - Erik Wejander
 - Sebastian Sjögren
 - Martha Levin
 - Meetings: 6
 - Comments received on first draft (93 comments)
 - Presented in TC 57 plenary meeting

- From graphical and tabular format to only tabular format
- Proposed name CCD
- Presentation of:
 - Sampled Value presentation
 - GOOSE communication presentation
 - Client to Server Control Presentation
 - Reporting
 - Time Synchronization
 - Disturbance Recorder Presentation
 - Digital communication protocol converters
 - Protection and control devices with only proprietary communication protocol

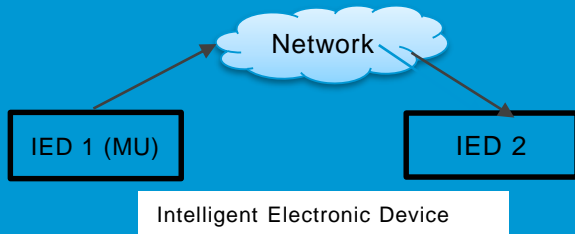
▪ Sampled Value presentation

Creation of sampled values , LPIT

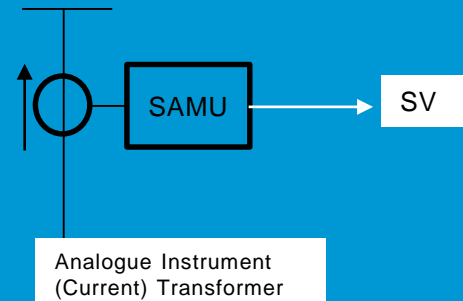


Primary object	Mandatory/Optional
Primary object name	M
Type of measurement	M
Connected to MU name	M
Nominal range	O
Accuracy class	O

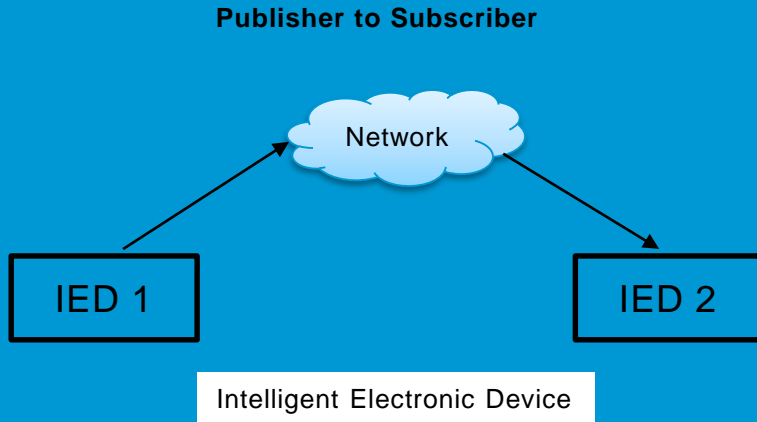
Sample Values publisher to subscriber



Creation of sampled values by aSAMU

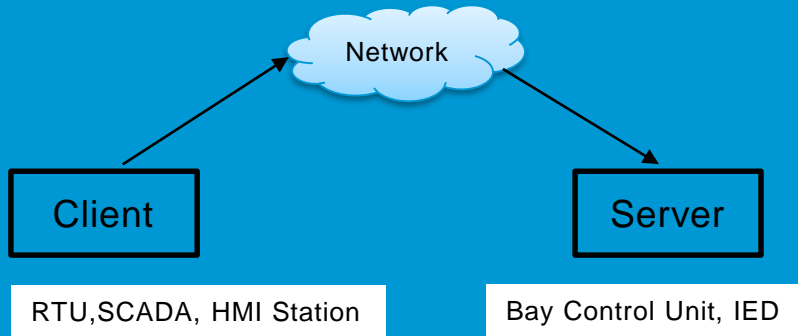


▪ GOOSE communication presentation



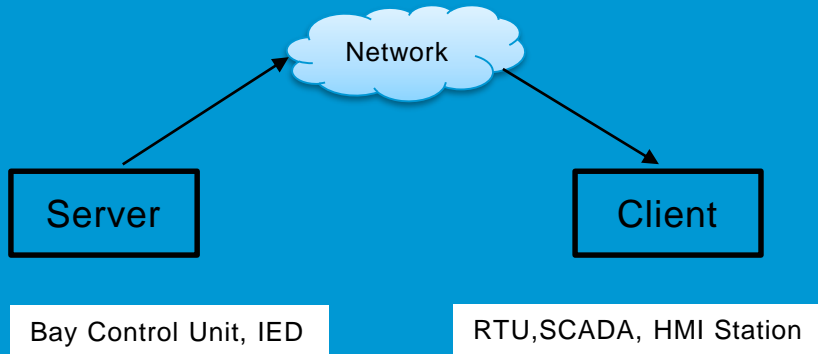
Publisher	Mandatory /Optional
IED name	M
IP address	M
Connection mode(PRP, HSR, SNGL)	O
Port A, B	O
GOOSE MAC address	M
GCB name	C ¹⁾
APP ID	M
GOOSE VLAN ID	M
GOOSE VALN Prio	M
GOOSE Dataset	C ¹⁾
GOOSE Data Object	O
GOOSE Description (purpose)	O
Internal application	O
Subscriber(s)(IED names)	O

▪ Client to Server Control Presentation



MMS Client	Mandatory /Optional
IED name	M
IP Address	M
Connection mode(PRP, HSR, SNGL)	O
Eth Port A, B	O
Eth port MAC Add	M
Command description	O

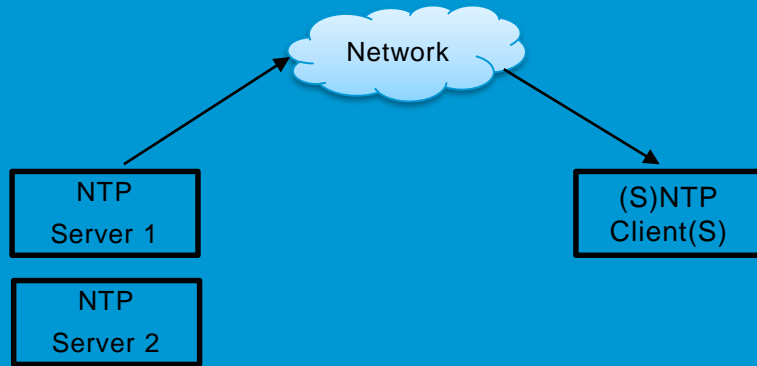
Reporting



MMS Report Server	Mandatory /Optional
Server IED name	M
Server IP Address	M
Server ETH Port MAC Add	O
Connection mode (PRP, HSR, SNGL)	O
ETH Port A, B	O
RCB Name	M
Static/Dynamic	M
Report Dataset Name	M
Report Description	O
Trigger Mode	M
Clients(s) (IED names)	M

MMS Report Client 1	Mandatory /Optional
Client IED name	M
Client IP Address	M
Client ETH Port MAC Add	O
Connection mode (PRP, HSR, SNGL)	M
ETH Port A, B	M
Internal application	M

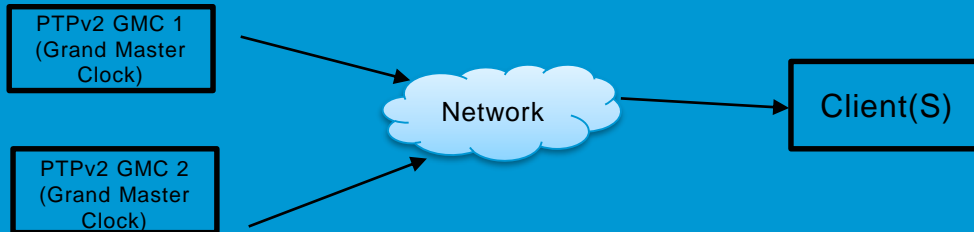
▪ Time Synchronization



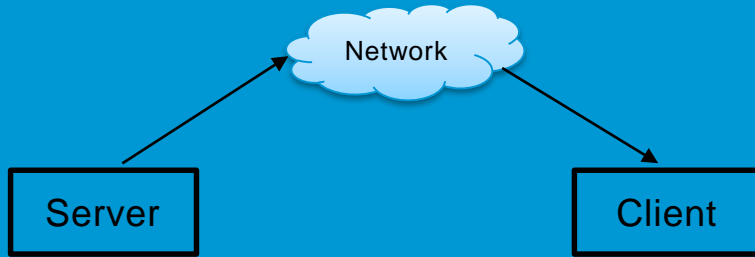
NTP Server 1	Mandatory /Optional
IED name	M
IP Address	M
Connection mode(PRP, HSR, SNGL)	O
Port A, B	O
Eth Port MAC Add	M
Source Type (GPS, Atomic Clock, Ext. Server)	M

Client 1	Mandatory /Optional
IED name	M
IP Address	M
IP Add Main Server (Priotized)	M
IP Add Secondary Server	M
Connection mode(PRP, HSR, SNGL)	O
Port A, B	O
Eth Port MAC Add	M

PTP IEC 61850-9-3 Time Synchronization



▪ Disturbance Recorder Presentation



Server (IED)	Mandatory /Optional
IED name	M
IP Address	M
Connection mode(PRP, HSR, SNGL)	O
Port A, B	O
Eth Port MAC Add	M
Communication protocol (MMS/ftp)	M
COMTRADE version	M

Client 1	Mandatory /Optional
IED name	M
IP Address	M
Connection mode(PRP, HSR, SNGL)	O
Port A, B	O
Eth Port MAC Add	M
Communication protocol (MMS/ftp)	M
COMTRADE version	M

- Digital communication protocol converters



Communication converter	Mandatory /Optional
IED name	M
IP Address of the IEC 61850 interface	M
ETH Port MAC Address	O
Connection mode(PRP, HSR, SNGL)	M
ETH Port A,B	M
Non IEC 61850 protocol type	M
Communication port type	M
Application description of the conversion	M

- Protection and control devices with only proprietary communication protocol



P & C device	Mandatory/Optional
Device name	M
Connected to IEC 61850 converter	M
Non IEC 61850 protocol type	M
Communication port type	M
Application description of the conversion	M



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