# **DLMS/COSEM** Training

DLMS/COSEM overview: architecture, protocol, data model



### Goal

The goal of this training is to offer the comprehension of DLMS/COSEM, its architecture, its data exchange protocol and the underlying data modeling.

This training duration is 1 day or 1.5 day, depending on the attendees background.

One training session may accept up to 10 attendees.

## **Training content**

The training is organized in three parts :

#### Smart Metering using DLMS/COSEM (1h-1h30)

- History
  From DLMS to COSEM, with IEC 61334 and IEC 62056
- Current standard
  Presentation of the DLMS UA books (Bluebook, Greenbook, Yellowbook, etc.)

#### Architecture and data exchange protocol (3-4h)

- Architecture DLMS/COSEM server and client architecture
- DLMS/COSEM communication profilesCOSEM services

Applicative session management Data access (LN and SN) Security

#### Data model (3-4h)

- Principle of DLMS/COSEM data model How it works
   Bluebook overview
- Object classes
  How to build a DLMS/COSEM object
  Most frequently used classes

- Link with the Smart Metering project specification
  Use of DLMS/COSEM in Smart Metering projects
  Link with the PLC requirements
  Link with the meters specifications
- Link with the Smart Metering project specification
  DLMS/COSEM architecture used in Smart Metering projects
  DLMS/COSEM services used in Smart Metering projects
- Practical work
  Encoding and decoding of DLMS/COSEM frames
- Link with OBIS
  OBIS rules for object identification
- Link with Smart Metering data model
  Smart Metering data model
  Link with DLMS/COSEM data model
- Practical work
  Creating DLMS/COSEM objects

## Contact us

For further information about this training, please contact: <a href="mailto:olivier.genest@trialog.com">olivier.genest@trialog.com</a>