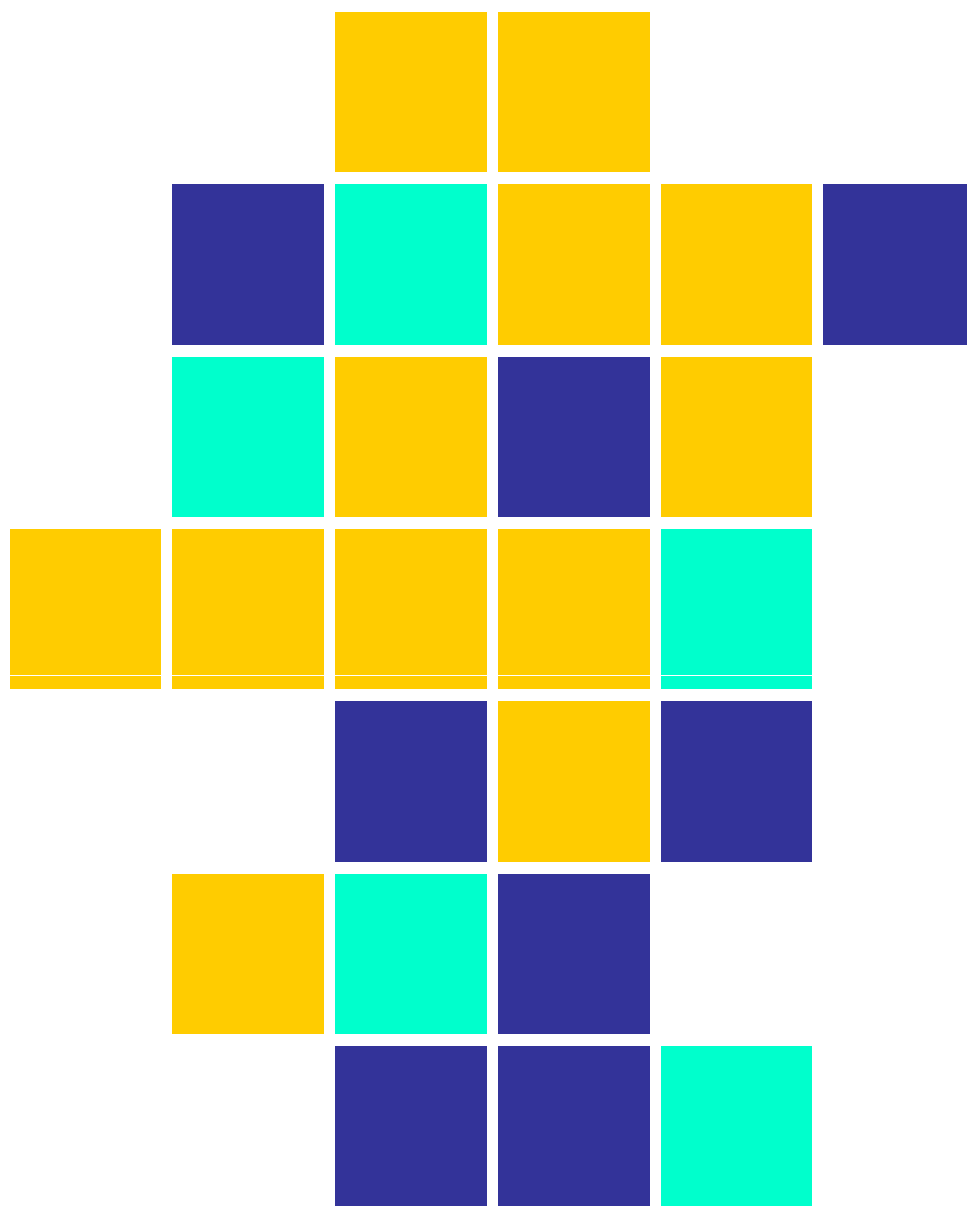


We speak the **same language...**



...DLMS/COSEM

the global standard for smart metering



USER ASSOCIATION

THE STANDARD FOR SMART METERING

New energy policies, market environments and technologies have spectacularly changed the landscape for meter data exchange. Intelligent meters, handling both energy and data flows play a pivotal role in operating the liberalised market, in informing customers, and in the vision of intelligent grids. Smart meters are to be deployed in large volumes in all customer segments.

The **DLMS/COSEM** specification, first published as **IEC 62056** and **EN 13757-1** in 2002, while remaining essentially stable, has continuously evolved to meet the latest requirements of the industry, and gained global acceptance. Today it is the standard of first choice for smart metering.

- **All energy types:** the COSEM interface classes and the OBIS object identification system provide a data model that meet metering needs for all energy types



- **All applications:** DLMS/COSEM supports all applications and market segments from residential to T&D, providing information to all stakeholders

- **All communication media:** DLMS is a messaging method providing an interface between the COSEM objects and the communication protocols



- **Scalable and flexible:** Minimum set of mandatory elements allows building meters from very basic ones to the most sophisticated

- **Efficient:** Data organization tools and adaptation to communication channel parameters allow efficient data exchange

- **Future proof:** the application model and the communication profiles can be extended independently from each other

- **Interoperable:** wide range of standard elements ensure that the same data can be read from and written to any meters the same way

- **Secure:** advanced role-based access security and data transport security features, based on latest cryptographic standards

Efficient – future proof – interoperable – secure



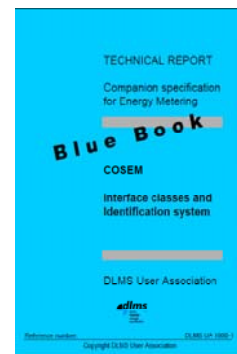
USER ASSOCIATION

INTEROPERABILITY THROUGH STANDARDIZATION

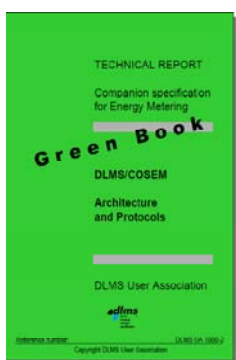
Development and maintenance of the DLMS/COSEM specification is in the centre of activities of the DLMS UA. It is carried out in Working Groups and Project Teams, gathering the best industry experts.

MARKET REQUIREMENTS are analysed and turned into data models, protocols and test processes.

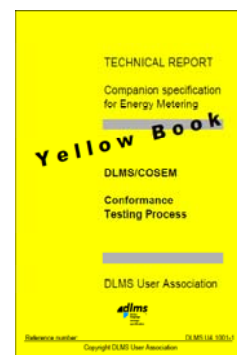
Specifies the **DATA MODEL**, comprising the COSEM interface classes and OBIS codes for the various energy types. Internationally standardized by the IEC and CEN.



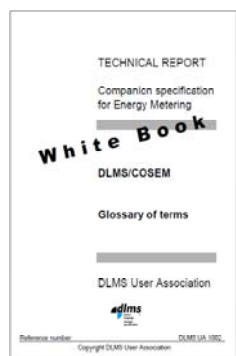
Specifies the **PROTOCOLS** for the various media-specific communication profiles, based on widely used ISO/IEC, Internet, NIST and FIPS standards. Internationally standardized by the IEC and CEN.



Specifies **CONFORMANCE TEST** plans for the COSEM object model and the communication layers, and describes the testing and certification process.

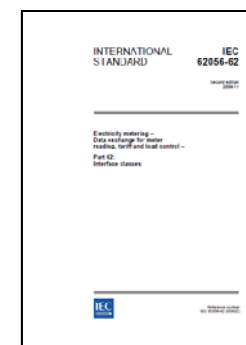


GLOSSARY OF TERMS helps understanding the specification. Internationally standardized by the IEC.



International standardization and conformance testing – indispensable for creating open, interoperable metering systems – are key elements in the DLMS UA strategy.

The DLMS UA works closely with IEC, CENELEC and CEN. Liased with IEC TC 13 WG 14, it acts as a registration authority / maintenance agency for the IEC 62056 DLMS/COSEM standards.



USER ASSOCIATION

THE DLMS USER ASSOCIATION

The **DLMS UA** is a non-profit organization established in 1997. It is located in Geneva, Switzerland. Since its foundation by leading utilities and meter manufacturers, its membership has grown to 120+, coming from all continents and from 30+ countries.

Its **MISSION** is to establish standards for meter data exchange, enabling to build **interoperable metering systems** that foster the **operation of liberalized energy markets**, provide **information to energy end-users** for the efficient use of energy, and **improve business efficiency** of companies involved with the generation, transmission, distribution, trading, supply and metering of energy.

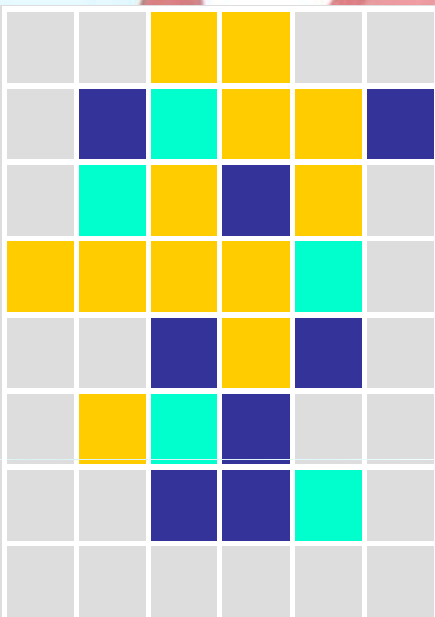
Its **OBJECTIVES** are reached by engaging industry leaders in the development of the DLMS/COSEM specification, driving international standardization and promoting the use of these standards to potential users and agencies worldwide.

MEMBERSHIP is open to entities active in designing, manufacturing, supplying and operating metering systems. **ASSOCIATED MEMBERSHIP** is open to organizations sharing interests with the DLMS UA.

BENEFITS include free access to latest documentation, participation in forming the strategy and in the technical work, technical support, and access to conformance testing and certification.

SERVICES:

- specification development and maintenance
- operation of the conformance testing scheme, Certification
- training and technical support
- IEC registration authority for the IEC 62056 DLMS/COSEM standards
- input to international standardization: IEC, CENELEC, CEN



DLMS User Association
Chemin de Merdisel 9
CH-1242 Satigny-Geneva / Switzerland
Tel. + 41 41 850 3920, Fax: +41 41 850 3916
www.dlms.com dlms@dlms.com