



# EDW3000 Metering System

The EDW3000 system is an integrated solution which solves the tasks needed for the collection, inspection, administration, and distribution of energy data and their related subareas. From the grid operators' and energy suppliers' point of view, it maps the entire process chain from measuring data to its transmission to a billing system.

The EDW3000 handles automatic meter reading, manual collection of register values, meter and device management, plausibility, generation of valid and validated billing data, as well as its management and transmission.



#### **Meter Reading**

The EDW3000 is the all-in-one tool for modern grid operators or those responsible for meter reading. It is a no-frills tool: it eliminates expensive overheads and unnecessarily complex administration. Any type of energy meter can be managed, read, and controlled quickly, easily, and accurately. The system is based on Europe's most popular AMR system, the ENZ2000, and integrates manual data collection, mobile collection devices, and customer meter reading via Internet, postcard, or telephone. This applies to all types of energy: electricity, gas, water, and heat.

### **Energy Data Management**

The EDW3000 processes the collected energy and metering data according to the regulations of the individual European countries, using the latest EDM functions. The intelligent integration of data collection and plausibility enables the automatic follow-up reading of initial gaps, the detection and correction of reading errors, and the substitution of data with a quality and accuracy, unimaginable to date. The system maps the process stage in which the authentic billing values for the energy market and the trading partner are generated. Optimised interfaces to SAP, as well as the customary market interfaces, ensure the simple integration of the EDW3000 into existing IT infrastructures.

### Accurate data processing for billing

Meters make mistakes, communication devices make mistakes, and people make mistakes. The EDW3000 is used in utilities where downstream systems and trading partners need a reliable database. At great expense, highly complex calibrated measuring devices create metering results that are as accurate and comprehensive as possible at the metering point. The EDW3000 metering system must handle the data with the same care. It can automatically generate readouts, repeat readings, or queries. Any additional corrections that may need to be made can be called up, on demand, at any time. An uncompromising definition of "real values" and individual check-ups for diverse markets and regulations guarantees accurate data processing for billing of the metering data, from its retrieval to its transmission to the billing system next in line.





## Providing real values

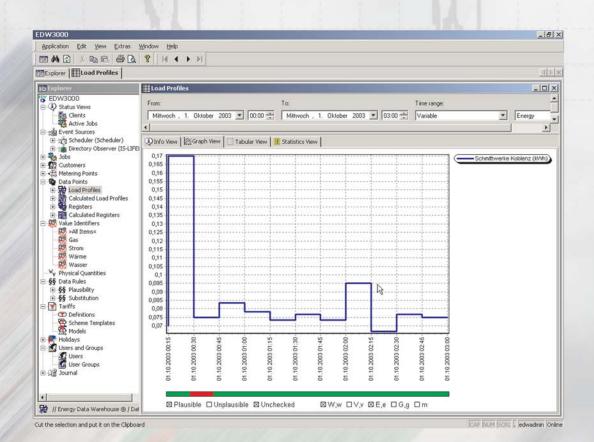
#### Liberalised metering data

2+2=5?

In a liberalised energy market, 1 kilowatt hour can become 10 or more; this is not particularly unusual. Energy and capacities are virtual commodities on the stock exchange. Outputs generated are purchased and sold, partially resold, potential over-deliveries are optioned, and shortfalls are covered.

The volume of commercial transactions is increasing dramatically, consequently every business must be aligned with actual supply and delivery and charge accordingly. To achieve this, absolutely correct and authentic billing values are of vital importance.

The billing and accounting of energy is a complex process. At one step it is metered, at another generated, and the transactions are reconciled at a third. One market partner is responsible for billing the customers and another balances the accounting grid. For the individual calculations to yield a coherent picture, it is imperative that all participants have the same authentic, uniformly generated measuring data at their disposal.



Time Stamp	Valid			History 1				
	Value	Status	Plausibility	Value	Status	Plausibility	Value	Stat
01.10.2003 00:15	0,07	W	Plausible (10)	0,07	W	Plausible (10)	0,12	٧
01.10.2003 00:30	0,17	е	Plausible (50)	0,17	е	Plausible (50)	0,08	W
01.10.2003 00:45	0,08	W	Unchecked	0,08	W	Unchecked		
01.10.2003 01:00	0,08	W	Unchecked	0,08	W	Unchecked		
01.10.2003 01:15	0,08	W	Unchecked	0,08	W	Unchecked		

#### **Energy data under control**

Metering data comes from calibrated metering devices.

Nevertheless, in practice, metered values can occasionally be incorrect. Reading errors can occur for varying reasons and need to be overcome. They can occur due to a mistake in writing down a reading, because of a power failure, a breakdown in communication, or simply a defective meter. Gaps and errors in data retrieval must be rectified as accurate data is needed for billing.

The EDW3000 is the ideal tool as the system enables the grid operator to validate and, if necessary, to correct the data for every metering customer. The EDW3000 can also provide interim data and its subsequent correction.

General validation regulation, such as the Dutch Metering Code in the Netherlands, can be automatically initiated in the system. The data exchange is carried out over standard interfaces e.g., LPEX, XML, and EDIFACT.



### Job management

Give yourself more freedom.

Manually operating the different process steps is not only time-consuming and uneconomical but is also no longer feasible with the expected increase in transaction volume.

The EDW3000 central job management handles the processes easily and transparently. The individual steps from meter reading, to integrity check, to data transmission to the billing system are automated and synchronised.

You can stipulate for every process step whether it should wait until the preceding one has been completed, or if it should be triggered again if there is an error or if a user needs to be consulted.

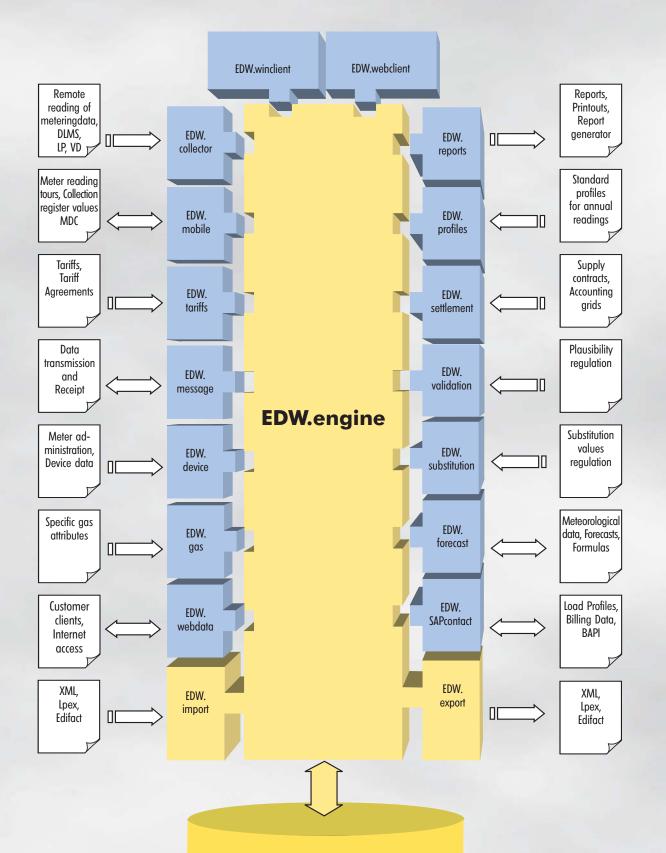
The complete transparency of all procedures is combined with historical mapping of data. This gives you the absolute certainty that billing and accounting is accurate.

#### **EDW.collector**

In the deregulated European energy market, the demands on automatic meter reading systems are steadily increasing. Consequently as a follow-up to the ENZ2000 AMR system, GÖRLITZ AG is offering a system which exactly meets these demands. The future-oriented development platform under Microsoft.NET offers, among other things, free scalability of different communication and analysis servers. The new driver structure permit manufacturer-specific drivers to be integrated into the system, allowing it to be adapted to customers' individual requirements. For international use, arbitrary time zones and definitions of time ranges (e.g., UTC, CET/CEST, or also gas day and gas year) are supported for individual meters or remote data transmission devices. In addition to the conventional metering protocols and transmission media, new methods for data acquisition, such as GPRS and other IP standards, have been integrated.

#### **EDW.**device

The metering and data collection devices form the basis for the collection of energy data. For a comprehensive software solution of the grid operation, the administration of all grid components is one of the basic tasks. Therefore, the management tool EDW.device is a core module for the other EDW3000 modules. It manages storage, calibration periods, dismantling, and installation, as well as the exchange cycles of a variety of meters and components in the metering field. A dovetail connection with the data readout technology eliminates redundant data administration. Meter exchange processes from mobile data collection devices have an immediate effect on the administration of the devices or, on the other hand, can also be triggered by them. The quality of plausibility controls on valid data can be increased by additional information, such as calibration periods or other related parameters.



#### **EDW.reports**

The analysis of the energy data is executed by EDW.reports. From customer-specific accounts to cost object documentation for archiving, the freely configurable reports can be output as PDF, HTML, XLS, or in printed form. Moreover, combined with EDW.tariffs, an accurate replication of register values for transmission of customer group data to the billing system is also possible.

#### **EDW.**validation

This module permits a survey of the quality of the data at any time and ensures automated further processing. Measured, as well as calculated, energy data can be plausibility-checked and validated to minimum/maximum limits, as can deviations from reference load profiles or timeframes, as well as status information. In conjunction with the module EDW.substitution, the system automatically fills gaps or corrects erroneous data. The conditions for these operations are created with the regulation editor. Furthermore, there are extensive pre-defined validation regulations included in the system, such as the "Dutch Metering Code" or load profile/register comparison.

#### **EDW.SAPcontact**

As GÖRLITZ AG energy data systems are often used together with SAP IS-U for the collection and billing of data, EDW.SAPcontact provides an optimised interface. The data exchange between the EDW3000 and SAP IS-U functions according to SAP standards.

In conjunction with the EDW3000 handling of the measuring data which guarantees accurate billing, the interface ensures the reliable and efficient processing of the energy data.

#### **EDW.forecast**

This module complements EDW3000 with functionalities, such as automatically creating schedules or forecasting the control energy needed. It calculates both the anticipated consumption and its periodical distribution, using historical consumption data, meteorological data and consumption notification. Of course, public holidays etc. are also taken into account.

N.B.: The brief descriptions of the modules are only examples of the modular versatility of the system. Further information on each module is available on the web site www.edw3000.net.

**EDW.**database

#### **Implementation**

The EDW3000 is the logical follow-up to the best-selling energy data control system in Europe. It functions in the Windows® operating system, just like its predecessor the ENZ2000, and has been developed to be compatible with Microsoft.NET technology. Servers and clients can be operated under the established Microsoft operating system platforms, Windows 2000 or Windows XP. Data access to the browser-based modules EDW.webclient and EDW.webdata is possible with any standard browser and platform. Current transmission media, such as PSTN, GSM and GPRS, ISDN, Powerline or direct Ethernet® connections, as well as Internet with mail (POP) and FTP services, can be used for remote reading of metering data. For mobile data collection, handheld terminals with Microsoft Pocket PC (Windows CE) operating system can be used.

The EDW3000 set-up and initial operation is carried out by specialised engineers on site. System engineering is individually planned and executed in close collaboration with your IT specialists. The hardware in existing ENZ2000 systems can be utilised. The migration of historical and master data is trouble-free.

Modul	Funktion	Info	
EDW.engine	Core module, Windows Server Import LPEX, XML, MSCONS; ditto Export Formats Database handling for Oracle/SQL	Licensing subject to number of data points, non time-based consumers and client work stations	
EDW.winclient	Data access for users in the company (client installation)		
EDW.webclient	Data access for users via the Web (browser)		
EDW.collector	Automatic Meter Reading	Licensing subject to number of devices and driver modules	
EDW.mobile	Manual Data Acquisition	For collection of non-AMR-customer register values, only in combination with EDW.webdata	
EDW.tariffs	Tariffication module		
EDW.message	Data-set communication	For export with acknowledged dispatch, e.g. FTP, mail with receipt	
EDW.gas	Gas-specific master data and functions		
EDW.reports	Report module	Contains utilisation licence for report configurator	
EDW.profiles	Module for integrating typed load profiles		
EDW.settlement	Accounting grid settlements, keeping totals and controling energy accounts		
EDW.validation	Plausibility module with regulation-editor		
EDW.substitution	Data substitution	with historical archiving of corrected data	
EDW.webdata	Customer access via the Web (browser)		
EDW.forecast	Forecast module		
EDW.SAPcontact	Certified SAP interface (BAPI)	requires SAP-standard configuration according to SAP@VVII	
EDW.device	Device administration		

Do you have any questions? Talk to us. Our experts will be only too happy to visit you and explain the system in detail. We will analyse your requirements with you and convey a concept to your solution together.

We in GÖRLITZ AG have set the standard for energy data acquisition in Europe. Benefit from our 20-year plus expertise to ensure your success.

**Producer:** 



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