

# BILLING USING ELECTRONIC DATA INTERCHANGE

**T**he ability of a supplier to provide electronic billing or EDI (Electronic Data Interchange) is often the second biggest factor (after price) when multi-site organisations select an electricity or gas supplier; and can be a major customer retention tool. Although the industry standard has been around for years, and indeed is used by many utilities, it's somewhat surprising that some large utilities still do not use it, some utilities have not heard of it and currently only one water company can provide EDI using the industry standard. For the first time in many years there are changes afoot which should make the standard more flexible, reliable and more widely used.

## So what is EDI and its benefits?

EDI is the structured electronic exchange of billing information using common, open standards. The process is approved by Revenue and Customs and can be truly paperless. For the process to work effectively the supplier and customer need to agree both a standard electronic format in which invoices are despatched and received and also a 'code of practice' which deals with matters such as change control.

What EDI isn't, is the despatch of non-standard ASCII files or spreadsheets containing billing information.

The UK are amongst the leaders in the world for mature EDI utility billing practices and the standard is called TRADACOMS 26 version 3.

The standard was managed and developed by an organisation called GS1 UK (previously known as the Article Numbering Association) although is now unsupported. GS1 UK is part of the global GS1 organisation, which is responsible for bar coding, RFID (radio frequency identification) and other electronic messaging standards used in supply chains throughout the world.

## How does it work?

What normally happens is the utility will collate multi site customer bills into a batch or 'bulk bill', and rather than send the bills to a printer hall for processing and mailing, the electronic 'bulk bill' is sent on a different journey. The electronic file is mapped into the TRADACOMS standard, encrypted and dispatched by email to the customer. To achieve this the utilities mainframe billing software simply diverts the file to a personal computer where proprietary EDI software can map, process, encrypt and despatch the 'bulk bill'. Many utilities use the latter process, as it can be much quicker, cheaper and easier to set up (costing as little as £50,000) and easy to use.

The customer receives the 'bulk bill' where it is unencrypted, authenticated, automatically checked and populates the organisation's energy Monitoring and Targeting system. Correct bills are automatically sent on to the customers' accounts payable system where prompt payment is made by BACS. The whole process can take only minutes.

## So what changes are afoot?

It has been recognised for some years now that although the industry standard TRADACOMS format works well, time has moved on and improvements can be made by converting this into an XML (eXtensible Markup Language) format, which is a widely supported open technology for data exchange. The major advantage to using XML is its flexibility. XML document types are not predefined but rather defined by the user. XML also provides a robust, non-proprietary, and verifiable file format for the storage and transmission of text and data sent either via the Internet or via other communication means.

As the improvements could 'inherit' all the good work that has gone into the messaging standard in the past, it should not be difficult to convert existing systems to accommodate a progression to XML and the movement for change seems to be catching on. Indeed one buying consortium is currently using its own version of an XML format with a few utility companies.

GS1 UK has recently facilitated a discussion with utilities, commercial and public sector consumers, as well as software providers on whether a progression to XML is appropriate. The public sector organisation, The London Energy Project\*, also supports this progression. Following an initial meeting in May this year there was unanimous support for the initiative from those present and agreement to move



**Paul Martin**

Managing Director of TEAM and Chairman of the Monitoring Group of the Energy Services and Technology Association (ESTA)

forward. As a result GS1 UK has set up the Utilities Special Interest Group (USIG) to develop GS1 XML electronic messaging standards for the sector. The process of collating the needs of all the stakeholders has been concluded and technical discussions based on these have started in November last year. With meetings continuing, the plan is now to produce a draft standard to be completed in March, after which it will be thoroughly tested by stakeholders and revised if required. An added benefit to utility companies operating in the UK is that this will form part of an international GS1 standard, which will be fully compliant with UN/CEFACT methodology and further enhance the UK's reputation as a world leader in this area.

