**Customer Briefing Note 006**

**Consolidated Billing**

## Edge Background

Edge is our flag-ship web-based software solution for retail water and waste services suppliers in the UK.
Edge has been designed and built from first principles to provide a complete "Business in a Box" for both established and new entrant Licensed Providers.
The Edge system allows seamless operations across the UK – in both the Scottish and English markets.
Edge runs on the Microsoft "Azure" cloud platform, and provides unrivalled flexibility, security and availability.
Deployment of Edge is quick and easy, whether you are a new start or the largest water company in the country.

## Consolidated Billing Concept

The concept of consolidated billing is attractive for water retail companies, but very few billing systems are able of provide true consolidated bills.

Many utility companies use a process of "invoice roll-up". In this approach, invoices that are created during a given period are bundled together with a summary sheet that provides a total amount. Often the summary sheet is created manually, using for example a spreadsheet. This is NOT what we call a consolidated bill.

A true consolidated bill is an Invoice that provides charges for multiple SPIDs over a single billing period. Each SPID within the consolidated bill will therefore have the same start and end bill date (the billing period).

The SPIDs that make up the consolidated bill will have one or more chargeable services, for example, Water, Waste, Drainage and Trade Effluent.

Also, the SPIDs can be from the Scottish market and/or the English market, so true multi-market consolidated billing is possible using Edge.

Because the SPIDs within the consolidated bill have the same billing period, it follows that many of the volumetric charges will be based on estimated consumption. This is because it is not practical to synchronise the meter readings of multiple meters at multiple SPIDs.

Accordingly, the "Average Daily Consumption" (ADC) approach to billing charge calculation is the only practical solution to this problem. See also CBN002 explaining the concept of "ADC Billing"

# Edge Consolidated Billing Approach

The Edge solution provides “True Consolidated Billing”. There are two fundamental architectural requirements for a system to provide true consolidated billing. These are:

- Account Based Billing
- Average Daily Consumption (ADC) Volumetric Charging

These concepts are further explained in the following sections.

**Account Based Billing**

The most important requirement for consolidated billing is that bills must be created at an Account level. This sounds obvious, and it is, but many alternate billing systems create bills at a SPID level, and some even at a Meter level.

The Edge billing architecture dictates that:

- Invoices can ONLY be created at an Account level
- Accounts can have one or more SPIDs (Premises)
- SPIDs can have one or more Meters
- Meters can have one or more Reads

These Entity Relationships with their relative Cardinalities are depicted below:

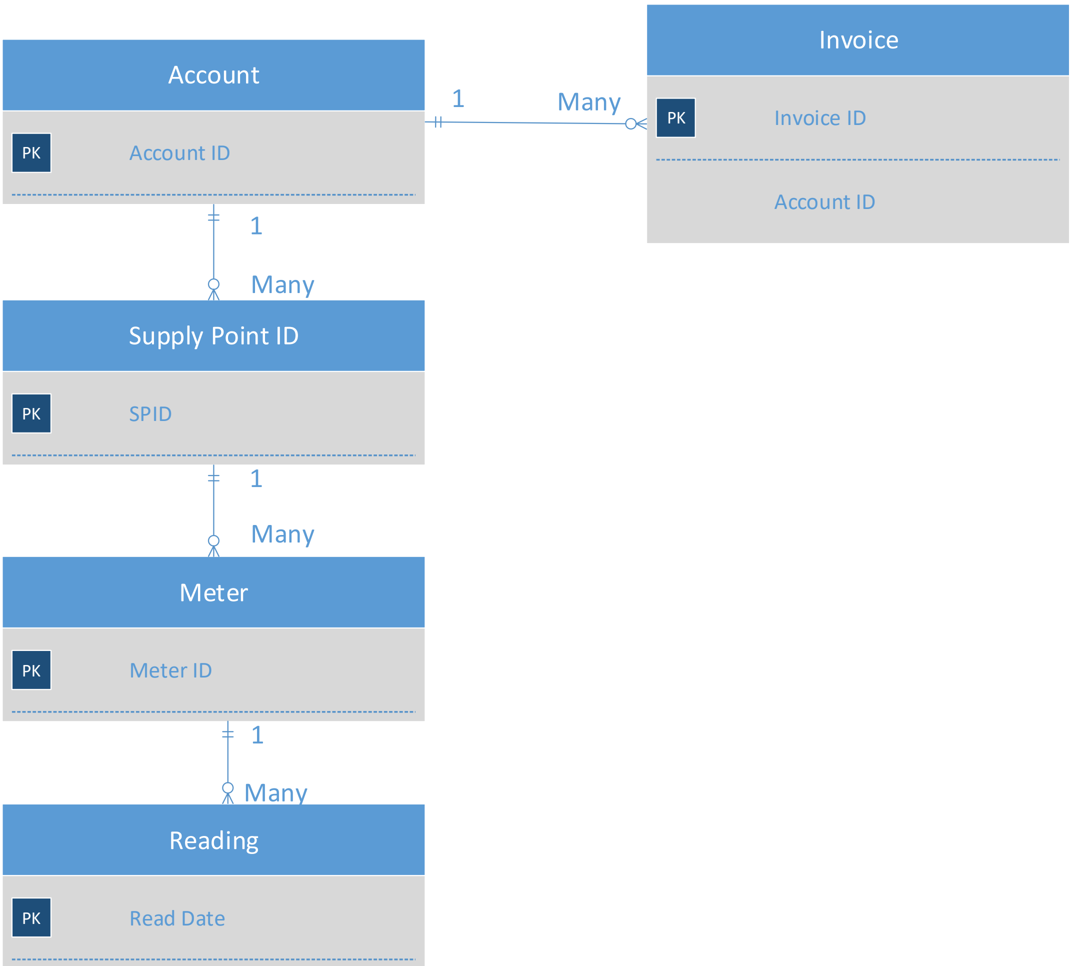


Figure 1 – Edge “Invoice” Entity Relationships

**Average Daily Consumption (ADC) Volumetric Charging**

The Edge billing module overcomes the traditional challenges of Consolidated Billing by removing the relationship between metering and billing. The Edge billing algorithm calculates an Average Daily Consumption (ADC), in the same way as the Central Market Operators do when calculating Settlement charges.

The ADC is then used to calculate the daily charges for each of the services associated with each SPID. Daily charges are then summed together to give the customer a charge for the billing period. The ADC is adjusted at next billing to take account of any new meter reads.

ADC bill calculation requires significantly more system processing power, but the advantages far outweigh the drawbacks. This methodology brings with it many benefits including:

- No need to input estimated reads;
- Ability to bill in advance;

- Ability to provide customers with fixed billing periods independent of meter readings e.g. 28 days, Monthly, Quarterly, Annually;
- True consolidated billing

For more information on Average Daily Consumption (ADC) Volumetric Charging please see CBN002 "ADC Billing"

## Scottish and English SPIDs

Edge can create consolidated bills for multiple SPIDs irrespective of the market – English or Scottish. For Scottish SPIDS the charges will be calculated using the Retail Minus billing method whereas English SPIDs will normally be calculated using Wholesale Plus. Note that we will be introducing Wholesale Plus billing for the Scottish market SPIDs in the forthcoming release of Edge.

## Edge Invoice Structure

The Edge invoice is structurally the same, whether it is for a single SPID or for a 1000 SPID Consolidated bill.

The Edge Invoice follows a three-page structure as follows:

| | |
|---|---|
| Summary Page: | This is the Invoice Summary with statutory invoice requirements such as Invoice Number, Date and VAT number etc and Charge Rows showing all Service Charges and the Total Amount owed |
| SPID Page(s): | Here is a page for each SPID within the Invoice. Accordingly, there can be one or many SPID pages within the Edge invoice. The SPID Page provides a detailed breakdown of the SPID service charges for the billing period, any Volumetric Adjustments and a VAT breakdown |
| Info Page: | This is a page that provides additional information to the Customer about the bill. It is generally fixed text as defined by the Retail Company. This is generally the final page of the Invoice. |

## Edge Invoice Media

The Edge invoice has been designed in the form of a "report" from the "SQL Server Reporting Services" (SSRS) module of the SQL Server database. Each Customer Invoice is created as a "template" (Report Definition Language Client-side) RDLC file within SSRS.

One advantage of this approach is that the RDLC can be customised to meet the exact "look and feel" of the Retail Company.

The other main advantage is that since the SSRS report is essentially an electronic file, then the output media can be changed to suit the end customer.

For example, originally the Edge billing module was designed to output Invoices using a .PDF file format. This .PDF file was then emailed to end Customers.

However, some Retail Companies prefer to print the .PDF files and post the Invoices to their customers. This is an option.

Other Retail Companies like to offer invoices to their larger customers in "Electronic Data Interchange" (EDI) format so this is also an option.

## Related Customer Briefing Notes (CBN's)

You may also be interested in these related CBN's

- CBN001: "Edge Overview"
- CBN002: "ADC Billing"
- CBN003: "Volumetric Adjustment"
- CBN004: "Metered Billing"
- CBN005: "Block Tariffs"
- CBN006: "Consolidated Billing"
- CBN007: "Published Tariffs"
- CBN008: "Manual and Automated Billing"
- CBN009: "Bill Output Formats"
- CBN010: "Market Transactions and Data Items"
- CBN011: "Integrated Transaction Management"
- CBN012: "Bitemporal Updates"
- CBN013: "Market Data Set"
- CBN014: "Market Pricing"
- CBN015: "SPID Transfers"
- CBN016: "CRM Module"
- CBN017: "Data Quality"
- CBN018: "Meter Reading Management"
- CBN019: "Sub Meters and Complex Metering"
- CBN020: "Meter Exchange Management"
- CBN021: "Trade Effluent"

## Further Information

If you require further information on any aspect of the Edge solution, please contact us at:

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