



Interesting times ahead for gas metering

The next twelve months promise to be extremely eventful as far as gas metering is concerned. The completion by the industry of the Ofgem-facilitated Review of Gas Metering Arrangements (RGMA) project, the formalisation of the roles and responsibilities of Meter Asset Managers (MAM), and recent ownership changes of major meter manufacturers have turned a traditionally conservative aspect of the gas industry into a hotbed of activity.

The gas industry, for example, is ahead of its utility counterpart in water in terms of removing barriers to competition. However, competition in such a critical and potentially dangerous industry as gas requires a framework of agreed business processes and dataflows to allow it to operate effectively. As far as gas metering is concerned this framework will be provided by the delivery of the RGMA project.

According to Mark Baldock, Ofgem's Head of Metering, the RGMA project seeks to "...design and implement a comprehensive range of standard industry processes and information flows to support a competitive gas metering environment." The external testing of these processes, involving a large number of industry participants, is due to start in March with 'go live' targeted at 12th July 2004.

The RGMA project is being conducted against the backdrop that British Gas has already appointed a number of competitive metering service providers (Siemens, United Utilities and OnStream) rather than use the existing regulated service provider, Transco. It is understood that such activity has resulted in, to date, the installation of over 150,000 non-Transco domestic meters on Transco's network. This number is rising on a day-by-day basis and currently stands at a rate of around 10,000 a week. Powergen and innogy have also begun tender exercises to appoint commercial MAMs.

The Ofgem 'Technical Issues Sub-Group' (TISG) has looked at the technical questions thrown up by the RGMA. As part of this process, IGEM reviewed all the relevant standards and produced IGE/G/1 which according to Dave Sharp, Chairman of IGEM's Gas Measurement Committee "...can be viewed as a baseline document for the future, defining as it does who does what and where." The critical interface in metering terms is between the Gas Transporter (GT) and the MAM (see diagram). In broad terms, the GT is responsible for all elements from the Transco main to the Emergency Control Valve. The MAM is responsible for the whole life management of the meter installation that lies between the ECV and the meter outlet point.

The TISG has built on the definitions in IGE/G/1 to produce a draft gas MAMCoP (Meter Asset Manager Code of Practice). The final draft MAMCoP, which will be submitted to Ofgem in April 2004, defines the responsibilities and competencies demanded of a MAM. For example, clause 3.2.1. defines the scope of a MAM's responsibilities as follows: 'A MAM shall be responsible for the design, installation, commissioning, maintenance, removal and disposal of gas supply installations as defined by IGE/G/1.' It is envisaged that the MAMCoP will complement the Ofgem meter installers Code of Practices (1a, b. and c) as well as covering medium pressure domestic installations.

Ofgem are in the process of consulting the industry on the status of the final document as well as the most appropriate form of future governance that should be applied to it. The final version will also take on any additional control measures recommended by the IGEM Gas Meter Competition Risk Assessment that is due to report to Ofgem by the end of March.

One of the oft-quoted benefits of competition is that it promotes innovation as each company seeks to develop potential competitive advantages. In the case of gas metering, however, the reverse appears to be true – at least in the short-term.

The standard mechanical diaphragm meter has seen little development over recent years. Invensys in partnership with Meter Provida, introduced the universal meter index that meant the same meter could be used in both wall-mounted and semi-concealed meter boxes but little else has changed. Mike Buss of meter manufacturer Actaris explained that the pressure has been to become more efficient. “When gas meters went metric in 2002 it led to more competition from European manufacturers. Also the structure of the customer base has changed from a single customer, Transco, to a group of potential clients”. From a manufacturer’s perspective it is easy to see how these factors could lead to greater uncertainty and a more cautious approach to investment. Certainly price competition amongst gas transporters has meant the search has been for lowest-cost solutions or as one IGEM member put it, “..some gas transporters have seen the meter as a low-tech cash register”.

There are problems to be solved. In last month’s IGEM magazine (pp10-11) Ray Cope, former Operations Director at the Gas Consumer’s Council, highlighted potential inaccuracies in gas billing and encouraged Ofgem to, ‘..encourage the development of an energy meter that would compensate for temperature, pressure and calorific value variations’.

When it was a monopoly supplier, British Gas encouraged and facilitated the development of the electronic ultrasonic meter. However, progress in this area has stalled despite these meters having considerable advantages over traditional mechanical units. As Craig Marsden of Landis + Gyr explained, “Electronic meters have no drift, possess far better diagnostics, offer greater security against tampering, and operate independently of operation”. In Northern Ireland, Phoenix Natural Gas Ltd has taken the opportunity of moving into a virgin gas market to install Landis + Gyr’s Libra 100. The use of an electronic meter allows consumers to budget more accurately, and a specific application has been the provision of a ‘pay-as-you-go’ facility in multiple occupancy buildings with high tenant turnover such as student accommodation. It will be interesting to see whether this approach becomes prevalent in other areas of the UK.

Phoenix, in conjunction with its supply chain partner Meter Provida, has also pioneered the supply to site of pre-assembled and tested domestic gas meters. Jayson Whitaker of Meter Provida explained: “The pre-assembled unit includes the meter box. Once it arrives on site, McNicholas Construction Services’ team has only one connection to make and the installation is complete. This approach should gain greater acceptance as the metering market becomes more stable and organisations start to look at total installed cost.”

On the Industrial and Commercial (I+C) front there is a greater variety of metering and the draft MAMCoP covers both standard I+C installations and non-standard designs including high-pressure meter installations up to 38 bar. There are also political pressures that will encourage the adoption of Automatic Meter Reading (AMR) in the I&C market, although most I&C installations already have a form of AMR – pulse output to data logger/corrector – phone line.

Whilst the UK has operated a voluntary carbon trading exchange since 2002, the non-voluntary EU trading arrangements will come into force early in 2005. These arrangements require license holders to have effective AMR procedures in place for audit purposes. To date, AMR has only gained ground in selected industrial and multiple-occupancy residential markets. In order for it to be attractive it needs to offer additional added-value services to the end-user. For example, AMR solutions that use GPRS and the internet - such as Qconnectis - allow the user to remotely check meter readings regardless of their location.

And the future? As the MAMs become established there should be greater stability in the market and GTs, MAMs and suppliers will be able to take a longer-term view of metering investment. A clear trend is developing towards single source energy supply – one company supplying a client's gas and electricity requirements. Whilst a 'dual fuel' meter is unlikely, the technology for meters to automatically communicate both with each other and with the supplier is available and, over time, may lead to the adoption of electronic AMR for domestic clients. The recent rebranding of Invensys Metering Systems as Sensus Metering Systems following its acquisition by two American private equity funds provides an indication that external investors taking the long-term view still believe that, from an international perspective, providing advanced metering and communications solutions to the utility sector is an attractive proposition.

Whilst researching this article, many people questioned whether the unbundling of meter management was a competitive step too far. In other words, is it competition for competition's sake – dogma rather than a genuine belief that there will be real benefits for the end-user? Only time will tell although competition itself is now no longer a theoretical argument but one of commercial reality.

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