

## **Horstmann Controls Ltd**

### **Response to OFGEM on:**

### **Electricity Distribution Price Control Review – Metering Issues Initial Consultation – July 2003.**

#### **1. Introduction - Horstmann Controls**

Horstmann Controls Ltd is one of the UK's leading designers and manufacturers of advanced electricity metering equipment and controls for domestic heating applications. Established in 1854 as a manufacturer of timepieces, Horstmann subsequently became involved in energy control products and developed an extensive range of central heating programmers and time switches. When control technologies migrated from electro-mechanical to electronic designs, Horstmann also became a 'household' name in the electricity metering market where the company now produces a range of products from the market-leading Radio Teleswitch and Telemeter to the sophisticated MeterLink smart metering and control system.

In recent years there has been significant investment in design and development facilities, and new production lines and processes. The current owners acquired the company in 2001 following a management buyout. Horstmann Controls is an independent, private British company operating from up-to-date facilities in South Bristol and employing some 200 people. The company has achieved the quality standard ISO 9001 and is approved by OFGEM for the certification of electricity meters.

HCL is also involved in a number of industry associations and working groups, and is responding to OFGEM's consultation document as an electricity metering equipment manufacturer and metering communications system supplier. As is the case with much of the Metering Issues document itself, our response is primarily aimed at non-half-hour metering for domestic premises unless otherwise stated.

#### **2. Background to the Current Situation**

Our observations on the present situation are that there has been little real take-up of new metering technology and related innovation over the past 6 years in GB, since the introduction of the "1998" arrangements for competition in supply to all NHH metered customers, and the subsequent separation of the PES's.

Indeed some new technology pilot schemes were withdrawn with the advent of "1998" – including mains signalling and keypad prepayment schemes.

It is now primarily up to suppliers (in the plural) to see how to apply innovative new metering technology. However there are a number of other stakeholders involved and the overall investment decisions have to recognise that the costs (and benefits) fall unevenly across a range of participants, including customers. While costs are important, anything that enables suppliers to offer a wider range of choices to customers also adds an important element of competition.

While the OFGEM document primarily addresses future DNO price controls so as to encourage competition in metering services, in our view more could and should

now be done to take forwards the overall thrust of OFGEM's Metering Strategy and to encourage metering innovation. We have included proposals to this effect in section 4 below. OFGEM's New Metering Technology Working Group is also relevant in this context (NMTWG).

### 3. Issues Arising

- a) Basic metering. The OFGEM document raises the concept of price controls for basic metering for the period 2005-2010 (in clauses 6.30 to 6.34). This would allow separate arrangements between suppliers and metering providers for advanced or superior service, including new metering technology. In our view the precise definition of what is meant by "basic metering" as opposed to "advanced metering" needs to be clarified before proper comment can be made. For instance:
- Does the price control cover basic MAP only, or also basic MAM service lines?
  - Does MAP cover just a meter, or a metering installation (including timeswitch)?
  - Does "basic" only apply to Ferraris meters, not to any electronic types?
  - If not, are some simple meters not "basic", e.g. if with a read-out port?
  - Are any existing prepayment meters "basic"?
  - If so, are all existing meter types "basic", including further purchases?
  - Does it only apply to single-phase single-rate credit meters (65% of the total)?
  - Does it only apply to new meters, or any mix of re-used meters too (50%)?
  - Is it the same definition for all 14 DNO's?
  - Would the controls be essentially the same for all 14 DNO's?
  - Would basic MAP prices depend upon remaining meter certification lives?

We would note that the wide variation in existing DNO MAP charges in Table 1 for both single rate and E7 credit metering is partly a reflection of the somewhat different metering and tariff policies adopted by each DNO over the last 20 years, and it is not yet clear how OFGEM's proposals would address this.

- b) Subject to the above comments, the proposed depreciated replacement cost basis for regulatory valuation of all existing metering assets (clause 5.5) appears to offer scope for the evolution of competition in MAP.
- c) Barriers to the introduction of new metering technology. These have been considered in the NMTWG and include the requirement in suppliers' licences for 2-yearly meter inspection visits, and the 28-day change-of-supplier rule with the normal "evergreen" contracts. Innovative demonstration schemes would also help establish the practical relevance of 2-yearly meter inspection visits on sites involving new technology. Also it could be practical for suppliers to sign fixed period 2 or 3-year contracts with some customers willing to participate in specific demonstration schemes. An additional practical barrier is the cost of any additional metering installation visits where equipment is replaced out of certification cycle – such visit costs can exceed the cost of the meter being installed, and have to be paid for by suppliers on a transactional basis. Other barriers are claimed to exist around the submission of residential and similar metering data for settlement and reconciliation purposes. All these barriers tend to limit the scope for competition in metering services.

- d) In some ways metering price controls themselves can also produce barriers to the use of innovative technology in metering, so it would also be appropriate to compensate for this by incorporating suitable incentives into the metering price control proposals.

#### **4. Proposal for Metering Innovation Zones in each DNO area**

Our proposal is aimed at making use of what is likely to be the last Distribution Price Control period (as far as NHH metering services is concerned) to encourage significant demonstrations of innovation in residential metering. Now that OFGEM's plans are to separate out the NHH meter assets and operations from the main network businesses of each DNO there is a window of opportunity to encourage DNO Metering Service Providers to foster the demonstration of innovative schemes. The scope of such schemes would involve innovation in metering and related communications technology and/or applications (see further below). These aspects could also involve innovation in supporting systems or infrastructures, and in related business processes and working practices.

Our basic proposal is that OFGEM should construct the metering price control in such a way that each DNO is permitted to absorb all of the costs of installing and/or reconfiguring innovative metering equipment at all relevant premises planned within its defined Metering Innovation Zone. This removes one of the barriers to the adoption of metering innovation and should lead to schemes being proposed by a variety of groupings in different parts of the country. Each zone would contain 10,000 to 25,000 domestic premises (depending on the size of the DNO) and be of an appropriate nature for the purposes of the demonstration, including as regards social and urban/suburban/rural mix, and in prepayment and/or electric heating usage. At least 2 suppliers would be involved in each scheme. By containing the scheme within a small geographic area it would be possible to manage the project, processes, costs, and benefits in an effective way, over a period of 2 to 3 years.

For a typical DNO area with 2 million customer points and an MIZ with say 20,000 points, then if equipment installation costs of £30 per point were provided for all 20,000 points this would amount to £600K. If this was allowed and recovered over the 5-year period of the price control it would amount to approximately £0.07 p.a. per DNO customer. Smaller numbers of points within the MIZ might be involved where prepayment metering or electric heating arrangements are involved, e.g. 5,000 sites for each of these.

In addition to subsidising the installation and maintenance costs through the DNO in this way it could also be appropriate for the DNO to fund part or all of the meter asset provision costs of new metering and communications equipment installed in the Metering Innovation Zone, over the 5 years of the DPC period. Alternatively an arrangement linked with DTI support for innovation might be considered for any additional costs of MAP at this demonstration stage.

It is assumed that some suppliers and customers and services organisations are willing to be involved in demonstration schemes in Metering Innovation Zones, with the metering service costs partly funded by the DNO's. While some DNO's might be hesitant to consider involvement in an MIZ demonstration scheme there would be advantages in them gaining a detailed understanding of the costs, benefits,

technology, systems, and processes involved, all of which could be relevant later to business in the evolving competitive metering services market.

Where a DNO did not wish to be physically involved in an MIZ scheme it might consider paying other services agents to be involved on its behalf. Also it might be appropriate for two or more DNO's to join together in a single larger MIZ, with appropriate arrangements.

The aims of the MIZ schemes would include:

- To stimulate investment in innovative schemes by a variety of participants,
- To plan for and report on progress with the scheme, and publish conclusions,
- To assess costs and benefits for each category of stakeholder, realistically,
- To improve practices and processes relating to metering.

Each MIZ scheme would be registered by OFGEM and meet agreed criteria. The overall set of schemes would be expected to cover a wide range of applications and innovation, without undue preference for a particular technology. It might be possible to agree that some DNO's schemes could commence before April 2005, with cost recovery to take place over the 2005 to 2010 period. Each scheme can be open to as many suppliers as wish to participate (at least 2 per MIZ).

The scope of schemes put forward for MIZ's might include:

- Improved meter reading, settlement, and reconciliation for domestic sites,
- Tariff implementation and management, including new heating schemes,
- Improved load management, off-peak and on-peak, plus energy efficiency,
- Prepayment metering alternatives,
- Overcoming misdirected payments problems with PPM's,
- Microgeneration metering and data collection (separate from the RPZ's),
- New methods of support for meter inspections and revenue protection.

Some of these schemes would require appropriate small-scale infrastructures linked up with suppliers' own systems.

## 5. Conclusions

In principle OFGEM's proposals - for the separation of metering services from the DNO's network business, and for the introduction of some "interim" metering price controls based on depreciated replacement costs for DNO-provided services – do appear to be necessary steps towards OFGEM's goal of establishing competition in NHH metering services.

However, there are also a number of practical details to be considered before a clear way forwards can emerge. There also has to be concern that the current proposals may be less likely to foster the take-up of metering innovation, and that the evolution of effective competition in MAM as well as MAP is likely to take several more years to become significant. In this situation we believe that OFGEM should take advantage of this (last?) metering price control period to facilitate the take-up of metering innovation, including by the establishment of Metering Innovation Zones as outlined above.

HCL/RRL – August 2003.