

Proposed acquisition by Bayard Capital Partners Pty Ltd of Landis+Gyr Ofgem's advice to the Office of Fair Trading

This advice was given in response to some initial questions to Ofgem by the Office of Fair Trading.

Summary of the parties

On 12 July 2004 Bayard Capital Partners Pty Ltd announced its intention to acquire the electricity and gas metering business, Landis + Gyr.

Bayard Capital Partners Pty Ltd is a private company which owns the subsidiary AMPY, a major manufacturer and supplier of electricity and gas meters in the UK and Australia respectively. Landis + Gyr owned by Demag Holding is the trade name of an international group of companies, who are a major global player in the manufacture of electricity meters and related equipment.

In accordance with the Concordat between Ofgem and the OFT, Ofgem sets out its views on this transaction through its answers to a number of questions raised by the OFT. These answers may be taken into account in deciding whether this acquisition is likely to result in a substantial lessening of competition.

Summary of Ofgem's initial views

Ofgem is of the opinion that this acquisition will result in a significant concentration of Ampy's market share in the market for prepayment electricity meters and may have conglomerate effects on the market for gas prepayment meters. Given the constraints in demand-side substitution of this product, Ofgem would suggest that the OFT give careful consideration to referring the acquisition to the Competition Commission for further investigation.

In Ofgem's view:

- Credit meters are not a substitute for prepayment meters on the demand-side.
- Ofgem does not have the information necessary to take a view on whether credit meters and prepayment meters are supply-side substitutes.
- The infrastructure may currently pose a barrier to entry in the prepayment market.
- The acquisition may produce a conglomerate effect whereby the merged entity will have significant market shares in gas and electricity prepayment meters.
- The acquisition has less impact on credit meters as there is greater demand-side substitution and no significant barriers to entry.

Background

Meter Manufacturers sell meters to Meter Asset Providers (MAPs) which install meters in domestic or industrial premises at the request of the suppliers of electricity. In Great Britain the majority of MAPs are Distribution Network Operators (DNOs). DNOs have obligations under their licences (Standard Licence Condition 36) to offer meter provision on a non-discriminatory basis to suppliers at a reasonable cost. The cost, which DNOs pass onto the electricity suppliers, is capped in the price controls set by Ofgem. Ofgem is currently reconsidering the price cap for metering which will take effect from 1 April

2005. Since prices are regulated DNOs are less sensitive to increases in price of electricity meters than they would be if there was full competition. However, Ofgem has recently introduced competition to allow suppliers to source meters and metering services from MAPs other than the regional DNO. Competition is still in its infancy but one supplier [] has set up contracts to procure meter asset management services with companies that are not DNOs. From 2007, Ofgem hopes to phase out regulation by no longer requiring DNOs to provide new meters and removing price controls for the DNOs that choose to remain as MAPs.

Question 1

MAPs purchase meters based on the requirements of electricity suppliers. Suppliers of electricity will require different meters depending upon whether the premises are domestic or industrial (the latter are often connected to a transformer and have greater functionality). Suppliers of electricity will also specify between a prepayment and a credit meter for domestic premises. Prepayment meters are mainly requested for customers whose credit worthiness raises concerns or by customers who prefer regular payments to assist with budgeting.¹ They not only measure the consumption of electricity but allow debt to be recovered² and disconnect supply when credit runs out. Therefore, the choice between prepayment meters and credit meters is less influenced by price. If there were a 5- 10 % increase in the price of prepayment meters, it is unlikely that MAPs would switch to credit meters.

Prepayment customers pay on average £63³ more than customers who pay by the cheapest payment method of direct debit.⁴ Based on the assumption that the average credit meter customer's annual electricity bill is £258⁵ based on medium consumption, then a 5-10% increase in the price of credit meters would not lead to credit meter customers to switch to prepayment meters. The additional functions which allow electricity supply to be disconnected combined with higher operational costs as a result of customer interface with the meter makes prepayment meters more expensive and less convenient. The burden of recharging prepayment devices is a factor other than price which may deter switching from credit meters to prepayment meters following a price increase.

Both electronic and electromechanical meters perform the same function, which means that all other things being equal, a cost-sensitive MAP would switch to the cheaper technology. As explained below, Ofgem does not have information on the costs on the supply-side of switching technology, but have no reason to believe that it is not competitive.

Question 2

The manufacturing processes for electromechanical and electronic meters are substantially different: one monitors current and voltage through mechanical parts the

¹ There are currently around 14 per cent of electricity prepayment customers repaying a debt through their meter. Social Action Plan Annual Review 2004.

² The Energy Act passed in July 2004 gives the Authority the power, following consultation and approval of the Secretary of State, to allow suppliers to recover debt accrued by the customer at previous addresses or for other sums such as gas debt through a prepayment meter.

³ This is an average for both fuels - £42 for gas and £21 for electricity.

⁴ P.4 Social Action Plan and Household Energy Efficiency- Report by the Comptroller and Auditor General.

⁵ Ofgem's retail prices data base.

other through electronic components. In switching from one to the other manufacturers would face costs of procuring new components, altering production lines and training staff. Ampy is the only manufacturer with high market share that only produces electronic meters, along with two manufacturers who operate on a significantly smaller scale. Other manufacturers produce both electromechanical and electronic meters. Many of the manufacturers have their assembly lines sites outside the UK and supply to countries other than the UK. The following table shows the status of electricity meter manufacturers, as currently understood by Ofgem, now operating in Great Britain:

Manufacturer	Manufacturing Sites	Electronic/Mechanical	Credit/Prepayment
Ampy	GB – majority of manufacturing operations sub-contracted	Electronic	Both
Landis + Gyr	GB – and outside UK	Both	Both
A	GB and outside UK	Both	Both
B	GB and outside UK	Both	Both – none certified recently
C	Outside UK	Both	Both – none certified recently
D	GB - majority of meter manufacturing sub-contracted outside UK	Electronic	Both – majority of production outside GB
E	GB	Electronic	Credit

Table 1 – Electricity Meter Manufacturers Operating within Great Britain

Therefore the costs of switching some of the production for most manufacturers will not be as high as it would be if suppliers were specialised in one technology. Ofgem does not have data on: the cost of procuring components for electromechanical or electronic meters; the cost of altering production line machinery; or on the current balance of electromechanical and electronic meter production in the manufacturing sites⁶ and cannot give a reasonable estimate of switching costs.

Prepayment meters can be either electromechanical or electronic and have extra functionalities attached than the basic credit meter. The use of mechanical prepayment meters is rare as the technology does not lend itself to payment systems currently used. Ofgem believes that no new mechanical prepayment meters are currently sold in GB. As Ofgem does not know what the costs are of adding the functions that allow electricity disconnection to the manufacturing process; we are unable to say whether manufacturers would switch production to prepayment meters following 5-10 per cent

⁶ Currently 90 per cent of meters certified in the UK are electronic but we do not know what percentage of meters produced are electronic since some meters are exported and meters produced outside the UK may be sold in other countries.

price increase. As explained below, the prepayment meter infrastructure may, in some regions, act as a barrier to the entry of new manufacturers in the prepayment market.

Question 3

As noted above competition in metering is still in its infancy and customer switching is limited.

The prepayment meter market has a number of unique features which add barriers to switching between different types of prepayment meters. There are three types of prepayment meter: token, key and smart card. Token meters are the most basic type of prepayment meter and suppliers need to visit the meter to reset the meter for debt or a change in tariff and are generally more susceptible to fraud. Key and smartcard meters can provide meter readings and be re-set remotely. Of the over 3 million electricity prepayment meter customers (15 per cent of domestic electricity customers) around 1.5 million use token meters, 1.5 million use key meters and less than 1 million use smart cards.

Prepayment meters require infrastructure for customers to obtain credit to maintain the supply of electricity. These facilities include the provision of payment devices (tokens, keys or smart cards), use of a network of payment outlets (Post Office, Paypoint or Payzone) and the transfer of payment and customer data. Former Public Electricity Suppliers (PESs) have obligations under their licences (standard licence conditions 53, 53A and 53B) to provide the infrastructure on a non-discriminatory basis to other suppliers. Suppliers are not obliged to take these services from the former PES, and can find other sources. Given the volumes of customers on prepayment meters, most suppliers of electricity have found little benefit in sourcing alternative infrastructure providers (known as PPMIPs).

When sourcing prepayment meters, suppliers have to ensure that there are payment outlets (Post office, Paypoint or Payzone) within reasonable distance of the customer's home, which are equipped to provide credit for the type of meter (token, key or smartcard). Paypoint and Payzone terminals are often located in local shops and can generally deal with more than one type of technology. The Post Office provides a wider network of payment outlets in rural areas but often has more limited opening hours and is currently not equipped to deal with more than one payment device in any given region. Further, in areas where the Post Office is located within a shop (often in rural communities) the shop cannot compete with the Post Office and offer Paypoint or Payzone services. This limits MAPs in their choice of prepayment manufacturer in these regions. For example, if the Post Office in the particular region could only process payments for token meters a supplier would have to negotiate another contract for access to a network which accepts key devices before being able to switch to a key prepayment meter manufacturer. While this feature of the prepayment market does not prohibit new entry or innovation in prepayment meters, it does add extra costs to entry in these particular areas. The Post Office is considering rolling out a network which would accept all prepayment devices in the future.

Question 4

Table 1 [] illustrates the location of meter manufacturers' operations. Significant numbers of electricity meters are manufactured outside of the UK either from their own manufacturing sites or from outsourced suppliers. Manufacturers do not require a presence in the UK to supply electricity meters.

All domestic meters put on the market in Great Britain for billing purposes must be approved by Ofgem. Meter examiners appointed by Ofgem visit production plants several times a year to approve the meter production process and certify the meters. Examiners have been sent to outside the UK.

Competition in the manufacture of credit electricity meters occurs at an international level. However, it is worth noting the smaller scope of the prepayment meter market. There are fewer manufacturers currently producing prepayment meters. In the UK the prepayment market is distributed between: Ampy, Landis + Gyr, [] and []. In Europe, prepayment meters are only used in Great Britain, Northern Ireland and in Ireland. There are around 4 million prepayment meters in South Africa where they are being installed as a matter of course for new electricity connections as part of a widespread electrification programme. Prepayment meters are offered as a consumer choice option in certain parts of Australia (such as Tasmania) and are used to a minimal extent in New Zealand for debt recovery.

Question 5

In the UK electricity meters have slightly different technical requirements to the rest of Europe. It is the norm, for both the UK and European markets, that meters are produced to applicable national and international standards. These standards cover various characteristics such as accuracy, casing dimensions, terminal arrangements and safety.

In the UK, meters are produced in line with BS 7856 “Code of Practice for Design of AC watt hour meters for active energy (classes 1 and 2)”. This standard defines dimensions, spacing of fixing holes, spacing of terminals and standard currents.

However, meters produced for some elements of the European market are produced to the German DIN standards 43857 and 43856.

The following fundamental differences exist between the BS and DIN standards:

- Spacing between terminals
- Connection of live and neutral cables
- Defined standard electrical currents

Ofgem does not believe that any listed point poses a significant barrier to European manufactured meters being used in the GB.

Additionally, meters used in GB must be certified under Schedule 7 of the Electricity Act 1989. For both electromechanical and electronic meters, Ofgem will issue an automatic 10 year certification period on approval. The certification period for electronic meters can be extended if the manufacturer demonstrates, through use of a reliability algorithm, that the operational life of the meter is higher.

All meters, irrespective of technology, will be subject to in-service accuracy testing to determine whether certification periods should be maintained, extended or reduced. It is expected that with the forthcoming implementation of the European Measuring Instruments Directive (MID) that the costs of switching to other European manufacturers will reduce as new meters approved by other Member States will be able to be used in the UK without need for further input by UK regulators. MID standardises the approach

to legal metrology across the EU, although there will be a ten year transitional period and the Directive only covers metrology and not peripheral devices such as the operation of prepayment systems.

Ofgem does not have data on the costs of adapting EU meters or manufacturing processes to the production of UK adapted meters. However, it is worth noting that suppliers do adapt their manufacturing processes to customise meters for specific customers.

Question 6

As explained above, electricity suppliers source meters from Meter Asset Providers, which buy the meters from the meter manufacturers. Some MAPs also provide meter servicing but none of the meter manufacturers do this.

Question 7

Prices of electricity meters have reduced steadily in the UK since 1997 and market shares in electronic credit meters have fluctuated over the last few years but Ofgem does not consider that this is necessarily evidence of negotiating strength among electricity meter customers. As explained above in some regions prepayment meter customers are restricted in their choice of prepayment meter by virtue of limited availability of payment networks in local outlets. Furthermore, as most of the current customers of electricity meters are the DNOs, subject to price caps set by Ofgem, they are constrained from changing technology which may limit buyer power. As competition matures, customers are expected to become more price sensitive, which may lead to greater consolidation of MAPs and the strengthening of their negotiating power.

Question 8

As noted earlier in this document, meters used in GB are required to be certified by Ofgem.⁷ Ofgem believes the estimated cost [] is a one-off cost covering the initial assessment of the manufacturing process, quality system, testing equipment and internal staff/management costs that are required to satisfy Ofgem's regulatory requirements.

Ofgem believes the estimated cost [] covers ongoing annual expenditure, following Ofgem authorisation, to monitor and audit the manufacturer to ensure the requirements of the authorisation are being met. This would cover internal and periodic audit costs. The assessment and audit operations are undertaken on behalf of Ofgem by an external service provider. Ofgem is not directly involved in monetary transfers – the service provider enters a commercial arrangement with the manufacturer – however the stated costs appear to be a reasonable estimate.

Question 9

Ampy does not supply gas meters within the UK. However it is worth noting that the acquisition may have some future conglomerate effects. Landis + Gyr through their previous acquisition of Siemens metering own the design rights for the quantum prepayment metering system, which is currently the only type of gas prepayment system, used by licenced gas suppliers, in GB. Following this acquisition, Ampy will have [] per cent of the electricity prepayment market) and the monopoly in the

⁷ In accordance with SI 1566:1998 (as amended)

provision of gas prepayment. The merged entity would have a powerful position in producing a dual fuel prepayment if they were to be produced in the future.

Both Ampy and Landis + Gyr have Ofgem approval for meters to be used on three phase electricity supplies. Three phase is generally supplied to industrial and commercial premises and not domestic. Although meters are approved Ofgem cannot confirm whether MAPs currently procure such meters from Ampy or Landis + Gyr, as records of industrial meters certified are not required to be maintained within the scope of Ofgem's responsibility.

Question 10.

In Ofgem's view this acquisition could result in a substantial lessening of competition within the prepayment market for electricity meters and could have conglomerate effects in a future dual fuel prepayment meter market. As a result of the acquisition Ampy's market share increases by [] per cent with two main companies sharing most of the market between them (Manufacturer D operates mainly in outside GB). The acquisition would significantly consolidate Ampy's dominance in the market. One risk is that Ampy increases prices due to the loss of competition from Landis + Gyr. However, given the technology constraints (explained below) in the prepayment market and the fact that Landis + Gyr's market share was significantly smaller than Ampy's pre-acquisition, it may be questionable the extent to which Landis + Gyr is currently a constraint on Ampy's prices. Perhaps a greater risk from the loss of the third largest competitor is that post-acquisition there would be very little competitive constraint on the two main competitors co-ordinating price increases.

Constraints on demand –side substitution

As prepayment meters provide extra functions, namely debt recovery or budget management functions, which are not provided by credit meters, there is limited substitution of this product.

As noted in question 3 due to the constraints in switching between different types of prepayment meters, Ofgem considers this market to have barriers to entry. When sourcing prepayment meters, customers (the MAPs) will either have to ensure that the device a meter uses (token, key or smart card) matches the local prepayment meter infrastructure available to a domestic prepayment customer (there is limited interoperability of prepayment credit machines) or negotiate contracts with outlets to put in place the infrastructure to charge new prepayment devices. This means that the switching costs between prepayment meters are higher than for other types of meter.

Conglomerate Effects

Ofgem is concerned that the acquisition will lead to Ampy having a dominant position in both the electricity and gas prepayment meter markets. Ofgem considers it unlikely that prepayment metering will be substituted for credit metering. In the future dual fuel prepayment meters may start to be provided. As a result of the acquisition Ampy will be the dominant provider of electricity prepayment meters and may own a monopoly in the provision of gas prepayment meters.

Buyer Power

Prepayment customers have raised concerns that limitations in the payment networks in some regions restrict their choice of prepayment meter and of meter manufacturer. Also, most of the MAPs are DNOs subject to Ofgem price controls and are constrained from changing technology which may limit buyer power. As competition matures, there may be a greater consolidation of MAPs able to exercise buyer power to drive down prices but it is not yet evident that current price decreases have been a result of buyer power.

Supply-side substitution

Ofgem notes that as a result of a price increase in prepayment meters, other manufacturers may enter or re-enter the market. There are technical requirements for prepayment meters to be approved within the UK but Ofgem does not have data on the costs of switching manufacturing processes from credit meters to prepayment meters and therefore cannot give assurances that new entry would occur.

Conclusion

Ofgem is of the opinion that this acquisition will result in a significant increase in Ampy's market share in the market for prepayment electricity meters and may have conglomerate effects on the market for gas prepayment meters. Given the constraints in demand-side substitution of this product, Ofgem would suggest that the OFT give careful consideration to referring the acquisition to the Competition Commission for further investigation.