OFFICE OF FAIR TRADING

Completed acquisition by Bayard Capital Partners Pty Ltd of Landis & GYR

The OFT's decision on reference under section 22 given on 15 November 2004

Please note that square brackets indicate figure or text excised at Bayard's request or exact figure replaced by a range

PARTIES

1. **Bayard Capital Partners Pty Ltd (Bayard)** is the parent company of a utility metering business known as 'Ampy', which it acquired in August 2003. Ampy is the largest Australian manufacturer of electricity meters and includes Ampy Automation Digilog Ltd in the UK. Ampy has production facilities and sales companies in the UK, Australia and China. In the UK, Ampy is active in the sub-assembly and final assembly of residential electricity meters, including electronic pre-payment meters.

2. **Landis & Gyr (Landis)** is a group of companies principally active in the manufacture of electromechanical, electronic credit and prepayment electricity meters and gas meters, including prepayment meters, energy data acquisition, processing software and systems ripple control receivers. Landis also refurbishes meters on behalf of utilities in the UK. It has manufacturing facilities in Greece, Mexico and India, and specialist low-volume sites or dedicated assembly lines in the UK and elsewhere. Its sales are either through its sales offices or through cooperation with local companies acting as distribution partners. In 2003, Landis' EU turnover was [ ], of which €41.9 million (approximately £30.6 million) was attributed to the UK.

TRANSACTION

3. Bayard, through its wholly-owned subsidiary, Bayard Metering (Europe) GmbH, has acquired Landis. The (then) anticipated transaction was notified on 12 August 2004 and the transaction completed on 7 October. The administrative deadline was 15 October 2004. The parties submit that the rationale for the transaction is to assist Bayard in expanding its existing business into new markets. In Europe, Bayard's metering activities are currently focussed mainly on the UK, while Landis has a presence in most other European countries.

JURISDICTION

4. As a result of this transaction, Bayard and Landis have ceased to be distinct. The parties overlap in the supply of electricity meters in the UK and the share of supply test in section 23 of the Enterprise Act 2002 (the Act) is met in respect of these goods. The OFT therefore believes that it is or may be the case that a relevant merger situation has been created.

5. On 6 July 2004, the European Commission received a Reasoned Submission referral request pursuant to Article 4(5) of Regulation 139/2004 (the EC Merger Regulation) on the grounds that the transaction should be examined by the Commission as it was notifiable in more than three Member States. On 27 July 2004, the OFT vetoed the referral request since the main effects of the merger appeared to be felt in the UK in particular in respect of prepayment meters, the UK being the only Member State in which such meters are used. Since a Member State competent to review the merger had disagreed with the request within 15 working days of receiving the Reasoned Submission, the transaction remained subject to the applicable national competition laws on merger control. The transaction has since been cleared in Spain and Poland. It has also been cleared in Australia.

RELEVANT MARKET

6. The parties overlap in the manufacture and supply of electricity and gas meters.

Products

Gas meters

7. Landis is active in the supply of gas meters in the UK, holding [around half of] UK share of supply. However, the parties' activities do not overlap in this connection since AMPY does not sell gas meters outside Australia.[1] While the

[1] Except for a very small *de minimis* level of sales.

transaction might result in a loss of potential horizontal competition in the supply of gas meters in the UK, the OFT has identified no evidence that this is a material competition concern. Accordingly, this possibility is not discussed further.

8. Certain third parties raised concerns about the ability of the merged entity to 'bundle' its gas and electricity meters. These issues are discussed below under conglomerate issues.

Electricity meters

9. Electricity meters are used by electricity suppliers such as Centrica and NPower to collect data from electricity end-users (domestic and business consumers) in order to measure their consumption of electricity for billing purposes. Around 85 per cent of GB electricity consumers use 'credit' meters whereby they are billed for past electricity consumption and the remaining 15 per cent use prepayment meters[2], whereby credit is purchased in advance of consumption.

10. There are 14 distribution network operators (DNOs) (some under common ownership) which, under licence from Ofgem, own, manage and operate the low voltage electricity wires (i.e., the local electricity distribution network) throughout England, Scotland and Wales.[3] Their primary function is to distribute electricity from the high voltage national grid into consumers' homes and business premises. DNOs are subject to price control regulation by Ofgem.

11. DNOs also act as meter asset providers (MAPs) to electricity suppliers. MAPs purchase meters from meter manufacturers, such as Ampy and Landis, and install them at the premises of the end users at the request of the electricity supplier. DNOs have licence obligations to offer meter provision on a non-discriminatory basis to suppliers at a reasonable cost.[4] Ofgem has recently introduced competition in metering[5] to allow electricity suppliers (or even large consumers such as businesses or city councils) to source meters from MAPs other than the relevant regional DNO.[6]

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[2] According to National Energy Action, 15 per cent of electricity consumers in Great Britain (3.6 million consumers) use prepayment meters (source: National Energy Action website). Ofgem estimates the figure at 3.8 million.

[3] Examples of DNOs are Scottish & Southern Energy, WPD and Central Networks.

[4] The cost, which DNOs pass onto the electricity suppliers, is capped in the price controls on total income (part of which is generated by the sale or lease of meters to electricity suppliers) set by Ofgem. Ofgem plans to introduce specific price caps for different types of electricity meters, which will take effect from 1 April 2005.

[5] Ofgem fact sheet 26 31/03/03: Introducing competition in metering.

[6] Non-DNO MAPs are not subject to meter price controls. Ofgem submits that competition is still in its infancy. From 2007, Ofgem hopes to phase out regulation by no longer requiring

12. In the UK, two types of electricity meter are in use: electromechanical and electronic (digital) meters [ ]. [ ] Approximately 90 per cent of the new meter installations and around 75 per cent of the replacement installations in the UK are now electronic meters. Electricity meters can be further sub-divided into credit and prepayment meters. Ampy and Landis are active in both segments as described below. Their share of supply for all electricity meters in the UK is [40-50 per cent], increment [less than 5 per cent].

Prepayment electricity meters

13. Prepayment meters contain technology which allows for energy consumption on a 'pay-as-you-go' basis. Broadly, a prepayment system consists of the provision of a payment device (magnetic card, smart key, smart card or keypad); the use of a network of charging or payment outlets (Post Office, Payzone or Paypoint); and IT systems to exchange information on payment and consumer data (with the exception of magnetic card which is credit-transfer only).

14. As noted above, around 15 per cent of total GB installed electricity meters are prepayment meters. Prepayment meters are used primarily for two reasons: first, where the utility is concerned about the consumer's creditworthiness and requires the consumer to pay up-front for consumption of electricity;[7] and, second, where the consumer wants to control spending on electricity. Other than the UK, the only other country where prepayment meters are sold in any significant quantities is South Africa. The lack of use of prepayment meters in Continental Europe is said to arise from differing Continental regulation in relation to the ability to cut off electricity supply for non-payment.

15. UK prepayment meters have changed from being coin-operated to using more sophisticated technologies. However, this technological evolution means electricity retailers are now faced with a legacy of different prepayment technologies used across the country and have to work with the regional IT system put in place by the relevant DNO for that region. There are at present four different technologies (meter types) in use in the UK.

- **Magnetic card** (or token) meters were introduced in the late 1980s and were adopted by approximately half of the UK utilities. Ofgem estimates that these are used by 1.5 million consumers. There are two types – broad and

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DNOs to provide meters and removing meter price controls for the DNOs that choose to remain as MAPs.

[7] 500,000 of 3.6 million electricity consumers using prepayment meters are paying off arrears via prepayment : source, National Energy Action website.

narrow cards[8] – which are purchased at the payment outlet. The cards are one-use, read-only for transferring credit to the meter. These are the most basic type of prepayment meter - suppliers need to visit the meter to reset it for debt or a change in tariff. They are also more susceptible to fraud. Both Ampy and Landis sell magnetic card electricity prepayment meters.

- **Smart Key** meters were introduced in the early 1990s. Ofgem estimates these are used by 1.5 million consumers. Consumers charge their key at a payment outlet. This is a two-way data transfer system, allowing data downloaded from the meter on to the key to be transferred to the utility as well as allowing credit to be transferred to the meter. They can be re-set remotely. Smart key meters have higher infrastructure costs because of the need for more sophisticated IT software. The technology is proprietary to Actaris, but has been licensed to Landis which has offered smart key meters to UK MAP customers.

- **Smart Card** meters were introduced in the mid 1990s. They were developed by Landis and sold to the (then) UK utilities Norweb and Midlands Electricity. Ofgem estimates these are used by less than 1 million consumers. Smart cards operate on a similar basis to smart key (two-way information flow). Only Ampy is now active in selling these meters.

- **Key Pad** meters were developed by PRI in the late 1990s. This is a one-way information system. When customers pre-pay at a payment point, they receive a 20 digit number which they enter into a keypad on the meter. Key pad technology meters are only used in Northern Ireland, where they replaced Ampy's magnetic card meters in 1999.

16. In addition, over the past three years new prepayment meter technology has developed which allows for national pre-payment infrastructure provision (PPMIP) thus avoiding the need to deal with a number of regional software infrastructures. **Actaris' Talexus key meter** (distinct from smart key) has been chosen by British Gas following tendering for its PPMIP for electricity meter services on a national basis. This is discussed in more detail below.

Product market

17. In identifying the appropriate frame(s) of reference for this case, the key issues that need to be considered include: (i) whether there are differing constraints according to the type of electricity meter supplied; (ii) whether after-sales

[8] The parties have confirmed that supply-side switching between narrow and broad magnetic card meters is relatively straightforward; accordingly, no distinction is made on this basis for purposes of determining the frames of reference.

servicing should be considered in conjunction with the initial purchase of a meter; and (iii) whether there are differing constraints depending on the type of end-customer.

Substitution among different types of electricity meter

18. The parties submit that the general functionality of electricity meters is the same and the relevant product scope is, therefore, for all electricity meters. Each of the meter types is discussed in turn below.

19. As regards possible substitution between electronic and electromechanical electricity meters, it is unnecessary to distinguish between credit meter types for purposes of this assessment. The following factors are relevant in this connection.

    - From a demand-side perspective, responses from third parties indicate that following a 5-10 per cent increase in the price of either electronic credit or electromechanical standard credit meters, some third parties (MAPs and electricity suppliers) would switch between the two types of credit meter. There has, however, been a movement away from electromechanical meters towards electronic meters: a trend noted in Bayard's internal documentation.

    - From the supply-side, the manufacturing process of electronic credit and electromechanical meters is different. The parties maintain that a supplier of electromechanical meters could start supplying electronic meters within [ ]. They submit that switching costs would be estimated at [ ] if suppliers had in-house expertise. One competitor agreed that an electromechanical meter provider could switch to the production of an electronic meter.

20. As regards credit meters and prepayment meters, the available evidence suggests that substitution between these two types of meters would be unlikely to occur sufficiently quickly or in sufficient scale to defeat a small but significant non-transitory increase in price.

    - For a proportion of installed prepayment meters, MAPs and electricity suppliers are unlikely to switch to standard credit meters following a 5-10 per cent increase in price.[9] Third parties maintain that electricity suppliers require prepayment meters for specific end-users, those that are potentially a

[9] Consumers can request prepayment meters and the parties submit that 60 per cent do so because they believe it is easier to budget. However, Ofgem maintain that this figure relates to people who are satisfied with their prepayment meter because it makes it easier to budget. This includes consumers who have inherited prepayment meters when they move home and is not, therefore, a good estimate of consumers who actively choose to have a prepayment meter.

credit risk. One third party maintained that a 5-10 per cent increase in price would not be sufficient to counter the risk of payment failure.[10] Ofgem submits the price of a prepayment meter is approximately £60, in contrast to £10 for standard credit meters.

- On the evidence available (the section on entry refers) switching by credit meter suppliers quickly and without significant investment to prepayment meters is not likely.

21. In light of the above evidence, competition in the supply of prepayment meters will be considered separately from credit meters.

22. For purposes of analysing the competitive effects of this transaction, it is also important to consider possible substitution among the various prepayment meter technologies. As noted above, there are four different prepayment technologies currently in use in the UK, each providing the same basic functionality. There are a number of considerations relevant to possible substitution among the four existing prepayment meter technologies.

- First, a distinction should be made between those electricity suppliers wishing to chose a prepayment technology *de novo* (this category could be further sub-divided to distinguish between former Public Electricity Suppliers (PESs), and post-deregulation electricity suppliers such as British Gas) and those suppliers needing to replace individual meters in their existing installed base. Different considerations may be relevant to each: there may be fewer constraints on choosing a new technology *de novo* as compared with replacement of a meter using a particular technology. In addition, new prepayment meter technologies also appear to evolve at irregular intervals, according to emerging technological advances and customer demand.

- Second, as the lifecycle of an individual meter can be up to 20 years,[11] the choice of technology is important for the electricity supplier. Once the choice is made, any replacement or additional meters for expansion purposes will have to be compatible with the existing system(s) and the technology type will remain until such time that it becomes economically or strategically viable to change technologies again should a more attractive system become available.

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[10] Some third parties maintain that within the UK there are difficulties in cutting off electricity supply, e.g. a court order is required. No evidence has been provided on this issue.

[11] Ofgem certification of a meter technology is initially for 10 years. This can subsequently be extended for another 10 years.

- Third, the evolution of meter technologies has been driven by customer demand. Historically, customer demand prompted first magnetic meters, and then smart key and smart card meters with two-way data transfer functionality, to supersede coin-operated meters. The new wave of potential *de novo* demand is currently beginning to emerge in respect of meters installed in the mid-to late 1980s and early 1990s, which are nearing the end of their 20-year lifespan. Suppliers now need to consider whether to continue with that particular technology or whether to switch to a newer one.

- Fourth, an additional consideration, for both former PESs and other electricity suppliers operating in a market in which national sales are now possible,[12] is the availability of a new generation of prepayment meters with national IT infrastructure coverage.

23. Overall, although there may be an installed payment infrastructure issue (discussed further below), the evidence suggests that different prepayment technologies do compete for new contracts. It is nevertheless prudent to consider each type of prepayment meter separately, as well as all prepayment meters together, due to the dynamic way in which competition takes place in this sector.

After-sale services

24. The parties submit that electricity meters and after-sales services are typically sold separately. This is supported by competitors and customers. After-sales services may be purchased from the DNO or from third parties. Furthermore, Bayard's internal documents [ ]. The evidence suggests that this element of the transaction will not raise competition concerns. Therefore, it is not considered further.

Type of end-consumer

25. End-consumers of electricity meters comprise residential (domestic and small customers) and industrial and commercial (medium to large businesses). Ampy does not manufacture and sell industrial meters in the UK or the EU. Landis does not supply industrial meters in the UK although it does in Continental Europe. Whilst respondents maintain that there is a distinction between the groups because they require different products, the parties submit that some residential meters can be used in industrial outlets and in some European

[12] According to the National Energy Action website : 'Initially, switching rates among prepayment meter users were significantly lower than for other prepayment methods. More recently there is evidence that suppliers may have begun to make more active attempts to recruit these consumers. Around 30 per cent have switched, a rate only marginally lower than those on quarterly credit'.

countries some industrial meters are used for residential purposes. The OFT has been unable to quantify the cost and timing of supply-side substitution. There is no increment to the share of supply in industrial meters and the parties maintain [ ]. For the purpose of the competition assessment, it is therefore unnecessary to reach any final view on possible distinctions among types of end-consumer.

Geographic market

26. The parties argue that the relevant geographic scope for electricity meters is European and cite the following facts to support their view. Electricity meters are manufactured outside of the UK (with only final assembly and testing operations being carried out in the UK) and transport costs represent approximately [ ] per cent of the resale value. They estimate that a European supplier not currently active in the UK could enter, gaining approval at a cost of [ ] per product or less. Third parties and Ofgem confirmed that credit meter suppliers do not require a presence in the UK and that competition occurs at a European, possibly international level.

27. In its 1997 merger decision on Siemens/Elektrowatt[13], the European Commission noted that there was already a strong trend towards Europeanisation in respect of electricity meters and that the market was becoming increasingly international. The decision also noted national technical standards and authorisation requirements. The decision left the scope of the geographic market open since it was not necessary to conclude on this issue.

28. With the implementation of the EU Measuring Instruments Directive (MID)[14] in October 2006, manufacturers will be able to demonstrate that their meters conform to normative international standards and also choose any 'Notified Body' designated by a Member State without the need for further approval.[15]

29. As noted above, prepayment meters are principally sold in the UK (GB and Northern Ireland) and South Africa. Shares of supply will not alter whether a UK or European scope is considered. Accordingly, the geographic frame of reference for prepayment meters can be left open.

Conclusion

30. For the purposes of the following competitive assessment, the relevant economic frames of reference are:

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[13] Case No IV/M.913 – Siemens/Elektrowatt.
[14] Directive 2004/22/EC of 31 March 2004.
[15] Currently, Ofgem has responsibility for type approval and meter verification, and uses International Standards. Ofgem also has other approval and certification responsibilities.

- the European-wide supply of credit electricity meters;
- the UK or European-wide supply of prepayment electricity meters.

31. As noted above, for present purposes it is prudent by way of competition assessment also to consider each type of prepayment technology separately, while acknowledging that this narrow approach does not necessarily fully and accurately reflect the dynamics of the sector (as discussed further below).

HORIZONTAL ISSUES

CREDIT ELECTRICITY METERS

Shares of supply

32. Table 1 shows that, post-merger, the parties' European-wide combined share of supply for credit meters (electromechanical and electronic credit) is [around one third] (an increment of [less than 5 per cent]). As noted earlier, the parties submit that these shares of supply would not differ significantly if residential and industrial customers were considered separately.

Table 1: European-wide share of supply of electricity credit meters – electromechanical and electronic credit in 2003 (% turnover)

Manufacturer	**Share of supply %**
Landis	[20-30]
Ampy	[less than 5]
Combined	[20-30]
Actaris	[20-30]
Iskraemeco	[0-10]
Enermet	[0-10]
AEM Timisoara	[less than 5]
DZG & Stepper Energie	[less than 5]
Sagem	[less than 5]
Pafal	[less than 5]
Elster	[less than 5]
Conlog/Schneider	[less than 5]
Others	[10-20]

Source: the parties.

33. Post merger, the HHI is [1800-2000]: an increment of [100-200], which might indicate that there may be some potential competition concerns. However, the

merged entity faces competition from a number of alternative suppliers with the potential to constrain the parties' behaviour, including Actaris and Iskraemeco.

34. This view was endorsed by customers, which did not express any concerns about the effect of the transaction on competition in credit meters. Indeed, some customers maintained that this is a very competitive sector, as evidenced by price reductions over the last 5 years. Bayard's internal documents highlight [ ]. On average Bayard predicts an average [ ].

Barriers to entry and expansion

35. The evidence suggests that barriers to entry are not insurmountable for credit meters. To manufacture such meters, a supplier needs to comply with the applicable European and national standards. There are two types of UK entry standards: type approval and plant approval. As noted above, the parties estimate UK entry at around [ ]. The introduction of the MID in 2006 will further ease entry requirements as then new meters approved by another Member State to the appropriate EC regulations and standards may be used in the UK without further approval. The parties estimate that it would cost approximately [ ] to establish a presence in the UK, taking 9-12 months to develop a simple meter and up to 18 months to produce a more sophisticated product. The average contract value for credit meters is £1.5-2 million.

36. The parties further suggested that it may be possible for customers to outsource the manufacture of their own electricity meters. This is based on [ ].

Buyer power

37. Third parties considered that they possessed, and would continue to do so, buyer power in relation to credit meters, as there are a number of suppliers available.

Conclusion

38. In light of the above, the OFT does not believe that it is or may be the case that the merger may be expected to lessen competition substantially in respect of the supply of credit electricity meters.

PREPAYMENT ELECTRICITY METERS

39. Prepayment meters account for approximately 18 per cent of electricity meters sold in the UK (approximately 15 per cent in GB) and, according to the parties, represented [less than £15 million] sales in 2004. The following section

discusses the merger's potential for both non-coordinated and coordinated anti-competitive effects in relation to prepayment meters in general and individual technologies in particular. While the parties' combined shares are undoubtedly high, the evidence – on points including technological change, declining use of magnetic card meters, entry and buyer power - indicates an absence of substantiated competition concerns, as reflected by the lack of concern of most customers.

Non-coordinated effects

Competition in the supply of prepayment meters

40. The table below provides UK shares for all prepayment electricity meters by turnover.

Table 2: UK Share of supply of all prepayment electricity meters (% turnover)

Manufacturer	**Fluctuations in annual share 1999-2004 (low/high, %)**	**Average annual share 1999-2004 (%)**	**2004 snapshot (%)**
Landis	[/]	[10-20]	[0-10]
AMPY	[/]	[50-60]	[50-60]
Combined	[/]	[60-70]	[60-70]
Actaris	[/]	[20-30]	[30-40]
PRI	[/]	[0-10]	[0-10]

Source: the parties

41. Although the above table shows a high post-merger share for the merged entity based on 2004 figures, a number of factors suggest caution in interpreting these data.

- First, the increment to Ampy's share of UK prepayment meter sales from this transaction is modest, at only [0-10 per cent].

- Second, [ ], reflecting the decline in importance of its magnetic card prepayment meters.

- Third, volatility in the parties' combined historic shares is mirrored in competitors' shares, which have fluctuated markedly in recent years.

- Fourth, as noted above, competition for entirely new contracts (as opposed to competition to replace meters in the installed base) is an important dimension of competition not wholly reflected in the above data.

- Fifth, the 'snap-shot' 2004 share data above say nothing about the emergence of prepayment meter technology. As discussed below, innovation is an important dimension of competition in this sector.

42. For these reasons, the above data may not be the best guide to future competition in the supply of electricity prepayment meters. The OFT has therefore considered other evidence to assess whether the merging parties represent an important competitive constraint on each other's commercial conduct in the supply of prepayment electricity meters and in respect of individual prepayment meter technologies.

43. In general (and structuralist) terms, the merger reduces the number of existing competitors of prepayment meters from four to three. The parties do appear to have exerted some degree of constraint against each other when bidding for prepayment meter contracts, if only by providing buyers with some perception of choice when tendering for contracts. According to data supplied by the parties covering the last two years, they have bid against each other on a limited number of occasions, [ ] out of [ ], and principally in the area of narrow magnetic card prepayment meters.

44. This view of limited pre-merger competition between Ampy and Landis was supported by customers. Only two of the nine responding customers identified any possible horizontal competition concerns and these concerns related specifically to the supply of magnetic card prepayment meters. Other third party evidence raised no concerns about the reduction in the number of suppliers of prepayment meters due to the scope for new entry, the emergence of new technologies such as the Actaris Talexus smart key (in particular to replace the old and declining magnetic card meters), and the existence of buyer power which would constrain the merged entity.

Competition in the supply of magnetic and smart card prepayment meters

45. Table 3 shows the parties' position in relation to individual prepayment technologies and the position of each technology in the UK prepayment sector overall.

Table 3: UK shares of supply for prepayment meters by technology, 2003

Supplier	Smart Card	Smart Key	Magnetic card	Keypad
AMPY	100%	-	[70-80]%	-
Landis	Licence	Licence	[20-30]%	-
Actaris	-	100%	-	-
PRI	-	-	-	100%
Value of meter sales	[£2-3m]	[£5-6m]	[£5-6m]	[£1-2m]
No. of installed meters in UK	0.5 million	1.4 million	1.5 million	0.13 million
% of total prepayment meters sold in 2003	[10-20]%	[30-40]%	[30-40]%	[1-10]%

Source: Parties' estimates

46. The only type of prepayment meter that both parties currently supply is based on magnetic card technology. There is also a potential overlap in smart card meters, where Ampy is currently active and Landis holds a license to produce meters using the relevant technology. Each of these overlaps is discussed below. As explained, the available evidence suggests that, in respect of meters based on each of smart key and magnetic card technology, there are a number of arguments why, even on a static view of competition, this transaction cannot be expected to result in any substantial lessening of competition. However, of particular importance in assessing the effects of this transaction is the scope for competition from other meter technologies and systems, both existing and new.

Magnetic card meters

47. Post-merger, the parties will be the only UK supplier of magnetic card meters. As noted above, two customers raised a possible concern in this connection. One thought this may pose a problem in rural areas, where demand side switching may not be possible due to a lack of appropriate payment infrastructure or where it may be uneconomical to establish alternative payment infrastructure. The second qualified its slight concern with the view that this was a declining market and that magnetic meters would become obsolete. The market investigation indicated that these problems are limited to some rural areas in Scotland and South Wales, although no information was provided to substantiate the scope of this concern.

48. The scope for future competition in respect of Bayard and Landis in magnetic card prepayment meters does appear limited.

- According to the parties, the majority of Landis' prepayment meter sales come from [ ] small contracts. The largest of these contracts, with [ ] and which accounted for [ ] per cent of Landis' sales, ended in March 2004 and was renewed with a competitor.

- Landis' prepayment meter business was worth [ ] in 2003 and was expected to [ ]. As noted above, one of the largest contracts that contributed [ ] per cent of Landis' 2003 sales was lost in early 2004. Bayard has emphasized that [ ].

- One customer did not consider Landis to be a competitive constraint at all in respect of magnetic prepayment meters because, when invited to bid for tenders, Landis either did not do so or quoted very high prices. Therefore, the customer did not think the transaction would affect competition for this type of meter.

- One further customer has never purchased magnetic card prepayment meters from Ampy, preferring to single-source from Landis.

- [ ]. Nearly all third parties agreed that magnetic card is a declining technology. Most utilities are now phasing out magnetic card technology in favour of smart key meters. (This is discussed in more detail below).

49. In the run up to magnetic card prepayment meter technology becoming obsolete, customers unable to switch their entire installed base to a newer technology due to some installed meters in rural areas where there are at present no alternative distribution/charging facilities, can maintain supply of the prepayment meter service to the affected consumer by refurbishing and recycling magnetic card prepayment meters. More specifically, this was said to be a function of the limited remaining life-cycle of these meters which are being replaced by alternative technologies.

Smart card meters

50. The merger also eliminates the scope for potential competition to Ampy from Landis in smart card meters. Actaris supplies smart key meters [ ](Landis has a license from Actaris). However, this is no more than a theoretical concern: one not articulated by any third party contacted by the OFT and no evidence was identified to support it.

Conclusion

51. In short, the above evidence shows that concerns focused on narrow technology-based product segments may not be sustainable and, as discussed below, the available evidence militates against a narrow approach of considering each type of prepayment technology separately.

Competition among prepayment meter technologies

52. As indicated above, a key factor in competition in the supply of electricity prepayment meters is the emergence of new meter technologies. (This latter point is discussed in the 'barriers to entry' section of this decision.)

53. The evolution of prepayment meter technologies has been driven by customer demand. Historically, customer demand prompted first magnetic meters, and then smart key and smart card meters with two-way data transfer functionality, to supersede coin-operated meters. The new wave of potential *de novo* demand is currently beginning to emerge in respect of meters installed in the mid-to late 1980s and early 1990s, which are nearing the end of their 20-year lifespan. The evidence available to OFT indicates that technology has evolved and customers are beginning to migrate to the new technology. This process of migration or the threat of migration is a competitive constraint and will continue to be so. Switching is said to occur notwithstanding the cost and effort of investing in the requisite IT and support infrastructure.

54. More specifically, the following examples of such switching behaviour have been identified:

- Northern Ireland Electricity, which decided to switch from magnetic card meters to keypad technology.[16]

- Ampy submitted that [ ].

- The OFT's market investigation confirmed that another DNO is currently replacing its magnetic card meters with smart key meters.

Barriers to entry to prepayment meter supply

[16] It should be noted that Northern Ireland does not fall within Ofgem's remit and the industry is still vertically integrated there. A third party has said that changing technologies is therefore a more straight-forward proposition.

55. When considering the possibility of new entry as a competitive constraint on the merging parties in respect of prepayment electricity meters, it will be apparent from the above that entry using an existing technology and entry using a new technology both need to be considered.

Entry using existing technology

56. Prepayment electricity meters require a system with a charging point and a suite of software that exchanges customer and payment data. There do not appear to be substantial barriers to obtaining access to a payment infrastructure. Distribution/charging facilities are currently offered by the following organisations.

- PayPoint provides national bill payment services.[17] Its terminals are used for re-charging smart keys or buying tokens and, in Northern Ireland, for buying PINs for keypad meters.
- Payzone is wholly owned and operated by Alphyra. Its prepayment services support all existing prepayment technologies. Payment outlets are provided nationally.
- The Post Office currently has magnetic card terminals at all its branches. In addition, around 380 branches (350 in the South West and 30 in the South) accept smart key payments, mainly in rural areas. According to Ofgem, there is also a prospect of the Post Office introducing a network that would accept all prepayment devices.

57. Obtaining access to these payment infrastructures does not appear to be a significant barrier for entrants. British Gas has secured PayPoint and PayZone to provide its own vending outlets for its electricity prepayment customers on a national basis in conjunction with Actaris.

58. Entry into the prepayment sector by other manufacturers could be possible. Two manufacturers in related industries contacted by the Office indicated in general terms that they might consider doing so.

59. There is a question about the costs of such entry. One third party thought such entry would be difficult due to the need to obtain licences and it estimated the cost of entry in the prepayment sector to be £1-1.5 million conditional on a license being obtained. However, the average value of a prepayment contract is said to be around £2 million.

[17] According to PayPoint's website, over 95 per cent of UK households are closely situated to a PayPoint retail agent: i.e., within one mile in urban areas or five miles in rural areas.

Entry using new technologies

60. Central to any consideration of the competitive effects of this merger is the role of innovation in the electricity prepayment meter sector. This has manifested itself most clearly in the development of new meter technologies that have demonstrated strong potential to capture shares of supply or indeed transform the sector, as witnessed by the introduction of first magnetic card, then smart key, smart card and key pad prepayment meter technology. Incumbents do not appear to have significant advantages over potential new entrants in terms of access to or development of technology: the parties submit that PRI developed its key pad technology prepayment meters despite having no previous experience of prepayment and won a major contract with Northern Ireland Electricity. Another credit meter manufacturer has gained approval for both a smart card prepayment meter and for a key pad prepayment.

61. The available evidence suggests that the emergence of new meter technology prepayment meters which can be used with software infrastructure and payment capability on a national basis will act as a strong constraint on the merging parties' behaviour in the short to medium term, as customers, with national customer bases, will migrate to such systems.

62. First, a new prepayment meter system technology, known as Talexus, has been developed by Actaris. It comprises a smart key system but is evolutionary in that it is capable of operating on a national basis. This contrasts with the historic situation (described above) where individual DNOs adopted their own technology for their region. British Gas has selected this technology following a tender process for its nation-wide prepayment meter infrastructure provision. Other electricity suppliers are expected to follow suit.

63. Second, one credit meter manufacturer has gained approval for a prepayment meter with such national capability and is in talks with a major utility about introducing it in the UK.

64. In response to these developments [ ].

65. In conclusion, past evidence of entry, in particular by a superior new technology offering additional customer benefits, indicates that competition can and has occurred, and that entry and the threat thereof will act as a constraint on the merged entity.

Buyer power

66. Finally, the parties have argued that buyer power will represent a continuing and real competitive constraint on their commercial conduct. In particular, they point to the relatively concentrated customer base (of electricity suppliers), with 9 main customers purchasing meters worth approximately £39.6 million per year.[18] This argument has been supported by a number of the customers, including MAPs and electricity suppliers. It appears that buyer power is manifested in three main ways.

67. First, most customers consider they are able to exercise buyer power in particular because they purchase a range of products (including electricity credit meters, as well as gas meters) and can discipline attempts by suppliers to make uncompetitive bids on one product area, such as prepayment meters. As the value of the electricity credit meter sector is significantly larger, at around £80 million, than the electricity prepayment sector, it seems feasible for DNO/MAPs and/or electricity suppliers to be able to leverage their buyer power in relation to credit meters, which account for a slightly larger part of the business of the merged entity, to ensure that prices of prepayment meters are not higher than they otherwise would be. The conclusion of framework agreements enable electricity suppliers to have agreed terms and conditions in place with a number of meter manufacturers.

68. Second, price discrimination by suppliers of prepayment meters (for example, by suppliers of magnetic card meters when bidding for replacement contracts in rural areas) does not appear feasible because of the tendering practices of customers. The market investigation revealed that when contracts for prepayment meters are put out to tender, they do not specify precisely where magnetic card meters will be installed.

69. Third, customers appear able to exert pressure on prepayment meter manufacturers to license proprietary technology to other manufacturers to ensure that they do not become dependent on a sole supplier. Third parties suggested that this had occurred in the past. The merging parties expect Actaris to face similar pressure from customers in respect of its Talexus technology.

70. In short, the majority of customers for prepayment meters, which are the national electricity suppliers on whose behalf MAPs purchase the meters, consider that they possess and exercise negotiating strength and buyer power. In the short term, they are capable of countering any attempts at disproportionate price rises for magnetic card prepayment meters through leveraging their buyer power in their contracts for tenders which consist of more than one type of meter. In a longer time frame, the threat of switching

 €54.3 million.

prepayment technology by customers should also constrain the merged entity in the supply of magnetic card meters.

Conclusion

71. Notwithstanding the high combined shares of sales in respect of prepayment meters generally and particularly in magnetic card and smart card meters, the available evidence suggests not only that these share data might overstate the extent of future competition between Ampy and Landis, but also that the merged entity will face a range of competitive constraints. First, the merged entity will continue to face competition from existing suppliers of prepayment meters. Second, there exists the continued potential for entry through using existing technology. Third, importantly, new emerging prepayment meter technologies will act as a further constraint. Fourth, this rivalry, when coupled with the ability and incentives of customers to exercise buyer power, will further discipline the merged entity's commercial conduct.

Coordinated effects

72. Ofgem raised for further examination the possibility that, post-acquisition, there would be very little competitive constraint on the two main competitors (i.e., Ampy-Landis and Actaris) co-ordinating price increases.

73. In order for tacit collusion to be successful or to become more likely, the OFT considers that three conditions must be met or be created by a merger: first, the participants must have an ability to align their behaviour in the market; second, the firms must have incentives to maintain the coordinated behaviour, which means detection of deviation from tacit coordination and perhaps also credible 'punishment' of deviating firms through retaliatory behaviour by others; and third, the coordinated behaviour should be sustainable in the face of other competitive constraints in the market.

74. Regarding the first condition, upon the basis of the available evidence, alignment by Actaris and the merged entity of their behaviour on the market does not seem a realistic prospect for the following four reasons.

- First, the two firms do not offer symmetrical product ranges. In the supply of credit meters, both firms would have similar shares of supply, but this is not the case for prepayment meters, where at present the merged entity is nearly twice the size of Actaris. In any case, there are a number of competitors active in the supply of credit meters in the UK.

- Second, the prepayment meter technology type each offers is very different, with Actaris, in addition to its newer smart key technology, now marketing

Talexus, which has truly national coverage capability whilst the merged entity is [ ], for what is said to be a declining technology [ ].

- Third, the tendering conditions do not lend themselves to price coordination. Contracts are for a range of meters (standard credit, prepayment and sometimes include gas meters) for which there are a number of suppliers (with the exception of prepayment meters) and provide the starting point for negotiation of price with the customer.

- Fourth, the step-change resulting from the merger is not large, with an increment of [less than 5 per cent] in the supply of standard credit meters for which, as noted above, a competitive constraint remains from a large number of competitors, and an increment of [0-10 per cent] in the supply of prepayment meters. There has been no indication that any such alignment of incentives had been taking place prior to the merger.

75. Since the first condition for founding a coordinated effects case is not met, it is not necessary to consider the remaining two conditions, though buyer power and market entry, which have already been discussed in some detail, would be an additional constraint against any such coordination.

76. In conclusion, there are insufficient indications to suggest that the merger will lessen competition between the merged entity and Actaris and lead to the possibility of coordination.

CONGLOMERATE/PORTFOLIO ISSUES

Bundling of different types of electricity meter

77. A few competitors raised concerns about the impact of the merger on the portfolio power of the merged entity because it will be able to supply an enhanced range of electricity meters (both credit and prepayment). If the transaction enables the merged entity to tie purchases together, e.g., prepayment and credit meters, it could, fully or partially, foreclose the sector to suppliers of only credit meters. One respondent argued that the merged entity can disguise the true cost of meters by cross-subsidising. A few believed that due to customers' preference for a 'one-stop-shop' this would inhibit any future competition.

78. Post-merger, the increment to credit meters is [less than 5 per cent] and as discussed above, this appears to be a competitive sector. Both parties are already active in prepayment and electronic credit meters. The accretion to the share of supply in prepayment meters must be such that this changes the merged entity's incentives to bundle its prepayment meters with the credit meters. The increment in prepayment meters is [0-10 per cent]. In itself, this

seems an insufficient change in position to incentivise the merged entity to bundle electricity meter products together.

79. Moreover, although some customers indicated that they may prefer a 'one-stop-shop', customers did not raise any concerns and maintained that alternative suppliers of electricity meters are available in the event that the merged entity sought to bundle (or tie) meter products together. Customers thought it was unlikely that the merged entity could tie products together anti-competitively and submit they do and could continue to multi-source post-merger.

80. The evidence suggests that the merger will not enhance the ability of the merged entity to foreclose the supply of electronic credit meters by bundling its electricity meter products.

Bundling of gas and electricity meters

81. Some third parties, including Ofgem, voiced concerns that the transaction would increase the merged entity's range of electricity and gas meters, in particular prepayment meters and this would increase its competitive strength overall. Some third parties also maintained that there is currently an increasing trend towards dual tenders for both gas and electricity meters and that the transaction may enable the merged entity to tie purchases and fully or partially foreclose the sector to suppliers of electricity meters.

82. Landis, through its acquisition of Siemens metering, owns the design rights for the Quantum prepayment metering system which is the only type of gas prepayment meter in the UK. Currently Landis holds [around half of] share of the UK gas meter sector. However, Ampy does not supply gas meters outside Australia so there is no increment to the share of supply. As discussed above, Ampy supplies [30-40 per cent] of UK electricity meters.

83. Gas and electricity meters are generally sold under separate contracts although there are examples of dual tenders. The merger does not appear to significantly alter the competitive situation. Current competitors in gas meters include four other electricity meter companies. Two submit that in theory they could, although currently do not, bundle gas and electricity meters to compete with the merged entity. Furthermore, customers thought it was unlikely that the merged entity could tie products together anti-competitively and submit they currently tend to multi-source.

84. Some third parties raised concerns that post-merger the merged entity has a strategic advantage in the development of dual (electricity and gas) prepayment meter. There is no evidence to suggest that competitors will be unable to develop a new, competing, technology. One third party believed that any

strategic advantage that the parties may possess in the development of dual prepayment meters would be eroded by innovation by competitors.

85. The evidence suggests that the merger will not enhance the ability of the merged entity to foreclose the supply of electricity or gas meters, including prepayment meters.

THIRD PARTY VIEWS

86. No third parties raised concerns about credit electricity meters. Most third parties did not have any concerns about the reduction in the number of suppliers of prepayment meters. Two customers voiced concerns that the transaction increases the concentration of prepayment electricity meter suppliers and that post-merger there is only one supplier of magnetic card meters which may pose a problem in some rural areas, where demand side switching may not be possible. In addition, some respondents highlighted concerns about bundling of: electricity prepayment and credit meters; and of electricity and gas meters. Ofgem raised as a potential concern to examine further the possibility about coordination on price. These concerns have been considered under horizontal issues and portfolio/conglomerate effects.

ASSESSMENT

87. The parties overlap in the supply of electricity meters. No concerns arise in respect of credit electricity meters, which represent the great majority of electricity meters sold and installed in the UK. The OFT's investigation therefore focussed on the supply of prepayment electricity meters, which represent around 15 per cent of all electricity meters in the UK. There are four existing prepayment electricity meter technologies.

88. Notwithstanding the high combined shares of sales in respect of prepayment meters generally and particularly in meters based on magnetic card and smart card technology, the weight of evidence highlights a number of competitive constraints which mean that reliance only on share of sales data for narrow prepayment technology meter categories would misrepresent the competitive impact of the merger.

89. Apart from continuing competition from Actaris and PRI supplying meters based on existing technologies, perhaps the most important constraint in this sector is the extent of dynamic competition from new meter technologies. Electricity meter supply has historically been characterised by the emergence of new technologies that rapidly win both acceptance and share. This trend can be expected to continue as competitors have brought new technologies to the marketplace which are already being adopted by customers, acting as a

competitive constraint on the parties' sales of older (and declining) magnetic card technology meters. In addition, the ability of customers to exercise a degree of buyer power, can be expected to represent a further constraint on the merged entity's behaviour.

90. As regards the possibility of coordinated effects, there are insufficient indications to suggest that the merger might give rise to a realistic prospect of such coordinated interaction. The possibility of the two leading meter suppliers being able to align on the terms of coordination does not seem at all realistic given their differing product ranges and positions at different stages of the innovation cycle.

91. Finally, concerns regarding possible conglomerate effects were not substantiated by the market investigation and competitive analysis.

92. Consequently, the OFT does not believe that it is or may be the case that the merger has resulted or may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom.

DECISION

93. This merger will therefore **not be referred** to the Competition Commission under section 22(1) of the Act.