5 Analysis of the relevant markets

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Introduction

5.1. In this chapter, we undertake an analysis of the markets introduced in Chapter 3 in order to define the relevant economic markets for this inquiry and to assess the concerns that have been raised in relation to the acquisition.

5.2. In addition to the issue of market definition, we need to consider the competitive conditions affecting the relevant markets. In this case, these competitive constraints are: the actions of competitors, the threat posed by potential entrants, the impact of new technology, the behaviour—and bargaining power—of customers, and the availability of alternative postal and communications methods.

5.3. We begin by discussing the purpose and methods of defining the relevant economic market. We then apply these methods to establish the relevant markets for the evaluation of this particular merger, in terms both of the products and services to be considered, and the geographic extent of the markets. Having defined the markets, we provide estimates of suppliers' shares. Then we address the competitive constraints in the markets. We also discuss issues that arise, such as the potential for tacit coordination and the effects of new technology.

Evaluating competition

5.4. The evaluation of the effects of a merger consists of two overlapping stages. First, it is necessary to define the relevant economic market or markets in which the merger should be assessed. Second, it is also necessary to consider the competitive constraints on market power. The two stages of evaluation can overlap in their coverage, and assignment of particular issues to a particular stage may be a matter of judgement. For example, whether or not a substitute product should be considered to be in the same market will depend on how willing customers are to switch to this substitute product at current price levels; if it is not a close substitute, it may nevertheless be a potential constraint should prices rise. In the present case, there are alternative methods of paying postage, as well as alternative communications methods, which, rather than being a direct substitute for franking machines, nevertheless provide an alternative to franking. Whether a substitute product is considered to be in the same market, or a possible entrant, or another constraint, may be a matter of judgement. What is important is that the competitive threats to any market power that may arise from a merger are properly identified and evaluated within one or other of the two stages of assessment.

Market definition

Method

5.5. In the first of the two overlapping tests identified earlier, we seek to define the boundaries of the relevant economic market. This allows calculation of the supplier market shares we expect to prevail after the merger. The relevant economic market comprises the market for a group of products that currently provide competitive constraints (be they active or potential) on the merging firms, and the geographic area in which this occurs. We draw the distinction with other products and services which are not in strong competition with the relevant products. Competition from other products and services may arise in two ways: either because they are close substitutes in demand (ie some customers would be willing to switch between products or services on the basis of changes in their relative prices), or they are close substitutes in supply (ie some suppliers could easily and quickly switch between supplying the different products or services). The market is defined narrowly to identify the minimum set of products, and the minimum geographical area, which constitute the economic market.

5.6. One tool that can help us identify the relevant economic market is the SSNIP test or hypothetical monopolist test. SSNIP stands for 'small but significant non-transitory increase in price'. We start with the narrowest product or group of products of interest and ask, if there were only one firm supplying these products (a hypothetical monopolist), would that firm be able to increase its profits by raising

prices by 5 to 10 per cent over a significant period of time? Sufficient numbers of customers might switch to a different product so that the price rise became unprofitable.[1] Substitution might also occur on the supply side, if suppliers of alternative products could easily—without significant investment—transfer into production of these products in response to a small price rise. If we conclude that the price rise engineered by a hypothetical monopolist would be unprofitable, we conclude the relevant market may be wider and so add the closest substitute products, and repeat the test.[2] This test identifies the relevant market as one that is profitably monopolizable. It provides a framework that helps to identify the relevant economic market—the scenario is hypothetical but the exercise can yield insights that enable the relevant market to be defined.

5.7. The main parties submitted to us that the principal relevant product market affected by the merger was an unsegmented one for all franking machines. They added that other forms of postage payment such as stamps and bulk mail posed a strong competitive constraint on the franking machine market, due to the high degree of demand-side substitutability between franking and the other methods of payment. They also argued that, because the different models of franking machine supplied in different countries were all derivatives of the same basic model, and suppliers could switch production between national configurations, the market was wider than just the UK, as international factors would have an influence on the UK market (although they recognized the barriers to demand- and supply-side substitution from national regulations). Scales for use with franking machines were considered as part of the franking machine market, because of the degree of integration between the two items.

5.8. For folding/inserting machines, the parties argued that there was again one product market, and that as there were no national licensing restrictions, in contrast to franking machines, the market was at least EEA wide. AMS told us that the same reasoning applied to letter openers.[3]

5.9. We now assess the extent of the markets for the relevant products, and associated services such as maintenance.

Application to mailing equipment

5.10. In deciding on the relevant market definition we consider the following aspects: the ease of substitutability in demand of other methods of postage payment and communication, the substitutability of any other equipment or labour processes to perform the same functions, and whether there are any easy substitutes in supply. We need to determine whether there are any relevant sub-markets. Additionally, we need to consider whether two or more of the products and services where the parties overlap fall within the same market, maybe due to close substitutability in demand or supply, or the joint nature of their consumption (particularly, whether the servicing and maintenance of machines, or the supply of consumables for them, are in distinct markets from the purchase of the machines themselves).

Demand-side substitution

5.11. We now consider market definition against the criterion of the SSNIP test, ie considering demand-side substitution, if prices of franking machines (or other mailing equipment) went up, what would customers do? Would there be a significant shift of demand away to other products or services?

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[1]In order to make a price rise unprofitable, sales would have to decline by a greater proportion than the hypothetical price rise. If initial profit margins are low, the increase in price increases profits substantially on all output. A very high quantity response is therefore required to render the price increase unprofitable. If initial profit margins are high, the quantity response need not be as high to render a price increase unprofitable (as the loss in sales also hits pre-existing profits), but it will always need to be greater than the price increase (ie there has to be a price elasticity of demand greater than one) if profits are to fall.

[2]This procedure is also used to determine the geographic extent of the market for a given group of products by starting from a local monopolist and iteratively increasing the area covered until external substitutes in demand and supply no longer render marginal price increases unprofitable.

[3]For reasons explained in paragraph 3.65, we do not find it necessary to consider the parties' overlap in the supply of mailroom furniture.

Franking machines

5.12. In order to produce a franking mark, there is currently no alternative, in the UK, to the use of a franking machine. However, there are alternative means of paying for postage or other communications methods that could be used by a business. As a user could switch to one or more of these other methods, the question arises as to whether these represent close substitutes to franking, and hence to the use of franking machines. These alternatives are described in detail in Appendix 5.1. The alternatives comprise:

— *Stamps*. These are purchased in advance, in person or by post. They are convenient, but time-consuming and labour-intensive to use in large quantities. Royal Mail has made attempts to make stamps more business friendly, for example by selling self-adhesive stamps in large sheets and rolls, and allowing Internet ordering with postal delivery. Prepaid stamped envelopes can also be purchased in advance.

— *Bulk mail*. A number of options are available from Royal Mail (see Appendix 5.1), starting at a minimum usage of around 70 letters a day, and payment can often be made in arrears.

— *Hays DX*. This is an example of an independent document exchange service where subscribers deliver mail addressed to other subscribers to central collection depots, and collect their own inbound mail. Members pay an annual subscription according to usage, which Hays claims can save up to 30 per cent against Royal Mail first class rates, as well as saving on stamp or franking costs, although currently it can only be used to communicate with other members of the network. There are over 35,000 members, such as solicitors, banks and building societies, local authorities, insurance companies, health sector companies etc.

— *Outsourcing*. Businesses may outsource all or part of their mailing functions. For example, documents may be delivered electronically for printing by a specialist mail-house. This may be particularly useful for occasional peaks in mailing such as quarterly invoice runs. Royal Mail also offers a free franking service for occasional large mailings of at least 500 letters per consignment: this is suitable for small businesses or non-commercial enterprises with occasional large mailing needs; mail does not have to be pre-sorted and payment is made at the time of posting.

5.13. Royal Mail offers discounts for both franked and bulk mail where mail is pre-sorted to some extent. Consignia told us that customers wanting to benefit from these discounts needed to invest in address management software to ensure that addresses were fully and correctly postcoded; and in mailing software which ordered their mailing lists in line with Royal Mail's sortation requirements. It said that this type of investment would not be cost-effective for customers not mailing high volumes on a regular basis, nor would it tend to be as useful for a company with a very mixed output of mail, as for one with large quantities of very similar output.

5.14. Additionally, email and other communication technologies provide an alternative to traditional postal services. With postal liberalization, new alternatives are likely to become available, and PC-franking may be introduced in the next few years (these are described in paragraphs 3.104 to 3.107, and their potential as a constraint on the franking machine market is discussed in paragraphs 5.80 and 5.83).

5.15. In considering whether a hypothetical rise in the price of franking machines would lead to a significant shift in demand to these other alternatives, we need to consider the total cost of different postage options. Assuming a five-year life—most franking machines actually have a longer serviceable life—an entry-level franking machine, used for ten letters a day for 240 days a year, will frank over 12,000 items over its life. Ignoring associated costs other than postage, a 10 per cent increase in the price of a basic franking machine would put up the cost of postage per item by 1 per cent.[1] If the price of maintenance and consumables increased by 10 per cent at the same time, the net effect would be to increase postage costs by just over 2 per cent an item. For a high-capacity machine processing 5,000 items a day and costing between £6,000 and £18,000, the unit cost increase following a 10 per cent price rise in the machine is between 0.04 and 0.11 per cent, and including an increase for maintenance and consumables (which are a very much lower proportion of total costs than for smaller machines), 0.05 to 0.14 per cent.

[1]That is, a 10 per cent increase in the price of a £400 franking machine increases the user's total costs, covering both postage and machine costs, divided by the number of items of mail, by 0.98 per cent. This assumes a £62 a year maintenance charge (the current list price for Neopost's IJ25 return to base cover) and 1p an impression in consumable costs.

5.16. In deciding whether to change to alternative postage methods as a result of these price changes, a customer has to consider the other effects such as the greater labour requirements of using stamps. Given the advantages offered by franking machines as described in paragraphs 3.38 and 3.39, it seems implausible that such a small shift in relative postage costs would lead to more than a 5 to 10 per cent reduction in purchases of franking machines, and a significant shift in demand to alternative means of postage or communication as described in paragraphs 5.12 and 5.14. Frama told us that a small price rise by all manufacturers would not be likely to have a large effect on demand because of the advantages offered by franking machines (although customers at the lower end of the market might be more price sensitive). Francotyp also said that there was a strong convenience benefit from franking machines compared with stamps. Therefore, these alternatives are not considered as part of the relevant market, but they are considered in paragraphs 5.126 to 5.130 as a potential competitive constraint. On the other hand, a change in the postage rates for different payment methods could have a major effect on customers' use of these methods—a discount in postage rates for franked mail, bulk mail or stamps could have a much greater impact on many customers' total postage bills than marginal changes in the costs of buying and using a franking machine. For example, if there were a 1 per cent discount on franked postage, using the same examples as above, in the case of a large £6,000 machine used for 5,000 letters a day, the discount would save the user over £16,000 over five years, well over the cost of purchasing and using a franking machine. For an entry-level machine, used for only ten letters a day, the effects of such a discount would be much less marked. The saving would be under 10 per cent of the £400 purchase price of the franking machine. However, the pricing of different postage payment methods remains a matter for postal service companies rather than franking machine manufacturers, and so this is not assessed as a factor in the definition of the relevant markets.

5.17. We considered whether there might be separate markets for franking machines of different capacities. Neopost told us that there was a high degree of demand-side substitutability between different sizes of franking machine in adjacent volume segments. For example, it said that low-end machines could be used to process volumes well into the mid-range of capacities. A large user could either use a large-volume machine, a medium-volume machine more intensively, or two medium-volume machines. AMS emphasized that customers also varied in how quickly they needed to process their mail: for example, customers with occasional peaks in usage might need a much higher-capacity machine than their average use suggested. Hence, the parties argued that there was a continuous chain of substitution between volume segments such that a price rise in one segment would have ripple effects through all segments.

5.18. Most other parties we spoke to described three or four market segments based on machine speed; some measured this by meter cycle speed (ie characterized by the machine capacity), and some by daily usage rates (ie characterized by the nature of use). As noted in paragraph 3.28, there was no consensus on where the segments were separated, and some franking machines appear to span adjacent market segments. This supports the idea that the categorizations describe segments of the product range but do not correspond to distinct sub-markets. The most distinct market segment is for SoHo entry-level machines, which may be manufactured and marketed using different techniques from those used for higher-volume machines. For example, manufacture may be entirely subcontracted, sales may primarily be through telesales, and faulty machines may simply be replaced rather than repaired. We were told there was a great deal of overlap between customers for SoHo and low-capacity machines, and that one of the major aims for manufacturers of SoHo machines was to introduce users to franking machines in order subsequently to persuade them to upgrade to faster models. Consequently, it does not appear that SoHo machines are a distinct sub-market.

Folders and inserters

5.19. The alternatives to the use of folding and inserting machines are manual operations or the use of non-postal communication, such as email. These are unlikely to be close substitutes given current dependencies on postal communication in business. The parties identified two broad categories of inserting machines based on FEI data: *(a)* those valued below £21,000, which insert 1,000 to 150,000 letters a month; and *(b)* those valued above £21,000, which insert more than 150,000 letters a month. Neopost told us that these market segments were distinct (although it also said that these could be in a single market), and that Neopost and AMS sold machines in the lower (desktop) segment only.

5.20. The three folding and inserting machine market segments identified by PFE were introduced in paragraph 3.59. PFE argued there were significant differences between the segments on both the demand and supply side. Desktop machines were designed as a compact item of office equipment with the

emphasis on reduced production cost and ease of use. The customer base for these machines would typically be local authorities, hospitals, small/medium-sized businesses, insurance companies and banks, government agencies etc. PFE said that modular office machines were larger, usually found in postrooms, and emphasized speed of throughput. They usually incorporated a flexible, modular design that allowed them to be configured to a particular customer's requirements. PFE said that the types of customer would be similar to those for desktop machines, with a much greater level of usage.

5.21. In contrast, PFE described production mail systems as large and expensive pieces of kit, which might require more than one operator. Customers might include the Inland Revenue, DSS, mail houses, and centralized mailing operations for large banks and insurance companies. PFE noted that both it and Pitney Bowes (the only other manufacturer involved in all three market segments) used separate sales forces for production mail systems on the one hand, and for desktop and modular machines on the other.

Scales

5.22. Unless all its output of mail is of the same size, a franking machine user needs to weigh mail to determine the applicable postage rate. Modern postal scales have postage tariffs stored in their memory and can automatically calculate the applicable postage rate. Often, they can be connected to the franking machine (if indeed they are not already built into it) so that the applicable value can be automatically transferred to the meter. The alternative of using ordinary scales would require postage rates to be calculated and manually fed into the meter, which is slower and prone to error. The parties said that scales and feeders were usually sold with franking machines rather than as stand-alone products, particularly since many scales were an integral part of the base; only exceptionally were scales sold separately if they were to be used with franking machines.

5.23. As franking machines and the scales which interface with them obey manufacturer-specific communication protocols, the products tend to be purchased together from the same supplier.[1] Some customers might use stand-alone scales or guess postage rates, but interfaceable postal scales and franking machines are joint purchases in most cases, and can be considered as part of the same market.

5.24. Customers with scales that calculate postage rates are obliged to pay for these to be updated whenever postage rates change. Only the manufacturer provides the new memory chips. We therefore consider this service to be a joint purchase with the scales.

Letter openers

5.25. Letter openers were described in paragraph 3.62. They are used for opening received mail and so will not usually be a joint purchase with franking machines, which are used for outgoing mail. The alternative to using such a machine is manual opening, but automating the process is attractive if a great many similar envelopes are expected. It appears that demand may be a little more price elastic than for franking machines, but there are no alternative products that could perform the same task. There was no evidence to suggest that the market is segmented.

Maintenance and repair, recrediting and consumables

5.26. Royal Mail requires that all franking machines are inspected once a year (twice in a small number of cases) to check that they are secure and are printing correctly and legibly. These inspections, together with maintenance and repair services, must be sourced from a company which has obtained the necessary authorization from Royal Mail. Consequently, the same engineers are likely to perform the inspection, and maintenance and repair tasks (and we use the term maintenance to refer to both these functions). In practice, apart from some Secap machines, there is currently no independent maintenance available, and the customer must, therefore, contract with the manufacturer or its agents. Consequently, under the current maintenance arrangements, maintenance and repair services can be seen as a joint good with the sale of the franking machine, and so form part of the same market.

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[1]One manufacturer said that there were limited instances where scales manufacturers could sell scales that interfaced with its machines direct to customers, rather than just through itself.

5.27. Users also require recrediting services in order to be able to use franking machines. The IT systems to operate recrediting are expensive, and Royal Mail exercises tight control over their security. In practice, apart from Consignia itself,[1] and an agreement allowing dealers to recredit Secap machines, the only parties that are able to provide recrediting are the manufacturers themselves for their own machines. We therefore conclude that recrediting revenues can also be regarded as part of the same market as franking machines as re-crediting is necessarily a joint purchase with the use of the franking machine.

5.28. Some consumables are available from a range of independent sources. Many types of franking machine label are similar to other adhesive label products, and so there is easy substitutability in supply between them. The situation with ink is more difficult as Royal Mail lays down rules on product specification. Ink-jet cartridges generally cannot be refilled, and each cartridge is designed to fit a specific franking machine model. As the designs are proprietary, the sale of such cartridges is again made through the manufacturer, and the customer is tied to them. We therefore consider that, as a joint product with the use of franking machines, ink-jet cartridge revenues can also be considered as part of the relevant market for franking machines.

Supply-side substitution

5.29. In considering supply-side substitution, we are assessing whether there is likely to be an increase in the supply of franking machines, or other substitutable products, in response to a market price rise imposed by the hypothetical monopolist, other than by new entry.

5.30. We received no indication that any other products were sufficiently close to franking machines, in the various factors needed for their production, that their suppliers could quickly and easily move into the production of franking machines. Neopost said that the skills and equipment required to assemble other types of mailing equipment, such as folders and inserters, were similar to franking machines, and so trained staff could be redeployed between these products once retooling had occurred. However, there are crucial differences between these production technologies in some respects. Creating additional productive capacity would be more difficult. Neopost estimated that creating tools and training staff from scratch would take around three months. Moreover, the need to get regulatory approval both for manufacturers and for new models prevents suppliers of other equipment from switching to the production of franking machines (although once approved as a manufacturer, a company could readily produce existing designs under licence).

5.31. With regard to the question of whether there are different market segments depending on the capacity of the machine, Neopost told us that production techniques, skills and infrastructure for all machines were similar. Production lines would need to be retooled, but other than that Neopost argued that a production line could easily by redeployed to different models and capacities of franking machine. However, the need for additional features and customization of high-capacity machines meant their assembly was best handled by a skilled, in-house workforce, whereas simpler, lower-volume machines could be entirely outsourced. Pitney Bowes told us that while it would be easy to move production between mid-range and large machines, assembly of low-end machines used different, mass production methods. However, the smaller suppliers manufacture all sizes of machine in the same plants. Frama told us that its production facilities tended to work on a just-in-time manufacturing method, therefore, flexibility in switching between products was vital. We therefore conclude that because of potential substitutability there is no evidence that the supply of franking machines is segmented.

5.32. PFE said that production methods for large folding and inserting machines differed from those used for desktop/modular machines: the scale of operations was different with output of production mail systems of maybe under 100 machines a year, as opposed to a minimum efficient scale for desktop and modular machines in the thousands each year. The design, equipment, manufacturing and assembly techniques used in the manufacture of production mail machines were very different. PFE said it had different design teams working on production mail and on desktop/modular machines. The manufacture of desktop machines might require the creation of large numbers of tools and mouldings and the setting

[1]There are three methods of recrediting still used for some older models: taking the machine to a Post Office for recrediting, having a Royal Mail representative visit business premises to recredit the machine, and the provision by Royal Mail of 'value cards' for use with certain models. These methods will cease to be available from the end of 2004 as a result of Royal Mail's meter migration programme.

up of a production line assembly, and hence entailed a higher upfront cost but much lower unit costs than the manufacture of larger machines. PFE said it operated three dedicated production lines corresponding to each of the three segments, and it noted that Bell & Howell, a manufacturer of production mail machines, had previously tried and failed to enter the modular segment.

5.33. PFE told us that it considered the appropriate cut-off between desktop and modular machines to be around £10,000. On that basis Neopost and AMS supply machines in the middle segment, as well as the low segment. However, we note that the arguments advanced above provide a much stronger basis for distinguishing between production mail machines and others than between desktop and modular machines. We therefore consider that the market for machines under £21,000 may be distinguished from the market for larger modular and production mail machines over £21,000, as suggested by the parties. If, as PFE suggested, the appropriate boundary between production mail machines and small machines were £50,000, the use of a £21,000 cut-off instead would lead to a marginal over-statement of their market share.

5.34. Assembly methods for letter openers appear to be similar to franking machines and smaller folding and inserting machines, although they are maybe less technically sophisticated. Moving production between different categories of mailing equipment requires different tools and supplies of subcontracted components. Consequently, despite similar labour skills and production lines, production cannot easily be substituted between them.

Conclusions on the relevant product markets

5.35. Using the SSNIP test we started from a narrow definition (that of a hypothetical monopolist in the supply of postal franking machines). We consider that a 5 to 10 per cent price rise would lead to an increase in profits of such a supplier. This is because a small percentage increase in the cost of a franking machine leads to a very small or insignificant change in the relative costs of franking compared with other methods of postage payment, hence the demand response is expected to be limited, due to the other relative advantages that franking offers. No immediate supply response would be possible. We do not find there to be sufficient evidence for the existence of distinct sub-markets for different sizes of franking machine.

5.36. Scales for use with franking machines are considered to be a joint product with the machines themselves. For the majority of new sales, scales are designed to interface with the franking machine (not counting those where scales are built into the base of the machine), and must obey the manufacturer's protocols to communicate with the machine. There is some use of non-interfaceable scales (and some customers may use non-postal scales, for example kitchen scales), but evidence from the parties suggests that sales of non-interfaceable scales to franking machine users are low and declining, and will not be seen as an effective substitute by most users. We therefore concentrate just on interfaceable postal scales. The costs to purchasers of updating scales for postal rate changes are a cost of ownership, which is considered to be a joint purchase with scales.

5.37. Maintenance and repair services are also found to be a joint product with franking machines. As a minimum, inspection contracts are mandatory, and with the exception of a small number of Secap machines, inspection and maintenance services can be obtained only from the manufacturer and its distributors. This also applies to the recrediting of franking machines.

5.38. In some cases, for example ink-jet cartridges, consumables are a close joint product with franking machines, as there is no alternative source of supply other than the manufacturer. For some other products, for example labels, there are alternative sources of supply and easy entry, and we do not consider these other consumables to be part of the relevant market for franking machines.

5.39. Mail folders and inserters are not in the same market as franking machines. Because of very limited substitutability in both supply and demand, there are separate sub-markets for small-scale folding and inserting machines priced below £21,000, as sold by Neopost and AMS, and for larger machines.

5.40. Letter openers are also found to be a distinct market. We found no evidence of market segmentation in this case.

The geographic market

5.41. The geographic extent of the relevant market may be influenced by differences in national regulations and patterns of demand.

5.42. Although franking machines tend to be similar internationally, they are modified to some extent to meet the requirements of each individual postal authority (see paragraph 3.33). Each country runs its own approvals scheme for models of franking machine, and may apply different standards. Test and evaluation procedures also differ. Even though an International Postage Meter Approval Requirement standard is being introduced, assessment by each national authority of its specific security requirements will remain, covering, for example, physical seals, payment processes, software, ink type, cryptographic techniques and data capture.[1] Currencies and postal rates also differ between countries, as do control panels and languages. Consequently, suppliers have to adapt machines in order to sell them in different countries. There is no potential for customers to purchase foreign specification machines for use in the UK as these will not be approved by Royal Mail. Neopost argued that there was close supply-side substitutability, ie manufacturers could easily switch production between countries if prices shifted. However, we heard evidence that price differences had developed and persisted between countries, suggesting that manufacturers appear to choose not to behave in this manner. Therefore, the market is considered as the UK only, as are the joint products (recrediting, scales, maintenance etc).

5.43. As folding and inserting machines and letter openers are not subject to regulation, these barriers do not apply and imported machines can be used freely in the UK, as within Europe there are common standards and paper sizes. Further, it is implausible that the use of different standard paper sizes in North America, for example, is a sufficient factor to separate the European and North American markets. It was put to us that customers needed to approach national dealers for supply and maintenance, and so the market was segmented between countries. However, against this we note the very easy substitutability between countries on the supply side and that there are no regulatory hurdles to stop customers moving machines between countries. We consider the market for folding and inserting machines to be worldwide. For similar reasons, we also conclude that the market for letter openers is global.

Market shares

5.44. Having established our market definitions, we now compute the market shares of the parties in the relevant markets.

Franking machines and associated services and products

5.45. We start with the broadly defined market for franking machines, and associated products and services, which as noted above includes interfacing scales, maintenance and other after-sales services, and the supply (where applicable) of ink-jet cartridges.

Franking machines

5.46. We obtained data on annual revenues for franking machine sales, including sales through distributors, from all manufacturers operating in the UK except Frama.[2] This data, and our calculations of total market size and shares, are shown in Table 5.1 (though, as explained above, we consider the relevant economic market to be wider than this). The FEI also reported total UK sales of franking machines by number and value based on data from the manufacturers, all of which are members of the FEI. However, we found that there were some inaccuracies in the information that was submitted to the FEI, including differences in interpretation of the exact data that was required. We therefore rely on our own calculations of market size.

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[1]Postcomm suggested that with measures to standardize security criteria for franking machines and the development of common digital postage marks (see paragraph 3.98), the relevant market might eventually become international.

[2]We did not receive data from Frama, but the company told us that it estimated its market share of sales at 4.5 per cent, which we note equates to its share of the installed base of franking machines in the UK. It told us that its share was not currently changing, and this is supported by the fact that its share of the installed base has remained relatively stable in recent years (see Figure 3.3). We have therefore estimated Frama's revenues for all franking machine and related revenues at 4.5 per cent of the market total. As Frama is a relatively small player in the UK market, any inaccuracies in these estimates of its turnover will not materially affect our findings.

TABLE 5.1 **UK sales of franking machines by value, 2000 and 2001**

	2000		*2001*	
	Turnover £'000	*Market share %*	*Turnover £'000*	*Market share %*
Neopost	[✂]	15.7	[✂]	22.9
AMS		8.1		9.1
Pitney Bowes		63.9		55.0
Secap		1.0		0.9
Francotyp		6.8		7.6
Frama		4.5		4.5
Total		100.0		100.0

Source: CC based on company data.

5.47. The combined market share of Neopost and AMS in 2001 is 32 per cent by value. Based on FEI data of sales number and value, the share of the companies by number of franking machines sold is likely to be slightly higher (because of differences in the relative strength of the parties compared with Pitney Bowes and others in the low and high ends of the markets).

5.48. To assess market structure and concentration one tool that we consider is the HHI. It captures both the number of firms in an industry and the dispersion in market shares between them. It is calculated by summing the squares of the market shares of each producer in the market. The US Competition Authorities' 1992 guidelines advise that a market HHI figure of over 1,800 indicates high concentration, and that an increment of over 100 from a merger would raise competition concerns (although it cannot on its own demonstrate if any concerns are justified).

5.49. Based on the market shares for 2001 shown in Table 5.1, the pre-merger HHI is 3,811, whereas post-merger (ie combining the shares for Neopost and AMS), the HHI would be 4,227, an increase of 416.

5.50. Additionally, because of the importance of after-sales revenues to franking machine manufacturers, their shares of the installed base of franking machines are important in understanding power in these markets. These are shown in Table 3.1.

Scales

5.51. The FEI reports UK sales in 2001 of [✂] postal scales (scales designed to be used for determining weights for postal items, whether or not these are interfaced with franking machines), with a value of £[✂] million. Neopost's sales were of [✂] units, worth £[✂] million, and AMS's were [✂] units worth £[✂] million. This gave them market shares of 40.0 per cent and 8.9 per cent respectively by number of units. However, as the size and price of scales vary considerably, value is the preferred measure. Market shares by value in 2001, based on FEI data, were 28.4 per cent for Neopost and 11.0 per cent for AMS.

5.52. For reasons explained in paragraphs 5.22 and 5.23, scales are in most cases bought jointly with franking machines and are often regarded as part of the same product. In particular, we consider the relevant market (because these are joint purchases) to include interfaceable scales. Neopost told us that it sold very few non-interfaceable scales, and for AMS they accounted for just over 1 per cent of sales numbers. We collected data from all franking machine manufacturers, and from independent dealers, on the value of their UK sales of interfaceable machines, although some parties had difficulty in distinguishing interfaceable scales from other scales. The data is used in calculating the size and shares of the broadly defined market for franking machines, and related products and services (see Table 5.2). For interfaceable scales alone, the merged company would have a combined market share by value, based on 2001 figures, of over 38 per cent.

Maintenance and repair of franking machines

5.53. The maintenance and repair of franking machines is closely related to the existing stock of franking machines in use. With the exception of independents maintaining around half of the Secap machines (ie about 1 per cent of the total market), all maintenance is conducted by the manufacturers or their agents and dealers. Therefore, market shares may be expected broadly to reflect manufacturers' shares of the installed base of machines, as shown in Figure 3.3, ie the merged company would have around 39 per cent of the market, based on Royal Mail's 2000 figures. Actual market shares will differ slightly because not all these machines will be in use, and larger machines demand a higher maintenance cost. Therefore, we obtained data on the actual value of maintenance revenues in 2000 and 2001 from all manufacturers operating in the UK, covering their own sales and those by agents or dealers, and sales by the two independent maintenance companies for Secap machines. The value of first year maintenance is often included in the sales price of the franking machine, but Neopost has started to charge separately for this (see paragraph 3.47), and so its share of turnover categorized as maintenance may be higher than most competitors'. This data is used in the calculation of the size of the wider market for franking machines, and related products and services (see Table 5.2). The merged parties would together have a 39.9 per cent share of all franking machine maintenance services, by value, based on 2001 figures.

Consumables, recrediting and other ongoing costs

5.54. The supply of consumables for franking machines is in some cases highly fragmented. This particularly applies to self-adhesive labels, and to the special envelopes used for late posting (another Royal Mail requirement). For traditional impact printers, there is some availability of Royal Mail-approved inks from various suppliers. The parties were, therefore, unable to provide any estimates of total market size for consumables, or their shares, nor could we identify any suitable data sources.

5.55. Modern ink-jet machines tend to use model-specific ink-jet cartridges, which are available only from the manufacturer (see paragraph 5.28). In these cases manufacturers have 100 per cent of after-sale replacement cartridge sales for their machines.

5.56. Manufacturers also realize revenue from administering the recrediting of franking machines, and from replacement chips for postal scales when postal rates change. In both cases, these services are only available from the manufacturers, and each has full control of the after-sales market for its own machines even though, as shown in Appendix 3.1, some manufacturers do not always levy charges. We collected data from the manufacturers on revenues from the sale of ink-jet cartridges, and from recredit-ing and postal rate changes, to be included in the measure of the franking machine and related products market (see Table 5.2).

Market shares for franking machines and associated services and products

5.57. The total market size and shares for franking machines and associated services and products, based on data submitted by manufacturers, dealers and maintenance companies in the UK, are shown in Table 5.2.[1] The total relevant market was found to be worth slightly over £[✂] million a year. Of this, Pitney Bowes accounted for over half. Neopost's share in 2001 was slightly over one-quarter, while AMS's was just under 10 per cent. Note that as franking machine sales are attributed to the manufacturer, even where sales are made through a dealer, the turnover of the independent dealers reported here is much lower than their actual business revenues. Based on these 2001 figures, the merged company would have a share of over 35 per cent. The HHI value based on 2001 data increases from 3,639 pre-merger to 4,139 post-merger, an increase of 500.

[1]In the case of Frama, and some of the smaller items of data from other companies, precise figures were not available according to our definitions. In these cases, sales were estimated based on their share of the installed base of franking machines.

TABLE 5.2 **UK sales of postal franking machines and associated services and products by value,* 2000 and 2001**

	2000		2001	
	Turnover £'000	*Market share %*	*Turnover £'000*	*Market share %*
Neopost	✂	19.9	✂	25.6
AMS		9.2		9.8
Pitney Bowes		59.7		52.3
Secap		0.6		0.8
Francotyp		5.6		6.3
Frama		4.5		4.5
NFS		0.2		0.3
FMCS		0.3		0.3
Total		100.0		100.0

Source: CC based on company data.

*These products and services are franking machines, maintenance of franking machines, interfaceable scales, charges for recrediting franking machines and changes to postal scales arising from postal rate changes, and ink-jet cartridges for franking machines.

Folding and inserting machines

5.58. We have defined the relevant market for folding and inserting machines to include only smaller machines, and to exclude production-mail machines. The boundary was drawn at a unit price of £21,000. We collected data from the relevant manufacturers—Neopost, Pitney Bowes (including Secap) and PFE—and from companies that market rebadged machines in the UK (AMS and Francotyp). Table 5.3 reports UK sales and market shares. In 2001, Neopost had a market share of just under 50 per cent. AMS's share was low at below 3 per cent.

TABLE 5.3 **UK sales of small folders/inserters (priced at under £21,000), 2000 and 2001**

	2000		2001	
	Turnover £'000	*Market share %*	*Turnover £'000*	*Market share %*
Neopost*	✂	43.8	✂	47.9
AMS		2.2		2.8
Pitney Bowes		31.8		26.3
Secap		5.0		5.0
Francotyp		1.0		2.5
PFE*		16.2		15.5
Total		100.0		100.0

Source: CC based on company data.

*Excluding OEM sales to other companies for sale under their own names.

5.59. For reasons explained in paragraph 5.43, we have concluded that the folding and inserting machine market is international. We therefore contacted the manufacturers of smaller folding and inserting machines in order to determine international market shares. These results are shown in Table 5.4. It should be noted that there may also be some sales of rebadged folding and inserting machines obtained under OEM agreements in other countries. Also, we were unable to obtain details of Francotyp's and Secap's sales in countries other than the UK. Therefore, the results may slightly over-state manufacturer market shares with regard to final sales. It can be seen that Neopost is the largest manufacturer of small folding and inserting machines worldwide, and that its share of the world market is higher than its share of UK sales, at over 55 per cent. However, the increment arising from the merger is small as AMS's world share is only 2 per cent. Pitney Bowes is the other large-scale competitor, with PFE being considerably smaller.

TABLE 5.4 **World sales of small folders/inserters (priced at under £21,000), 2000 and 2001**

	2000		*2001*	
	Turnover £'000	*Market share %*	*Turnover £'000*	*Market share %*
Neopost*	[redacted]	52.4	[redacted]	55.8
AMS		2.8		2.1
Pitney Bowes		37.6		35.2
Secap†		0.4		0.4
Francotyp†		0.1		0.2
PFE*		6.8		6.3
Total		100.0		100.0

Source: CC based on company data.

*Excluding OEM sales to other companies for sale under their own names.

†These are UK sales only, and so will substantially under-report the market shares of these companies, while shares for the other companies will be over reported.

Letter openers

5.60. In the case of letter openers, there are no accurate figures available for total UK sales, as although the FEI collects data from its members, some significant suppliers are not members of the FEI. Neopost told us that it believed that the combined share of Neopost and AMS for letter openers was 30 per cent or less in the UK, with AMS's share below 5 per cent). We have no reason to believe that these estimates are unreasonable. As noted in paragraph 5.43, the market for letter openers is international, but we were unable to obtain any reliable estimates of the world market size for letter openers.

Competitive constraints in the franking machine market

5.61. In general, when a firm accounts for a low share of the market it is unlikely that it can exert market power. However, a higher market share does not necessarily mean that a firm can exert market power, due to the possibility of significant competitive constraints. As a consequence, ascertaining what the market is and computing market shares must be supplemented by the assessment of the competitive constraints that operate both inside and outside that market.

5.62. We now turn to a consideration of the competitive constraints that could affect market power in this case, starting with the market for franking machines, and related products and services. We assess these under four headings: new entry; rivalry within the market (factors relevant to maintenance, and to distribution, are considered here); buyer power and consumer behaviour; and availability of substitutes for franking.

New entry

5.63. We first consider new entry into the franking machine market. This could either be through entry by suppliers not currently in the market anywhere, or the expansion of foreign producers into the UK. There has been no new entry into the UK postal franking machine market since the mid-1980s, when Secap entered, and it appears that entry to the industry must be difficult. This in turn suggests that new entry is unlikely to form a strong competitive constraint on existing suppliers. Here we consider barriers to entry into the production of franking machines.

5.64. Possible barriers to entry are costs of product development, access to assembly and distribution facilities, approval by postal authorities, brand recognition and technology barriers. These factors must also be seen in the context of this being a fairly small and mature market, with uncertain potential growth rates.

5.65. Developing a full range of sophisticated franking machines would involve substantial time and effort, estimated by Neopost to cost tens of millions of Euros. Therefore, it suggested that any new

entrant would be more likely to target a particular niche, such as low-capacity SoHo machines, as had been done by Melex and Telefrank in Germany. However, the time and cost required would still be large. One alternative would be to sell branded franking machines bought from existing manufacturers under an OEM agreement to establish a presence in the market, assuming such an agreement could be reached.

5.66. Economies of scale in production, purchasing, marketing, distribution, management and R&D are all discussed in paragraph 3.68. AMS's estimates of the effect on unit production costs of different output levels demonstrate that a small entrant would face much higher unit costs than an established, large-scale producer, even though component manufacture (and sometimes final assembly) is generally sub-contracted.

5.67. The costs of establishing a dealer network would not be larger than for any other types of office equipment, and maintenance could be offered via dealers or the new independent maintenance companies. However, Neopost said that brand recognition would be a significant problem. It said that Pitney Bowes, particularly, was very well known and might be considered synonymous with franking machines, and its reputation helped it achieve sales.

5.68. As discussed in paragraphs 3.30 to 3.33, all national posts impose requirements on franking machine manufacturers to meet specific technical standards and to submit machines for testing; to be approved themselves (for example, to meet security standards in the supply and servicing of meters and recrediting); and to indemnify the postal service against loss. These requirements, and the fact that the details differ in each national market, represent a barrier to new entry and to expansion into new markets. Francotyp told us that, although there were plans to standardize the approvals process for new machines in different countries, this would require the manufacture to pay for testing at an independent testing institution, and that Royal Mail was the only national authority planning to move to the international standard in the near future. Consequently, it said that the cost of getting a new machine approved for the UK market would increase very markedly, and this would prevent smaller manufacturers from introducing new models to the UK market, at least in the short term until other countries introduced the same standard. We understand that Consignia has agreed to postpone adoption of this standard until January 2003.

Intellectual property

5.69. The parties told us that a great deal of technology was subject to patent protection, particularly by Pitney Bowes, which enforced its IPRs rigorously. Consequently, technology-licensing agreements will be needed, or ways of working around the technology barriers will have to be found to develop new products. The parties told us that Pitney Bowes' patent portfolio caused major difficulties in the development of new products since competitors either had to avoid patent infringement or at least limit the cost of licensing where licences were required. Francotyp also told us that the whole industry had to work around Pitney Bowes' patent portfolio when developing new products, and it outlined an example where it had to develop a remote resetting system. Frama suggested that technology was less of a barrier to entry than the need to meet different postal specifications and the limited attractiveness of what was a small marketplace. It said that the technology was not ground-breaking and tended to be a mix of technologies that were readily available. However, it said that it was a costly process to develop new products to avoid existing patents. For example, Frama suggested that, were it to enter the North American market, it would need to review more than 200 patents in conjunction with its lawyers. It said that Pitney Bowes' patent portfolio was a particular concern. Frama's strategy had been to develop new products, such as digital ink-jet machines, using its own technologies, and it had not needed to pay any licence fees in the UK.

5.70. Pitney Bowes told us that it had entered into a number of cross-licensing agreements with other suppliers, including Neopost and AMS, on a worldwide basis. These agreements allowed its competitors to design products without the risk of infringing licensed patents. Pitney Bowes said that a common feature of the agreements was the entitlement of each party to obtain licences under additional patents of the other party (including both pre-existing and future patents) at predetermined prices. These options, which automatically converted into licences upon their exercise, enabled the development and sale of future products that otherwise would infringe new or unanticipated patents. Pitney Bowes said that there was, therefore, no scope for it to delay the granting of additional licences, whether by withholding agreement

or by holding out for higher prices. Pitney Bowes told us that the other parties had not yet exercised any options under their respective agreements with it, yet its rivals had succeeded in launching new products that included advanced features such as digital ink-jet printing, remote electronic fund crediting and throughput speeds of over 13,000 envelopes per hour. Pitney Bowes believed this to be evidence that there was no technological barrier to entry as a result of its patent portfolio.

5.71. Neopost told us that it had cross-licensing agreements with Pitney Bowes that provided for the licensing of certain patents on a non-exclusive basis dating back to the 1970s, 1980s and early 1990s. Neopost paid $[✂] million in consideration of the rights in respect of Pitney Bowes patents listed in the agreement signed in 1985. In addition, Neopost told us that the agreements granted options on a non-exclusive basis to acquire the licence to a [✂] of patents at a [✂]. Each right could relate to any patent filed by Pitney Bowes, including technologies arising since the early 1990s, provided the patent filing application was made prior to 31 December 2002. However, Neopost said that these rights were restricted in so far as they related to equipment functionality which might not extend to new technologies. The same agreement conferred on Pitney Bowes a larger number of options to license Neopost patents. Claims of patent infringement over and above the options available were subject to separate negotiation. Neopost told us that Pitney Bowes had publicly claimed that new specifications in the USA and Europe violated a number of its patents, and that this number exceeded the number of options available to Neopost under any agreement. Neopost said the pricing of any additional licences was likely to be subject to negotiation with Pitney Bowes close to the termination of the agreement once all claims had been lodged.

5.72. AMS entered a cross-licensing agreement with Pitney Bowes in October 1994. The agreement survives until the expiry of the last of the Pitney Bowes patents listed in the agreement. In addition to granting non-exclusive worldwide licences in respect of licensed products, the agreement grants AMS an option to designate [✂] further Pitney Bowes patents for worldwide and non-exclusive licensing, each for [✂], and any additional Pitney Bowes patents for worldwide and non-exclusive licensing for up to a maximum royalty rate of [✂] per cent of sales of licensed products. AMS paid Pitney Bowes a total of $[✂] million for the use of the licences, rights and immunities granted under the agreement. AMS granted similar rights to Pitney Bowes and was entitled to similar royalty rates in respect of AMS's patents. AMS told us that the agreement related only to patents for use in mechanical and electronic postal franking machines, and not to the new generation of digital franking machines being developed by AMS. In addition, on completion of the acquisition of AMS by a third party, AMS said that the reciprocal options of AMS and Pitney Bowes to elect to take licences of the other's patents would fall away. It added that neither AMS nor Pitney Bowes had exercised any of its options to take a licence over the other's patents and no royalties had been paid.

5.73. Pitney Bowes said that the pricing of licences must reflect the respective value of patents licensed by each party from the other. It said that a company's negotiating freedom was circumscribed by the value of its patents and by the extent to which it needed a licence under its competitors' patents to develop and market its products.

5.74. Neopost said that the electronic generation meter included technology that the other players needed to license from Pitney Bowes. It argued that the current patent infringement claims by Pitney Bowes regarding the USPS specifications could place Pitney Bowes in an even stronger position for the new generation machines. In addition, Pitney Bowes said in its press release of 14 June 2001, announcing its forthcoming new range of Internet-enabled products, that its settlement agreement with Hewlett Packard would provide expanded access to technology and enhance its ability to move to networked products.

5.75. The parties told us that the technological and skill-set requirements associated with developing franking machines were becoming more difficult to achieve. Requirements included encryption technology, secure printing, diversity of postal standards, and ink-jet printing technologies. For the next generation of machines, Neopost stressed the importance of specifications laid down by the national postal authorities. In this respect, the USPS was the technology leader, and the USA would continue to set the pace for Europe, including the UK. Neopost said that by working closely with the USPS, Pitney Bowes was involved in developing standards, then claiming related IPR and enforcing those rights vigorously. Neopost said that there were already draft specifications for digital postmarks in all major posts in Europe, including the UK, which would pose renewed risks of infringing Pitney Bowes patents.

Two-dimensional indicia

5.76. As discussed in paragraph 3.97, Consignia told us that two-dimensional franking might be introduced within the next five years. Pitney Bowes has confirmed that it owns patents that read on the security mechanism and the information contents of the two-dimensional bar-code system as adopted by the USPS. It has confirmed that it is willing to license this technology.

5.77. Consignia told us that it would be difficult for third parties to produce two-dimensional IBI without infringing Pitney Bowes' intellectual property. If the decision was taken to migrate to two-dimensional bar-code machines, Consignia would be reluctant to enforce adoption of the next generation given that consumers had only recently been required to change or upgrade their machines to comply with the 1997 standards. Delays in imposing the system would allow other suppliers more time to develop new products for the UK market. The parties argued that by combining forces and patent portfolios, the merged company would be better placed to provide a serious competitor to Pitney Bowes (see the pro-competitive case below).

PC franking

5.78. There have been examples of new entrants using PC franking technologies in the USA and elsewhere (see paragraphs 3.104 and 3.105). If PC franking were introduced in the UK there would be opportunities for new entrants. This would require a new entrant to have access to adequate funding to develop or acquire Internet software technology that met specifications, and the ability effectively to market and sell its product within a viable model.

5.79. Consignia told us it had no immediate plans to introduce PC franking in the UK. Any such plans were dependent on finding a commercial model that realized a return within five years. A viable model had not yet been identified, but Consignia was carrying out work to understand the infrastructure requirements in an effort to reduce the overall cost base. Consignia said that, as security was held within the frank itself, encryption and decryption technology was critical. It told us that the USPS used hand-held decryption devices for random sampling. Consignia would look to introduce decryption within its mail reading system, and this would therefore represent a major infrastructure cost.

5.80. PC franking, where already introduced in other countries, has been marketed towards the low-volume SoHo sector. Neopost told us that this technology could be rolled out to the medium- and high-volume categories: the software and hardware that created the intelligent franking machine could migrate to the PC. In these circumstances the franking machine would become an application-specific printer. However, Neopost told us that it had cut back on its R&D programme in this area because it now believed that the commercialization of these developments would be slower than previously expected. Consignia said it believed the introduction of PC franking would have little impact on the use of franking machines as users of PC franking were more likely to be infrequent purchasers of small quantities of postage.

5.81. Consignia said its initial intention, on contemplation of a PC franking solution, was to develop an encryption standard that was as patent free as possible. In doing so, Consignia's aim would be to minimize the possibility of third-party patent infringement; and, where a company wishing to supply encryption software for PC franking purposes had no option but to purchase a patent licence from the patent owner, to minimize the fees involved.

Summary

5.82. Technological barriers to entry appear to be strong in the franking machine market. A new entrant would need to negotiate licence fees with incumbent suppliers, perhaps without the bargaining power of its own patents. Alternatively, it could seek to develop its own products that would require a wide range of skill sets and technologies. Neopost argued there were only low technological barriers to entry into the UK market from abroad; however, apart from two small, single-model manufacturers in Germany (see paragraph 5.65), there are no such potential entrants abroad.

5.83. It appears that threats of new entry into the franking machine market using current technology are a limited competitive constraint. Entry to the SoHo sector would be more likely, enabled by the use of alternative franking technology, if Consignia approved the use of PC franking.

5.84. For services such as recrediting franking machines and postal scale rate change chips, and in the case of ink-jet cartridges, we have seen that manufacturers can prevent rivals having access to the after-sales market for their machines. Maintenance is addressed in paragraphs 5.110 to 5.116.

Rivalry within the market

5.85. In practice, the pricing power of the merged company will be affected by the actions of other mailroom equipment manufacturers currently in the market. The parties argued that Pitney Bowes, as market leader, provided a strong, technology-driven competitor benefiting from economies of scale. They also said that Frama and Francotyp provided alternative competition in the franking machine market.

5.86. We now summarize the nature of competition in the franking machine industry (competition to develop new technology is largely covered in the section 'The pro-competitive case' (see paragraphs 5.100 to 5.109)). In the 1986 MMC report (see Appendix 3.3), Pitney Bowes was considered to be an industry price leader. Neopost's and AMS's current pricing strategies place emphasis on monitoring Pitney Bowes' pricing, and both consider it in setting list prices, whereas Neopost does not monitor AMS's prices in the same way. However, they argued that this was consistent with active competition in that there was widespread discounting of list prices in order to achieve sales, depending on the negotiating strength and competitor offers open to customers. They also stressed that competition extended into several dimensions besides the price of machines: product specifications, supplementary features (for example, auto-feeders), the price of maintenance contracts, the quality of service, and the pricing of the supply of consumables. AMS and Francotyp both told us that they stressed whole-life cost (including maintenance and consumables) rather than just the price of the machine, as they would find it difficult to match particularly Pitney Bowes, which they assumed would benefit from lower unit production and sales costs. We have seen that discounting of list prices is common (see Table 3.5). Francotyp told us that both Pitney Bowes and Neopost made use of promotions, as well as discounting, as a short-term tool of price competition, targeted at particular product areas. The manufacturers confirmed that where dealers sold machines, they had freedom to set their own prices below the list price, although the geographic areas they could cover were usually tightly controlled.

5.87. As a further area of competition, manufacturers differ in the extent to which they promote particular sales methods: outright sales, rental or leasing (and whether this is through an in-house leasing company or not). We note that Neopost has made considerable and increasing use of its all-in-one deal, where lease customers are guaranteed no maintenance price rises if leasing and maintenance are arranged and paid for together. This tying together of leasing and maintenance might reduce competition in dimensions of the franking machine package. Neopost disagreed with this view, arguing that the service and leasing elements were listed separately on the invoice, and that a guaranteed price package for maintenance was also available to customers purchasing outright, albeit at a 5 per cent surcharge. Several parties told us that AMS had a reputation for adopting ethical, low-pressure sales techniques, which allowed it to pick up custom from dissatisfied customers of the two larger manufacturers.

5.88. The parties argued that Pitney Bowes enjoyed power in the market due to its advantages in brand recognition and loyalty. Pitney Bowes has the largest installed base in the UK, but unlike the USA, where it has an 80 per cent share, other manufacturers are well established in the UK. It told us that it was very rare for customers not to seek at least two quotes for supply, and customer loyalty was limited when dealing with professional buyers. One factor important in raising brand awareness is the size, and activity, of a manufacturer's sales force. While Pitney Bowes' sales force is much larger than those of Frama, Francotyp and AMS, it is not markedly greater than that of Neopost. Neopost told us that it had seen a [✂] per cent increase in sales since it had increased its sales force by over [✂] per cent over the last two years. Following the merger [*Details omitted. See note on page iv.*]. None of the independent market reviews we saw placed any emphasis on brand awareness for Pitney Bowes.

5.89. As shown in Figure 3.3, AMS increased its share of the installed base of franking machines in the UK from under 5 per cent in 1982 to around 17 per cent in 1998, although its share has begun to fall back in the last three years. In this time Neopost's share has fallen from over 40 per cent to under 25 per cent (but its share rose in 2000/01 for the first time since 1982), and Pitney Bowes' from around 55 per cent to under 50 per cent (the fall occurred from the mid-1980s to the early 1990s but it share has been broadly stable since). In response to our suggestion that AMS had been a significant competitive force in

the market over this period, providing a challenge to the power of the two market leaders, Neopost responded that much of the initial increase in AMS's market share had come from supplying the public sector with good-quality, innovative products, but that AMS's product range was now somewhat dated, and that it was losing share of the installed base. It also questioned the extent to which there was now head-to-head competition between AMS and Neopost: rather it believed that, in the main, competition was between Pitney Bowes on the one hand, and all remaining suppliers on the other. Neopost commissioned Frontier Economics to undertake a study of recent sales where Neopost's sales staff knew which other manufacturers (if any) were also competing for the contract (this study is described and critically assessed at Appendix 5.2). Examining 165 recent bids, Frontier Economics found that in [✂] per cent of cases Neopost was the only bidder. In the other cases Neopost was generally competing against one or two rival bidders, including Pitney Bowes in the great majority of cases ([✂] per cent), but that in [✂] instances was Neopost competing just against AMS. The study also found that the discount rate offered on list prices did not significantly increase when there was more than one other competitor bidding for the contract. Thus, Neopost argued that the study showed that head-to-head competition between Neopost and AMS was very rarely a factor in determining competition outcomes.

5.90. The parties further submitted that the two smaller manufacturers present in the UK, Francotyp and Frama, provided a viable competitive option. They were both able to offer a range of machines. Although their sales forces or dealer networks were comparatively small, they provided national coverage. However, if Neopost and AMS believe they need to merge in order to achieve enough scale to challenge Pitney Bowes, the question arises as to how these smaller companies can provide an effective alternative. While Francotyp and Frama are small in the UK, they have a major presence in some other national markets. Francotyp has a world share of the installed base of around 10 per cent, and in Germany (the second largest market in the world after the USA) over 52 per cent, while Frama has around 3 per cent of the installed base worldwide, but over 30 per cent in Switzerland (and is the market leader in the Netherlands). Some of their products are technologically advanced: Francotyp introduced the first digital ink-jet franking machines, and Frama introduced the first touch-screen machines. Francotyp and Frama machines account for three of the five 'best buys' recommended by *What to Buy for Business* magazine 2001: Pitney Bowes machines take the honours for SoHo machines and very high-capacity machines, Frama for mid range, and Francotyp for low to mid and mid to high capacity. Frama purchases products from Neopost on an OEM basis to fill in the gaps in its product range, and Francotyp markets one such model in the USA.

5.91. Francotyp told us that the impact of technological developments on its business was its biggest concern. It said that it needed a larger critical mass to support the R&D to meet the new requirements. Francotyp said that it was committed to R&D investment but the new technologies meant that its R&D spend had to be more targeted and specific. It said that for these reasons it was no longer feasible to compete in all countries across all product segments. Frama told us that product development costs were high, whether through legal costs incurred in ensuring third party patents were not breached or through incurring licensing costs.

5.92. There is evidence of competition between suppliers, and this is across a variety of attributes, such as technical specification and service levels as well as price. Frama and Francotyp appear to be effective competitors across much of the range of franking machines. While this may be expected to continue in the short term, in the longer term they may face difficulties in meeting the required R&D expenditure to develop new ranges of machines, and may rely on having to license technology from larger competitors. Competition in distribution and maintenance of franking machines is discussed in paragraphs 5.110 to 5.116.

Tacit coordination

5.93. One factor of particular concern would be the possibilities of collusion, tacit coordination or price leadership in the industry, and whether the merger might have any effect on the potential for this. The 1986 MMC report (see Appendix 3.3) found that Pitney Bowes held a dominant position in the market for the supply of franking machines. It said 'The dominant position of Pitney Bowes PLC has enabled that company to assume a degree of price leadership which neither Roneo Alcatel (now Neopost) in recent years nor the newer entrants have been in a position to challenge' (paragraph 9.44). The MMC concluded that this had resulted in higher prices than would have prevailed under more effective conditions of competition, and described the market as 'one of not very strenuous price competition in which Roneo Alcatel (Neopost) and the smaller suppliers compete for market shares within a degree of shelter

provided by Pitney Bowes' dominant position' (paragraph 9.36). It was also noted that manufacturers had established agreements to exchange confidential internal price lists (but not details of discounting), although this practice had ceased at about the time the MMC's inquiry began (see paragraph 2.34 of the 1986 report).

5.94. The parties pointed to a number of changes to the franking machine market since 1986, which they said indicated that the market was now much more competitive. These included: the growth of market share of the smaller manufacturers; the fact that franking machines had become more complex products with competition on technology, facilities and service as well as price; a reduction in pricing information available to competitors and increased use of discounting; and the fact that average prices had fallen through the introduction of cheaper, more advanced machines. There is also the increased availability of alternative communications methods such as emails and fax. We noted that a US 'consent decree' dating from 1959 applied to Pitney Bowes, by which it was required to license its patented technology to competitors free of royalties, due to concerns about its dominant technological position. This was lifted in the 1960s, but we were told that since then Pitney Bowes' policy had been to license its technology in return for royalties.

5.95. Given the level of concentration in the US market (and the awareness of Pitney Bowes' strength), we consider that the likelihood of any overt collusion among industry participants there is relatively low (and is unlikely to emerge elsewhere). In the UK, however, the market shares for Pitney Bowes and the merged Neopost/AMS would be similar, and each would be pursuing a technology-driven, broad-range product strategy with similar sales methods. The question therefore arises as to whether they might show a commonality of interests where a tacit agreement could develop in the UK. They might both consider that they could benefit from a relaxation of competition, at least in some parts of the market or in some competitive dimensions. One hypothesis would be that there might be a shared incentive not to compete on price, but to confine competition to technology features (which would have the benefit of hastening product replacement cycles). Pitney Bowes' acquisition of Secap has reduced the strength of competition from smaller rivals.

5.96. Against this, Neopost pointed to a number of factors that it said made tacit collusion highly unlikely. For such an arrangement to work, a party would need to be able to observe that others were behaving similarly, there must be shared interests, and a trust that others would abide by the arrangement. It argued that, even after the merger, there would remain substantial asymmetries between the companies. In terms of its production base, Pitney Bowes would remain much larger than the merged Neopost/AMS worldwide. Therefore, because of economies of scale, Pitney Bowes would still enjoy lower production costs and proportionately lower R&D costs. This might mean that it could benefit from undercutting a collusive price. Frama and Francotyp, whose cost base and sales tactics were not closely aligned with the two major producers, would also remain as competitors in most sectors of the market.

5.97. Franking machines are sold on a number of features: price, capacity, supplementary features, ease of use, running costs and service quality, product advice from sales staff to best meet the customer's need, etc. Sales can also be made outright, through in-house or external leasing, or through rental contracts. As competition could be in any or all of these dimensions, the parties argued that any tacit agreement would be difficult to set or monitor. Any tacit agreement on price competition, for example, might simply lead to intensified competition in the other dimensions. They also argued that there was little price transparency. Although list prices were often known, most sales were at discounted prices, and sales staff would rarely receive reliable feedback from customers of their rivals' quotes, as customers had an incentive to mislead on the exact terms they had been offered. Maintaining an agreement in the face of the rapid introduction of innovative models would also be difficult.

5.98. Neopost said that any market-sharing agreement would be difficult to agree or enforce. There were many, small, heterogeneous customers. Finally, it argued that the market faced strong competitive pressures from alternative mailing systems. Therefore overall it argued that, unlike some commodity products where tacit or overt collusion had been observed, the features of the market made such an agreement infeasible.

5.99. We asked whether tacit collusion might emerge in the maintenance function, as the product was reasonably homogeneous, there appeared to be relatively little discounting of service prices other than in the first year, and in the absence of independent maintenance companies, customers were tied to the manufacturers. Neopost responded that, even if there were higher returns available from the after-sales market, these would merely result in further price competition and discounting of initial sales as manufacturers competed vigorously for these income streams.

The pro-competitive case

5.100. The parties argued to us that the effects of the merger would be pro-competitive, in that it would create a company better placed to challenge Pitney Bowes (see Chapter 6 for Neopost's and AMS's arguments). The benefits would come from larger size leading to economies of scale in R&D, production, purchasing, marketing and distribution. Part of this would arise from the Ascom brand being phased out and all products marketed under the Neopost brand with one sales force. The lower cost base would allow strong price competition. There would also be greater opportunity to influence and be involved in the development of postal standards, and marketing under one brand would lead to greater brand recognition.

5.101. All these aspects would allow the merged company to challenge the dominance of Pitney Bowes and so, the parties said, would lead to an increase in competition and customer choice. It was also put to us that Frama and Francotyp would be able to benefit and strengthen their position because of the merger. It would mean they were invited to bid for contracts (as a third alternative supplier) more frequently. They would also have the opportunity to adopt alternative sales techniques to be attractive to dissatisfied customers of the largest suppliers (as mentioned in paragraph 5.87, we heard that AMS had partly served this role to date).

5.102. We now pay particular attention to the technology aspects of the merger's effects. The difference in size between each of the parties and Pitney Bowes has been present for many years, including the periods when electronic machines replaced mechanical ones, and when remote resetting, digital ink-jet machines and low-cost SoHo machines were introduced. We note that Neopost has managed to keep up with these technologies, [*Details omitted. See note on page iv.*]. On the other hand, AMS has struggled to develop the latest generation of machines. The parties argued that the pace of technological change had increased greatly in this industry since the mid-1980s.

5.103. Neopost said that the franking machine industry was different from many other industries where a change in technology often led to a change in competitive positions and very often a change in market leadership. Pitney Bowes had remained market leader throughout the change from mechanical to electronic meters and was already releasing the next generation of machines. Neopost said that its acquisition strategy was determined by the need for critical mass to challenge Pitney Bowes more effectively. A critical aspect of the acquisition strategy was to consolidate the R&D effort, removing duplicative efforts and refocusing. Neopost argued that an effective R&D strategy was a prerequisite to being successful in the franking machine market.

5.104. Neopost told us that technological advances had enabled the development of its low-volume IJ25 model. It had experienced a migration of customers from middle-volume machines to the IJ25 since product launch. [*Details omitted. See note on page iv.*]

5.105. Neopost argued that the development of new product technologies would benefit both the customer, (for example, by providing track and trace functionality) and Royal Mail or other carriers, who could collect mail usage statistics for mutual benefit. Neopost believed that customers would begin to decide to change machine in order to obtain the benefits of enhanced functionality rather than being required to change due to meter migration requirements; this in itself could bring a reduction in product life cycles. It said that postal liberalization would mean greater choice and that online capabilities would enable the customer to choose between competing postal tariffs. [*Details omitted. See note on page iv.*] It had reduced its investment in its online business arm, and merged that business with its traditional activities in order to reduce costs following a slower than expected take-off; but it believed the merger would enable it to compete better with Pitney Bowes' innovations and to provide the UK consumer with more choice.

5.106. Neopost will be in a position to offer a wider product range post-merger by incorporating the most attractive AMS products, for example the high-end AMS machine, the Automail. AMS told us that some of the technologies it brought were complementary to Neopost's. Moreover, AMS had 125 families of patents. The parties argued that the combination would allow greater emphasis on intellectual property creation to enable more patents to be registered, while also putting the merged group in a stronger position to negotiate with Pitney Bowes on the terms of future licences.

5.107. The parties said that AMS's current range would be obsolete from 2004. Ascom told us that it took the decision to divest AMS in part due to the need for high investment in R&D to compete successfully in the market. AMS told us that its R&D efforts had not been successful in developing digital products both in terms of cost, speed and quality of product performance. It said that it had been left behind as a technology follower developing only 'me too' products. The R&D collaboration with Secap had been intended to pool resources and optimize their development. The collaboration had led to the development of two digital ink-jet machines. AMS said that the Ascom-branded versions of these machines were not fully operational for a number of countries, including France and the UK. It said that the joint R&D agreement with Secap had not met its expectations in terms of speed of development, cost, or quality of product. The R&D project has come to an end, and Secap has been acquired by Pitney Bowes. Pitney Bowes said that it believed AMS had good products and relatively advanced technologies. We note that AMS has made no investment in R&D on online postage systems.

5.108. Pitney Bowes told us that Neopost was already a vigorous competitor, with a strong technological base. The parties argued, however, that the next generation of products represented more of a hurdle to Pitney Bowes' competitors due to the likelihood of adoption of two-dimensional indicia by European posts, including Consignia, with an attendant risk of Pitney Bowes' IPR being infringed. Furthermore, Pitney Bowes has already launched Internet-enabled machines and expects to launch Internet and IBI-enabled machines across all categories during 2002 and 2003. These developments illustrate the need for franking machines to cope with multi-carrier functionality following postal liberalization. Pitney Bowes told us that the technological advances necessary to migrate to Internet-enabled machines did not represent a difficult transition, and it said that most of its competitors already had digital technology. The challenges facing the parties and other competitors in avoiding patent infringement claims when developing new products is discussed in more detail in paragraphs 5.69 to 5.75.

5.109. The industry continues to experience rapid technological growth and expectations of a shorter product life cycle. It remains to be seen whether customers will demand the additional features now offered, such as Internet connectivity. However, there is some evidence to support the argument that the merger will enable the parties to compete more effectively with the market leader, Pitney Bowes, for example through the removal of duplicative R&D efforts and greater R&D focus. This could prove more important if European posts adopt IBI standards similar to those specified by the USPS over which Pitney Bowes has important patent rights. The strength of Pitney Bowes is further reflected in the cross-licensing agreements discussed in paragraphs 5.70 to 5.72.

Maintenance

5.110. We now specifically consider the competitive constraints on maintenance, as a factor in competition in the broadly defined market for franking machines, and related products and services. This activity differs from the sale of franking machines themselves in that customers are, in the great majority of cases, tied to the original manufacturer or its agents once an outright sale or lease has been concluded. This is because Royal Mail requires that all franking machines be inspected at least annually, in order to check for signs of fraud or tampering with the machine. An approved engineer must make these checks, although some modern machines allow this to be done remotely. The manufacturers and their distributors or agents have in the past been the only parties licensed to service their own machines. The 1986 MMC report (see Appendix 3.3) recommended that the Post Office should allow approved persons other than manufacturers to maintain and service machines, so that they could compete with manufacturers for servicing and maintenance work. The report noted that independents would need access to spare parts and necessary technical training from the manufacturers, and said the DGFT should consider taking action in the event of any persistent and unreasonable refusal to supply. Royal Mail has so far authorized two independent maintenance companies, NFS (authorized in March 2001) and FMCS (authorized in September 2001), to inspect, repair and maintain some Secap machines.[1] In addition, FMCS told us that it had been approved by Royal Mail to service any machine. Both companies told us that the authorization process had taken around seven years in total. Consignia told us that the actual authorization process had taken over a year in the case of the first applicant, NFS, which it attributed to the need to develop a new authorization system and the time taken to agree terms with the applicant (for example, NFS had found that it was unable to get indemnity bonds underwritten, and Royal Mail eventually

[1]These two companies are established dealers for Secap machines (previously marketed under the distributor's name, ASI). They acted as servicing agents for ASI under ASI's servicing approval.

accepted that financially secure companies could support the bond themselves rather than seeking backing from an insurance company). Royal Mail told us that the authorization process would be much quicker now the criteria and process were established.

5.111. Such independent companies need the approval of the manufacturers, and their cooperation in providing training, technical information, spares, etc, and Royal Mail requires evidence that such practical support will be provided by manufacturers of the models which the company wishes to maintain.[1] So far neither of the two independents has received agreement from any manufacturer, apart from Secap, to act as an independent service provider. No independent companies (other than appointed dealers) have to date maintained Neopost or AMS machines. The parties stressed that until recently they had never been approached concerning independent maintenance: Neopost said that it was currently considering the first such approach, and AMS also said that it had been approached prior to the announcement of this planned merger. Where sales are made through dealers, for example in Northern Ireland, the dealers are also approved to act as servicing agents.

5.112. As a manufacturer can, if it so chooses, effectively deny independent maintenance companies access to training and spare parts, and prevent them gaining Royal Mail approval, there are potentially high barriers to any new entry.[2] In addition, a new entrant would have to train engineers in the maintenance of a variety of machines, carry an inventory of spare parts, and meet Royal Mail's own requirements (such as for the physical security of its premises and vehicles). Neopost told us that the move from mechanical to digital technology had had a major impact on the skills required of the servicing engineers: substantial investment had been made to ensure the engineers kept pace with the changing technologies.

5.113. Neopost told us that existing manufacturers had shown no interest in seeking to provide maintenance for their competitors' machines, even though the undertakings which Pitney Bowes had given following the 1986 report could oblige it to cooperate in this. It referred to the high entry costs identified, and also noted that such an engineer would not be credible to customers as there would be a conflict of interest between maintaining the Pitney Bowes machine and seeking to sell the competitor's machine as a replacement. It was suggested by some third parties that there was little future in independent servicing because of the development of remote servicing and diagnostics, and because for low-end machines repair in the field was not financially worthwhile. However, remote servicing is by no means available on every machine, nor will it meet every need, and there is a substantial installed base to be serviced.

5.114. Any independent servicing company would also be disadvantaged in not having access to customer lists that would allow it to approach specific companies that might be interested in maintenance services. In the late 1990s, Royal Mail undertook an internal analysis of the economics of entering the maintenance market as an independent, assuming no previous involvement in the field. Taking account of all the necessary infrastructure costs against likely revenues, it estimated that an 800-strong customer base would be required to justify the employment of one engineer full-time.[3] It said that this explained why there had been very limited interest in the maintenance market from possible entrants. Francotyp noted that there were considerable economies of size in maintenance, in that it was much easier to provide rapid cover where there was a tight density (or critical mass) of customers. We note that the two independent maintenance companies are also dealers for Secap, and for some other machines. This gives them an introduction to a customer list, and it might be that a company would need to be both a dealer and a maintenance company to be viable (in the manner of existing Francotyp and Frama dealers, although these dealers are then tied or franchised rather than independent). Where manufacturers jointly offer leasing and maintenance packages, this might reduce access for independent maintenance companies while the package is in place.

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[1]Royal Mail authorization requires a company to submit a business case and demonstrate its ability to meet certain requirements and procedures, such as the maintenance of records, reporting and security of facilities. The manufacturer's agreement will address issues of supply and use of parts and equipment, training, responsibilities and payment terms. Following the 1986 MMC report there are undertakings applicable to Pitney Bowes which might require it to supply independent maintenance companies.

[2]Consignia pointed out that the manufacturer would have legitimate concerns about preserving IPRs, security and liability (for example, if fraud arose, how would liability to compensate Royal Mail be attributed between the manufacturer and the maintenance company?).

[3]However, NFS told us that it employed a workforce of 18 to service 1,500 customers, although it also acts as a dealer.

5.115. Pitney Bowes told us that it would consider whether to extend the servicing agreements for Secap machines with the independent suppliers when such proposals were made, although we note that its undertakings to the OFT following the 1986 report may oblige it to do so.

5.116. We saw no evidence of active price competition between manufacturers based on maintenance costs, although maintenance contracts might be provided free or, sometimes, at discounted prices for the first year. AMS told us that it did not normally discount its maintenance prices. Frama also told us that its direct sales force was unlikely to offer any discounts on the price of maintenance agreements. Neopost said that such discounts were given in just [✂] per cent of cases. Francotyp said that all competitors tended to follow Pitney Bowes' prices for comprehensive maintenance contracts. Neopost argued that discounting was limited because all competition was concentrated on the initial machine sale, and so any profits that might be realized on maintenance were reflected in discounting of machine list prices. The two independent maintenance companies told us that they were able to undercut substantially the prices for annual servicing offered by the major manufacturers (although their services are currently only available for other manufacturers' machines).

Distribution

5.117. We also noted that there were no independent dealers for Neopost, AMS and Pitney Bowes in mainland Britain (the only exception being one independent dealer for Neopost's IJ25 machine), and we saw no evidence of one dealer selling differing manufacturers' machines from the same part of the product range (ie that would be in direct competition). Before the 1986 MMC report (see Appendix 3.3), Post Office regulations prevented the distribution of franking machines by independent dealers. The report concluded that customers would benefit from competition between dealers and from the opportunity to compare products from different manufacturers in one showroom, and recommended that the Post Office should amend its arrangements in order to allow dealer distribution, although it did not recommend that manufacturers should be required to supply independent dealers. In most cases the situation has not changed. The exceptions have been the appointment of one dealer for the Neopost IJ25 (which competes with Neopost's direct sales force in respect of this machine); the use of dealers by Frama and Francotyp, whose dealers generally operate in particular territories; and Secap, which had, as an independent company, appointed dealers with freedom to market nationally. Apart from this, we see no indication of competitive constraints at the retailing level.

Customer behaviour

5.118. The parties were not able to provide direct evidence on the price sensitivity of customers for franking machines. They argued that the price elasticity of demand for franking machines would be high because of the availability of substitute postage methods (for example, stamps and bulk mail), or other communication methods (for example, email). However, the advantages of franking machines over other methods (as listed in paragraph 3.38) will restrict price sensitivity. Neopost presented the sales results of a trial price reduction for telesales of its IJ25 machine. [

Details omitted. See note on page iv.

] There was a sales increase of nearly [✂] per cent, which Neopost said demonstrated the price sensitivity of customers. However, it is impossible to tell from these results whether the price reductions stimulated new demand for these low-end franking machines, presumably replacing stamps, or whether sales were won at the expense of other manufacturers.

5.119. *Mind your own Business* (January 2001) estimated that around 25 per cent of franking machine users decided to return to the use of stamps as a result of the announcement of Royal Mail's meter migration programme in 1997. However, as this programme necessitated investment in a new machine for such customers, it does not provide a useful guide to the effects of small price increases. In any event the figures for the installed base of machines do not demonstrate that such an effect took place.

5.120. As larger machines have many more features and higher productivity than smaller machines, Neopost acknowledged that price would play a smaller role in the investment decision. Frama also said that customers with high-capacity machines would place greater emphasis on reliability and service rather than price. New technologies will allow medium- and high-end machines to be produced in more variants, with a greater variety of features individually specified by customers to their particular requirements: this may also reduce price sensitivity. In the mid-range of franking machines, as there is no easy

alternative of switching to stamps (because of labour time involved) or bulk mail (as users may not meet Royal Mail's minimum requirements),[1] it might be expected that demand in that segment is price insensitive. Neopost argued that any individual supplier would still face a great deal of price sensitivity, for all classes of machine, due to the availability of very close substitutes from competing suppliers.

5.121. There appear to be no large barriers to customers switching to a new supplier when they need to replace their machine. Franking machines can usually be integrated with a mail folder/inserter from another manufacturer, and, apart from postal scales having to communicate with franking machines, there are few other barriers to mixing or changing manufacturers' equipment in a mailing room.

5.122. However, as noted in paragraph 3.89, it has been argued that manufacturers can take advantage of lease agreements to approach customers before the expiry of the lease in order to secure an early upgrade or renewal. Neopost analysed what happened to its lease contracts that were due to expire in 2000 and in 2001, which mostly related to sales made in 1994/95 and 1995/96 respectively (ie five or six year leases). Around [✂] per cent of leases due to end in 2000, and around [✂] per cent due to end in 2001, were terminated early because the customer upgraded to a new machine before the end of the life of the original lease. In addition, the existing lease was extended for the same machine before the end of the original term for some [✂] per cent of contracts due to end in 2000, and [✂] per cent due to end in 2001.

5.123. AMS told us that there was a lot of market information available to customers if they sought it. This could be from business magazines (see paragraph 3.42), Royal Mail, manufacturers' web sites, and by contacting a variety of manufacturers. As evidence that customers do shop around, the Frontier Economics survey described in Appendix 5.2 found that of 165 recent sales pitches, Neopost sales staff believed there were competitors also bidding in [✂] per cent of cases.

Countervailing power

5.124. We also considered whether buyers have any countervailing power. Large customers with multiple installations will often put their equipment requirements out to tender, asking three or more suppliers to bid. Even without tendering, their trained buyers will be able to demand higher discount rates. Neopost estimated that around 10 per cent of sales were through competitive tender, typical customers being Government departments, banks, mailing service providers and local authorities. One factor that enhances customer negotiating strength is the availability of bulk mail offerings from Royal Mail. However, few companies buy franking machines regularly or in large numbers. Of Neopost's sales from 1997 to 2001, the largest customer accounted for [✂] per cent of sales, the ten largest [✂] per cent, and the 30 largest [✂] per cent. Consequently, few customers are likely to be large enough to ask for offers to tender: rather, they will negotiate individually. The cost of a franking machine also represents a relatively small proportion of a business's overall postal costs, and so it is unlikely to command much management attention and effort in securing the best deal.

5.125. It appears that customers have the option to switch to new suppliers when franking machines are replaced, although, as noted in paragraphs 3.89 to 3.90, manufacturers could make some efforts to limit this option. However, few customers appear to be in a strong negotiating position arising from their purchasing strength. Only a small proportion of machines are sold to large customers using competitive bidding, although some determined smaller customers occasionally achieve substantial discounts. The main source of negotiating strength may be the availability of alternatives to using a franking machine, as described in the next section.

Substitutes for franking

5.126. There are expectations that new technologies will replace conventional mail systems. The Union Postale Universelle (a United Nations body for postal services) predicts that physical mail will account for 14.5 per cent of the communications market in 2005 compared with 19.6 per cent in 1995,

[1]Neopost argued that the minimum number of mail items to qualify for PPI was relatively low and within the average daily throughput of a medium-capacity franking machine, although this would require that there was not a mixed variety of mail types and weights.

primarily because of the growth of email. This does not demonstrate that physical mail will decline in absolute terms, but the USPS considered that electronic billing would replace traditional mail billing, which accounts for a large proportion of first class mail in the USA. From the start of 2000 to the start of 2001, the volume of physical mail fell by 0.4 per cent in the USA. Royal Mail data (see Table 5.5) demonstrates the decline in revenues—in proportionate terms—for franking (meter post) relative to bulk mail (permit mail) in the last few years, even if absolute values of business have not changed. Deutsche Bank (Europe Equity Research 3/1/02—Neopost) reported that the only segment of mail growing in absolute numbers worldwide was business mailing to individuals.

TABLE 5.5 **Royal Mail revenues by source**

£'000

	1997/98		*1998/99*		*1999/2000*		*2000/01*	
	Revenue	*%*	*Revenue*	*%*	*Revenue*	*%*	*Revenue*	*%*
Stamps	929.5	31	938.6	26	859.5	22	900	19
Meters	1,081.6	36	1,080.7	29	1,063.8	28	1,100	23.5
Permit mail and other revenues	992.9	33	1,683.7	45	1,907.7	50	2,700	57.5
Total revenue	3,004.0	100	3,703.0	100	3,831.0	100	4,700	100

Source: Royal Mail.

5.127. The alternative means of postage delivery—stamps, bulk mail, alternative carriers (such as Hays DX) and outsourcing mail—were introduced in paragraph 5.12 and are described in detail at Appendix 5.1. Alternative communications means such as fax and email are also available. PC postage is discussed in paragraphs 3.104 to 3.107. The question arises to what extent the availability of these alternatives to franking is a constraint on the more narrowly defined franking machine market.

5.128. We heard that, for smaller businesses, stamps are much more widely used than franking machines: only about 10 per cent of the total number of businesses in the UK are estimated to use franking machines. Royal Mail has also attempted to make stamps more business friendly, for example by delivering self-adhesive stamps in bulk by post and taking orders through the Internet. Smaller companies, therefore, have a choice between deciding to use stamp or franking machine methods. Bulk mail options are useful under certain circumstances, and are becoming more widely available, for example Royal Mail will now accept that the minimum number of mail items required to qualify for a contract may come from a number of locations rather than from an individual location. Although the volumes of bulk mail are large, the actual number of customers may be fairly small. The *Financial Times* (13 March 2002) reports that just 500 companies account for around half of all letters posted each day, these typically being banks, credit card operators and direct marketing companies.

5.129. We noted that Royal Mail had a dual role, both in regulating the approval and use of franking machines and setting postage rates for franked mail, but also in providing bulk mail services in competition with franked mail. Although in either case Royal Mail receives the postage revenue, franking machine suppliers suggested that Royal Mail benefited from lower operating costs for franked and bulk mail compared to stamps, but that while it provided financial incentives to bulk mail users, it offered no discounts to franking machine users compared with the price of stamps. Consignia told us that there was little difference to it in the profitability of franking and permit mail business, and that discounts were available to franking machine users for sortation. Both methods were more profitable for it than stamps (see also paragraphs 7.103 to 7.105).

5.130. As mentioned in paragraph 5.126, alternative communication means, such as email and fax, are substitutes for letters to some extent. They have the advantage of speed and cheapness, although they tend to be used for more informal communications. In the longer term, these may be more widely accepted for commercial means, and some e-businesses (for example, Internet banks) primarily rely on electronic communication rather than post. However, the driver for this appears to be the convenience and novelty of the services offered rather than the relative cost of the different communications methods. Deutsche Bank (2002) points to evidence that the growth of e-commerce has actually increased use of physical mail due to reliance on publicity mailings (although Consignia doubted that this was still the case following the end of the dot.com boom). Finally, in the future innovative technologies may provide further alternatives, for example PC postage may be introduced in the UK.

5.131. The Postcomm report (February 2002) *Proposals for Promoting Effective Competition in UK Postal Services* set out the aim of liberalizing entirely the postal services market by 31 March 2006, with a phased opening of the market before that date. From April 2002 to the end of March 2004 it proposed to enhance competition though the grant of licences to bulk mail service providers for individual mailings with a minimum of 4,000 items, which would expose some 30 per cent of Consignia's inland letters revenues, equivalent to 40 per cent by volume, to competition. Postcomm would also grant licences to companies wishing to consolidate mail from a number of users, which would then be passed to Consignia for delivery. In addition, the postal regulator would consider opening up further discrete parts of the market in response to interest expressed by operators.

5.132. In a second phase starting in April 2004, Postcomm proposed to lower the bulk mailings threshold exposing a further 30 per cent of Consignia's revenues to competition, bringing the total to 60 per cent, equivalent to 70 per cent by volume. At the end of March 2006, Postcomm proposed to license operators under a regime free from any restriction on the scope and scale of the operator's activities.

5.133. Neopost argued that, as new postal operators were licensed to collect and deliver mail, the amount of mail that was franked for delivery by Royal Mail would decrease. This would reduce demand for franking machines. Although other operators could develop their own franking system, Neopost pointed to experience in two recently liberalized markets, New Zealand and Sweden, where new entrants had concentrated mainly on developing alternative bulk mail solutions. There was also some development of alternative stamped mail, but not of franking-based alternatives. It said that since the New Zealand postal market had been deregulated about three years before, demand for franking machines had declined. In Sweden, it said, the number of franking machines declined by 3.48 per cent in 1998/99, and declined 1.64 per cent in 1999/2000. Neopost did not expect that competitors to Royal Mail would use franking machines. Consignia confirmed that experience in deregulated countries had not shown any increase in demand for franking machines. Pitney Bowes said that in Sweden franking machine sales had picked up again in response to discounts for franked mail offered by the Swedish Post Office.

5.134. It seems likely that new entrants will develop further postal alternatives, maybe using different models for organizing the handling and payment of mail enabled by new technology and software. This would provide further competition to franking. However, as noted previously, as the use of franking machines represents a small proportion of total postage costs, the effectiveness of this as a constraint on conduct by franking machine producers may still be limited. We were told that these alternatives could provide more of an incentive for franking machine manufacturers to develop features that increased the attractiveness of franking, whether to users or to postal services (increasing its attractiveness to posts might lead them to offer discounts to users). One entrant into the UK postal services market told us that it had no plans to make use of franking machines, but another told us that it had an agreement in place with Pitney Bowes. We were given no details of the nature of this agreement, but it raises the possibility than new opportunities could emerge for franking machine manufacturers to service the customers of these new providers.

Competitive constraints for other products

Folders and inserters

5.135. We now address the extent to which there are also similar competitive constraints in the market for folding and inserting machines.

New entry

5.136. In contrast to franking machines, mail folders and inserters do not face the same regulatory barriers restricting new entry: the national postal authorities do not lay down requirements for these products. We also heard that there were fewer technical barriers to entry although, as with franking machines, patent complications restricted easy entry. That said, the paper-handling technology involved in a folder and inserter is relatively complex, and designing and producing an effective machine is likely to be a long and expensive process. PFE told us that any folding and inserting manufacturers required the following design technologies: paper transport and handling; software control systems and user interfaces; roller materials and processing; folding techniques; plastic moulding; and sheet metal fabrication

technologies. It said that the prerequisite skill sets were highly specialized and were not readily available, and that it could take four to five years to train its designers fully. PFE said that the shift from electro-mechanical to software-controlled products had required increased investment in R&D and that the technology had led to a shorter product life cycle. It said that this had been particularly important for the desktop segment due to the increased demand for ease of use features.

5.137. In the case of desktop machines, these are generally produced in considerable numbers on production lines, suggesting that there are considerable economies of scale in production, which would disadvantage any new entrant. The overall size of the market is modest. Entry would, therefore, have to be made in several countries in order to gain any economies of scale. PFE told us that desktop folding and inserting machines had only been available for around ten years, but even so, there appears to be only limited growth in the market. A new manufacturer would also have to establish a dealer and maintenance network. It might be possible for a new entrant to sell direct without a dealer network, subject to constraints imposed by lack of brand recognition. However, in this case, unlike franking machines, there is no need for dealers and maintenance companies to obtain Royal Mail approval.

5.138. The overall number of suppliers of folding and inserting equipment is low. We were told of three entries into the market in the last ten years: Secap; another French company, Technopoli, which was acquired by Secap prior to Secap's acquisition by Pitney Bowes; and a company called AKB, which has not survived. Neopost said that there might also have been some entry in the USA.

Rivalry within the market

5.139. The parties considered that the merger would not have a major competitive effect on the market for folding and inserting machines. They noted that sales, in particular by AMS, of these machines were very low in the UK. They also noted that AMS did not produce any of these machines itself, but rather relied on supplies of rebadged equipment from PFE under OEM agreements. The equipment would, therefore, still be available from the original manufacturers, although the choice of retail channel would be reduced, as the merged company would be likely to market only Neopost designs.

5.140. We were told that PFE and Pitney Bowes as substantial suppliers would continue to provide strong competition across the range of folders and inserters, although we note that PFE might be disadvantaged if the effectiveness of Mailroom Innovations was reduced by the withdrawal or exclusion of AMS post-merger (see paragraph 3.73). Pitney Bowes has been strengthened by its recent acquisitions of Secap and Bell & Howell, although it does not appear that a manufacturer needs to be represented in all segments of the market to be an effective competitor. The evidence from PFE, showing that separate production lines, design teams and sales forces were maintained for the production mail segment and for smaller machines, suggests that there are few economies of size from being present in all segments.

Maintenance

5.141. Neopost and AMS provided details of the maintenance agreements on their folding and inserting machines. These were similar to those for franking machines, and offered a similar range of levels of service and payment options, except there was no equivalent to an inspection-only contract. However, uptake rates were lower as there is no Royal Mail requirement for inspections. We noted that in practice, at least for desktop and modular office machines, there are no alternative providers of maintenance services apart from the manufacturers. PFE said that there were independent maintenance companies that serviced the top-end production machines, but for desktop machines customers kept with the manufacturers.

Customer behaviour

5.142. PFE told us that, whereas franking machine customers were likely to shop around between manufacturers, a folding and inserting machine customer might behave differently. It said that often the sale of a desktop machine was made by demonstrating to the customer the capabilities of a machine, and the customer deciding whether this could be cost justified. The salesman who made the initial contact was then likely to achieve the sale. In the case of larger machines, customers had very specific requirements and a lot of market knowledge, and would seek out the machine that fulfilled these requirements.

This suggests that the extent of inter-firm competition is currently limited: rather, the challenge for the supplier is to persuade customers to make a purchase at all. Neopost described the market as embryonic, and said that particularly in the UK there was limited awareness or use of this labour-saving technology. Market growth was slow, and the main challenge was to persuade customers to use the machines. Neopost also said that price would play a lesser role in the investment decision for folding and inserting machines than for franking machines, as there were fewer comparable alternatives on the market. There were no direct substitute machines or services, other than manual folding and inserting, or possibly electronic communications (email).

Letter openers

5.143. There was limited information available regarding letter openers. There are many suppliers and a wide variety of opener types and capacities. The parties said that, as their sales in the UK were small—in particular AMS's sales in the UK in 2001 were [✂] letter openers, worth approximately £[✂], and these were of rebadged machines obtained under OEM agreements—the effects of the merger in this market would be very limited. It appears that there are few barriers to entry, as the technical difficulties of paper-handling technology are much less here than for franking machines and folders and inserters, nor are there any regulatory restrictions. A major difficulty would be the small size of the market, and that, for most customers, manual opening of mail would be a viable alternative, unless they were expecting to receive many similar mail items.

Sales malpractices

5.144. The 1986 MMC inquiry (see Appendix 3.3) heard reports of various malpractices by salesmen of Pitney Bowes and Roneo Alcatel (which became Neopost) concerning incorrect statements of the terms of supply and attempts to secure orders by suggesting, incorrectly, that equipment was worn out or that Post Office regulations required its replacement. Roneo Alcatel subsequently reduced the rate of commission payment to its sales staff and threatened disciplinary action against sales staff engaging in malpractices. However, following complaints the OFT undertook a further examination in 1993, as part of an investigation into leasing of office equipment. Areas of concern remained misleading statements on both lease terms and the need to replace machines. The OFT issued a 'minded to revoke' notice for Neopost's consumer credit licence, but this was not enforced as Neopost reformed its practices and gave undertakings as to future conduct. Neopost told us that these problems had originated under previous management and that all such practices had ceased. It provided details of its internal procedures designed to prevent any malpractice. For example, after the sales team agreed a lease deal, the customer received a separate call from Neopost's leasing company to repeat and check all details of the agreed lease.

5.145. In January 1998, the FEI published a code of better working practice for the franking machine industry. Its terms cover issues such as misrepresentation, clarity of financial proposals, clear after-sales contracts, guarantees and complaints-handling procedures. All franking machine manufacturers in the UK are parties to the code. Consignia told us that it now received very few complaints about such problems, and the parties told us that they exercised high standards and tight internal controls. However, we note that *What to Buy for Business* (2001) still tells customers to be aware of sharp sales practice. The parties also abide by the Finance and Leasing Association Business Code of Practice for leasing. This requires specific information to be provided in particular formats, clearly and in plain English, to enable customers to understand and compare lease agreements. Costs are expressed as repayments per £1,000 of capital value, and customers can easily calculate total costs of the lease. An APR does not have to be quoted as business customers are not usually covered by the Consumer Credit Act.