APPENDIX 5.2
(referred to in paragraphs 2.94, 5.21, 5.68, and 6.67)

CC summary of a consumer survey commissioned by KPCL from Research International

1. Research International undertook a consumer survey on behalf of KPCL. The survey explored consumers' behaviour in choosing their D&P services. It also attempted to establish consumers' switching behaviour across the different service speeds under different pricing scenarios. This appendix briefly explains the survey methodology and then summarizes the conclusions that KPCL drew from the results.

The survey

2. The objective of the survey was to understand the effect price has on service choice and the key factors determining channel choice for processing.

3. The fieldwork was carried out at the end of September 2001 using face-to-face interviews in central hall locations in towns across the country.[1] Respondents were chosen who used 35mm film and who were responsible, or jointly responsible, for deciding where the film was developed. Also, each respondent was to have processed between 3 and 30 films a year. This led to a sample of 625 persons being identified.

4. Quotas were set on the type of service used most often, with respondents classified into one of the following three cells:

– Those who used a 1-hour or same-day developing service most often (the 'Quick' cell).

– Those who used a next-day or three- to six-day services most often (the 'Medium' cell).

– Those who used a mail-order service most often (the 'Slow' cell).

5. The sample was chosen by Research International to give equal weighting to these cells. As a result, the initial results did not reflect realistic market shares (for example, mail order accounted for one-third of the sample but constituted only 20 per cent of the market). KPCL asked Research International to reweight its results on the basis of realistic market shares.[2]

6. As well as classifying respondents by the type of service most often used, respondents were asked to recall the D&P services they had used for their last ten rolls of film. KPCL used these results to illustrate the extent of overlap between services and the awareness of service availability. They found that almost 30 per cent of mail-order users had used three- to six-day services in the previous two years, 18 per cent had used next-day services, 14 per cent had used same-day and 21 per cent had used 1-hour D&P. Among users of 1-hour and same-day D&P, over 30 per cent had used next-day, 21 per cent three- to six-day, and 11 per cent mail order. Users of next-day, three-day and six-day D&P included 27 per cent who had used 1-hour D&P, 18 per cent who had used same-day and 15 per cent who had used mail order.

7. Respondents were asked about the retail outlets they used for D&P over the previous two years. The profile of channels used by consumers who mainly use 1-hour to same-day D&P was found to be similar to that for those who mainly use either next-day, three-day or six-day services. KPCL inferred from this that there is a high degree of awareness about service availability and prices.

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[1]These were: Ramsgate, Sutton, Romford, Braintree, Bristol, Swansea, Birmingham, Nottingham, Sheffield, St Helens and Newcastle.
[2]The weights were 25 per cent for Quick (15 per cent for 1-hour and 10 per cent for same-day), 55 per cent for Medium (25 per cent for next-day, 30 per cent for 3+ days) and 20 per cent for mail order.

8. Respondents were also asked about which D&P service they would choose under particular pricing scenarios. In particular, each respondent was asked to consider 25 permutations of different pricing scenarios. From a base set of prices for 1-hour, same-day, next-day, three-day and mail-order D&P, each scenario adjusted two or more of these prices by amounts ranging from £0.50 to £3.00. Price adjustments were sometimes increases, decreases or a mixture. The percentage price adjustments relative to base prices were computed and compared with the percentage changes to market share which KPCL inferred from the responses to the survey.

9. KPCL fitted a mathematical model, in which the logarithm of market share for each type of D&P service was explained by the logarithms of prices for all D&P services, by a constant and a residual term. The coefficients of the logarithms of prices are estimates of market share elasticities and are shown in Table 1. The residuals measure the differences between the mathematical model and the observed behaviour of respondents to the survey. Table 1 also shows standard errors computed by KPCL from these residuals. It should be noted that the estimates of elasticity and the standard errors in Table 1 are based on the sample of 25 experiments and not on the 625 original observations.

TABLE 1 **Estimated market share elasticities and their standard errors***

	Dependent on the price of D&P service				
Share of D&P service	*1-hour*	*Same-day*	*Next-day*	*3-day*	*Mail order*
1 hour					
Same-day					
Next-day			*Figures omitted. See note on page iv.*		
3-day					
Mail order					

Source: KPCL based on Research International survey.

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*Estimated elasticities that were different from zero (at the 5 per cent level of significance) are shown in bold with their corresponding standard errors in brackets.

10. Table 1 shows own-price elasticities as diagonal entries and cross-price elasticities as off-diagonal entries. The own-price elasticity for a service is the ratio of its percentage change in market share resulting from a corresponding percentage change in its price, assuming that prices of other services are held constant. Own-price elasticities are negative, which means that a price increase in each of the services will lead to a reduced market share for that service. The larger the elasticity, the more sensitive is the behaviour of consumers. For example, a 10 per cent increase in the price of the three-day service is estimated to reduce the demand for that service by around [✂] per cent (since the elasticity is [✂]). This movement out of the three-day service could be to any of the other services.

11. The figures off the diagonal are cross-price elasticities. Not all of these could be shown statistically to be significantly different from zero but those that were positive. This means that, for example, if the price of the three-day service were to increase and if consumers behave according to the model, the market share for mail-order D&P will increase. Moreover, the proportional increases will be about the same (since the elasticity of [✂] is not significantly different from [✂]), so that a 10 per cent increase in the price of the three-day service would lead to an increase of about [✂] per cent in the share of consumers choosing mail-order D&P.

12. Table 1 indicates that consumers are most sensitive to the price of same-day (ie longer than 1 hour) D&P and least sensitive to the price of mail-order D&P. The table also shows several positive cross-price elasticities that are significantly different from zero. The results suggest that a price increase in 1-hour D&P increases market share in same-day and three-day D&P. Similarly a price increase in same-day D&P increases the share of next-day D&P, and a price increase in next-day D&P increases the share of same-day D&P; this also leads to an increased share for three-day D&P. Increasing the price of

three-day D&P increases the share for mail order, while increasing the price of mail order increases shares for three-day and next-day services.

13. KPCL interpreted the results as showing that consumers are more willing to switch from next-day or three- to six-day services into mail-order services than from mail order into next-day or three- to six-day services. For example, the own-price elasticity for mail order is relatively small and yet its cross-price elasticity with respect to three-day D&P is approximately equal to [✂]. It gave two possible explanations for this behaviour of the respondents to the Research International survey. First, the respondents were selected on the basis of the service they most preferred and, if they had chosen mail order because it was cheapest, few would switch to a more expensive service even if relative prices reduced price differentials. Second, it suggested that mail-order users may be more loyal while other consumers may be more willing to switch into a cheaper service in response to a relative price increase.

Conclusions

14. KPCL's key findings from the survey and price switching analysis are set out below:

(a) The Research International survey found evidence for overlap in the use of different service speeds by consumers. The proportions of users who normally used one type of service but who also used slower or faster services ranged from around [✂] per cent.

(b) KPCL found a high degree of price sensitivity among D&P consumers. It concluded that consumers of next-day or three- to six-day services are price sensitive and that a hypothetical monopolist of these would not be able profitably to increase prices.

(c) KPCL suggested that its analysis of the Research International survey showed that consumers are more willing to switch from next-day or three- to six-day services into mail-order services than from mail order into next-day or three- to six-day services. KPCL pointed out that this is of relevance when considering the ability of a hypothetical monopolist of next-day or three- to six-day services to raise prices profitably.

15. KPCL concluded that, looking at demand-side substitution on its own, 1-hour or same-day services and next-day or three- to six-day services are in the same market.