

8 Views of EGA suppliers

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Introduction

8.1. The MMC received evidence from 17 EGA suppliers (manufacturers and importers). This mainly took the form of factual submissions in response to a detailed questionnaire. Four suppliers in whose favour we provisionally found that a complex monopoly situation existed (Sun, FKI Crypton with FKI Transervice, Churchill and Kamasa with Lucas) provided further information in reply to a letter informing them of our provisional finding and seeking their views on related issues (the 'issues letter'). The letter identified four practices which prevent, restrict or distort competition and these are reproduced in Appendix 8.1. It appeared that each of the companies involved in our provisional finding engaged in at least one of the practices.

8.2. In addition a number of suppliers responded to complaints from other parties which we put to them. Hearings were held with four of the major suppliers (Sun, FKI Crypton/Transervice, Churchill and Oliver/GEMCO).

Sun Electric UK Limited

The reference services

8.3. Sun told us that it was strongly opposed to the calibration and servicing of its equipment by third parties. It was concerned that its world-wide reputation for product quality and reliability could be severely damaged. Sun also believed that the standard of EGA calibration and servicing would be likely to deteriorate with increasing involvement of independent service companies and this could have adverse implications for the integrity of the MOT exhaust emissions test as well as exposing Sun to potential product liability claims.

8.4. Sun said that it accordingly did not make manuals or software (including passwords) for its EGAs available to third parties seeking NAMAS approval to calibrate its instruments. Sun also made it a condition of its warranties that calibration and servicing were carried out by its own staff and that only its authorized spare parts were used.

8.5. In Sun's view its manuals and software represented a considerable investment in developing its equipment. Making them available either directly or indirectly to third parties including, potentially, rival manufacturers would enable these manufacturers to evaluate the product and improve their own products at minimum cost. Moreover, Sun told us, it was not empowered under the terms of its copyright licence from Sun Electric Europe BV (paragraph 4.3) to make its manuals and software available to third parties.

8.6. Sun also considered that the servicing and calibration of EGAs was a natural monopoly because the small size of the market and the magnitude of economies of scale implied that these services were provided at the lowest cost by just one supplier. In this situation the entry of independent service companies would in the company's view raise industry costs and prices to the detriment of customers. Sun believed that independent engineers could not achieve economies of scale over a range of different manufacturers' EGAs because of the difficulties of being trained for each model, the large number of manuals they would have to carry and the extensive range of spare parts they would need to stock.

8.7. Sun expressed strong reservations about the true 'independence' of third party service companies because, in its view, they did not make a full contribution to the cost of developing calibration and servicing procedures, did not contribute to EGA manufacturers' training costs and imposed on manufacturers the additional costs of monitoring the quality of third parties' work to safeguard their reputations.

8.8. On the relationship between calibration and servicing, Sun considered that while these could be carried out separately by engineers from different companies this was likely to prove substantially more costly and much less convenient to the user. This was particularly so, in Sun's view, as the EGA had to be recalibrated immediately after servicing before it could be used in the MOT test; furthermore a routine calibration often identified the need for servicing or other attention.

8.9. On servicing of its EGAs, Sun said that it regarded these instruments as highly sophisticated computerized machines which in its view could not be adequately serviced by third parties without the lengthy and continuing specialist training Sun gave to its own engineers.

8.10. Sun told us that it operated its own laboratory which was accredited by NAMAS for the approval of EGA calibration engineers. Sun said that it had not been approached by third parties seeking such approval, nor had it received any requests for the use of its manuals or software. Sun also told us that it was, in any event, unable to assist third parties to obtain calibration approval from NAMAS because of a restriction imposed by NAMAS itself. On servicing EGAs, Sun said that its training facilities were fully employed in ongoing training of its own engineers and it had no spare capacity for third parties.

8.11. Sun regarded the NAMAS requirements for the approval of engineers to calibrate EGAs as essential to the integrity of the MOT exhaust emission test. Sun also considered appropriate the current procedures for determining the frequency of EGA calibration.

Calibration and servicing charges

8.12. Sun told us that its call-out charges for calibrating and servicing its EGAs were generally standard throughout the UK. The company appreciated that the actual cost for a particular customer depended on such factors as the customer's location in relation to Sun's engineer, the size of the area covered by the engineer and the dispersion of customers within that area. But Sun believed that a charging system based on individual site visits would significantly increase its administrative costs and these increases would have to be passed on to customers in higher charges. Moreover, charging actual costs to customers in remote areas might cause their MOT business to become unprofitable. Sun also maintained that its charges for the reference services were comparable to other business service operations such as the repair of washing machines or central heating systems, both, in its view, considerably less complex than an EGA.

The complex monopoly situation

8.13. In its response to the issues letter, Sun accepted that a complex monopoly might technically exist in the supply of the reference services, including itself and the other suppliers named in the letter. Sun nevertheless maintained that the business practices it had adopted for the calibration and servicing of its EGAs were neither anti-competitive nor exploiting a monopoly position. They had in Sun's view been adopted for the specific purposes of maintaining the integrity and accuracy of the EGAs it supplied and the company's reputation as a supplier of reliable, high-quality equipment.

8.14. In response to the four practices listed in the issues letter (Appendix 8.1), Sun reiterated its reasons for not making manuals, software or training available to third parties (paragraphs 8.3 to 8.10) and confirmed that it imposed warranty conditions requiring the use of its own employees and authorized spare parts for the reference services. Sun said that it supplied proprietary spare parts to creditworthy customers and on contracts of employment Sun told us that it had not until recently imposed restrictions designed to prevent former employees taking up employment with a competitor. The restrictions it had now introduced were for the express purpose of preserving the confidentiality of its commercially valuable know-how and information.

Restrictions on access to manuals, training and software

8.15. In an economic analysis of the market submitted to the MMC, Sun argued that these restrictions, whilst inhibiting competition from independent providers of the reference services and so possibly increasing the market share of the EGA suppliers, did not enhance or create market power which could be abused by, for example, raising prices. In support of this Sun drew our attention to a 1992 research paper prepared for the OFT by National Economic Research Associates (NERA) which recognized that 'tying' customers to purchasing secondary services from manufacturers might not enable them to raise service charges if purchasers' choices of the primary product were based upon its total 'whole-life cost', in other words the initial equipment cost plus future service charges. It was suggested in the paper that in this situation over the longer term manufacturers could not afford to acquire a reputation for expensive secondary services, because buyers would avoid purchasing their products. NERA accordingly argued that in such situations secondary services did not constitute a separate market but were part of the primary product market.

8.16. Sun drew our attention to two MMC reports, those on Motor car parts¹ in 1992 and on Indirect electrostatic photocopiers² (IEPs) in 1991, which it said had accepted this NERA argument. For example, in the report on IEPs the MMC had observed that 'there is a wide choice of IEPs available to end-users at the time of purchase; given this healthy competition in the supply of IEPs themselves, there is little scope for uncompetitive behaviour by suppliers in the provision of maintenance, since suppliers have to ensure that the package as a whole, ie IEP and maintenance which customers demand, is competitive' (paragraph 9.137). Sun accordingly argued that in assessing the scope for EGA suppliers to raise the prices of the reference services it was necessary to take into account the intensity of competition in the supply of EGAs (which in turn would 'drive' competition in the supply of the reference services), and the sensitivity of users' future choice of EGAs to the quality and price of these services.

8.17. In Sun's view the competition between suppliers of EGAs was so vigorous that the instruments and their associated services had to be supplied on highly competitive terms. As evidence of this Sun pointed out that there were over 20 UK suppliers of EGAs offering a wide range of over 30 models; there had been 15 new entrants into the market since 1991; EGA prices had fallen in real terms and significant discounts off price lists, in some cases as much as 25 per cent, had had to be offered by the company to secure orders.

¹ *Motor car parts: a report on the wholesale supply of motor car parts within the United Kingdom*, Cm 1818, February 1992.

² *Indirect electrostatic photocopiers: a report on the supply by manufacturers and importers of indirect electrostatic photocopiers in the United Kingdom*, Cm 1693, October 1991.

8.18. Sun ascribed to this intensity of competition in the EGA market what it saw as the company's low overall profits in 1992. In that year Sun told us that its UK operation (excluding exports) achieved a return on capital employed of 7.4 per cent and a return on sales of 4.1 per cent.

8.19. Sun also emphasized in its economic analysis its view that MOT stations were sophisticated purchasers of a wide range of garage equipment. Minimizing any period for which an EGA was out of action was essential as for most garages, which had only one instrument, this would interrupt their MOT income until the fault was put right. This, Sun believed, necessarily focused particular attention on the availability and price of the reference services and strongly influenced EGA purchasing decisions.

8.20. In examining some of the issues raised by these restrictions on access to manuals and software and Sun's justification for them, we asked Sun what steps it took to publicize the 'whole-life' costs of its EGAs in promoting their sale. Sun told us that the cost of the reference services formed part of the normal cycle of negotiations conducted by its sales staff so that customers were aware of the cost of EGA calibration and the cost of maintenance. Sun said that it did not endeavour to sell service contracts as part of the initial EGA sale and believed that this was fairly common in the industry.

8.21. In this context we examined the analogy drawn by Sun (paragraph 8.16) between the servicing of EGAs and the MMC's findings on the restrictions on maintenance in their report on IEPs. We understood that one of the factors taken into account by the MMC in that report was that the IEP was service-intensive as it was mechanically complex and required frequent maintenance. We asked Sun for evidence that the EGA could also be described as service-intensive. We pointed out that some evidence to the contrary could be inferred from Sun's decision to increase the period of its warranty on its MGA 1200 EGA-the model most widely sold for the MOT test-from one to two years. Sun said that it had taken this decision to the benefit of its customers because it knew the reliability of its product and that the additional cost to the company would be very small. Sun also told us that while initially only 2 per cent of its customers had taken out service contracts at the time of sale some 25 per cent currently had combined calibration/service contracts. Sun ascribed this increase largely to the VI's requirement that MOT stations have a contract for calibration. The frequency of service visits over the 12 months ending June 1993 had been:

No service calls	-	39 per cent
1-2 service calls	-	42 per cent
3-5 service calls	-	17 per cent
Over 5 service calls	-	2 per cent

Sun reiterated its view (paragraph 8.8) that calibration and servicing could not be separated. In this context Sun regarded the EGA as service-intensive because it was a mechanically complex piece of equipment and customers had to rely on effective and prompt calibration and servicing to avoid any significant down-time.

8.22. We also raised with Sun the immaturity of the market in EGAs and in the reference services, which had been in operation for some 18 months only. We questioned whether the company's assertion that these services, on the NERA argument, formed part of the EGA primary product market could have been established in so short a time without any significant competition from service companies independent of EGA suppliers being allowed to develop. Sun pointed out that its view was based on many years' experience in the servicing of diagnostic equipment (including EGAs) throughout the world. The company also reiterated its argument (paragraph 8.6) that the entry of independent service companies would be likely to raise industry costs and prices for the reference services.

8.23. On the issue of its uniform charges for the reference services (paragraph 8.12), we put to Sun the possibility that greater competition from independents might benefit both EGA suppliers and their customers by reducing the travelling time costs to the suppliers by providing the reference services in remoter areas. Sun told us that in its view it was not possible for an independent to make a living on that basis and it was for that reason that the independents were situated in or serving conurbations. Sun also said that in its view the possibility we had suggested did not appear to offer any further choice to users in such remote areas.

8.24. We asked Sun whether its profits in 1992 which it considered to be low (paragraph 8.18) might not be considered reasonable if allowances were made for the costs of free warranty work arising from EGA sales in 1991. Sun told us that in its view it was unlikely that the profit levels of either 1991 or 1992 would

be repeated in 1993 as a consequence of the decline in EGA sales, the squeezing of margins and the present recessionary period.

8.25. Concerning the barrier to entry by independents posed by the restrictions on access to manuals, training and software we asked Sun for its view on the consequent reduction in consumer choice. Sun reiterated its contention that in the supply of the reference services greater competition would result inevitably in higher costs to customers in the longer term because the independents would not seek to provide a complete competitive choice against Sun but would rather concentrate their efforts in areas with a high density of EGAs. This, the company argued, was what had happened in the case of Kaltek (paragraph 8.35). This would mean that in the last resort the independents' customers would only have Sun to turn to if things went wrong with a consequent increase in the company's costs. This would in Sun's view be especially so if it had to provide its current service with its cost base spread more thinly and amongst its more remote customers.

8.26. On another aspect of the barrier to entry by independents, we asked Sun about its stated inability (paragraph 8.10) to assist third parties to obtain NAMAS approval to calibrate its EGAs because of a restriction imposed by NAMAS. We put to Sun NAMAS's statement that it saw no problem if Sun wished to do this (paragraph 7.37). Sun said that it had been told by NAMAS that it would have to make substantial further investment, which Sun estimated at about £24,000 to £25,000, for such approval of third parties. In response to a further question as to Sun's policy if the NAMAS restriction did not exist, the company said that it would be willing to compete with SIRA in assisting third parties to obtain NAMAS approval for calibrating its EGAs. Sun said that it was not, however, in a position to offer training for this as it did not have sufficient training capacity.

Restrictions on warranties

8.27. Sun confirmed that its warranty contained provisions causing it to be invalidated if calibration, servicing or repair were carried out by a third party or unauthorized parts were fitted. Sun expressed surprise that this practice should be taken to be evidence of the existence of a complex monopoly as, in the company's view, it was a practice pursued by the vast majority of manufacturers of technical equipment. Sun considered that its exposure to warranty provisions for repairs, adjustments, claims for consequential loss and potential product liability claims required it to impose these restrictions. Sun believed it should have the right to withdraw cover in the event of unauthorized interference. Sun told us that in practice it had never exercised this right, preferring to keep customers happy by rectifying EGAs that had been calibrated, serviced or otherwise tampered with by third parties.

8.28. We questioned Sun about the need to apply this restriction to calibration given that this could only be carried out by engineers approved by NAMAS. Sun argued that its product liability insurance cover would not extend to calibration by such third parties. Moreover, calibration sometimes revealed the need for servicing or repair.

8.29. In the context of Sun's claim never to have exercised its right to invalidate a warranty, we drew the company's attention to letters received by a number of its customers in 1992. These were customers whose EGAs were calibrated by third parties and the letters appeared to threaten to invalidate warranty unless it was restored by contracting Sun to carry out future calibrations. Sun denied that this interpretation could be put on the letter. Sun told us that something over 140 of those who had received the letters had asked Sun to carry out work under warranty and this work had been done free of charge. Sun also denied that it had required any customer who had previously had his EGA calibrated by a third party to enter into a contract with Sun for future calibration in order to have their equipment repaired. Sun justified the sending of the letters as necessary to make certain customers aware that they were risking their warranty and the validation of their equipment for MOT purposes by using third parties to calibrate, service and repair their EGAs. Sun was also concerned that in these circumstances its product liability cover might well be voided if it failed to make these risks clear to customers.

Restrictions on the supply of proprietary spare parts

8.30. Sun told us that apart from making their use a condition of its warranty (paragraph 8.4) it considered the use of its authorized spare parts essential to the integrity of its EGAs. In Sun's view the use of unauthorized spare parts could invalidate the instrument's OIML pattern approval. Sun said that such a situation need not arise as its proprietary spare parts, although available only from Sun, were supplied to anyone who was creditworthy at the prices specified in its current price list. In addition non-proprietary spare parts were available from commercial suppliers.

8.31. We questioned Sun about its policy on filters for its EGAs. Sun told us that its filter supplier was free to supply to third parties the filters it supplied to Sun provided it did not use Sun's part number. On pricing of its filters, Sun had told us that the current price for a box of ten of its Class I filters was £12 excluding VAT. We put to Sun the suggestion that this price had been in the region of £40 at the time EGAs started to be sold for the MOT test. We asked how the significant price reduction had been achieved and whether it was a deliberate move by the company to undercut third party suppliers of filters for its EGAs. Sun denied this and told us that its price as at 1 November 1991 had been £31.40 for ten filters. The price reduction had resulted from the significant increase in the demand for filters following the introduction of the exhaust gas emission test into the MOT test. Sun said that it had been able to negotiate substantial reductions in the price at which it purchased filters from its suppliers and these reductions were passed on to its customers with effect from 1 June 1992.

Restrictions in contracts of employment

8.32. Sun told us that it had recently changed its contract of employment for new employees on legal advice. This had been done following what Sun described as the defection of a number of its employees to a competitor in the reference services, Kaltek (paragraph 5.8) with which it was currently in litigation. A restriction had been included as an addendum to the contract requiring the employee to confirm:

For a period of 12 months after the date of termination of my employment I will not, either on my own, or with others or as an employee of any agency or organisation whatsoever calibrate any Sun Electric Equipment for which I require NAMAS accreditation.

8.33. Sun said that its principal concern in imposing this restriction was to prevent its competitors benefiting immediately from its confidential know-how. Sun did not consider that such provisions were unreasonable or could be taken as evidence of a complex monopoly since they were well-established standard provisions of most employment contracts. Sun believed that such provisions should not be imposed for any longer than was necessary to protect an employer's know-how, recognizing their doubtful enforceability at law if expressed to be for a longer period.

Complaints

8.34. We asked Sun for its comments on a number of specific complaints made against it by Kaltek (paragraph 5.9) and, on the question of filter supplies, by HFL (paragraphs 6.75 to 6.78) and Prosol (paragraphs 6.79 and 6.80). We also asked Sun to comment on a number of general complaints directed at EGA suppliers which the MMC had received from users.

8.35. In commenting on the complaints from Kaltek, Sun told us that this organization had been established by a Mr C Gostling, a former Sun employee and manager of its service operations in South and Central England. Mr Gostling had contributed to preparation of the Sun calibration procedures required for training engineers for NAMAS approval. He had left the company to take employment with another EGA supplier but subsequently set up in business with a number of other former Sun employees trading as Kaltek UK. Sun explained that it was currently in litigation with those employees, alleging that they were in breach of their duties of confidentiality to Sun.

8.36. Kaltek complained about Sun's use of its warranty to discourage Sun EGA users from having their instruments calibrated, serviced and repaired by Kaltek. In particular, Kaltek complained about the letter sent

by Sun to a number of its customers threatening to invalidate their warranty unless they contracted with Sun to carry out calibration. In this context Sun reiterated its arguments, denying that the letter could be interpreted as a threat, saying it quite properly warned that warranty might be invalidated by unauthorized repair. Sun also said that the letter could not be interpreted as casting doubt on the ability of independent calibrators to calibrate its instruments. Sun also told us that the letter had been in part prompted by the practice of some of its former employees among Kaltek's engineers calling on existing Sun customers using their Sun business card inscribed with the name 'Kaltek' and their new telephone number.

8.37. Sun also denied Kaltek's allegations that some warranties had been suspended or that it kept a 'blacklist' of Kaltek's customers. Sun suggested that this referred to the computer database it maintained of all equipment it had supplied. From this Sun said that it could identify those instruments not maintained by Sun whose history was incomplete.

8.38. On its letter to customers warning about the use of non-approved parts, Sun said that it was drawing users' attention to the potential danger of using such parts. It was a requirement of the OIML laboratory that the label quoting the EGA's pattern approval number be placed on the instrument under the implicit assumption that it was maintained in its 'as approved' condition. Any modification caused it to be downgraded from Class I to Class II which could require increased calibration frequency under the VI's requirements.

8.39. Sun said that Kaltek's allegation that it was developing a 'lock-out' facility was correct. This was designed to prevent tampering with its EGAs as this had been required by law in the USA for a number of years and would shortly be required in Germany and Switzerland for which markets Sun manufactured in the UK. Sun said that passwords also constituted a type of lock-out; but in a large population of EGAs the degree of secrecy maintained was obviously a factor in controlling the degree of tampering possible. Every additional person who knew the password added to the potential for tampering. (Sun had recently discovered that some MGA 1200 machines that it did not calibrate or service had affixed a label showing the password.) Accordingly, Sun disclosed the password to its employees strictly on a 'need-to-know' basis. The spread of knowledge of the password could be effectively restricted by changing it frequently. This was technically possible and was a route which Sun told us it intended to pursue.

8.40. Finally, on Kaltek's complaint about publication of SIRA's list of NAMAS-approved calibrating companies in the February 1992 edition of the *Motor Retailer*, Sun described the suggestion that it had been able to influence the manner in which the list was published as 'fanciful'.

8.41. Sun did not accept the complaint from HFL that it had ceased placing filter orders with that company because HFL had supplied Kaltek and Prosol with filters for Sun EGAs. Sun told us that it commenced buying filters from HFL in 1986 in substitution for its existing supplier for the replacement market and for EGAs supplied to Switzerland. By the end of 1988 it was purchasing two types of filter from HFL. Shortly thereafter HFL sought to supply replacement filters to Sun's sister companies in Germany and the Netherlands; and upon doing so Sun's UK Marketing Manager discovered that HFL was supplying to those companies at a lower price than to Sun in the UK. He requested that HFL supply to him at the same lower price, and when HFL refused he ceased all further purchases of HFL filters for the replacement market. Sun told us that it continued to buy HFL's filters for the Swiss market and when its MGA model was developed and submitted for type approval it was fitted with an HFL filter. Subsequently HFL's filter system was assessed as marginally inferior to that of Sun's traditional supplier. HFL's quoted price was also higher and it refused to supply on an exclusive supply arrangement. Accordingly the other supplier's quotation was accepted and Sun's purchases from HFL ceased.

8.42. Responding to the complaint by Prosol that EGA manufacturers were attempting to prevent the supply of filters by third parties by implying that they were of inferior quality, Sun said that it had never claimed, and could not claim, that no alternative filters were suitable. Identical filters might well be made available to the market by Sun's own supplier. But Sun maintained that only filters it had approved and submitted to a type approval laboratory as fitted to an EGA were those bearing Sun's part number. Filters obtained elsewhere might be identical, but might equally not be; and the use of a different filter was liable to prejudice the measurement accuracy of the EGA. Sun also pointed out that its filter prices were now considerably lower than those of Prosol (see paragraph 8.31).

8.43. On the more general complaints made against it and other EGA suppliers, Sun commented as follows:

- (a) *Refusal to release information and manuals to independents.* Sun reiterated that no independent calibrator had ever requested Sun to supply manuals. However, for the reasons previously set out (paragraphs 8.3 to 8.10) Sun would not wish to supply manuals to third parties and had registered concern that independent calibrators appeared to have obtained copies of its calibration and service manuals and access to its software passwords without the company's consent.
- (b) *Little or no choice of calibrator.* Sun accepted that this was factually correct and was, Sun understood, one of the reasons for the reference being made. However, Sun refuted the suggestion that the consequence of that was that the customer was required to pay a higher price for calibration than would be the case if there were greater competition in the supply of calibration services. Sun drew the MMC's attention to its previous comments on its calibration charges (paragraph 8.12).

8.44. Finally Sun commented on the apparent absence of any complaints to the MMC from its EGA customers.

FKI Crypton Limited, FKI Transervice Limited and FKI plc

The reference services

8.45. FKI told us that it was opposed to the release of its intellectual property to third parties to assist them in achieving NAMAS approval to calibrate its EGAs. Accordingly FKI did not release its calibration manuals to third parties and, it told us, had turned down the one approach it had so far had.

8.46. FKI said that it did not actively obstruct any competitor wishing to calibrate its EGAs; but to assist in their approval by NAMAS would enable competitors to exploit at low cost to themselves a product in which FKI had made a considerable investment to develop and establish a market share.

8.47. FKI also considered that as calibration had to be carried out after any major repair, an engineer had to be fully competent on the repair as well as the calibration of the product. FKI believed it to be in the best interests of the customer that this was carried out by the manufacturer's service agent who was factory trained and up to date with any equipment modifications. FKI said that prior to the introduction of emissions testing into the MOT scheme, repair and calibration were carried out almost exclusively by the manufacturer. This was despite the fact that there was no requirement for engineers to meet any particular standard.

8.48. FKI believed that, if it gave assistance to third party service companies to achieve NAMAS approval, they would offer their services in the areas of highest density, leaving FKI with the responsibility of supporting customers in the remainder of the UK, so forcing costs up in the rural MOT stations. The resulting fall in revenue would also cause fragmentation and reduction in the quality of FKI's after-sales support which the company considered to be significantly against the interests of its UK customers.

8.49. FKI was not aware of any EGAs being calibrated by FKI Transervice that were being maintained by independent service companies. FKI told us that there were some of its EGAs suitable for MOT use which were not under any FKI Transervice contract or service cover. It assumed that third parties or the users themselves were maintaining the units which could not be used in MOT tests as the engineers were not approved. FKI was unable to estimate the number of EGAs suitable for MOT tests being maintained in this way by third parties but believed it was a small percentage. FKI considered that its reputation had suffered from the involvement of such independents as users always came back to FKI if any problems arose.

8.50. FKI considered that calibration of EGAs carried out to a traceable standard set by NAMAS could be the correct way to control the accuracy of the instruments in use for the MOT test. FKI had 72 engineers NAMAS-approved through SIRA, so as to be able to provide a national service. FKI told us that its engineers were approved in line with the original NAMAS requirement. They had an electrical engineering background with at least four months' experience of the products and were able to prove their competence by

carrying out a calibration to the satisfaction of SIRA. The engineers approved through SIRA were randomly assessed and audited by NAMAS.

8.51. In FKI's view the original outline EGA calibration scheme presented to the GEA was considered acceptable if properly controlled. FKI considered that subsequently, the issues associated with the control and qualification of engineers had become diluted. As an example of this FKI told us of the case of one of its former employees, a mechanical engineer, whom it had made redundant at the time the calibration scheme was introduced because it considered that he did not have the relevant experience. This employee was subsequently recruited by another company and approved by NAMAS.

8.52. FKI also expressed concern at the procedure for the pattern approval of EGAs used in this country. Once this had been secured by submitting the instrument to one of the NAMAS-approved laboratories no follow-up action was taken to check that the manufactured models conformed precisely to the approved pattern. FKI told us that this contrasted strongly with the procedure in a number of European countries where the state set the pattern approval standard and approval tests were carried out in a state-controlled laboratory. The manufacturer was required to exercise control to ensure that the approved standard was maintained and this, for example, required that only manufacturer-approved spare parts, conforming to the original approval standard, could be fitted. In FKI's view the VI's less stringent approach weakened the integrity of its exhaust emission testing arrangements compared with these other countries.

Calibration and servicing charges

8.53. FKI told us that it charged a standard contract price throughout the UK. This was to ensure that customers in rural districts were not penalized as the MOT test fee was also standard nation-wide. Any change in this pricing structure could, in FKI's view, force rural MOT stations with a low throughput of vehicles to withdraw from the scheme to the detriment of all parties concerned. FKI did not consider that greater competition from third parties would benefit customers or manufacturers by cutting response times in some areas and reducing engineers' travelling time. FKI said that because of the number of trained and approved engineers at its disposal travelling time on average was less than an hour between jobs and, in its view, the competence and experience of its engineers ensured a high 'first fix' rate and minimized their time on site.

The complex monopoly situation

8.54. In its response to our issues letter FKI did not dispute the existence of a complex monopoly situation as defined in section 7 of the Fair Trading Act 1973, in respect of the reference services. But FKI believed that the definition of the service referred to the MMC by the Director General of Fair Trading was too narrow to identify correctly the key competitive forces which determined the price and quality of the reference services. In FKI's view the nature of the market and the way in which it operated could only be understood by looking at both the supply of EGA equipment and the supply of the service of calibration and servicing. FKI considered that in reality the supply of the equipment and the provision of after-sales service and calibration together made up one market. FKI also considered the market to be extremely competitive to an extent that manufacturers were prevented from offering uncompetitive service, calibration and repair charges. FKI also believed that low-cost suppliers of these services had made only a limited penetration of the market because of their uncertain service support so highlighting the importance of the EGA manufacturer's service capability as part of the original purchase decision.

8.55. FKI further argued that it had always been the case in the UK (both before and after the introduction of the VI scheme) that the reference services were predominantly provided by manufacturers of the equipment. The complexity of the equipment and the quality of service provided by the manufacturer in what was a relatively small market had predicated this situation. This pattern was repeated in most of the major markets in mainland Europe; indeed in a number of other European countries this was a statutory requirement, in that strict pattern approval standards existed in respect of both the equipment and the provision of servicing and calibration.

8.56. In response to the four practices listed in the issues letter, FKI told us that it engaged in only one, restricting access by third parties to the calibration manuals and software needed to calibrate its equipment.

Restrictions on access to manuals training and software

8.57. FKI considered that restricting access to calibration and service manuals, training and software did not restrict competition by limiting those able to enter the market for the reference services. FKI believed that the existing market structure ensured a competitive framework for the supply, servicing and calibration of EGAs between the manufacturers which resulted in the high levels of customer satisfaction recorded in the MMC survey (Appendix 3.4). If independent providers of services were given access to FKI's intellectual property this was likely, in the company's view, to lead to a reduction in the number of its engineers. As a result FKI said that it might not be able to maintain the current uniform and consistent level of cover nationwide; average travel times would be extended and costs increased. FKI said that it had invested in what it saw as the highest quality of service support to differentiate its product in the market-place. It considered that the increased involvement of independent servicers and the inevitable contraction of its own operations would have a serious adverse effect on the company's reputation. Furthermore, FKI argued, a fragmented market was likely to leave areas of the country with only independent coverage, where manufacturers had had to withdraw, and this could give rise to opportunities for excessive price increases.

8.58. FKI also pointed out that the compilation of calibration manuals, the training and approval of engineers and the development of products and software represented a substantial investment by FKI in the market amounting, the company told us, to an expenditure averaging over £1 million in each of the past five years. This expenditure represented a very significant part of FKI's intellectual property and asset base. FKI believed that to make it available to third parties would allow them to exploit these assets without having made the initial investment. Any modest price gain for end users would in FKI's view be transient as the service to end users was bound to deteriorate without further investment.

8.59. FKI also considered that there was in practice nothing to prevent any third party service organization or independent service engineer from compiling their own calibration manual, or from developing the technical information which would allow them to gain approval and compete in the market-place. FKI told us that it would be possible for a skilled engineer to 'reverse engineer' FKI equipment especially as, unlike its two major competitors, FKI did not make use of passwords or software locks to prevent third party access. Such an investment by a third party in compiling the necessary information through a process of reverse engineering would, in the company's view, at least represent some equivalent investment to that it had made.

8.60. FKI told us it considered that restrictions on access by third parties to its manuals and software did not result in higher prices for the reference services than would otherwise be the case. FKI believed that the prices for the reference services provided by the major companies, while showing some variation, did not reflect any exploitation. This, in its view, was due to the highly competitive nature of the market for equipment. FKI pointed out that currently the customer had a wide choice between approximately 23 suppliers of EGAs in the UK. Nor, in FKI's view, was there any evidence of excess levels in those parts of its profits associated with the reference services. FKI said that overall it had for a long time been a profitable company. This had been achieved by the scale of operations and investment made by FKI in equipment, training and information technology. FKI also pointed out that the calibration services operated on relatively low margins and this too, FKI believed, was due to the fierce competition it faced in the sale of new EGA equipment.

8.61. FKI also told us that it had always run its business on the basis of service contracts with payments in advance. We pointed out from data provided by FKI in response to the MMC's questionnaire that as at 31 March 1993 payments in advance for the reference services were 57 per cent of the EGA sales figures compared with 18 per cent of sales for the company's business as a whole. FKI said that the 18 per cent referred to total sales including direct spares sales, inter-company trading and parking meter maintenance and that the 57 per cent figure for the reference services was relatively low and the company expected it to increase. There was no pressure exerted on EGA users to take out service contracts and it was normal, FKI told us, for two-thirds of the company's field service income from garage equipment to be contracted.

Restrictions on warranties

8.62. FKI said that it did not impose conditions in warranties that had the effect of requiring calibration and/or servicing to be carried out by its employees or appointed agents or the use of FKI- supplied parts. In its view its terms did not restrict competition or consumer choice, though FKI accepted that, at present, no one other than the company's employees were NAMAS-approved to calibrate its instruments. FKI confirmed, however, that its warranty would not be voided if an instrument were calibrated by a NAMAS-approved engineer but the result of repairing damage arising from any third party interference with the equipment would necessarily be chargeable.

8.63. FKI also maintained that it was in the best interests of its customers that they use engineers that were accountable and parts that could be guaranteed to conform to pattern approval. FKI believed that only in this way could there be any guarantee of conforming to design and specification for the machine in its warranty period. FKI also noted that the accountability of the manufacturer for the ongoing performance of its products in the field arose from the competitive market for the supply of EGAs. In the absence of what in its view was strict pattern approval FKI believed the VI depended on this support by the manufacturer to maintain the integrity of the EGA calibration scheme.

Restrictions on the supply of proprietary spare parts

8.64. FKI told us that it had never refused to supply proprietary spare parts to customers or to third parties. Nor did FKI actively discourage the sourcing of spare parts from third parties. The company said that it operated a third party spares sales service at its Bridgwater base and parts were made available to third party service organizations and end users with acceptable credit accounts or who were willing to pay cash.

8.65. At the same time FKI pointed out that it was impossible for the company to guarantee the performance of spare parts supplied by any third party. This was particularly the case in the context of pattern approvals of equipment. FKI said that it could only guarantee the parts sourced and supplied by its own procurement, specification and quality control organization. The company told us that there had, for example, been cases of filter failure resulting in damage to the EGA's infra-red gas bench. FKI provided evidence of this in an analysis of 75 SIRA Incident Report Forms. Of these 38 were related to filter problems and 18 were due either to incorrect filter specification, filter failure or repair or modification of the unit by a third party.

Restrictions in contracts of employment

8.66. FKI said that its contracts included a confidentiality agreement but it did not include conditions in contracts with employees which restricted their ability to provide the reference services after termination of their employment.

Complaints

8.67. We asked FKI for its comments on a number of specific complaints made against it by Rosary Garage (paragraph 6.32) and Mr Derek Whittaker (paragraphs 5.24 to 5.26) as well as on a number of general complaints received by the MMC directed at EGA suppliers.

8.68. On the complaints by Rosary Garage, FKI commented that the garage had had a free calibration contract covering the first four EGA calibrations. The customer was able to choose between a range of calibration contracts and was not obliged to enter into an annual contract. FKI also denied the claim by Rosary Garage that no calibration took more than 20 minutes. Its service reports suggested that calibrations at the garage were taking between 45 and 90 minutes depending on the experience of FKI's engineer. FKI's contract costs were based on visits taking one hour; anything over this was the company's liability. Finally FKI said that the requirement for calibration and service was known to Rosary Garage before it purchased its FKI EGA.

8.69. Mr Whittaker, FKI told us, was recruited by the company prior to the introduction of the EGA calibration scheme to ensure that he would qualify as a calibrator, under NAMAS guidelines, by the November 1991 deadline. FKI said that he was made redundant in September 1992 following the uneven pattern of EGA sales in that year and the reduced workload in Mr Whittaker's area. Under the rules of the calibration scheme NAMAS approval and the relevant documentation belonged to the company and had to be withdrawn when an engineer left the company. FKI considered Mr Whittaker's comments on an alliance between the company, NAMAS and SIRA to be unwarranted. The requirements were imposed, in FKI's view, by the VI and not by the company.

8.70. On the more general complaints made against it and other EGA suppliers, FKI commented as follows:

- (a) *Little or no choice of calibrator.* FKI reiterated that it was not willing to license use of its intellectual property to third parties to enable them to calibrate its EGAs, for the reasons previously set out (paragraphs 8.46 to 8.48).
- (b) *Discouraging use of filters supplied by third parties.* FKI said that it could only guarantee its EGAs if its own filters were used. Manufacturers had frequently found unsuitable, incorrectly sized or substandard filters fitted to their EGAs. FKI also doubted the claim, by Prosol UK (paragraph 6.79), that 90 per cent of the filters market was taken up by manufacturers' supplies. In FKI's case, it told us, its annual sales for the MOT emission test amounted to about 5,000 units. It had estimated its annual filter sales in 1992 as 24,000 units assuming that 3,000 of its EGAs were in use. Its actual sales in 1992 had been 8,000 units and FKI was unable to assess the respective parts played in the shortfall by cheap substandard filters, quality filters from other suppliers or end users not changing filters as frequently as was advisable.

V L Churchill Ltd

The reference services

8.71. Churchill told us that it did not make its calibration manuals available to third parties as it considered this to be its intellectual property. The company's reaction to someone seeking to offer an independent calibration service for its EGAs would be to enquire whether they had already or were in the process of obtaining NAMAS approval, would be prepared to pay a reasonable royalty for the use of Churchill's intellectual property and whether they had a firm financial base and were prepared to offer a nation-wide service rather than concentrate on the more profitable conurbations. However, Churchill believed it was unable to license third parties in this way because of NAMAS/SIRA regulations (but see paragraphs 8.86 and 8.87).

8.72. Churchill told us that the Autogas 4 was an OIML Class I EGA with the calibration procedure operated by plugging in a special software cartridge. It was required by the VI to be calibrated four times a year. The company was under the impression that most Class I machines were required to be calibrated four times a year although it was aware of one for which calibration was required only twice a year. The company told us that in its view there was some confusion as to where responsibility for initiating changes in the frequency of calibration lay. Churchill had understood that this was a matter for the VI which would keep the situation under review on the basis of calibration data provided by the manufacturers. Only recently, Churchill said, had it become clear that the VI expected manufacturers to take the initiative and approach it with supporting data if they wished to seek to change the calibration frequency of their machines.

8.73. Churchill told us that it had entered the UK EGA market with a mass-produced product, the Autogas 4, for the first time in 1991. It had decided, unlike most of its competitors, that it would be easier and simpler, for such a delicate instrument, for servicing to be carried out at the company's manufacturing plant. Churchill said that when a service was required the user was provided with a calibrated EGA on loan so that the MOT test business should not be interrupted. Churchill also told us that the Autogas 4 had been designed for the UK market and might not meet the specifications required in other countries.

8.74. Churchill considered the pattern approval requirements for the EGA for use in MOT test stations to be among the most severe in the world. It involved manufacturers in considerable time and expense to meet the required standard.

8.75. We asked Churchill about the suggestion made to us (paragraph 8.52) that the UK pattern approval rules were less stringent than in other countries because no checks were made on manufacturers to ensure that they were maintaining the approved standard. Churchill commented that this had developed since the original scheme was established. It had been Churchill's understanding that such rules applied in the UK. When the filter system on the Autogas 4 was changed the company had re-submitted it for OIML approval to the test house. The company said that it subsequently discovered that it was probably alone in carrying out this level of OIML approval. Churchill also agreed that it would have been preferable for the UK to set its own standard for EGA pattern approval but pointed out that there was insufficient time for this when the scheme was first introduced. This, Churchill understood, was because the VI was under political pressure to introduce the scheme by a certain date and, as a result, it was very late in the day before the VI finally approved the calibration process.

8.76. Churchill considered that approval of calibration engineers to a high standard as stipulated by NAMAS would ensure a similarly high standard of field calibration work for MOT stations. But in the company's view the cost of this approval was extremely high both in terms of the initial investment and the ongoing maintenance of approval.

8.77. Churchill said that it had 29 NAMAS-approved calibration engineers, sufficient to provide a nation-wide service under the system it operated of carrying out all servicing at its Daventry plant. As its EGA had been a new product it had recruited a completely new team of calibration engineers solely for the purpose of providing calibration support for the product in the field.

8.78. On the relationship between calibration and servicing, Churchill said that the latter required diagnostic and test capabilities whereas calibration was a more routine procedure and could be carried out by less qualified engineers. If a Churchill EGA was serviced by a third party the calibration seals would be broken and it would have to be recalibrated by a Churchill NAMAS-approved engineer. The company told us that as far as it was aware none of its Autogas 4 EGAs were currently being serviced by third parties. The company also told us that a small proportion-possibly 200 out of some 2,500-of the Autogas 4 EGAs sold were not being calibrated or serviced by the company. It assumed that they were being used in garages that were not MOT stations.

Calibration and servicing charges

8.79. Churchill said that it charged the same price for calibration throughout the UK. The additional cost of supporting remote locations was absorbed in the cost of running its calibration business. Churchill told us that it had adopted this policy so as to be in line with the MOT test fee which was also set by the DOT at a national flat rate. Churchill doubted that greater participation by third parties in the reference services would make an alternative charging system feasible. In its view there was a scarcity of suitably qualified engineers in the more remote areas. Churchill offered two types of calibration contract for the Autogas 4: either an annual contract payable in advance or payment per calibration. A combined calibration/service contract for the Autogas 4 had been offered for the first time in 1993.

The complex monopoly situation

8.80. Churchill did not accept as justified the MMC's provisional finding that the company was part of a complex monopoly situation in relation to the supply of the reference services. The company said that section 7(2) of the Fair Trading Act 1973 applied to persons who, whether voluntarily or not and whether by agreement or not, so conducted their respective affairs as to prevent, restrict or distort competition in connection with the supply of services. Churchill pointed out that it had 'conducted its affairs' in this matter so as to follow the requirements laid down by the VI, NAMAS and SIRA. In this context Churchill also recalled that it was a requirement of the VI that EGA calibrations should be carried out only by NAMAS-approved technicians.

8.81. Churchill also pointed out that in the results of the MMC's survey of MOT test stations only 2 per cent had complained about the requirement that calibration had to be carried out by a specified company. Churchill, in this context, reiterated the practical difficulty referred to earlier of separating servicing and calibration so as to have them carried out by different companies because servicing-in which the calibration seals were broken-required immediate recalibration if the EGA was to be used in MOT testing.

8.82. In response to the four practices (Appendix 8.1) listed in the issues letter Churchill told us that it engaged in only one: restricting access by third parties to the calibration manuals and software needed to calibrate its equipment.

Restrictions on access to manuals, training and software

8.83. Churchill did not consider that the practice of restricting access to calibration and service manuals, training and software necessarily led to an effect on competition in the reference service markets as, in its view, fierce competition existed at the point of purchase of EGAs. Churchill argued that although where the purchase is of high value and a one-off type (as, for example, with the motor car itself) this might not be a valid argument, it believed it to be valid in the case of the EGA. This was because customers for EGA equipment typically could be expected to purchase other equipment from the same supplier on a regular basis. This, the company considered, was quite different to a major consumer purchase such as buying a car.

8.84. Churchill also considered cost to be a relevant factor. The company pointed out that the majority of MOT stations responding to the MMC's survey (Appendix 3.4) stated that it was the price of the equipment rather than servicing which influenced them most in their choice of EGA. Churchill said that the cost of a stand-alone Autogas 4 EGA was between £1,800 and £2,000. The MMC's survey of MOT stations showed that some garages had more than one EGA and over three-quarters of them used other diagnostic equipment in their garage. A further 69 per cent of garages said that their experience of calibration and servicing would affect their decision to purchase other equipment from the same manufacturer, 45 per cent of them to a significant degree. Accordingly Churchill submitted that consumer choice which existed at the point of purchase of the equipment inhibited any restriction of competition which might exist in the reference service markets.

8.85. Churchill told us that it had had three formal requests from companies, mostly distributors of its equipment, seeking to calibrate its EGAs. This was in the early stages of the VI's formulation of its calibration requirements, and Churchill said that it had turned down the requests because the VI's requirements were not yet clear, but the company had been given to understand that the manufacturers would be responsible for arranging suitable calibration facilities for their customers.

8.86. Apart from the reasons already given for refusing access to manuals and software to third parties (paragraph 8.71), Churchill told us that it was also under the impression that under its arrangement with SIRA for preparation of the calibration procedure for the Autogas 4 from the company's manual, that procedure document was SIRA's copyright and could not be made available to third parties. We pointed out to the company that from enquiries the MMC had made of SIRA (paragraph 7.61) this did not seem to be the position. We understood that, although SIRA owned the copyright, the procedure document could be released to third parties with the consent of the manufacturer under whose contract SIRA had drawn it up.

8.87. We enquired of Churchill in the light of this clarification from SIRA whether the company would be willing to consider licensing third parties to make use of its manuals and software subject to the conditions it had previously indicated (paragraph 8.71). The company said that it would probably be willing to do so subject to SIRA's position being confirmed.

8.88. Churchill also raised another possible obstacle to access by third parties: the possibility that the manufacturers of the infra-red gas bench used in the Autogas 4, the US company Andros, might object to licensing. But Churchill said that it had not sought Andros's views on the matter and agreed that logically such an objection appeared unlikely.

Restrictions on warranties

8.89. Churchill told us that it imposed no conditions on its standard warranty which had the effect of requiring calibration or servicing to be carried out by its own employees. Nor, Churchill said, did any spare parts fitted during warranty have to be obtained from the company or its agents. It was also open to users to have calibration carried out by a third party without affecting the warranty. On this last point Churchill accepted that it was of limited value at present as no one other than the company's employees was accredited to calibrate its instruments.

8.90. Accordingly Churchill did not believe that the warranty terms it offered restricted competition and consumer choice in the provision of the reference services. Churchill told us that it was not its policy to prevent the customer from obtaining service elsewhere. But Churchill made the point that in the event that the supplier of alternative services were to cause damage or to insert a part which itself caused damage, then the warranty would not apply.

Restrictions on the supply of proprietary spare parts

8.91. Churchill told us that it did not refuse to supply proprietary spare parts to third parties or end users. Nor did Churchill seek to discourage the sourcing of spare parts from third parties. Churchill also told us that it did not operate a policy of restricting access to spare parts, nor did it prevent the acquisition of spare parts from third parties.

8.92. On filters, Churchill said that its supplier was free to supply to other parties the same filters it supplied to Churchill and was under no restraint whatsoever from the company.

Restrictions in contracts of employment

8.93. Churchill said that there were no restrictions in its employment conditions which constrained the freedom of employees to provide the reference services after the termination of their employment.

Complaints

8.94. We asked Churchill for its comments on one specific complaint made against it by the St Cleer Motor Company (paragraphs 6.33 and 6.34) as well as on a number of general complaints directed at EGA suppliers received by the MMC.

8.95. Commenting on the four points raised by the St Cleer Motor Company, Churchill said that the advertising mailshot referred to was, in its view, in no way misleading. The mailshot referred to a mandatory requirement for a calibration contract and explained that the VI had made it mandatory for all MOT stations using EGAs to have a written contract for calibration. This was set out in the 1992 edition of the MOT Instruction Manual, Appendix D(ii). Accordingly, in Churchill's view, the statement in the mailshot was correct.

8.96. On the allegation that Churchill refused to replace or give a refund for unmerchantable goods, the company said that this related to the need it had found to seek an alternative source of supply for the filtration system on the Autogas 4. But the company said that it had at all times provided the St Cleer Motor Company with a loan unit for which it was not charged. Nor, Churchill said, was St Cleer charged for any calibrations of the loan units that fell due during the period of the loan.

8.97. The charges for two calibrations which St Cleer alleged were not carried out related, the company told us, to calibrations that fell due for the St Cleer unit at times it was being serviced at Churchill's Daventry plant in February and May 1992. Churchill justified this on the grounds that no charge had been made to St Cleer for calibrations carried out on the loan units provided in lieu of St Cleer's EGA. Churchill told us that it was the company's policy to charge for calibrations that fell due on machines while they were undergoing

services at its Daventry plant. The company said that it did not charge for recalibration after servicing but only for a calibration that otherwise fell due at the expiry of the usual three-month interval.

8.98. Finally on St Cleer's allegation of Churchill extorting payment for the two calibrations that were in dispute Churchill argued that the payments were due. Churchill said that if the calibrations had not been carried out at Daventry its engineer would have had to make a calibration visit to St Cleer before the EGA could be used for MOT tests.

8.99. On the more general complaints made against EGA suppliers, Churchill commented as follows:

- (a) *Choice of calibrator and charges.* Churchill said that it had invested considerable sums in arranging for its engineers to become NAMAS approved. Despite this the company claimed that it tried to offer a calibration service at costs comparable to calibration service on other equipment not subject to stringent requirements laid down by the Government for the EGA used in MOT tests. Churchill also told us that it was operating at a loss on its calibration service.
- (b) *Self-calibrating instruments.* Churchill said that the Autogas 4 was self-calibrating and was sold as such shortly after the MOT exhaust gas tests started. It was only later, the company told us, that the VI's requirements became known and these overrode what Churchill saw as this inherent advantage of its EGA.
- (c) *Supply of filters.* Churchill said that it did not discourage purchase of filters from third parties but its guarantee did not extend to parts other than its own.

H Young (Operations) Limited (trading as Kamasa Tools) and Lucas Service UK Ltd

The reference services

8.100. Kamasa told us that it was the sole UK importer of the Protech Flux 2000 EGA manufactured in Italy and approved for use in the MOT test. Kamasa said that it acted as importer and distributor only and did not participate in the calibration or servicing of the Protech EGA; this it subcontracted to Lucas. Kamasa also told us that it sold the Protech only to its distributors Lucas and Brown Brothers (Dana) Ltd which were totally independent and with which Kamasa had no supply agreements. Lucas was the only company authorized by Kamasa to calibrate and service the instrument.

8.101. Kamasa said that it did not support calibration of EGAs by independents and would only do so if this were to be required by legislation. Kamasa considered it preferable that as few service companies as possible participated in the reference services market so that the calibration services and service warranty offered to end users could be properly managed and controlled.

8.102. Kamasa considered the current requirements of the calibration scheme to be sensible and Lucas said that, in its view, NAMAS's requirements appeared to ensure continuing quality and consistency.

8.103. Lucas told us that in agreement with Kamasa it had secured NAMAS approval for the Protech EGA for 26 of its engineers. These were based at the company's various branches throughout the UK. Customers were offered calibration service from their nearest approved engineer. Lucas said that this service was provided completely separately from the sale of the EGA and customers might have purchased their instruments from either Lucas or from Brown Brothers (Dana) Ltd.

8.104. Lucas said that it did not offer a combined service/calibration package with the purchase of the EGA. Lucas also said that it did not offer formal calibration contracts and branches invoiced their customers locally. Nor did it currently offer service contracts. Lucas also told us that it currently calibrated and serviced only the Protech EGA and that warranty terms and conditions were set by Kamasa.

8.105. On the relationship between calibration and servicing Kamasa considered that the two functions could be carried out separately. But in the company's view this was, in effect, impractical as the EGA often

needed to be recalibrated after servicing and this had to be done by an approved engineer; to call out another person for this purpose would not, the company believed, be efficient or cost-effective.

Calibration and servicing charges

8.106. Lucas told us that with 26 locally-based engineers it found little variation in travelling times in carrying out the reference services provided it organized its workload so as to cover several jobs on each journey by one of its engineers. Accordingly Lucas said that it did not vary its charges in line with geographical location although the situation in the Shetland Isles was currently under review. Kamasa said it did not consider that a system of variable costs according to location was workable and suggested that it was not practised in other industries, eg for telephone line installation charges.

The complex monopoly situation

8.107. Neither Kamasa nor Lucas commented directly in their replies to the MMC's issues letter on our provisional finding of a complex monopoly situation in the reference services. Both implied in the comments they did make that their respective policies were in almost all respects not anti-competitive and that there was strong competition in the market.

8.108. Kamasa said that there were sufficient players in the market to ensure keen competition. The company also pointed out that the four major players in the market identified by the MMC in their provisional finding were in direct competition with one another. In Kamasa's view a garage owner took account of such factors as the cost of the EGA, the back-up services offered, his own particular requirements and the cost of calibration and servicing in making his choice. If any one of the factors compared unfavourably with what was on offer elsewhere, Kamasa believed that the garage owner would be influenced against the machine. It was therefore essential for the EGA supplier to keep down his charges for the reference services. Nevertheless Kamasa did not consider that EGA calibration costs were a considerable item of revenue expenditure for the average garage.

8.109. Lucas told us that its charges were carefully calculated to cover its training, equipment investment, continuing engineer approval fees, equipment calibration fees, travelling costs, vehicle costs, consumables such as calibration gas, certificates, central administration and computerized follow-up procedure, the actual time taken to calibrate and a fair profit margin. In the company's view, if the same MOT test requirements were maintained, it had no reason to believe anyone could provide the same level of service more cheaply. Lucas also pointed out that it had a much wider business relationship with many of its customers for EGA calibration. The ability of these customers to take their business elsewhere was, in Lucas's view, a sufficiently powerful incentive to deter it from risking any monopolistic practices.

Restrictions on access to manuals, training and software

8.110. Kamasa said that the difference between the EGA and other MOT test instruments was that although it could put a car off the road there was no way in which the consumer could check whether or not the EGA's decision was correct. In other aspects of the MOT test the consumer could 'feel' or see that something was wrong. It was for this reason in Kamasa's view that the EGAs had to be maintained in the highest possible conditions by calibration and servicing and this was the objective of the VI and NAMAS approval requirements. In addition to achieving these objectives it was, in Kamasa's view, eminently reasonable that the manufacturer should have some control over the calibration and servicing activity in order to preserve his good name.

Restrictions on warranties

8.111. Kamasa told us that its warranty required that the EGA should be calibrated and serviced by Lucas employees only (as the company's agents). Kamasa said that this restriction was necessary, in its view, to ensure that the end user was provided with good service and to assist with the management of the engineers carrying out the reference services. Kamasa also told us that these warranty conditions were made clear to the customer as, in effect, a condition of the purchase of its EGA. The company took the view that most guarantee/warranty documents required inspection, servicing and repair by the manufacturer or his agent and the use of 'genuine parts'.

Restrictions on the supply of proprietary spare parts

8.112. Kamasa considered it important to distinguish between spare parts and consumables. In its view a spare part was something that was not routinely replaced. A consumable was regularly replaced and Kamasa considered that this could be done by the user who could also obtain them from any source he chose. Kamasa also suggested that any consumable supplied by a non-manufacturer should be tested and proven by the supplier to be compatible with the range of machines for which it was intended and should be so certified before its use was allowed.

8.113. Kamasa told us that it required proprietary spare parts for the Protech to be bought only from the company. It was the only source of the parts designed, manufactured, tested and distributed by the manufacturer. Kamasa said that the use of non-manufacturer spare parts might affect the performance of the instrument. Kamasa accepted that this restriction on the supply of proprietary spare parts would in turn restrict competition but the company believed this would guarantee that the EGA worked to its original specification. Kamasa said it would be happy for another company to supply spare parts for any of its machines provided each spare part were tested in accordance with the strict guidelines laid down by such bodies as the OIML and the VI.

Restrictions in contracts of employment

8.114. Lucas provided the MMC with a copy of its 'Employee Handbook' which, it pointed out, made no reference to EGAs. Nor did it appear to place any restrictions in the way of any employee who left the company and wished to continue or engage in provision of the reference services. Lucas also pointed to the NAMAS requirement that an engineer approved by NAMAS for Protech calibration lost that approval on leaving the company's employment. Lucas commented that had that stipulation not been in place the company might well have questioned the wisdom of entering a field where its employees could have been presented with the possibility of starting their own business at the company's expense and with its customers.

8.115. Finally both Kamasa and Lucas commented on the results of the MMC's survey of MOT stations. Kamasa said it suggested that the vast majority of EGA users were happy and had no real complaint and that if the system were working well it was best left alone. Lucas considered that there was a danger of over-reacting to what it considered to be a handful of complaints.

Richard Oliver Limited and the Garage Equipment Maintenance Co Ltd

8.116. Oliver told us that it had developed its EGA (the Gas Check 2000-an OIML Class II instrument) from its many years' experience as a manufacturer of gas analysis equipment used in research and development in all types of engines and in education. Oliver said that it was not previously involved in the garage equipment market in the UK and was not able to support or even to sell its machines in the field. It was for that reason that it had reached agreement with GEMCO, a company with a service organization and already in the garage equipment market, for the distribution and provision of the reference services for the Gas Check 2000. Oliver also told us that it had given GEMCO sole distribution rights for its EGA and that the agreement between the two companies gave GEMCO complete discretion in the arrangements it made for the provision of the reference services. The agreement also allowed GEMCO to distribute, calibrate and service other EGAs if it wished.

The reference services

8.117. Oliver said that it was not opposed to the calibration and servicing of its EGA by third parties, subject to their meeting the required standards through GEMCO, nor to the release of its manual to them. The company had had a few approaches from third parties wishing to calibrate and service its EGA but had referred them all to GEMCO.

8.118. GEMCO told us that it was willing to assist third parties to acquire NAMAS approval to calibrate the Gas Check 2000 by providing training, including release to them of the Oliver manual. No royalty was charged for the Oliver manual but GEMCO made a charge of around £250 for the 40 hours of training required. Two third party firms, ATE (Neil Jeffery) and Everquip, had already secured NAMAS approval. GEMCO said that it had also had approaches from a number of other companies but none had been pursued. If they had been GEMCO said that it would wish to establish through references that they had an established business and were commercially sound. Without these precautions GEMCO feared that a third party might secure NAMAS approval for its engineers with GEMCO's assistance and if it then went out of business the end user would look to GEMCO to remedy the situation and incur the costs of doing so.

8.119. On its relationship with the two third parties providing the reference services for the Gas Check 2000 GEMCO told us that they were totally independent and not under contract to GEMCO. They were totally free to provide the reference services in any area, including those covered by GEMCO's engineers, and to charge their own fees. GEMCO said that the third parties were also free to calibrate other makes of EGA if they so wished.

8.120. On its own services GEMCO told us that it had trained its engineers in its own training school to calibrate the Gas Check 2000 in accordance with the required procedures. It had secured NAMAS approval for 50 of them through SIRA. It operated a national service at uniform charges and offered calibration either on annual contract or on demand. GEMCO said that it did not currently offer service contracts apart from a small number of its EGAs, estimated at about 100, sold on all-encompassing lease agreements. Of these, about half had calibration and maintenance contracts.

8.121. GEMCO said that it had adopted its uniform charging system so as to be in line with the terms covering the range of other garage equipment it serviced and to comply with the demands of its national account customers. GEMCO also told us that the cost of acquiring NAMAS approval for its engineers was much greater than it had anticipated so that in the first year of the calibration scheme it had underpriced its charges by some £50 per calibration. GEMCO said that it had had to increase its 1993 charges accordingly and had received a number of complaints as a result. Overall GEMCO believed its calibration charges were much the same as those of its competitors. In response to a suggestion that increased competition from third parties might reduce its costs by taking over responsibility for some of the more remote MOT stations, GEMCO said that this was unlikely in its case because of the proportion of its business represented by contracts with major garage groups located throughout the UK.

8.122. On the relationship between calibration and servicing, Oliver told us that it was possible to carry out these operations separately apart from the economics of so doing. GEMCO said that it was very difficult to see how the two operations could be economically carried out by different companies because servicing involved breaking the calibration seals requiring immediate recalibration.

8.123. Both Oliver and GEMCO considered the approval procedures satisfactory though GEMCO thought them to be expensive. On the other hand GEMCO believed that using only engineers approved by NAMAS ensured that the appropriate standard of engineering skills was maintained across the market-place.

Warranties

8.124. GEMCO said that it was not a condition of its warranty that its EGA should be calibrated and/or serviced by the company or that only its spare parts be used. On the other hand, if there were evidence that the instrument had been tampered with the repairs might not be carried out free of charge and the matter would be taken up with the customer.

Spare parts

8.125. Oliver told us that it did not itself manufacture many spare parts but some were made to its specification and design and it would not be happy to make these generally available through third parties. Other standard parts for the Oliver EGA were, we were told, generally available in the market-place. All Oliver's spare parts were supplied in bulk to GEMCO.

8.126. On the more specific issues of filter elements and the probe, Oliver said that there was a wide variety of filter elements available for use with EGAs. Oliver used a particular brand of filter element for removing water droplets etc and another for removing particulate matter. It used these types after carrying out lengthy and expensive tests on the sample handling of its equipment. Oliver said that it did not claim that another brand or type of filter element would not perform satisfactorily; it simply did not know. Oliver emphasized that users sometimes did not realize that the filters were there to protect the most expensive part of the analyser, the optical bench, and so had to be treated with the utmost caution. Oliver also pointed out that the probe on its analyser was designed specifically to meet the required performance of the sample handling side of the EGA and to meet the requirements of the OIML specification. The design of the probe was Oliver's but it could be produced to Oliver's drawings by several concerns and there were no supply problems.

8.127. GEMCO told us that, in its view, spares were an integral part of the EGA market and that, with a few exceptions, a free market existed. On filters, it was GEMCO's policy to change the filters at every calibration and it had put this into its calibration procedure.

Contracts of employment

8.128. GEMCO told us that its contract of employment contained the standard terms to safeguard confidentiality and to provide for retention of documents etc when an employee left the company. GEMCO said that there were no other restrictions on the employee's future employment.

Complaints

8.129. We put to GEMCO the specific complaints by Neil Jeffery (paragraphs 5.20 and 5.21) and AVS (paragraph 6.17) and to Oliver and GEMCO some of the more general complaints received by the MMC directed at EGA suppliers. Commenting on the points raised by Mr Jeffery, GEMCO said that he had referred to his contract with GEMCO but it was unaware of any formal or informal contract with Mr Jeffery for calibration. On Mr Jeffery's complaint that he had to buy spare parts from GEMCO rather than direct from Oliver, GEMCO pointed out that the supply of spare parts had been contracted out to it by Oliver as that company had no distribution channels of its own. GEMCO also denied Mr Jeffery's allegation that it had spoiled his tender to BT by stipulating that he could not hire other engineers. GEMCO reiterated that it was willing to assist third parties to acquire NAMAS approval subject to the criteria it had laid down (paragraph 8.118). GEMCO had, it said, told BT that there were two alternative calibrators for the Gas Check 2000.

8.130. Oliver denied the allegation by Prosol (paragraph 6.79) that manufacturers discouraged purchase of filters from third parties by suggesting that they were of inferior quality. Oliver reiterated the importance of using the correct filter for its EGA (paragraph 8.126) and said that if a third party secured its supplies from Oliver's filter supplier under the same part number then there would be no problem. If a third party offered an alternative filter for use in its EGA, Oliver said that it would be prepared to test it at the supplier's expense but pointed out that such testing was expensive and lengthy. Oliver also said that if end users of its EGAs

accepted alternative filters for the Gas Check 2000 without its approval it would require them to pay for repairs caused by filtration problems.

Tecalemit Garage Equipment Co Ltd

8.131. Tecalemit told us that it was a major supplier of garage equipment in the UK and that the EGA it supplied, an OIML Class II instrument, was purchased from Omitec Instrumentation Limited. Tecalemit said that it had received NAMAS laboratory accreditation for the approval of engineers to calibrate its EGA and it offered servicing and calibration through its Service Division. Tecalemit had received only one approach from an unknown person seeking to calibrate and service its EGAs and this had been refused. The company said that its policy on such approaches was to consider them on the basis of its assessment of the party's abilities, resources and the degree of customer support that could be given.

8.132. We put to Tecalemit the complaints made by Renault (paragraphs 6.67 and 6.68). On the lack of choice of calibrators for its EGA, Tecalemit pointed out that some 200 out of the 900 EGAs it had sold were not calibrated by the company. On Renault's complaint about Tecalemit's refusal to release its calibration manual, the company pointed out that ownership of the copyright rested with Omitec but it also maintained that the calibration scheme as originally put forward to EGA manufacturers and other interested parties in June 1991 had provided for nomination as an approved calibrator to be endorsed by the manufacturer.

Souriau (UK) Ltd

8.133. Souriau, which is a wholly-owned subsidiary of its French parent company, Souriau Diagnostic Electronique SA France, told us that it sold gas analysers and other automotive workshop equipment. Souriau said that the UK company had been responsible for the repair, maintenance and calibration of the company's products but that agreement had recently been reached to transfer responsibility for this, including the EGAs, to Tecalemit. Souriau had also employed three other companies as subcontractors to calibrate and service its EGAs but had not, as yet, been approached by any others. It had been prepared to consider such approaches provided that the company concerned was able to maintain the standards required and provide the appropriate levels of customer service.

8.134. We asked Souriau about the complaint about increased charges made by Pratt and Gelsthorpe (paragraph 6.31). Souriau told us that its initial calibration fee of £65 was set in February 1991 to meet a request from the RMIF for information for its members. This was before the details of the calibration scheme were available. Souriau said that it held the fee for 12 months but then had to raise it to £85 for calibrations under prepaid contract or £110 without a contract, in order fully cover its costs.

Hermann Electronics (UK) Ltd

8.135. Hermann told us that in association with Autocraft Equipment Limited it imported, sold, serviced and calibrated garage equipment including EGAs. Hermann said that it had acquired NAMAS laboratory accreditation in order to service its customer base. Hermann had received no approaches from third parties seeking to service and calibrate its EGAs but it had contracted two other companies, Celtech and Celtech UK, to provide these services. Hermann also said that it would be willing to consider further approaches from other parties provided that they were willing to seek NAMAS approval through Hermann's accredited laboratory and to work strictly to the company's procedures and quality manual.

8.136. We raised with Hermann the complaints made by Addtronics (paragraphs 5.6 and 5.7). Hermann told us that its past relationship with that company was *sub judice* but said that it had supplied Addtronics with an OPUS EGA in May 1992 on cash-on-delivery terms. The invoice had not been paid but Hermann said that it had continued to calibrate the instrument. Hermann also told us that a number of NAMAS-approved engineers carried out calibrations on its behalf but were not directly employed by the company. Mr Addison of Addtronics was one of these and had assisted Hermann to achieve NAMAS accreditation, but Hermann said that it reserved the right to decide who to retain in this role. Finally Hermann considered that the faulty OPUS 4 machine referred to by Addtronics was still capable of use for the MOT test and replacement of the faulty oxygen sensor was in Hermann's view Addtronics' responsibility.

Other EGA suppliers

8.137. In addition to the above eight EGA suppliers, which account for over 75 per cent of both EGAs at MOT stations (Table 3.4) and of calibration services (Table 3.10), replies to our questionnaire were received from a further nine suppliers (listed in Appendix 8.2). From the evidence provided by these suppliers it appeared that the provisional finding of the existence of a complex monopoly situation did not apply to them. Specifically all the companies said in their replies:

- (a) *Access to manuals, training and software.* The companies, many of which indicated that they had not been approached for the use of their manuals, all told us (with varying degrees of enthusiasm) that they would be willing to consider their release to third parties subject, in some cases, to conditions such as payment of a royalty plus evidence of an established business reputation and a sound financial position. Some had already agreed to third party calibration of their EGAs and released their manuals accordingly.
- (b) *Restrictions in warranties.* A number of these other suppliers imposed restrictions requiring that repairs were carried out by the manufacturer using 'genuine' spare parts during the warranty period. None had conditions which invalidated the warranty if calibration was carried out by a third party NAMAS-approved engineer.
- (c) *Spare parts.* None refused to supply spare parts.