

# 10 Pattern approval and calibration arrangements

10.1. When the Office of Fair Trading announced that this reference had been made to the MMC its press release said that the reference would enable the MMC to investigate related issues which may bear upon the working of competition in this market such as the technical and procedural requirements for the present, and any possible future, system of servicing and calibration. We became aware of a number of such issues during the course of our investigations.

## **Pattern approval arrangements**

10.2. Some of the companies supplying EGAs criticized the arrangements for pattern approval in the UK. They considered that the OIML standards against which approval is granted are not the most appropriate and that it would be better if a national standard were developed. We do not believe it is within our terms of reference to comment on this aspect since it does not relate to calibration or servicing.

10.3. However, criticisms that the arrangements do not ensure that a machine is kept to the approved standard are relevant because manufacturers argue that this places the onus on them to ensure that servicing is carried out only by them and that only original parts and manufacturer-approved consumables are used throughout the machine's life.

10.4. Pattern approval is obtained by submitting specimens of the machine to a testing laboratory accredited by NAMAS (or its overseas equivalent) for this purpose. There are two such laboratories in the UK: SIRA and GEC Avionics Ltd. If the laboratory certifies that a machine meets the appropriate OIML standard the VI will normally add it to the approved list. According to the manufacturers no steps are taken to see that production models remain identical to the specimens submitted for testing nor that a machine is not modified during servicing so that it no longer conforms to the standard. They argue that the VI implicitly relies on them to perform these functions. The manufacturers contrast this with arrangements in the USA and some European countries where production models are regularly checked at the factory and the manufacturer is required to see that every machine continues to meet the standard throughout its life. He is able to do this by arrangements which ensure that no one else opens the cover of the machine, that the machine 'locks-out' so that it cannot be used if it moves out of calibration and that only the manufacturer has access to the password necessary to release the lock-out and recalibrate the machine.

10.5. We understand from the VI and NAMAS that they are satisfied that a machine is continuing to function correctly if it can be properly calibrated against a specimen gas at the required intervals (normally three months). It does not matter if different spare parts, which may not have been tested to the OIML standard, are used so long as the machine calibrates correctly. We are not convinced that this is a sufficiently rigorous arrangement to ensure that EGAs continue to function in accordance with the standard. Calibration is required only at intervals of three months (or longer in a few cases) and it is possible to envisage circumstances in which a machine calibrates correctly but then, because it incorporates inappropriate spare parts or consumables, quickly drifts out of calibration so that for much of the period between calibrations it is not taking accurate measurements.

10.6. While this situation could be remedied by giving the manufacturers more control over servicing and use of the machine we do not believe that this is the only or best way.

10.7. One way of detecting machines which are failing to read accurately is to examine the extent to which they have drifted out of calibration between one routine calibration and the next. This information is recorded at the time of calibration on the calibration certificate, of which a copy is retained by the calibrating engineer's company, and, in the case of engineers operating under the auspices of SIRA, a further copy is returned to SIRA and entered on a computer database. It should be possible to analyse this information on a regular basis to identify any particular machine where the drift between calibrations is consistently worse than the average for a particular model. The VI could then require the machine to be taken out of service until it had been checked and adjusted by the manufacturer to bring it back into specification. In this way the integrity of the machines could be ensured without inhibiting competition in calibration and servicing.

10.8. As far as consumables are concerned the same object could be achieved by requiring manufacturers of EGAs to publish the functional specification of the relevant parts (eg filter elements) used in the models submitted for testing. Competing filter manufacturers and suppliers could then have samples of their filters tested against the specification in an accredited laboratory and so demonstrate to users that their filters, while not necessarily the original equipment, were nevertheless of the same specification.

10.9. We believe that the VI should consider the practicability of these proposals with a view to implementing them when an opportunity to change the regulations next arises. The proposals should also be considered in relation to smoke meters and any other equipment which might be required for MOT tests in the future.

10.10. Early decisions on future changes in requirements, for example those expected to be introduced in 1996, are important in ensuring that competition in the market for EGAs and their calibration/servicing is as effective as possible. If manufacturers do not know the requirements until shortly before introduction they cannot readily develop or adapt equipment to meet the need and they cannot develop appropriate servicing and calibration information with the result that they will not be able to provide information to the market on the after-sales services they will offer and the prices they will charge for them. Purchasers of equipment will then be less able to make informed choices which take account of the whole-life costs and competing suppliers of after-sales services will not be able to develop and advertise their offerings. We recognize that the VI itself had very little time in which to organize the introduction of emission tests in 1991. We recommend that on future occasions this situation be avoided.

## **Calibration arrangements**

10.11. The organization of calibration arrangements for EGAs involves three parties—the VI, which is the government agency responsible for laying down the requirements and policing the way MOT stations adhere to them; NAMAS, which is the government agency responsible for accrediting and monitoring laboratories which test equipment for pattern approval purposes and carry out the calibration of measuring instruments (including EGAs); and SIRA, which is one of the organizations accredited by NAMAS to carry out calibration services and which does so largely for those EGA suppliers which do not have their own NAMAS-accredited laboratories.

10.12. Some EGA suppliers said that they believed these and other functions concerned with vehicle testing should be carried out by a government agency on a monopoly basis or, in the case of calibration, by themselves under close government supervision—as is the case in a number of other countries. However, in the UK the Government has adopted the policy of putting as much of this work as possible in the private sector and allowing it to be carried out on a competitive basis. In our view, where government imposes requirements on commercial organizations, such as the possession and regular calibration of an approved EGA, there is an onus on it to ensure that the system it designs will minimize costs and provide the customer with good value for money. This can be achieved either by competition or by economic regulation. Competition is generally to be preferred where it is practicable but its efficient operation depends on the VI designing systems which promote *effective* competition.

10.13. In the case of EGAs, competition could be enhanced if the VI published information about those suppliers that are willing to release the information necessary for independent calibrators to enter the market. Purchasers who regarded a choice of calibrator as important would then be able to make a more informed choice at the time of the original purchase. The VI publishes such information for smoke meters and we

believe that there would be benefits in doing the same for EGAs and for any future equipment which requires regular calibration.

10.14. Competition is not feasible in relation to the activities of NAMAS, a government organization whose costs are borne by the industry. In such cases there is an onus on the Government both to provide such services as efficiently as possible and to ensure that the requirements laid down by the VI are not more onerous than are necessary. For example, we are concerned that the VI has not reviewed its requirements for quarterly calibration (see paragraph 7.13) unless asked to do so for its own model by a particular manufacturer. We consider that the VI should regularly examine the available data in order to avoid a situation where the responsibility for seeking a review lies with one of those parties which gains revenue from calibration (which includes NAMAS and SIRA) and therefore may not have an incentive to reduce the frequency where this could safely be done. In any change to the arrangements the VI might also consider the possibility of linking calibration frequency to the number of MOT tests carried out so that those MOT stations which did not carry out many tests would have to pay less per annum for calibration services than those which used the machine more intensively. A combined arrangement, such as every 400 tests or every 12 months (whichever occurred first), might meet the VI's requirements and relate the costs borne by the MOT station more closely to its revenues from tests.

10.15. Competition could be enhanced if more information on the performance of the various models of EGA were available to purchasers. One source of such information is the calibration data discussed in the previous paragraph and we suggest that the VI considers whether some comparative analysis might be published.

10.16. We note also that SIRA gains work and revenue from every calibration which is carried out other than by an employee of one of the other three NAMAS-accredited laboratories (Sun, Tecalemit and Hermann Electronics (UK) Ltd). In practice 244 out of the current total of 304 calibration engineers are issuing certificates in SIRA's name. This represents some 80 per cent of the market. However, we saw no evidence that there were barriers to becoming an accredited laboratory and so if SIRA were to be perceived to be exploiting its position we would expect competition to emerge, for example from one of the other companies manufacturing EGAs in the UK. However, if circumstances had existed where entry was restricted this would be another example of the need for the VI to consider the structure of the market in devising its requirements.

## **Proposals**

10.17. In the light of these considerations we propose that in any review of the arrangements for the use of EGAs in connection with MOT tests the relevant government agencies should consider the practicability of:

- (a) establishing regular analyses of calibration data to monitor the performance of individual models, having regard to usage levels and other factors, so as to identify the scope to vary the required frequency of calibration if appropriate and to identify any machines that appear not to be remaining within specification;
- (b) requiring suppliers of EGAs submitted for pattern approval to publish the specification for consumable items such as external filters so that competing suppliers of consumables can have their products tested against the specification;
- (c) publishing new or changed requirements as far in advance of the implementation date as possible so that competitive supply can be allowed to develop and purchasers have better information at the time of initial purchase;
- (d) publishing information about those EGA suppliers which are willing to provide information needed by competing suppliers of calibration services and about the performance of different models of EGA; and
- (e) designing any system which imposes compulsory costs on businesses in a way which will foster competition or otherwise ensure that those costs are kept to a minimum.

We believe that these considerations may also apply to other equipment which may be introduced for the purpose of the MOT test in future.

B C OWENS (*Chairman*)

J EVANS

J F PICKERING

J K ROE

S N BURBRIDGE (*Secretary*)

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