

Position on Electromagnetic Compatibility of vehicles post-October 2002

1. Purpose

This paper advises the Mobile Services Committee on the regulatory environment relating to the use of electrical and electronic equipment fitted in vehicles, subject to the provisions contained in the Automotive EMC Directive (95/54/EC).

2. Background

The Automotive Directive was introduced in 1996 with a 6 year period permitted for full implementation on 1 October 2002. Since the 1st October all new electrical or electronic products that are fitted in vehicles have to meet the requirements of the Automotive Directive (95/54/EC) and be "e" marked. Until now the use of the "CE" mark, with the product meeting the requirements of the EMC Directive (89/336/EEC) has been acceptable (at the discretion of the individual EU countries). These changes mean that manufacturers will have to go down the application route for certification. The 'e' mark is issued by the Vehicle Certification Agency (VCA) in the UK. As the VCA does not have its own EMC test facilities the testing required by 95/54/EC will need to be carried out either by authorised technical services or test facilities which have been approved by the VCA.

3. Department of Transport consultation update

Despite being given six years to prepare for the implementation of the Directive, it became evident it became evident that neither the motor industry nor its customers had prepared adequately for the introduction of the Automotive EMC Directive. Consequently, the Department for Transport received representations from the Radiocommunications Agency and the Home Office outlining difficulties that would be faced if the 1 October 2002 deadline was imposed.

Following a consultation process in March 2002, the Department of Transport through the Road Vehicles (Construction and Use)(Amendment) (No.3) Regulations 2002 relaxed the wording of the existing Regulation 60 to allow the continued fitment and use of "legacy" equipment (equipment first sold before 1 October 2002) in vehicles, whether old or new. This eased the burden of the new regulations, particularly on users of specialised equipment such as the emergency services. Regulation 60(1)(D) also required amendment, in line with treaty obligations, to accept compliance with ECE Regulation 10.02, as this is the most recent version of Regulation 10. The consultation responses also confirmed that without the required amendments there was a real possibility that many of the country's emergency services might not be able to comply with the regulations on 1 October 2002.

4. Outcome

Without these amendments it would be an offence from 1 October 2002 to use a vehicle which had been type approved pursuant to 70/156/EEC (currently only possible for passenger cars) if it fitted with an Electronic Sub Assembly (ESA) that

had not been approved to the Automotive EMC Directive requirements. **Relaxing the Regulations allowed the continued fitment and use of “legacy” equipment (equipment first sold before 1 October 2002) in vehicles, whether old or new.**

5. Risk

There is a small theoretical risk associated with allowing the continued use of "old" equipment in new vehicles, as it might affect the functioning of the vehicle. However, virtually all new passenger cars that have been produced since 1996 have been in compliance with 95/54/EC and therefore have a guaranteed level of immunity. If the legacy equipment has not previously caused any EMC problems, there appears little likelihood that any will emerge with its installation in new vehicles. Major users such as the emergency services are expected to ensure that old equipment is installed in line with recognised procedures and that therefore any risk is minimised.

6. MPT 1362

The Radiocommunications Agency together with representatives from the communications industry has revised the code of practice for the installation of radio equipment into vehicles. MPT 1362 details the best practice for the mounting and connection of equipment to the vehicle. Many communications and automotive industry representatives were consulted during the revision period. The final document was agreed by TAG/WG8X earlier this year. The document is available from the RA library or can be downloaded from the RA web site.

7. Emerging issues

(a) Key manufacturers of new PMR systems are producing compliant equipment and testing and ‘e’ marking equipment. In some cases this equipment has a space reserved for options or add on facilities. The electrical connection is made via a socket with defined interface, although this interface is likely to be manufacturer specific. The Automotive Directive does not give guidance on expanding the function of factory equipment. It has been assumed that if options are correctly installed and these options have been tested and marked as ‘e’ compliant the combined unit remains compliant.

(b) The equipment installed in accordance with the manufacturers instructions and also to MPT 1362 code of practice do not appear to have presented any problem. However, it is reported that a number of unscrupulous installers, particularly in the taxi market, take short cuts and install equipment in a temporary and unsafe fashion with unpredictable consequences in the event of an accident. Local Authorities appear to be turning a blind eye to this practice when licensing taxi operators. It is suggested that Local Authorities and Trading Standards Officers have this brought to their attention in order to avoid any subsequent problems.

RA2/PBS

12 November 2002