



House of Lords Select Committee on Communications' call for evidence on digital radio switchover

SMMT submission

February 2010

1. Introduction

- 1.1 SMMT is the leading trade association for the UK automotive industry, providing expert advice and information to its members as well as to external organisations. It represents more than 500 member companies ranging from vehicle manufacturers, component and material suppliers to power train providers and design engineers and including suppliers of radios and antennae installed in vehicles. The motor industry is a crucial sector of the UK economy, generating a manufacturing turnover of £51 billion, contributing well over 10% of the UK's total exports and supporting around 800,000 jobs.
- 1.2 SMMT welcomes this opportunity to provide evidence to the House of Lords Select Committee on Communications about its members' perspective on the migration to digital radio and the five-point plan for the automotive industry announced in the Digital Britain Report ('the report').
- 1.3 SMMT is engaged with the Department for Business, Innovation and Skills, the Department for Culture Media and Sport and Digital Radio UK in constructive discussions about how to deliver a successful migration to digital radio within the automotive industry.
- 1.4 Unless otherwise stated, the term 'vehicles' in this paper covers cars, commercial vehicles, buses and coaches, motor-homes and any other motor vehicle fitted with a radio. The paper is also based on the assumption that new vehicles will be digitally-enabled by having digital radios installed during production, as opposed to being supplied with analogue radios and digital convertors.

2. Automotive industry overview of digital migration

- 2.1 SMMT's members have welcomed the element of certainty introduced by the report. Though the deadline of 2013 for digitally-enabling new vehicles is challenging, it is manageable.
- 2.2 SMMT members have, however, mentioned a number of concerns:
 - the apparent perception that the markets for in-vehicle radios and domestic radios are similar, if not identical, and that any assumptions about the speed of take up can be applied to both markets
 - the timeline for adapting the existing vehicle parc
 - the continued availability of traffic information after 2015 to those driving vehicles which are not digitally-enabled
 - the extent of radio transmitter coverage

- the need for broadcasters to promote the advantages of digital radio to consumers to create demand
- safety and security issues arising from the use of digital convertors
- the need for pan-European approaches to the introduction of digital radios in vehicles.

3. The market for in-vehicle radios

3.1 There appears to be an assumption that the market for in-vehicle radios and that for domestic radios have similar, if not identical, features. In fact, they differ in five main ways:

- in the automotive market, the vehicle itself, not the radio, is the reason for the purchase
- vehicles are required to undergo an approval process which is far lengthier than any applying to consumer goods
- the sizes of the two markets and their dynamics are vastly different, where customers purchase new radios more frequently than they do vehicles
- if a radio in a vehicle fails, or even only appears not to work properly, blame is attached to the vehicle manufacturer, whereas the reputational risk if a domestic radio fails is borne by the radio manufacturer
- in automotive applications, the radio is not static. It moves between transmitters and, therefore, complete and national coverage of the digital radio network will be required.

3.2 All vehicles have to be type-approved before they can be sold in the EU. Broadly speaking, the time from beginning product development to receiving type approval averages four years. Though radios themselves do not have to be type approved, they do have to be integrated with other systems in a vehicle and then tested to ensure their compatibility with components which themselves have to be type approved.

3.3 Thus, meeting a deadline of 2013 will be a challenge for vehicle manufacturers who began product development in 2009, but we expect it to be achievable. A bigger challenge is represented by those models already on the market or most of their way through the development cycle, where the manufacturers will have to decide whether to divert engineering resources to the task of digitally-enabling them or provide new vehicles with digital convertors.

3.4 This contrasts with the market for domestic radios. Because they are free-standing, such radios can be designed, put into production, and appear on the market, within months.

4. Timeline for adapting the vehicle parc

4.1 The report suggests that the majority of the vehicle parc should be converted to digital by 2015, with low-cost convertors for the remainder.

4.2 Vehicle manufacturers are certain that retrofitting of digital radios on a large scale is impractical. Vehicles' electronic systems have become increasingly integrated; often, the radio is part of this integration and cannot easily or economically be replaced. A radio has to operate in the vicinity of sensitive electronic components, and poor integration has a detrimental effect on other systems.

- 4.3 Retrofit also affects the perceived quality of the vehicle:
- antennae have to be chosen very carefully – reception from an internal antenna may be poor if a vehicle is fitted with infra-red reflection glass, or if a magnetic antenna base is fitted to an aluminium body
 - poor refitting of trim items removed to permit a retrofit will cause rattles .
- 4.4 Drivers will, therefore, be reliant on the use of digital convertors to enable continued use of their analogue radios after 2015. As vehicles have very long lives, most of the vehicles first registered since 2006, if not earlier, will still be in use in 2015. It is likely that over 20 million vehicles will have to be so fitted, and very likely that most of the necessary sales will be made in the few months before the date for digital migration. The commitment for a cost:benefit study to be conducted before any digital migration date is announced is therefore welcomed by vehicle manufacturers because it should firmly identify the progress made towards digitally-enabling the car parc.

5. Traffic information

- 5.1 SMMT members consider traffic information to be one of the most important issues arising from the report.
- 5.2 Drivers' ability to receive traffic information while on the move plays an important part in keeping traffic flowing. Digital Radio Upgrade has serious implications for drivers because current radios, even digital ones, will be unable to receive traffic information. This also applies in the case of current satellite navigation systems, which rely on the FM signal to identify slow moving traffic. Accepting that loss of traffic information will occur would contradict other policies, which attempt to use the flow of information to increase traffic flow, increasing driver safety while reducing emissions.
- 5.3 Vehicle manufacturers need speedy clarification of government's policy on the future supply of traffic information. This will enable them and their suppliers to develop cost-effective solutions for application both at the point of production and in the aftermarket. In particular, government must consider the feasibility of continuing to supply information on FM for a number of years after the migration date.

6. Transmitter coverage

- 6.1 SMMT members are clear that the gaps in digital coverage are a major deterrent to their introduction of digital radios as standard equipment. As outlined above, any vehicle manufacturer bears the reputational risk if a radio in one of its products appears not to work properly. Drivers have become accustomed to the gradual deterioration in FM reception which occurs throughout parts of the UK and recognise this is not the fault of their radios. At the present stage of digital roll-out, shortcomings tend to be blamed on the vehicle manufacturer.
- 6.2 SMMT members therefore welcome the statements in the report that
- one of the criteria for deciding the date of the Digital Radio Upgrade will be whether national DAB coverage is comparable to FM coverage and that local DAB radio reaches 90% of the population and all major roads

- the BBC should begin an aggressive roll-out of the national multiplex to ensure that its national digital radio services achieve coverage equivalent to FM by 2014.
- 6.3 However, there is also a need for a plan to enable reception on those stretches of road, primarily tunnels and long underpasses, where reception goes 'dead' for a short period. At present, for instance, FM coverage in the Dartford Tunnel is addressed by special measures. In shorter tunnels, the FM signal tends to deteriorate but not disappear, whereas the digital signal disappears entirely.
- 6.4 SMMT members appreciate the way in which the BBC is keeping interested parties including the Society informed of its transmitter roll-out plans and the speed of their implementation.

7. Promotion of the advantages of digital radio

- 7.1 While vehicle manufacturers will develop their own marketing programmes for digital radio, they are strongly of the view that responsibility for raising the general level of understanding of the advantages of digital radio rests with the broadcasters. They look forward to working with Digital Radio UK, through SMMT, to help this process.

8. Safety and security issues

- 8.1 SMMT members have identified two safety and security concerns.
- 8.2 The safety concern relates to the amount of information which is presented to a driver. It is recognised that digital radio permits much more information to be available to listeners. However on safety grounds, vehicle manufacturers may wish to limit the amount of information provided to the driver while a vehicle is moving, especially in the form of visual announcements which would be distracting.
- 8.3 Vehicle manufacturers' security concern arises from the use of portable digital convertors fixed to windscreens. They see these as a possible cause of an increase in the number of 'thefts from' vehicles. Although the manufacturers of digital convertors suggest that future products will be capable of being safely installed out of sight, vehicle manufacturers have yet to be convinced that the need for a power supply via a socket in the passenger cabin will disappear. (There has also been some concern that convertors will create a safety hazard by being placed in drivers' vision.)

9. European collaboration

- 9.1 The automotive industry is an international one. SMMT's members therefore welcome government's commitment in the five-point plan to work with its European partners in order to maintain a smooth cross-border transition to digital services. That will allow all radios to work in all countries.

10. DAB as the chosen UK standard

- 10.1 Vehicle manufacturers and their suppliers have for many years worked from the assumption that DAB will be the UK standard. The international nature of their business means that they will increasingly have to fit their vehicles with radios capable of receiving DAB, DAB+, DMB, DRB or other

digital formats in order to sell them in different markets. However, SMMT supports a continuation of the endorsement of the DAB format from government and associated bodies to ensure certainty for vehicle owners through the migration phase and for a substantial period beyond. Any change to that standard would risk further problems in converting the vehicle parc.

1 February, 2010