department for
culture, media and sport

APPROVED INSTALLATION

Digital Radio Action Plan Report

June 2013

improving the quality of life for all

Our aim is to improve the quality of life for all through cultural and sporting activities, support the pursuit of excellence, and champion the tourism, creative and leisure industries.

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Section 1: Foreword

1.1 Introduction

1.1.1. The Digital Radio Action Plan (DRAP) sets out the process for allowing Government to make a well-informed decision on whether to proceed with a Radio Switchover, and if so how, it should be implemented.

1.1.2. The DRAP is delivered through four central working groups, covering technology, market preparation, coverage planning and government policy. The Technology and Equipment Group (TEG), which is chaired by Laurence Harrison, Technology and Market Development Director at Digital Radio UK, has been tasked to identify, investigate, report and make recommendations on the technology and equipment issues related to any future Radio Switchover, including both domestic and in-vehicle receivers. Due to the importance of in-vehicle digital radio conversion the TEG created a specific sub-group, the In-Vehicle Group (IVG), to look at the barriers to take-up and conversion options.

1.2 Scope

1.2.1. Under task 2.14 the In-Vehicle Group was asked to '*define the conversion specifications which allow car dealers and retailers to develop installation services. Report on the need and mechanisms for training approved installers of DAB in-vehicle receivers, including recommendations on the policing and enforcement requirements'*. In order to develop this report and complete the action, the IVG set up a working group, which included representatives of the automotive industry's Sector Skills Council (the Institute of the Motor Industry – IMI), installation businesses, training providers, product suppliers, the Consumer Expert Group, and associations whose members either supply or fit in-vehicle receivers.

1.2.2. This report includes recommendations for a qualification for installers of in-vehicle DAB receivers (radios and adaptors) which could be included in the conditions of the Digital Radio Switchover Certification Mark scheme; and recommendations on business requirements to be met by installation businesses wishing to be eligible to use the Digital Radio Switchover Certification Mark.

Section 2: Steering Board Decision

The Steering Board considered the 'Approved Installation' report in October 2012 and agreed to it subject to the DCMS consulting with the Trading Standards Institute (TSI) with respect to the governance and quality assurance that would be required before the government digital radio certification mark can be applied to "approved installers".

DCMS consulted the TSI in late 2012 because from April 2013 the management of the Consumer Codes Approval Scheme, operated by the Office of Fair Trading since 2001, transferred to a new Consumer Codes approval Board operated by TSI.

Government having shared the report with TSI notes the following issues:

- A potential concern that the ratio of qualified versus non-qualified technicians carrying out the installations should be higher;
- A requirement for businesses to have a clear customer complaints resolution service or independent alternative dispute resolution provisions, in line with the new Alternative Dispute Resolution directive;
- A need to ensure there is sufficiently robust monitoring of customer satisfaction and mystery shopping.

Government is grateful to the TSI for its input and considers that some of the issues raised are for an implementation body to deal with and others will have to be taken forward in discussion with industry, for example the ratio of qualified and non-qualified fitters.

Section 3: Approved Installation Report

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PURPOSE OF THIS REPORT

1.1 This report includes recommendations for:

- a qualification for installers of in-vehicle retrofit DAB receivers (radios and adaptors) which could be included in the conditions of the Digital Radio Switchover Certification Mark scheme;
- business requirements to be met by installation businesses wishing to be eligible to use the Digital Radio Switchover Certification Mark ('the Mark').

Note: 'Installation businesses' includes businesses which offer an installation service as part of a wider business, as well as those which specialise in the installation of retrofit equipment (such as DAB receivers, or security systems) in vehicles.

2 BACKGROUND

2.1 This report was written by a working group of the In-Vehicle Sub-Group (IVG) and accepted by the IVG at its meeting on 11 September, 2012. The working group included representatives of the automotive industry's Sector Skills Council (the Institute of the Motor Industry – IMI), installation businesses, training providers, product suppliers, the Consumer Expert Group, and associations whose members either supply or fit in-vehicle receivers.

2.2 The IVG reports to the Technology & Equipment Group (TEG). Created as part of the Digital Radio Action Plan framework, TEG's role is to identify, consider and make recommendations on the development of digital radio technologies and equipment. The IVG was created as a sub-set of the TEG specifically to look at the barriers to in-vehicle take-up of digital radio.

2.3 The IVG's remit on installation of digital radios was:

'Define conversion specifications which allow car dealers and retailers to develop installation services. Report on the need and mechanisms for training approved installers of DAB in-vehicle receivers with external aerials'.

A report was required in Q1 of 2013.

2.4 Discussions within the working group extended the scope of the remit. The result is that this report:

- is also relevant to the commercial vehicle sector
- recommends a training scheme which will allow installers to install receivers fitted with any type of antenna (internal/external)
- recommends requirements to be met by installation businesses in order to be eligible to use the Mark.

2.5 As there was already a well-established training and accreditation supply chain within the automotive sector, the Working Group was quickly able to develop an accreditation scheme for Digital Radio Installation Technicians. This will be launched in November, 2012.

The first holders of the new qualification will be accredited from Q1 of 2013 onwards. This will help the sector begin to make inroads into the conversion of the legacy vehicle parc and improve the chances of meeting government's aspiration for such conversion to be completed by 2015.

The IVG recommends that the qualification should be adopted by the organisation which eventually manages the Mark scheme. (For the purposes of this report, this organisation is described as the Scheme Governing Body (SGB).)

3 WHY INSTALLER ACCREDITATION IS NEEDED

3.1 IVG supports the introduction of a single accreditation for installers because of the number of routes by which retrofit receivers come to market in the vehicle sector, the varying skill-sets available in each market segment, and inconsistencies in the content of current qualifications. Furthermore, as consumer demand for retrofit installations increases, there is likely to be increasing competition for installation work and the emergence of new entrants to the market, not all of whom will have the level of expertise acquired by established installers. Creating a level of current competence through training and accreditation will give consumers confidence that their receivers, if fitted by a qualified installer, will be properly installed and work within the parameters established by the device manufacturer/supplier. Holding such a qualification could also become a condition of eligibility to use the proposed Mark, in the same way that membership of the Registered Digital Installer (RDI) scheme was for aerial installers throughout digital television switchover.

4. THE STRUCTURE OF THE INSTALLATION SECTOR

4.1 Installation businesses

4.1.1 Franchised vehicle dealers

Franchised dealers will have a selection of approved aftermarket products to fit to customers' vehicles. These products will have been approved by the owner(s) of the marque(s) which the dealers sell and typically will have been extensively tested before approval to ensure compatibility with the range of vehicles and their existing electronics. This is a vertically controlled market for installation and the types of vehicle and product are known and constrained.

Franchised dealers typically outsource the training of their staff to vehicle manufacturers and/or accredited third parties. Customers of franchised dealers' aftermarket installation services usually have vehicles either within warranty or relatively new.

4.1.2 Non-franchised dealers

Essentially, these are independent vehicle dealers selling and installing aftermarket equipment for a range of vehicles from different vehicle manufacturers. Though installation staff could have come from a franchised dealer environment, the skills required will be much broader because of exposure to many product and vehicle variables. Training and accreditation will either be outsourced or provided through accredited trade bodies.

A franchised dealer who sells aftermarket products to fit to vehicles of other marques (such as used vehicles taken in part-exchange for new ones of the marque(s) which the dealer sells) will be a 'non-franchised dealer' for the purpose of this part of its business.

4.1.3 Service type garage

These are garages which only service or repair vehicles and do not retail them. As with non-franchised dealers, they sell and install aftermarket equipment for a range of vehicles from different vehicle manufacturers. Though installation staff could have come from a franchised dealer environment, the skills required will be much broader due to exposure to many product and vehicle variables. Training and accreditation will either be outsourced or provided through accredited trade organisations.

4.1.4 National installation company

A 'national installation company' is an organisation, such as Halfords, which provides formal training to its own technicians and/or underwrites its employees' work. The skill requirements for installation staff will be broad because of exposure to many product and vehicle variables. These organisations may have their own in-house training service and accreditation status. If this is the case, they will also require a level of independent assessment.

4.1.5 Independent Installer

Independent garages and installers can be very specialised in the aftermarket installation services they offer. Installation staff may be trained by manufacturers directly (for example, the Parrot Certified Installer Programme). However, many independents are members of one of the industry organisations, such as the Mobile Electronics & Security Federation (MESF) or the Federation of Communications Services (FCS), which also offer training and accreditation to their membership.

4.2 The training and accreditation supply chain

The Working Group and IVG used the Institute of the Motor Industry's (IMI's) Automotive Technician Accreditation (ATA) as an example of a qualification that meets the need. (The IMI is the Sector Skills Council for the retail motor industry and has a proven track record in other sub sectors of the industry using this scheme to prove current competence of individuals.) The chart in Annex 1 provides an overview of how training is currently delivered. That in Annex 2 does the same for ATA accreditation.

5 CONTENT OF THE ACCREDITATION

5.1 The IVG decided that a completely independent nationally accredited qualification is not required, because:

- the automotive installation industry already has a well-established and rigorous training and accreditation supply chain;
- existing training modules required only relatively minor changes to develop a dedicated digital radio installer scheme;

- the complexity of the installation supply chain introduced a need to retain a level of flexibility in how a scheme was delivered and managed by different organisations.

5.2 Instead, the IVG agreed the introduction of a Radio Installation Technician (RIT) accreditation, based on the modules included in the ATA DAB RIT, which aligns to existing training qualifications and delivery methods. It is a minimum standard of individual competence intended to deliver a uniform approach across the UK while recognising that some installation businesses (such as vehicle manufacturers' franchised dealers) may wish to supplement it with marque-specific training. (Such additional training would not be tested for the purpose of deciding whether a trainee met the requirements of the qualification).

5.3 The accreditation was developed with input, in particular, from the IMI, the FCS and MESF, and individual businesses.

5.4 The content of the accreditation is:

Radio Installation Technician (RIT)			Could be demonstrated during:	
			Practical Assessment	Theory Assessment
MET – Trim		Correct tools to remove and refit trim	P	T
		Care of removal/replacement of trim	P	
		Storage of components	P	
		Knowledge and understanding of SRS		T
Electrical Knowledge		Knowledge and understanding of Ohms law		T
		Volts - amps - ohms - watts - measuring	P	T
		Circuit protection	P	T
		Wiring/circuit diagrams	P	T
		Knowledge and understanding of transistors		T
		Knowledge and understanding of resistors		T
		Knowledge and understanding of relays		T
		Knowledge and understanding of solenoids		T
		Knowledge and understanding of diodes		T
		Interconnection - termination insulation harness	P	T
		Knowledge and understanding of RF termination / insulation		T
		Knowledge and understanding of the routing of cables within a vehicle		T
		Earthing / power supplies	P	T
		Knowledge and understanding of mulitiplexing including CAN/MOST/LIN/fibre optic		T
		Test equipment - application and usage		T
Presentation (communications and planning)		Working with others		T
		Confirming specifications - customer requirements / work place	P	T
		Explanation to the customer of the variation in performance of products available	P	T
		Communication with customer	P	T
		Legal requirements awareness	P	T
		Access - following fitting instructions	P	T

		Work to timescales - keep others informed of progress	P	T
H & S		Risk assessment	P	
		Method statement	P	T
		Personal health and safety and PPE	P	T
		Use of power tools - mechanical / electrical	P	T
		High voltage - hybrid/electric vehicles		T
		Fire precautions	P	T
Vehicle Preparation		Pre and post installation documents signed by candidate	P	
		Vehicle protection external/interior	P	
Testing Procedures		Testing the fitment of DAB installation	P	
		Testing to identify the system meets the manufacturers specification	P	T
		Set system installation functions	P	
		Restoration of vehicle system(s) post installation	P	
Audio DAB Replacement Head Unit		Location of components	P	
		Installing of components - upgrade to DAB	P	
		Running of cables	P	T
		Interface with vehicle's own wiring	P	
		Modification to dash location	P	T
		Modification of vehicle wiring	P	T
		Fitment to documented instructions / specifications	P	
		ID of wiring connections	P	T
		Test replacement head unit for all major function(s)	P	
		Test replacement head unit performance	P	T
Audio DAB Adaptor unit		Location of components	P	
		Installing of components - upgrade to DAB	P	
		Running of cables	P	T
		Interface with vehicle's own wiring	P	
		Fitment to documented instructions	P	
		ID of wiring connections	P	T
		Test DAB adaptor unit for all major function(s)	P	
		Test adaptor unit performance	P	T
Antenna Installation		Antenna installation - plan	P	
		Antenna installation - fitment of antenna WITHOUT drilling body		T
		Antenna installation - fitment of antenna by drilling vehicle body to accept antenna		T
		Carryout vehicle anti-corrosion procedures		T
		Location of components	P	
		Installing of components	P	
		Fitment to documented instructions	P	
		Running of cables - electrical/coaxial	P	
		ID of wiring connections	P	T
		Test system performance of overall installation	P	

5.5 Delivery of the DAB Radio Installation Technician (RIT) training

The supply chain for technician training includes practical and theoretical training and guidelines, as shown in Annex 1. It also includes essential governance and feedback mechanisms for the SGB. Each installer will have access to study guides from their training organisation(s) throughout the

training. These guides will include information on antennas, the performance levels that are required, and correct installation.

5.6 Delivery of the DAB Radio Installation Technician (RIT) accreditation

The accreditation is achieved by taking both a practical test (that is, demonstrating the skills) and a theory test (demonstrating the knowledge).

During the assessment process, the technician will sign an ethical 'Code of Conduct'. Once accreditation is achieved, the technician's details will automatically be placed on an open Public Register which may be used by consumers and standards setting/monitoring bodies.

The IVG believes that from beginning the training through to completion of the accreditation should take 3-6 months, depending on the availability of training resources and assessment periods.

Additional points to note about the proposal are:

- SGB – the IVG understands that, once the SGB has been appointed, that organisation will decide how it wants to manage the DAB Approved Installation scheme.

- Awarding Organisations (AOs) – the awarding organisation has the responsibility of Quality Assuring ATA by approving and monitoring the assessment centres.

- Consumer communications – the SGB may wish to administer the database of approved installers and installation businesses on its own. However, there are industry organisations (such as FCS, MESF and Motor Codes Ltd) which could signpost the database to consumers who approach them for information. The IVG, therefore, strongly recommends that there be open access to the database.

- Training provision – while a consistent approach to training is needed, the IVG envisages a competitive open market for the provision of training services. All training providers will have access to the skill-sets required to pass the qualification and the detail of how the accreditation process works. They will develop their own courses accordingly and compete on quality and price.

- Advice to potential installers – it is envisaged that the SGB will publish advice to potential installers on where to find information about how to become an accredited installer.

5.7 Timelines

At the time of writing, the IMI was formally consulting the automotive industry and other interested parties about the content and development of the ATA DAB RIT accreditation. As mentioned in paragraph 2.5, it is expected that the accreditation will be formally launched on 1 November, 2012. Thus, qualified

and accredited installers will be available to apply for licences to use the Mark once the SGB has decided the scheme criteria.

6 BUSINESS PRACTICES

6.1 There was a strong view during the discussions that qualified installers would wish to apply to use the Mark. However, it was also recognised that consumers would look for some assurance about the practices of the businesses which employed installers – even a sole trader is running a business, although it may not be a limited liability company.

6.2 The IVG, therefore, recommends that installation businesses seeking to use the Mark should have to comply with the following general set of conditions:

a) employ at least one installer who holds the ATA DAB RIT accreditation and will be responsible for installing digital receivers and adaptors as well as overseeing the work of unqualified installers. (The ratio of qualified to unqualified persons engaged in the installation of digital receivers should not be more than 1:4.)

Note: even if it could comply with all of conditions b) – f), an installation business would be unable to apply to use the Mark until it met this condition.

b) have a business address even if fitting is carried out by a mobile unit

c) have appropriate insurances, including mandatory Public Liability Insurance and mandatory Service Indemnity Insurance (or 'Defective Workmanship insurance'), each with a minimum cover of £5.0m, and offer proof of insurance if requested

d) have and display a health and safety policy in accordance with the current health and safety legislation

e) have a documented customer care policy, including after sales service and assistance

f) maintain customer records sufficient to provide an audit trail in the event of a complaint.

It realises that these criteria will need to be part of the regulations contained within the Mark when it is registered.

6.3 Industry bodies such as the FCS, MESF and Motor Codes Ltd have their own codes of behaviour with which their members must comply. Though their individual requirements exceed those mentioned above, by no means all installation businesses which may want to apply for the Mark are members of any of them. Adoption of the recommended minimum would, therefore, extend the principles of best practice while leaving consumers free to decide whether to seek a higher level of assurance by using a subscriber to one of the present codes. Industry bodies would, if requested, collaborate with the SGB in the development of a supplementary code of behaviour which would apply to businesses which are not members of a trade organisation.

6.4 Representatives of SMMT could not agree to the proposal and the group agreed that their views should be expressed in an Annex to this report. As a result, Annex 3 sets out the views of the SMMT.

7 COSTS

7.1 Training

Precise information on costs will not be available until service providers have considered the content of the RIT accreditation and developed appropriate study guides and training programmes.

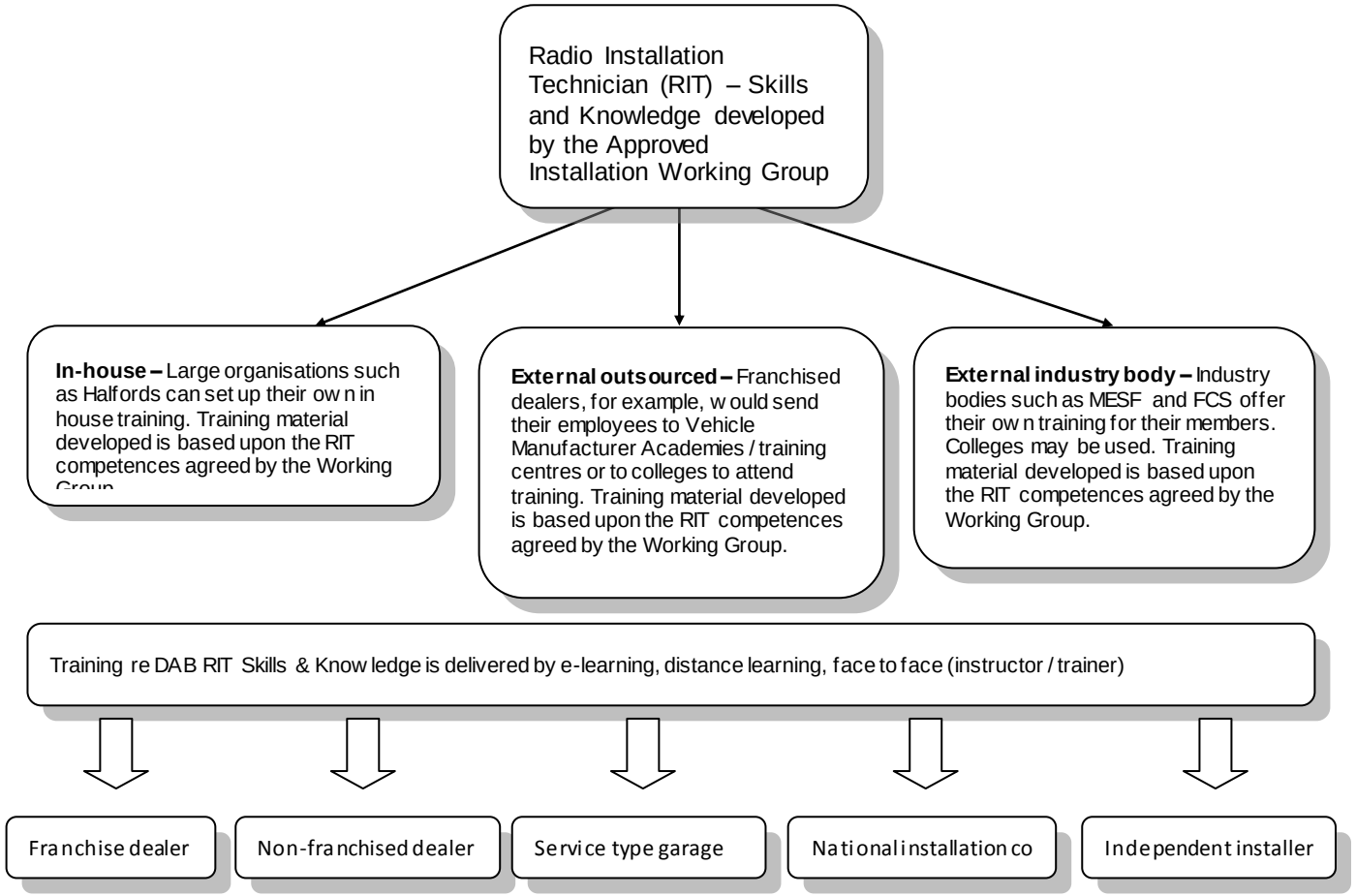
7.2 Accreditation

Provision of quality assurance via a nationally recognised AO (such as IMI Awards Ltd.) will involve a cost for certification/accreditation. When this paper was written, the cost was £50 per registration. This included the costs of the AO and the recognition certification/ID card, as well as the cost of adding a candidate's name and business into a national database that could be viewed by the public and standards setting bodies.

Individual organisations and businesses involved in the preparation of this report estimated that, in addition to the cost of certification/accreditation, training would cost up to £300 per individual.

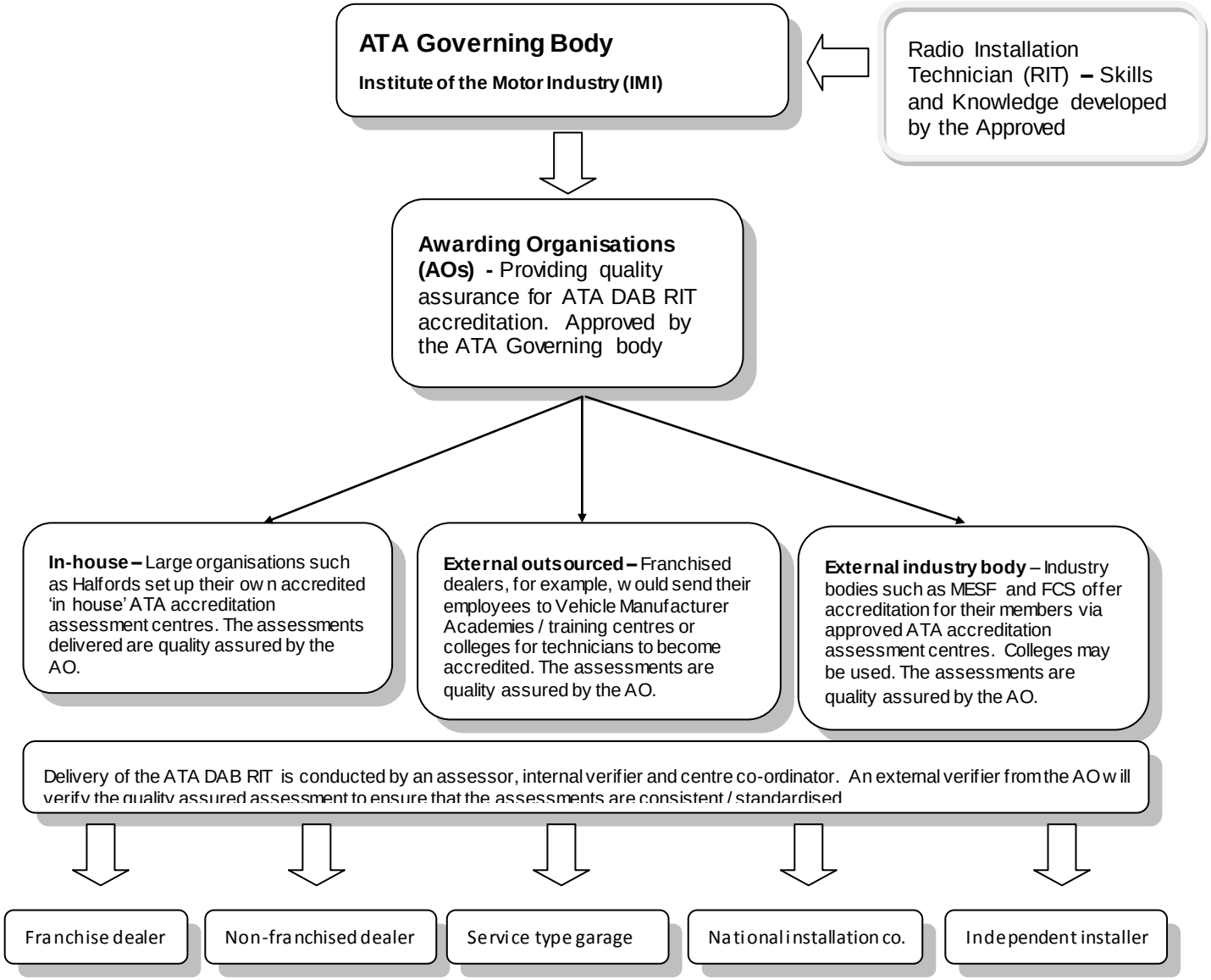
Annex A

DAB Radio Installation Technician (RIT) Training (skills/knowledge) Supply Chain



Annex B

ATA Radio Installation Technician (RIT) Accreditation Supply Chain



Annex C

SMMT proposals for a digital radio approved installer scheme

Introduction

A digital radio switchover will create a very significant disruption to road users. There are more than 36 million vehicles currently on our roads and only a very small number are currently equipped to receive digital. In setting the timetable for digital switchover the Government will create a large demand for the retro-fitting of digital capability.

The Society of Motor Manufacturers & Traders (SMMT) is keen to ensure that all motorists have a good experience in transitioning to a digital future. SMMT through its involvement with Digital Radio UK (DRUK) and with the Digital Radio Action Plan has been consistent in seeking reassurance for consumers on the equipment fitted to their vehicles, the people undertaking fitting and the businesses facilitating the work.

There has been good progress made in establishing minimum technical requirements for retro-fit equipment and there is now a clear specification for the skills and competences required for those installing such equipment into motor vehicles. Unfortunately there has not been satisfactory progress in determining appropriate criteria for the businesses facilitating retro-fitting activity.

SMMT supports the establishment of an approved installer scheme that provides consumers with a safe, reliable and trustworthy environment to undertake the installation of digital radio capability. It has specific experience in developing schemes to advise and support consumers and sets out its views for consideration by Government.

Benchmark for consumer protection

SMMT believes that an approved installer scheme should be closely aligned with the benchmark standards for industry self-regulation established by the Office of Fair Trading (OFT) through their consumer codes approval scheme. The OFT approach is recognised by consumer organisations and the Trading Standards Institute as providing appropriate reassurance for consumers.

The OFT approach looks to provide consumers with a guarantee that businesses will operate in a fair way, will offer a clear and accessible process for dealing with problems should they arise and provide information so consumers can judge the performance of the individual businesses that commit to abide by the approved consumer code.

The OFT has established a set of core criteria for consumer codes and these should provide the basis for establishing the business criteria for an approved installer scheme. These should include specific commitments to help ease consumer concerns and eliminate undesirable trade practices. It should also commit participants to clear and truthful marketing, fair contracts, and the provision of cancellation rights, guarantees and warrantees.

One of the most important issues for consumers is how businesses deal with problems when they occur. The OFT demands a speedy, responsive, accessible and user friendly procedure for dealing

with consumer complaints is available. It also requires a low cost and independent redress scheme to act as an alternative to seeking court action.

Finally those wanting to be part of an approved code must support transparency and feedback so that consumers can use the experience of others to help guide their choices. The OFT require the use of performance indicators and independent compliance audits. They also require this information to be made available and to be supported by satisfaction surveys. These all help consumers make better decisions and drive custom to better businesses.

In considering the appropriate design of an approved installer scheme SMMT believes businesses should commit to specific business practice, an accessible complaints procedure with independent advice and dispute resolution and the public availability of compliance reports, consumer surveys and performance measures.

Motor industry and consumer concerns

The UK motor industry has a large number of businesses offering a wide range of services to the motorist. The majority of these businesses and the individuals within them work hard and offer good value. In these businesses it is acknowledged that the consistency of service delivery can vary. There are a minority of businesses and individuals that offer consistently poor service, either through a lack of competence or deliberate action.

The difficulty for the consumer is that there has been no reliable way of determining what a business will deliver and this uncertainty causes consumers great concern. In 2004 the National Consumer Council (NCC) threatened a super complaint against the entire service and repair sector unless action was taken to address significant consumer detriment.

In response to the NCC threat all sectors of the industry worked together to develop an OFT approved Motor Industry Code for Service & Repair. The code was formally endorsed by industry, consumer organisations and Government in 2007 and launched in 2008. The code is now operated by Motor Codes Ltd and has more than 6,800 subscribers.

There is now a recognised way for consumers looking to get vehicles serviced or repaired to identify trustworthy businesses. An approved installer scheme for digital radio needs to recognise the doubts and uncertainties consumers have about the services offered within the motor industry and respond to them.

In February this year the Secretary of State for Transport, Justine Greening MP, highlighted the importance she attached to helping motorists find garages they can trust. She recognised the role of an approved OFT code in building consumer confidence and committed to finding ways of encouraging more garages to commit to them.

SMMT supports Motor Codes Ltd and has pioneered the use of OFT approved consumer codes.

A practical set of operational requirements

SMMT wants to ensure that the digital radio approved installer scheme reflects the importance of OFT consumer codes and the role Motor Codes Ltd has established in leading self-regulation. Some organisations that will benefit commercially from the digital switchover have expressed concerns about the costs, desirability and practicality of meeting the standards required by an OFT approved consumer code.

To help address these concerns SMMT has developed a set of clear promises it believes should be at the heart of an approved installer scheme. These are consistent with the approach required by the OFT and in-line with industry best practice.

SMMT and Motor Codes Ltd re-iterate their willingness to work with Government and the broader industry to achieve real protection and reassurance for consumers, as well as a cost effective and administratively efficient scheme for businesses of all types and sizes.

A set of promises to the consumer

- Advertisements and promotions will not contain any items which are likely to mislead you or be misunderstood.
- We will fully explain and give you clear practical advice to help you understand the work required, which will be confirmed in writing if requested.
- Our prices will be clear and inclusive of parts where supplied by us, labour, VAT and any other additional charges.
- We guarantee all work against failure and remain responsible for ensuring the quality of any subcontracted work carried out under the agreed booking.
- Our staff are competent to carry out the work within their responsibilities, or in the case of trainees they will be supervised by someone who is competent.
- Our staff will use appropriate equipment and facilities to complete all work to a satisfactory standard.
- Staff will communicate clearly and not use technical jargon or terminology without offering to explain it fully.
- If it becomes apparent that additional labour or parts will be necessary to address consequential or additional needs not previously recognised, we will contact you to agree prior to commencing.
- All elements of the service provided, work carried out and the prices charged will be explained to you during the handover procedure upon completion of the agreed work, at which point payment will be due.
- We will have in place an easily identifiable and accessible arrangement for the reception and handling of complaints.
- In the event that your complaint remains unresolved, we will provide you with an alternative dispute process that is independent and approved by the Office of Fair Trading.

These promises reflect the consumer process of selecting and doing business with a garage and are intended to create consumer confidence in the process and offer alternative support in the event of a concern over the quality of work, customer service or price of the work.

These promises can be easily supported by the transparency created through completion of a business registration and self certification process, on line and public facing business search tool and a credible consumer survey mechanism with publicly available results.

SMMT and Motor Codes are ready to work with other organisations to help them develop and implement an approved installer scheme. They are also ready to assist others to develop their own OFT approved consumer code or work to accommodate them within the existing codes environment.

Scheme Administration

In establishing the requirements for the approved installer scheme SMMT would ask Government to work with the operators of OFT approved consumer codes to minimise any additional costs and administrative burdens for existing subscribers. The OFT approval process ensures a robust set of compliance procedures, consumer advice and dispute resolution and administrative infrastructure. It should be possible to recognise these within any free-standing scheme and avoid imposing a double burden on those already publicly committed to high standards of consumer care and transparency.

SMMT would welcome further dialogue and discussion on the detailed implementation of an approved installer scheme.

Paul Everitt, Chief Executive
SMMT Ltd.
August 2012

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