



department for  
**culture, media  
and sport**

# Digital Radio Action Plan

## Version 6

May 2012

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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## 1. The Government's Vision

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Radio plays an important part in everyday life in the UK; around 90 per cent of the population together consume over a billion hours of radio each week. Even at a time when the range of services and technologies competing for consumers' 'free time' is greater than ever before, total radio listening has grown. This is evidence, if it were needed, of the special relationship listeners have with radio, a relationship which has stood the test of time. However, radio is not immune to the changing world.



The analogue media landscape which radio heralded in the 1920s, with the first BBC Home Service broadcast, is quickly giving way to the new digital world. Digital radio is an opportunity for greater choice, functionality and importantly, control for the listener. Media businesses can be freed of the constraints of an analogue world, of limited spectrum and services.

Across Europe, other countries are recognising the benefits of digital radio. Both France and Sweden have passed legislation to incentivise growth of digital radio and Germany has recently agreed funding for the roll-out of national digital radio. The direction of travel in Europe, and in fact at an international level, is clearly moving towards digital.

The UK remains the world leader in the take-up of digital radio; nearly 11 million<sup>1</sup> DAB radios have been sold to 35 per cent of households. Listening to digital radio accounts for 24 per cent<sup>2</sup> of all radio listening in the UK, including radio listening on the internet. UK-based manufacturers are market leaders innovating and designing products on sale around the world.

The benefits of a transition to digital for the radio industry have been well documented; both in terms of cost savings and the potential for new growth. However, the benefits for consumers are far less apparent. We believe that any transition from analogue to digital radio must be consumer-led, both in terms of the take-up of DAB radios and the extent to which listeners are choosing to consume their radio via digital, rather than analogue, platforms. To this end the whole radio sector must do more to develop a range of services, functionality and devices which will drive consumer demand. However, Government and regulators must ensure that if, or when, the market is ready for a transition, or switchover, to

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<sup>1</sup> Over 15 million as of May 2012

<sup>2</sup> 29.2 per cent as of Q1 2012

digital it can be delivered in a way so as to protect the needs of listeners, and results in a radio industry fit for a digital age.

In achieving the balance between the needs of the industry and the consumer, it is essential that any Digital Radio Switchover should only begin when the market is ready. It is for that reason that a decision on a Digital Radio Switchover can only be made once:

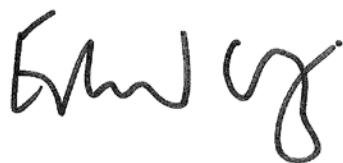
- 50 per cent of all listening is to digital; and
- National DAB coverage is comparable to FM, and local DAB reaches 90 per cent of the population and all major roads.

In 2002, the joint Government-industry Digital TV Action Plan was published. This set out the process for providing Ministers with the information and assurances necessary to make a decision on whether to proceed with switching off the analogue TV transmitters and providing digital TV transmissions to all households able to receive analogue previously. This information was essential in allowing Ministers ultimately to agree to and set a timetable for Digital TV Switchover in 2005.

We now set out the joint Government-industry Digital Radio Action Plan, which again seeks to inform a future decision on a Digital Radio Switchover. The Action Plan will address the key issues of DAB coverage planning, waste disposal and energy consumption, which have been key themes of the public debate around a Digital Radio Switchover. In addition, the Digital Radio Action Plan will consider how such a transition would be implemented and delivered.

The Government believes that certainty, for the sector and consumers, is key to unlocking the potential and building confidence in a digital future for radio. We have already said that the transition to digital radio must be consumer led, while at the same time recognising the industry's desire for quick progress. In many of these areas, consumers will benefit from early action and clarity of direction so, where possible, the Action Plan seeks to resolve issues quickly.

The Action Plan will provide a focus for the radio broadcasters, manufacturers, consumer representatives and Government to address the barriers which have for too long provided a barrier to a successful digital radio market in the UK.



**Ed Vaizey**

**Minister for Culture, Communications and Creative Industries.**



## **2. The Action Plan's Objectives and Timetable**

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The passing of the Digital Economy Act 2010 laid the foundations for a Digital Radio Switchover by changing the radio licensing framework and providing broadcasters and multiplex operators with the certainty to invest further in DAB.

The purpose of this Action Plan is not to implement a transition to digital radio, but to provide the information to allow for a well-informed decision by Government on whether to proceed with a Digital Radio Switchover. Following a decision to proceed, this Action Plan would enable Government to decide when and how to deliver a Digital Radio Switchover and set the foundations for a successor project to implement it.

The technical and social scale of the process must not be underestimated; comprehensive and long-term planning is needed to identify and address the regulatory, technical and social impact of a possible Digital Radio Switchover. The Action Plan will be subject to quarterly review and will during the duration of the programme be amended to capture new issues and refine the delivery timetable.

The Government cannot, nor should it, tackle these issues alone. The broadcasters, manufacturers and, importantly, consumers must have a role in shaping the Government's thinking and future policies. The Action Plan provides a framework and focus for the engagement of these parties.

### **Objectives**

The Action Plan will seek to address five key objectives. These are:

#### **1. CONSUMER CHOICE**

- Of content: the development of new digital-only content; this includes data services, such as news, travel, and weather.
- Of technology: to support a wide range of technologies used to deliver digital radio, including DAB, internet and Digital TV.
- Of equipment: to support the development of a diverse range of digital radio devices.

## 2. QUALITY

- Of sound: to understand attitudes about digital sound quality and where appropriate support improvements.
- Of services: to support the development of a high quality and innovative radio services and new functionality.

## 3. AFFORDABILITY

- Of household conversion: to ensure that switching to digital is an affordable option for the vast majority of the population.
- Of in-vehicle conversion: to provide a wide range of affordable options to convert vehicles to DAB radio.

## 4. ACCESSIBILITY

- To services: ensuring that DAB coverage matches FM before a date for a Digital Radio Switchover is set, ensuring that those who can receive FM services can also receive national and local DAB services.
- Of devices: to provide digital radio receivers which are easy to use and accessible for all users.

## 5. AWARENESS

- Through communications: by delivering a public information campaign and developing a common set of standards and testing for digital devices with a certification mark to ensure consumers understand digital radio and are better informed when purchasing devices.
- Through training: for retailers to provide clear advice to consumers at the point of sale.

### **Timetable of Action Plan**

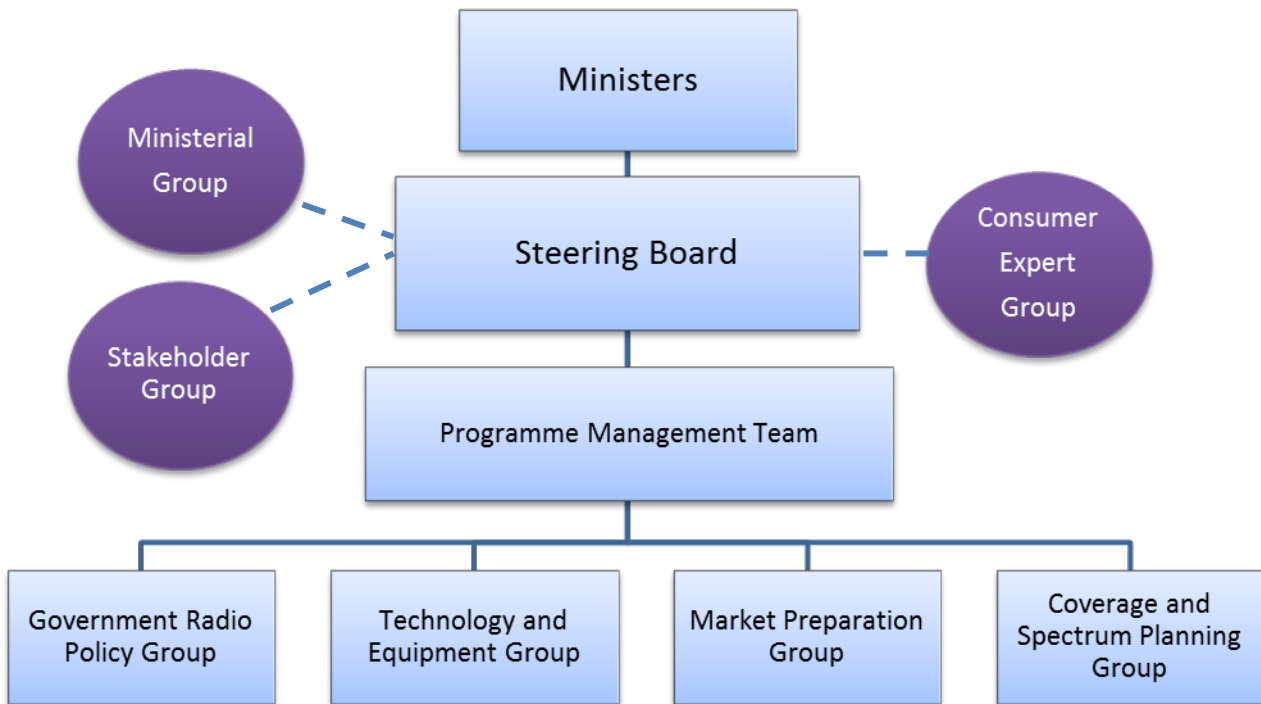
The Government recognises the industry desire to reduce the burden of dual-transmission through an early switchover. There are also benefits to consumers of a quicker transition to digital radio and the certainty this can bring, including a reduction in the price of digital receivers through greater economies of scale. Therefore, the timetable for the delivery of the Action Plan supports a switchover date of 2015 as a target which all parts of the industry can work towards. This is reflected in the timings of the work strands which follow in section 4. However, there should be no conflict between the timetable and the switchover criteria. When the decision is made to set a firm date for Digital Radio Switchover, it will be the criteria, not the timetable, which take precedence.





### 3. Programme Structure

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#### Steering Board

The Steering Board is the principal decision-making body within the Action Plan structure, with the Board managing the strategic delivery of the Action Plan through the Programme Management Team. The Steering Board provides the forum in which recommendations can be made to Ministers, who will ultimately make the decision whether to go ahead with Digital Radio Switchover.

- Meet every two months
- Chaired by the Senior Responsible Owner

## **Programme Management Team**

The Programme Management Team is made up of officials from DCMS. As the team responsible for the day-to-day management and delivery of the Action Plan, it works together on a daily basis and meets regularly to monitor progress.

To ensure the delivery of the Action Plan, this team prepares and monitors the project work-plan, directs the Task Groups and supports the activities of the different programme groups.

## **Task Groups**

Task Groups are charged with the delivery of the key work strands, as set out in the Action Plan. Individual Chairs were appointed by the Steering Board for each Task Group. Membership of Task Groups has been agreed by the relevant Chair and the Steering Board.

## **Ministerial Group**

The Ministerial Group is chaired by the relevant Government Minister and membership includes representatives from industry and consumer groups. Its principal purpose is to inform Ministers of progress of the Action Plan and to provide a forum for discussion of the key issues.

- Meet quarterly
- Chaired by Minister
- Other members: representatives from the BBC, commercial radio broadcasters, community radio broadcasters, transmission providers, Ofcom, manufacturers, the automotive sector, retailers, consumers and Digital Radio UK.

## **Stakeholders Group**

The Stakeholder Group, which is chaired by a Government official, is open to a wide range of industry and related stakeholders. The principal purpose of this Group is to inform external stakeholders of progress against the Action Plan and gather views on emerging findings.

- Meet quarterly
- Chaired by Government



## **Consumer Expert Group**

The Consumer Expert Group (CEG) was established to inform the Digital Television Switchover Programme. It includes a wide range of consumer representatives including RNIB, British Wireless for the Blind Fund, the Voice of the Listener and Viewer and Citizens' Advice. The CEG has formally agreed to extend its role to consider the Digital Radio Switchover through a revision to its Terms of Reference.

- CEG, with its extended Terms of Reference which include digital radio, to continue current format of quarterly meetings

## 4. Work Plans

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### SECTION 4.1

#### GOVERNMENT RADIO POLICY

The key functions of the Government Radio Policy Group are to deliver a comprehensive assessment of the proposed Digital Radio Switchover and to develop Government policies to inform a future decision about whether and when to implement a Switchover.

	TASK	ACTION	TIMING	STATUS	COMMENTS
1.1	<b>PUBLISH ACTION PLAN</b>  Publish first Digital Radio Action Plan	Publish Action Plan  Updated quarterly	Q3 2010  Ongoing	<b>Completed</b>	Available at: <a href="http://www.culture.gov.uk/what_we_do/broadcasting/7228.aspx">http://www.culture.gov.uk/what_we_do/broadcasting/7228.aspx</a>
1.2	<b>REVIEW PROGRESS AGAINST CRITERIA</b>  Review of digital radio market – conducted by Ofcom	Publish first review  Publish second review  Annually thereafter	Q3 2010  Q3 2011	<b>Completed</b>  <b>Completed</b>	Available at: <a href="http://stakeholders.ofcom.org.uk/market-data-research/radio-research/digital-radio-reports">http://stakeholders.ofcom.org.uk/market-data-research/radio-research/digital-radio-reports</a>  Next report due Q3 2012



<p>1.3</p>	<p><b>CONSUMER IMPACT – INCLUDING ACCESS FOR DISABLED PEOPLE</b></p> <p>Respond to reports from the Consumer Expert Group.</p> <p>Scope full range of human factor issues. Taking account of the analysis and any other available evidence, identify which, if any, listeners would be disproportionately disadvantaged by a Digital Radio Switchover and how appropriate provisions and services should be made, for example, through a Help Scheme.</p>	<p>Response</p> <p>Scope issues for consideration</p> <p>Report</p>	<p>Q4 2010</p> <p>Q3 2012</p> <p>Q4 2012</p>	<p><b>Completed</b></p> <p><b>Ongoing</b></p>	<p>Available at: <a href="http://www.culture.gov.uk/publications/7593.aspx">http://www.culture.gov.uk/publications/7593.aspx</a></p> <p>Decision taken to defer timing of report to allow for further consultation with key stakeholders on issues for consideration</p>
<p>1.4</p>	<p><b>IMPACT ASSESSMENT</b></p> <p>Carry out an impact assessment of the options and timings of a Digital Radio Switchover. This will include, but not limited to, the following:</p> <ul style="list-style-type: none"> <li>• the costs and benefits of any interventions to enable the migration of all national and large local radio stations to DAB and alternative uses for the analogue spectrum vacated after a Digital Radio Switchover;</li> <li>• the rural impact of implementing a Digital Radio Switchover;</li> <li>• Impact on energy consumption of a Digital Radio Switchover; and</li> <li>• Environmental impact of analogue receiver disposal</li> </ul>	<p>Set terms of reference</p> <p>First report</p> <p>First results paper</p>	<p>Q4 2010</p> <p>Q2 2012</p> <p>Q4 2012</p>	<p><b>Completed</b></p> <p><b>Ongoing</b></p> <p><b>Ongoing</b></p>	<p>Relevant reports available at: <a href="http://www.culture.gov.uk/what_we_do/broadcasting/7228.aspx">http://www.culture.gov.uk/what_we_do/broadcasting/7228.aspx</a></p>

	following a Digital Radio Switchover.				
1.5	<p><b>EMERGENCY COMMUNICATIONS</b></p> <p>Identify the impact of a Digital Radio Switchover on the Government's current civil contingencies policy and where appropriate agree changes in policy.</p>	Produce Guidance	Q2 2012	Ongoing	Timing revised to allow for (i) further consultation with Cabinet Office, and (ii) consideration of infrastructure resilience policy
1.6	<p><b>DEFINE TARGET FOR DAB COVERAGE AT SWITCHOVER</b></p> <p>Determine and agree the target level of DAB coverage in the UK post-Switchover.</p>	Decision	Q4 2011	Ongoing	Discussions ongoing with industry to agree terms of reference for coverage planning as set out in Ofcom's recent coverage consultation.
1.7	<p><b>ASSESS COSTS OF DAB COVERAGE BUILD-OUT</b></p> <p>Taking account of the recommendations from the Coverage and Spectrum Planning Group establish and agree the division of costs for DAB build-out to match FM.</p>	Review	Q4 2011	Ongoing	
1.8	<p><b>COMPLIANCE TESTING REGIME</b></p> <p>Ensure that a compliance testing regime is established which provides an open and transparent framework for testing consumer reception equipment against the agreed technical specifications which deliver the minimum receiver requirements.</p>	Agree testing regime	Q4 2012	Ongoing	Revised timing to reflect ongoing work of task 2.5



1.9	<b>HELP SCHEME</b>  To report on the case for a Digital Radio Help Scheme, and determine where it might apply and how it could be administered.	Report	Q4 2012		Timing revised to enable report to take account of (i) findings of Cost Benefit Analysis and (ii) report on consumer impact
1.10	<b>ADVISE ON THE SCOPE AND ROLE OF ANALOGUE SERVICES AFTER SWITCHOVER</b>  Assess the role and character of the small local and community stations remaining on FM and make recommendations on the future regulatory regimes.	Initial Report  Ongoing	Q3 2012		
1.11	<b>ISSUES RELATING TO NON-DOMESTIC RADIOS</b>  Provide guidance on digital conversion for non-domestic use in public bodies. Identify specific issues which relate to radios used for education, health (hospitals), prisons and in the workplace (including in-vehicle). Liaise closely with other Government Departments.	Produce Guidance	Q2 2013		
1.12	<b>MARKET REVIEW</b>  Conduct a review of market readiness for Digital Radio Switchover, as set out in Section 33 of the Digital Economy Act 2010.	Publish review	Q2 2013		
1.13	<b>IDENTIFY ANY CHANGES TO THE SPECTRUM MANAGEMENT REGIME</b>  Identify and make any changes to the multiplex licence regime which are pertinent to a Digital Radio Switchover, such as those set out in Section 35 of the Digital Economy Act 2010.	Review	Q3 2013		

1.14	<b>PUBLISH TRANSITION AND RADIO SWITCHOVER PLAN</b> Agree a transition plan, setting out the means under which a Digital Radio Switchover could be achieved. The plan will include criteria which will be applied to determine which stations switch over.	Report	Q4 2013		
1.15	<b>MONITOR REGULATORY FRAMEWORK</b> Ensure there is an appropriate statutory and regulatory framework for the Digital Radio Switchover at both national and EU level.	Review	Ongoing	Ongoing	





## SECTION 4.2

### TECHNOLOGY AND EQUIPMENT

The Technology and Equipment Group work focusses primarily on consumer equipment, including both domestic and in-vehicle radios. The priorities in this area are the usability of devices for all listeners and the development of a set of common specifications to provide quality assurance to consumers. Due to the importance of in-vehicle digital conversion there is a specific sub-group which looks at the barriers to take-up and conversion options.

	TASK	ACTION	TIMING	STATUS	COMMENTS
2.1	<p><b>DEVELOP CORE SET OF MINIMUM SPECIFICATIONS FOR DOMESTIC RECEIVERS</b></p> <p>Define minimum radio receiver requirements in order to develop the technical specifications for equipment for use with digital radio transmissions in the UK, which can be tested for compliance against specified test suites, and which are capable of underpinning any future certification scheme.</p> <p>Core specifications will be based upon WorldDMB Profile 1 and will include discussions around:</p> <ul style="list-style-type: none"> <li>• Digital codecs included in devices</li> <li>• Inclusion of FM</li> <li>• Size of DLS (screen for providing data)</li> <li>• Receiver performance / sensitivities (subject to the work of the Coverage &amp; Spectrum Planning Group)</li> </ul>	<p>Report</p> <p>Peer review and technical authoring</p> <p>Recommendations to Government</p> <p>Reviewed annually</p>	<p>Q1 2012</p> <p>Q2 2012</p> <p>Q3 2012</p>	<p><b>Completed</b></p> <p><b>Ongoing</b></p> <p><b>Ongoing</b></p>	<p>Timeline revised to allow for (i) further consultation with key stakeholders, (ii) analysis of receiver sensitivity testing results and (iii) consideration</p>

	<ul style="list-style-type: none"> <li>• Consumer upgrade mechanisms</li> <li>• Accessibility / usability issues</li> </ul>				of the outcome Ofcom's consultation at task 4.2
2.2	<p><b>COMMUNICATIONS FOR TECHNICAL CHANGES</b></p> <p>Agree a process for monitoring and communications on technical issues affecting DAB equipment such as changes to bit-rates, Electronic Programme Guides and the reconfiguration of multiplexes.</p>	Report	Q1 2011	<b>Completed</b>	
2.3	<p><b>ANALYSE ACCESSIBILITY ISSUES</b></p> <p>In light of any recommendations by the Consumer Expert Group, consider the specific accessibility / usability needs of people with disabilities and older people, and identify viable solutions.</p>	Review Review	Q1 2012 Q4 2012	<b>Completed</b>	Timeline revised to allow further consultation with key stakeholder
2.4	<p><b>DEVELOP SET OF OPTIONAL SPECIFICATIONS FOR DOMESTIC RECEIVERS</b></p> <p>Make recommendations on additional optional / advanced radio receiver specifications, which would provide "best practice" should optional technology be installed. This is likely to include:</p> <ul style="list-style-type: none"> <li>• WorldDMB Profiles 2 and 3</li> <li>• Electronic programme guide</li> <li>• Integrated station guide</li> <li>• Text to Speech</li> </ul>	Report Reviewed annually	Q4 2011	<b>Completed</b>	Timeline revised to allow for further work on other platforms, and further consultation
2.5	<p><b>PRODUCT TESTING AND SUPPORT</b></p> <p>Agree a conformance testing regime to test consumer</p>	Report	Q1 2012	<b>Ongoing</b>	Timeline revised to carry out



	<p>reception equipment for compliance with the agreed technical specifications and make recommendations on the appropriate level of testing to be applied to products sold in the UK.</p> <p>Report on the process for policing the application and use of the switchover certification mark, feeding into task 1.8. This should include the process for a product sample testing regime to check compliance against the minimum receiver specifications (domestic and in-vehicle)</p>	<p>Peer review and technical authoring</p> <p>Recommendations to Government</p> <p>Report</p>	<p>Q2 2012</p> <p>Q3 2012</p> <p>Q3 2012</p>	<p><b>Ongoing</b></p> <p><b>Ongoing</b></p> <p><b>Ongoing</b></p>	<p>further work on testing environments</p>
2.6	<p><b>REPORT ON FUTURE ENERGY CONSUMPTION</b></p> <p>Consider future energy consumption of digital radio receivers, taking account of development in functionality and technology.</p>	<p>Report</p>	<p>Q4 2012</p>	<p><b>Ongoing</b></p>	<p>Timeline revised to allow for further analysis</p>
2.7	<p><b>ASSESSMENT OF DAB ADAPTERS</b></p> <p>Analyse and make recommendations on the potential market for, and implementation of, converters for domestic analogue radio receivers and the specifications for these devices.</p>	<p>Report</p>	<p>Q2 2012</p>	<p><b>Completed</b></p>	<p>Timeline revised to allow for further analysis</p>
2.8	<p><b>REPORT ON ROLE OF OTHER DIGITAL PLATFORMS</b></p> <p>Monitor and review the development of other delivery mechanisms for digital radio, including the internet, digital TV and mobile communications and make recommendations on how to use these technologies and</p>	<p>Report</p>	<p>Q3 2012</p>		<p>Timeline revised to allow for further analysis</p>

	the required infrastructure to drive take-up of digital radio and any impact on the minimum specifications and a certification mark.				
2.9	<p><b>REPORT ON DISPOSAL OF OBSOLETE EQUIPMENT</b></p> <p>Give clear guidance to manufacturers (including car radio manufacturers) and retailers on their responsibilities within the European Waste Electrical and Electronic Equipment Directive (WEEE) on the disposal and recycling of redundant devices and identify strategies to reduce levels of equipment disposed of or recycled. Commission research into small WEEE devices and incorporate findings into the marketing strategy.</p>	Report	Q3 2012		Timeline revised to allow for further analysis
<b>IN-VEHICLE SUB-GROUP</b>					
2.10	<p><b>TRAFFIC AND TRAVEL SERVICES</b></p> <p>Report on the impact of the analogue switch-off of national networks on providers of traffic and travel services, review the options for the continuation of FM services following a Digital Radio Switchover and the development of a DAB replacement for analogue traffic services.</p>	Report	Q2 2011	<b>Completed</b>	
2.11	<p><b>DEVELOP SET OF MINIMUM SPECIFICATIONS FOR IN-VEHICLE RECEIVERS AND ADAPTERS</b></p> <p>Define a minimum receiver specification for in-vehicle receivers and adapters in the UK, likely to consider:</p> <ul style="list-style-type: none"> <li>• Mobile receiver performance</li> <li>• In-car functionality and interfaces between device</li> </ul>	<p>Report</p> <p>Peer review and technical authoring</p>	<p>Q3 2011</p> <p>Q2 2012</p>	<p><b>Completed</b></p> <p><b>Ongoing</b></p>	Tasks 2.11 and 2.13 merged as the In-Vehicle Group is addressing all equipment



	<p>and vehicle</p> <ul style="list-style-type: none"> <li>• Driver distractions and other safety issues</li> <li>• Aerial configurations</li> </ul>	Recommendations to Government	Q3 2012	Ongoing	(receivers and adapters) collectively
2.12	<p><b>AGREE AERIAL / RECEIVER SENSITIVITY LEVELS</b></p> <p>Through dialogue with the Coverage and Spectrum Planning Group, determine the receiver and aerial configurations and reception to correspond with the planning model for field strengths in coverage build-out.</p>	Report	Q4 2011	Completed	Incorporated into task 2.11
2.13	<p><b>REVIEW PROGRESS OF IN-VEHICLE CONVERSIONS</b></p> <p>Identify and agree the mechanisms for recording vehicle data and consider practicability of setting up a database for matching existing vehicle models with the appropriate conversion equipment.</p> <p>Review progress with longer-term market modelling where appropriate.</p> <p>Monitor in-vehicle progress in meeting the Digital Radio Switchover criteria, with a particular focus on the position of commercial vehicles to ensure they are not left behind.</p>	<p>Ongoing</p> <p>Initial report</p>	Q2 2012	Ongoing	
2.14	<p><b>APPROVED INSTALLATION</b></p> <p>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, including recommendations on the policing and enforcement requirements.</p>	Report	Q1 2013	Ongoing	

2.15	<p><b>CONSUMER ADVICE</b></p> <p>Assess the need for a certification mark for in-vehicle radios and adapters, and for identifying compatible devices. Consider dealer and consumer advice for both dealerships and for the used-vehicle market, with reference to the EU Consumer Protection Regulations.</p> <p>Examine the role for retailers of in-vehicle accessories.</p> <p>Work with the Market Preparation Group for input into final report.</p>	Report	Q1 2013	Ongoing	
2.16	<p><b>EUROPEAN AND INTERNATIONAL TECHNICAL STANDARDS</b></p> <p>Monitor and review technical standards developments within WorldDMB and coordinate with work being undertaken in other countries ensuring that, wherever possible, agreed international standards are implemented.</p>	Ongoing	Ongoing	Ongoing	This task is also being undertaken by the main TEG group



## SECTION 4.3

### MARKET PREPARATION

The Market Preparation Group will develop and co-ordinate a coherent cross-industry strategy (broadcasters, manufacturers and retailers) to raise awareness and understanding of digital radio, of Digital Radio Switchover with the public and with key trade audiences, and to develop a monitoring and research strategy.

	<b>TASK</b>	<b>ACTION</b>	<b>TIMING</b>	<b>STATUS</b>	<b>COMMENTS</b>
3.1	<p><b>MONITORING MARKET READINESS</b></p> <p>The Monitoring and Research sub-group will develop mechanisms for regular monitoring and reporting on:</p> <ul style="list-style-type: none"> <li>• Attitudes (to include awareness, understanding, conversion and intention to convert by audience) with Ofcom</li> <li>• Sales (cross-platform - GfK)</li> <li>• Coverage (Coverage &amp; Spectrum Planning Group)</li> <li>• Listening (RAJAR)</li> <li>• In-vehicle conversion (with Ofcom and SMMT)</li> <li>• Campaign development (working with BBC)</li> </ul>	Outline plan	Q4 2010	<b>Completed</b>	
3.2	<p><b>CONSUMER PROPOSITION</b></p> <p>Working with industry, set out a compelling consumer proposition for digital radio, including benefits, consistent description of the range of services, functionality and</p>	Publish outline document	Q3 2011	<b>Completed</b>	

	<p>receivers.</p> <p>Identify barriers to achieving such a proposition and make recommendations on how these could be overcome.</p> <p>Work with industry to develop a consistent cross-industry approach to communicating digital radio.</p>	<p>Report on final proposition</p>	<p>Q3 2012</p> <p>Ongoing</p>	<p>Ongoing</p> <p>Ongoing</p>	
3.3	<p><b>DEVELOP AND IMPLEMENT A STRATEGIC MARKETING AND COMMUNICATIONS PLAN</b></p> <p>i) Develop and implement a strategic marketing and communications plan to raise awareness and understanding of digital radio and to promote the uptake of digital radio.</p> <p>This plan should include, although not exclusively, the following elements:</p> <ul style="list-style-type: none"> <li>• A campaign to raise awareness and understanding of digital radio and its benefits, to include vehicle owners and managers</li> <li>• A campaign specifically on the Digital Radio Switchover</li> <li>• A campaign on what consumers can do with unwanted radios and other unwanted electrical equipment</li> </ul> <p>The plan should target all audiences and include different groups, for example by age/ethnicity/disability. The plan should also include media handling, politicians, opinion</p>	<p>Outline plan</p> <p>Report</p>	<p>Q2 2011</p> <p>Q4 2012</p>	<p>Completed</p> <p>Ongoing</p>	<p>Timing revised in order that report can take account of findings of Government report on case for a Help Scheme, task 1.9</p>





	<p>formers, local authorities, charities, the voluntary sector, and consumer groups.</p> <p>ii) Devise and implement a communications plan aimed at non-domestic users of radio, such as businesses and workplaces.</p> <p>The Plan to include (non-exhaustive list):</p> <ul style="list-style-type: none"> <li>• The development and distribution of retail point of sales materials and training for retailers (when appropriate)</li> <li>• Non-domestic use (e.g. hotels/B&amp;Bs, private landlords, factories)</li> <li>• Company vehicle schemes, commercial vehicle operators, fleet managers, car/vehicle purchasers and owners</li> <li>• Vehicle trade audiences (e.g. car dealers, independent garages, vehicle installers, vehicle-related retailers).</li> </ul>				
3.4	<p><b>AGREE AND IMPLEMENT UK DIGITAL RADIO SWITCHOVER MARK SCHEME</b></p> <ul style="list-style-type: none"> <li>• Agree form of a potential UK digital radio mark</li> <li>• Develop a plan for how the mark could be promoted to consumers and industry.</li> </ul>	<p>Decision</p> <p>Plan</p>	<p>Q4 2010</p> <p>Q2 2012</p>	<p><b>Completed</b></p> <p><b>Completed</b></p>	

3.5	<p><b>ENGAGEMENT WITH THIRD SECTOR &amp; CONSUMER SUPPORT NETWORKS</b></p> <p>i) Communicating via the third sector</p> <ul style="list-style-type: none"> <li>Develop a plan for communicating about Digital Radio Switchover and training the relevant charity, voluntary and community groups, and a method for assessing success.</li> </ul> <p>ii) Mobilisation of existing support networks</p> <ul style="list-style-type: none"> <li>Develop a strategy and programme activity reflecting existing consumer support networks to offer advice and help to those who need it for the Digital Radio Switchover, including those eligible for a potential Help Scheme.</li> </ul>	Outline plan	Q4 2012		Timing amended in order that outline plan can take into account Government decision on Help Scheme, task 1.9
3.6	<p><b>HELP SCHEME</b></p> <p>In light of the report on a possible Help Scheme, devise a communications campaign that could be implemented to raise awareness of any Digital Radio Help Scheme.</p>	Outline Plan	Q1 2013		Timing revised in order that the Plan can take account of task 1.9, report on case for a Help Scheme
3.7	<p><b>IDENTIFY TRAINING NEEDS WITHIN INDUSTRY TO ENABLE WORKFORCE TO ADVISE AND SUPPORT CONSUMERS EFFECTIVELY (e.g. retailers, engineers)</b></p> <ul style="list-style-type: none"> <li>An assessment and plan for achieving the necessary quantity and quality of trained retail staff, and for the development of a certification scheme</li> <li>This is TEG's task 2.14</li> </ul>	Outline plan Guidance produced	Q1 2013		



3.8	<p><b>DEFINE SUPPLY CHAIN REQUIREMENTS FOR SWITCHOVER</b></p> <p>Provide initial assessment of the potential demand for digital radio sets in order to inform supply chain about potential requirements at switchover</p>	Initial review	Q1 2013	<b>Ongoing</b>	Wording changed to clarify work required
3.9	<p><b>MESSAGING GRID</b></p> <p>The Messaging Sub-Group to develop an agreed strategic messaging grid with the lines to take on issues surrounding Digital Radio Switchover.</p>	<p>First grid agreed</p> <p>Review monthly</p>	Q3 2010	<b>Grid reviewed monthly</b>	1st grid agreed Q1 2011. Grid reviewed on a monthly basis.

## SECTION 4.4

### COVERAGE AND SPECTRUM PLANNING

Detailed coverage planning is needed to inform policy development and the implementation of Digital Radio Switchover. A Coverage and Spectrum Planning Group was formed, under the chairmanship of Ofcom, to consider a wide range of coverage issues and make recommendation to Ministers.

	TASK	ACTION	TIMING	STATUS	COMMENTS
4.1	<b>FREQUENCY AND MULTIPLEX ALIGNMENT</b>  Make recommendations on changes to the coverage area of multiplexes and re-organise the frequencies allocated to DAB.	Recommendations to feed into 4.2	Q4 2010	Completed	
4.2	<b>DAB COVERAGE POST-SWITCHOVER</b>  Determine the current level of FM; including defining what listeners determine is an appropriate signal quality on FM. Make recommendations on the build-out of DAB coverage so that it is equivalent to existing FM coverage. Determine level of receiver sensitivity to meet DAB planning parameters.	Consultation  Final Report	Q2 2011  Q2 2012	Completed  Completed	
4.3	<b>SPECTRUM EFFICENCY</b>  To consider and identify future uses for the MW spectrum and any vacated FM spectrum.	Report	Q2 2012	Ongoing	
4.4	<b>AGREE SWITCHOVER TRANSITION PLAN</b>  Agree a plan for the transition for stations migrating from analogue.	Report	Q2 2013		



## SECTION 4.5

### PROJECT CO-ORDINATION AND MANAGEMENT

Successful implementation of the Digital Radio Switchover programme will only be achieved through close Government-Industry co-operation. The Digital Radio Switchover is a complex and large activity and we need to ensure that there are proper accountability and control mechanisms. The Programme Management Team provides direction and co-ordination of the Action Plan both within and outside of Government. This includes commissioning and delivery of reports, reviewing progress against key milestones and disseminating information to key stakeholders.

	<b>TASK</b>	<b>ACTION</b>	<b>TIMING</b>	<b>STATUS</b>	<b>COMMENTS</b>
5.1	<b>SECURE PRINCIPAL GROUP SUPPORT</b>  Secure commitment from the Government Digital Radio Group and the Stakeholders Groups to the Action Plan.	Approve Action Plan	Q2 2010	<b>Completed</b>	
5.2	<b>PROJECT GOVERNANCE</b>  Establish Project Steering Board. Establish Project Team, including management and reporting structures.	Terms of Reference Terms of Reference	Q3 2010 Q3 2010	<b>Completed</b> <b>Completed</b>	
5.3	<b>SET UP TASK GROUPS</b>  Set up, including agreeing terms of reference, Task Groups to take forward specific areas of work.	Terms of Reference	Q3 2010	<b>Completed</b>	
5.4	<b>ESTABLISH REPORTING FRAMEWORK</b>  Agree regular reporting framework and reviews against key milestones.	Terms of Reference	Q3 2010	<b>Completed</b>	
5.5	<b>IDENTIFY FUNDING CONSTRAINTS</b>  Quantify and address any funding restraints which might	Report	Ongoing	<b>Ongoing</b>	

	hinder the work of the Task Groups.				
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# Appendix A: Terms of Reference

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## GOVERNMENT RADIO POLICY GROUP

### Purpose

The **Government Radio Policy Group (GPG)** work strand provides a focal point for work with Government Departments, Devolved Administrations and public bodies, for the development of future government policy on Digital Radio Switchover.

### Objectives

- To conduct a comprehensive impact assessment of the Digital Radio Switchover;
- Identify any necessary changes to the regulatory regimes for radio;
- Determine the case for a digital radio Help Scheme; and
- Agree a DAB coverage plan, including how the costs for further build-out will be met.

### Membership

The GPG will be chaired by DCMS who will be responsible for the delivery of the work strands. A formal group, made up of officials from across government, will meet once every 6 months to discuss general issues and progress against the key activities. However, the majority of the work strand tasks will be delivered in smaller sub-groups with the relevant Departments and Agencies for each issue.

### Mode of Operation

1. The GPG will meet every 6 months.
2. The Chair will report as required by the Action Plan, and the secretariat will be provided by the Programme Management Team.

## TECHNOLOGY AND EQUIPMENT GROUP

### Purpose

The **Technology and Equipment Group** (TEG) will identify, investigate, report and make recommendations on the technology and equipment issues related to the Digital Radio Switchover.

### Objectives

- Develop a set of minimum specifications for domestic digital radio receivers and technology;
- Develop a set of minimum specifications for in-vehicle radios including both line-fit and adapters;
- Develop a strategy for quality assurance of digital radio receivers, to include testing devices against agreed common specifications;
- Advise on the design and implementation of receivers which are accessible to all listeners;
- Advise on the implementation of the WorldDMB Profile 1 and co-ordinate future discussions with WorldDMB on European specifications;
- Report on the energy efficiency of digital radio receivers and, where appropriate, mechanisms to reduce energy consumption; and
- Report and advise on the disposal of analogue receivers to ensure compliance with UK and European regulations.

### Membership

This Group will be chaired by Digital Radio UK. Membership of the TEG is by invitation of the Chair, and the Group should include representatives from the manufacturers, silicon providers, retailers and consumer groups.

Membership of sub-groups such as the In-Vehicle Group may be limited or expanded beyond the main Group depending upon the topic under consideration. Membership of an individual sub-group will be by invitation of the sub-group leader in consultation with the TEG Chairman.





## **Mode of Operation**

1. The TEG will meet regularly. It may also set up specific sub-groups to carry out elements of the work.
2. The Group will report as required by the Action Plan, and the secretariat will be provided by the Programme Management Team.

## MARKET PREPARATION GROUP

### Purpose

The **Market Preparation Group** (MPG) will develop and co-ordinate a cross-industry strategy to raise public and industry awareness and understanding of digital radio, and a subsequent Digital Radio Switchover.

### Objectives

- To develop and make recommendations on the implementation of a strategic marketing and communications plan that raises awareness and understanding of digital radio, supports the industry timeline of Digital Radio Switchover in 2015, and ensures that the needs of groups less likely to switch are addressed;
- To determine and action what research or information is required to enable Government and industry to develop understanding of the likely market conditions pre, post and during a Digital Radio Switchover, working with key stakeholders such as Ofcom and BBC;
- To consider and agree appropriate deployment of a common UK labelling scheme for digital radio, and related products and services;
- To devise and make recommendations on the implementation of a communications plan for non-domestic users of radio (to include vehicle operators, car dealers, schools, etc.);
- To identify any industry training needs (retailers, installers, engineers, etc.) and possible means of implementation;
- To devise a communications campaign to support a possible Help Scheme;
- To ensure the appropriate prioritisation of the work of the Group.

### Membership

This Group will be chaired by Digital Radio UK. Membership of the Market Preparation Group is by invitation of the Chair, but will include representatives of the broadcasters, manufacturers, retailers and consumer groups.

### Mode of Operation

1. The Market Preparation Group will meet regularly. It may also set up specific sub-groups to carry out elements of the work.
2. The Group will report as required by the Action Plan, and the secretariat will be provided by the Programme Management Team.



## COVERAGE AND SPECTRUM PLANNING GROUP

### Purpose

Detailed coverage planning is needed to inform policy development and the implementation of Digital Radio Switchover.

The **Coverage and Spectrum Planning Group (CSP)**, under the chairmanship of Ofcom, will consider a wide range of coverage issues and make recommendations to Ministers.

The Group will be responsible for developing a range of options to support an increase in existing DAB coverage, with a specific view on matching current FM coverage. It will also liaise as required with the other working groups as part of the Digital Radio Action Plan.

The Digital Radio Action Plan sets out the key tasks for the CSP in the lead-up to and implementation of the Digital Radio Switchover.

### Objectives

- 
- Make recommendations on changes to the coverage area of multiplexes and re-organise the frequencies allocated to DAB:
  - Based on requests from multiplex operators consult on and implement changes to existing licensed areas
  - Produce plan to extend further existing licensed areas to cover white spaces, including the licensing of new multiplexes where necessary
- Determine the current level of FM; including defining what listeners determine is an appropriate signal quality on FM and make recommendations on the build-out of DAB coverage so that it matches existing FM coverage:
  - For national and large local services define usable FM coverage of households and roads and publish the results for consultation
  - Define appropriate field strengths and other parameters necessary to deliver robust DAB coverage
  - Identify the achievable coverage for DAB services from the selected sites using the latest agreed coverage prediction model, including specifying the geographically and terrain constraints which must be considered in DAB planning
  - For BBC network services and Classic FM develop options for transmitter plans to match existing FM coverage of households and roads as far as practicable
  - For large local services (BBC and commercial) develop options for transmitter plans to match existing FM coverage of households and roads within agreed editorial areas as far as practicable
- To consider and identify future uses for the MW spectrum and any vacated FM spectrum.

- Future use of VHF Band III to consider use for small-scale FM services and digital radio services
- Agree a plan for the transition for stations migrating off analogue
  - Advise Secretary of State on criteria for determining which stations should switch-off analogue coverage
  - Ofcom to implement the Secretary of State's decision

## **Membership**

The Group will be chaired by Ofcom. Membership is by invitation from the Chair and comprises those organisations which are responsible for radio spectrum planning and co-ordination in the UK. This includes representatives from the BBC, Ofcom, and DCMS. It may also include subcontractors who are working directly for one or more of the Group's members.

## **Mode of Operation**

1. The Group will meet regularly. It may also set up a sub-group to carry out elements of the work.
2. The Group will set up an Advisory Group, consisting of multiplex operators and Digital Radio UK, but all decisions and responsibility for producing reports rest with the Chair of the Coverage and Spectrum Planning Group
3. The Group will prepare and regularly review a Project Plan. This will comprise objectives, timescales and deliverables which will be linked to the requirements of the Action Plan.



## STAKEHOLDERS GROUP

### Purpose

The **Stakeholder Group** provides the forum for a wide range of external stakeholders from industry and other related organisations to debate progress against the work strands of the Action Plan and to gather views on emerging findings.

### Objectives

- To collect ideas and opinions from interested parties in the work of the Action Plan;
- To give a cross-sector perspective on the progress of the work strands and any other work towards the Digital Radio Switchover; and
- To provide high-level advice to the Steering Board and Ministerial Group.

### Membership

The Stakeholder Group will be chaired by Government. Membership will be drawn from organisations with a valid interest in the Digital Radio Switchover, these will include: broadcasters, content providers, manufacturers, retailers, network operators, the motor industry and consumer groups.

### Mode of Operation

1. The Stakeholder Group will meet quarterly.
2. The Chair will report to the Steering Board and the Ministerial Group as appropriate, and the secretariat will be provided by the Programme Management Team.

## MINISTERIAL GROUP

### Purpose

The **Ministerial Group** is chaired by the relevant Government Minister. Its principal purpose is to inform the Minister of progress of the Action Plan and to provide a forum for discussion of the key issues.

### Objectives

- To provide updates to the Minister on the work strands within the Action Plan;
- To allow key stakeholders to raise any issues or concerns with the Minister.

### Membership

The Ministerial Group is chaired by the relevant Government Minister and includes representatives from the BBC, commercial radio broadcasters, community radio broadcasters, transmission providers, Ofcom, manufacturers, the automotive sector, retailers, consumers and Digital Radio UK.

### Mode of Operation

1. The Ministerial Group will meet quarterly.
2. The secretariat will be provided by the Programme Management Team.
3. Papers will be sent out 1 week before each meeting and comprehensive minutes circulated within 1 week of the meeting.



## CONSUMER EXPERT GROUP

### Purpose

The Digital Television **Consumer Expert Group** (CEG) was convened by the Government in June 2003 to give Ministers advice on the issues for consumers as the UK switches to digital television. They have since extended their remit to include digital radio and use of the internet.

The following terms of reference have been agreed between CEG members, the Department for Culture Media and Sport and the Department for Business, Innovation and Skills.

### Objectives

- To advise Government on:
  - the issues arising for consumers of the implementation of the Digital Radio Upgrade programme;
  - the ways of communicating the principles and impact of the Digital Radio Upgrade, including the timetable, to consumers
- To write any reports that are deemed necessary to fulfil this remit.
- Government will give due consideration to and respond to the reports and other advice received from the CEG.

### Membership

The CEG includes representatives from Royal National Institute for Blind People, Age UK, Rural Community Councils, British Wireless for the Blind Fund, Voice of the Listener and Viewer, Sense, WaveLength, Royal National Institute for Deaf People, TAG, Citizens' Advice, Which? and Consumer Focus.

### Mode of Operation

1. The CEG meets quarterly.
2. The secretariat is provided by DCMS.

# Appendix B: Glossary

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**DIGITAL RADIO:** When digital radio is referred to in this document it includes all digital platforms on which radio can be consumed, including DAB, digital television, the internet and mobile phones. Of these platforms, DAB is the most popular with 62% of all digital listening, followed by digital TV with 18% and the internet with 11%.

**DIGITAL RADIO SWITCHOVER:** Digital Radio Switchover is the point at which all national and large local stations broadcasting on both DAB and analogue frequencies will cease to broadcast on analogue, and small local and community stations will populate the vacated FM spectrum.

**DAB:** DAB stands for Digital Audio Broadcasting which is the digital radio broadcast technology adopted in the UK. DAB is one of the family of EUREKA 147 technologies developed as part of a European Union research project which began in 1987.

**DAB+:** DAB+ is a variant of DAB which uses a more advanced audio coding technology and provides greater capacity on digital multiplexes.

**ANALOGUE RADIO:** The majority of radio stations in the UK are carried on analogue. Analogue radio is traditionally broadcast on the following bands:

- Medium Frequency Band (MF, also known as Medium Wave);
- Low Frequency Band (LF, also known as Long Wave) – both MF and LF use a technology called AM (amplitude modulation); and
- VHF Band II – this is used for broadcasting services using a technology known as FM (frequency modulation).

**MULTIPLEX:** A multiplex consists of a number of digital services bundled together on a single frequency in a given transmission area.

**WORLDDMB:** The WorldDMB Forum is an international non-governmental organisation whose objective is to promote, harmonise and co-ordinate the implementation of DAB Digital services based on the Eureka 147 DAB system. WorldDMB's three most well-known standards are the original digital radio standard DAB, the recently developed additional radio standard DAB+ and the multimedia/video standard DMB. It is dedicated to encouraging international co-operation and co-ordination between sound and data broadcasters, network providers, manufacturers, governments and official bodies, thus gaining consensus for the smooth introduction of DAB based services.





**WORLD DMB PROFILE 1:** provides the mandatory and recommended features for a standard radio receiver, including compatibility with frequencies, with digital and analogue technologies, standards for text display and traffic and travel services.

**WORLDDMB PROFILE 2:** provides the mandatory and recommended features for a rich media radio receiver with a colour screen display of at least 320 x 240 pixels. These include text presentation, EPG and slideshow features.

**WORLDDMB PROFILE 3:** provides for the mandatory and recommended features for a multipurpose receiver with a colour screen display capable of rendering video, which includes video decoding.

**ELECTRONIC PROGRAMME GUIDE:** An Electronic Programme Guide (EPG) is an on-screen guide to scheduled radio programmes, allowing the listener to navigate, select and record content.

**INTEGRATED STATION GUIDE:** An Integrated Station Guide (ISG) lists the digital and analogue stations available together on the screen of a digital radio device.

**WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE) DIRECTIVE:** The WEEE Directive requires manufacturers and retailers to take responsibility for the recycling and disposal of electronic and electrical equipment. Consumers can, for example, return their analogue devices to a store. The exact responsibilities for industry and options for consumers will be researched as part of the Action Plan and guidance provided.



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