

Service following and traffic announcements technical trial

April 2013

Contents

- 1.0 Summary of results
- 1.1 Background
- 1.2 Trial objectives
- 1.3 Service following
- 1.4 Announcement switching
- 2.0 The trial
- 3.0 Summary of findings
 - 3.1.0 Service Following
 - 3.1.1 Key to Table 1 - service following use cases
 - 3.1.2 Description of results
 - 3.2 Announcement Switching
 - 3.2.1 Key to Table 1 – announcement switching use cases
 - 3.2.2 Description of results
- 4.0 Recommendations and next steps
- 5.0 Acknowledgements
- 6.0 References

Annexes

- Annex A: Trial route and Receiver behavior on a response form
- Annex B: Details of the Ensembles and Services participating in the trial
- Annex C: Service following tables
- Annex D: Manufacturers questionnaire

1.0 Summary of results

- When tested, many of the receivers did not implement service following at all, but where they did implement service following, most receivers switched from DAB to FM correctly using the implied linkage association for hard linked services
- Where traffic announcement functionality was supported by a receiver, it was implemented correctly.

Results showed that improved performance could be obtained by ensuring good communication of expected receiver behavior, between radio broadcasters and receiver manufacturers.

1.1 Background

This trial is not part of a specific task in the [Digital Radio Action Plan](#) (DRAP). However, this trial was initiated as a direct result of the work in the Technology & Equipment Group (TEG) on the UK Minimum Receiver Specifications.

The DRAP has been set up by the UK Government in order to help in the decision making process leading up to Digital Radio Switchover. The TEG was set up as part of the DRAP to focus primarily on consumer equipment. One of the tasks for TEG included the development of a set of minimum technical specifications for equipment used to receive digital radio transmissions in the UK [4] [5]. These criteria are to be used as the basis of a future Digital Radio Switchover Certification Mark.

The in-vehicle element of the UK Minimum Specifications requires service following and (traffic) announcement switching as a minimum criteria. Thus in order for a vehicle manufacturer or receiver manufacturer to be granted use of the Digital Radio Switchover Certification Mark (at the point it is launched), they must implement service following and traffic announcements correctly.

Service following and traffic announcements have been implemented across the FM infrastructure. However, prior to April 2012, only limited service following and traffic announcements had been implemented across the UK's DAB network. Furthermore, it was agreed amongst industry experts that there was a lack of understanding about exactly how service following and traffic announcements should be implemented – by service providers, multiplex operators, broadcasters, vehicle manufacturers and receiver manufacturers. Thus the industry trial was launched, to test the implementation and ensure that the DAB infrastructure was in place to handle service following and traffic announcements.

The following paper has been written by Digital Radio UK and Arqiva.

1.2 Trial objectives

The trial objectives were as follows:

- To ensure UK DAB networks and services meet the requirements for implementing service following and traffic announcement features
- To provide a platform for manufacturers to test receiver behavior according to the technical specifications for service following [1] [2]
- To provide a platform for manufacturers to test receiver behavior according to the technical report for announcement switching [1] [3]
- To assess how current in-vehicle digital radios handle service following and traffic announcements in a simulated post-switchover environment, and assist the development of future in-vehicle receivers
- To log any other technical issues affecting digital radio networks and receiver performance, associated with service following and traffic announcements
- To provide a set of ETI files for World DMB members and receiver manufacturers to test receiver behavior for service following and traffic announcements

1.3 Service following

Service following is the term applied to maintaining the same audio or data content (“hard linked”) or associated audio or data content (“soft linked”), in spite of the varying reception conditions, or while roaming between Ensemble areas.

Two Digital Audio Broadcasting (DAB) broadcast network topologies are possible:

- The tuned service may be carried on one Ensemble using a single frequency network (SFN) or on a multiple frequency network (MFN) covering a wide geographical area
- The tuned service may be carried on other Ensembles (SFN or MFN) covering smaller geographical areas

In geographical areas, where DAB is not available, the same audio or data content (hard linked and/or soft linked) may be available on an FM broadcast bearer. DAB provides signaling that enables service providers to inform receivers about the broadcast networks and service configurations that allow service following to take place and to allow the information to be dynamically controlled to take into account of the changes during the day.

Three types of information may be involved with service following:

- Service linking information
- Other Ensemble Services information

- Frequency information

1.4 Announcement switching

The Announcements feature is a (short) vectored interruption of the currently selected programme service. There are two types of announcement switching, depending on whether the announcement message is carried on the same service that the listener is tuned to or whether it is provided by another service, either on the same Ensemble or on a different Ensemble. After an announcement, the originally selected programme service should be restored to the user (listener).

In the case of the spoken announcement message being carried on the same service that the listener is tuned to, there will be no re-direction from the tuned service, but the volume will increase. However, in the case of the spoken announcement message being carried by a service, whilst the listener is listening to a CD or mp3 player, the listener will be temporarily re-directed from the current selected audio source to an audio source which delivers a spoken message in the form of a (short) announcement.

2.0 The trial

The trial route was live between 15th April 2012 and 15th August 2012. The correct infrastructure was set up around the South East of England, within the broadcast area of the following multiplexes (respective coverage areas are shown in Figure 1):

- London 1
- London 2
- Kent
- Sussex Coast
- Berkshire North Hampshire

Note – the BBC and Digital 1 national Ensembles also participated in the technical trial, however their coverage is not shown in Figure 1. FM transmitters are shown for the Heart service only.

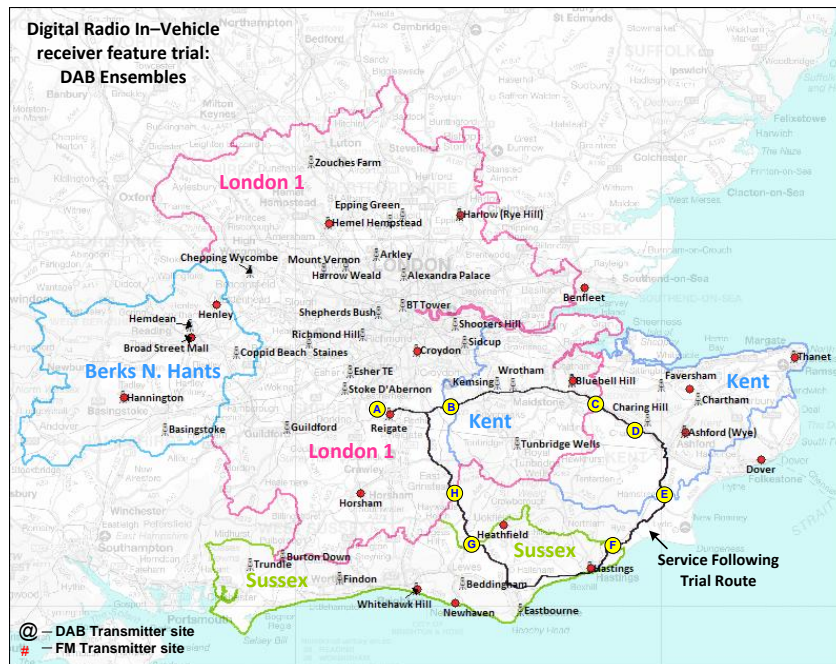


Figure 1 - Map describing DAB Ensembles and the trial route

The trial route was designed to exploit the service following and traffic announcement features in order to give the maximum opportunity for vehicle manufacturers and receiver manufacturers to experience the functionality.

As part of the trial, vehicle manufacturers and receiver manufacturers were tasked with driving the trial route and recording receiver behavior on a response form (see Annex A). A set of ETI files were produced for the trial in order to enable manufacturer bench testing. The relevant ETI files are available from www.worlddab.org/eti_library for WorldDMB members only. For the duration of the trial they were made available for trial participants by mark.sutcliffe@arqiva.com.

The ETI files provided by the DRAP technical trial represented a snapshot of the Ensemble configurations at the time the ETI files were captured. During the trial period, the Service following and Announcement signaling conditions were flexed to trial the various configuration options, therefore, it is possible that the data captured by trialists may not exactly match the content of the DRAP ETI files.

The actual receiver behavior (as recorded as part of the trial) was then compared with the expected behavior of the receiver (as understood by the manufacturer), and – where there was a significant difference between actual and expected behavior – a dialogue commenced between the broadcasters, Arqiva and the manufacturer in question, in order to diagnose the problem(s) and seek solutions.

Note – for each of the participating DAB Ensembles, the fast information channel (FIC), fast information group (FIG) data for the service following and announcement signaling information is shown in Annex B.

Service information is shown in Annex C detailing the Ensemble and service identifiers used for each of the participating radio stations. Here, service linking information is provided. This was done in order for manufacturers to make a link between services on one Ensemble to another Ensemble or FM service, according to the user case specified in [2].

3.0 Summary of findings

27 products were tested during the trial – driving the trial route, using the ETI files, and/or providing information based on a manufacturers questionnaire as shown in Annex D. Although not all participants were keen to share their results in full, the following is a brief summation of the trial's findings:

Note – although there were 27 trial respondents who took part in the trial, the number of trial participants does not match the number of receivers listed in the trial report because not all trial results were fed back appropriately.




Note – we have anonymised the identities of receiver manufacturers and vehicle manufacturers who took part in the trial. Each manufacture has been allocated a unique OEM reference.

Note – we have split the results into three groups, defined by their year of manufacturer (i.e. the date they were manufactured).

3.1.0 Service Following

| Year of Manufacturer (Before 2010) | Service Following test cases (see Note 1) | | | | | | | | | |
|---------------------------------------|---|------|------|---------|------|------|------|------|------|-------------------------|
| OEM Reference | A.1 | A.2 | A.3 | A.4 | A.5 | A.6a | A.6b | A.7 | A.8 | Time to switch (sec) |
| 3 | FAIL | FAIL | FAIL | NO DATA | FAIL | FAIL | FAIL | FAIL | FAIL | |
| 9 | FAIL | FAIL | FAIL | NO DATA | FAIL | FAIL | FAIL | FAIL | FAIL | |
| 11 | FAIL | FAIL | FAIL | NO DATA | FAIL | PASS | FAIL | FAIL | FAIL | 1 |
| 12 | FAIL | FAIL | FAIL | NO DATA | FAIL | PASS | FAIL | FAIL | FAIL | 1 |
| 13 | FAIL | FAIL | FAIL | NO DATA | FAIL | FAIL | FAIL | FAIL | FAIL | |
| 14 | PASS | PASS | FAIL | NO DATA | FAIL | PASS | FAIL | FAIL | FAIL | 1 - 30 |
| 15 | PASS | FAIL | FAIL | NO DATA | FAIL | PASS | FAIL | FAIL | FAIL | 30 |
| 16 | PASS | PASS | FAIL | NO DATA | FAIL | FAIL | FAIL | FAIL | FAIL | |
| 17 | PASS | PASS | FAIL | NO DATA | FAIL | FAIL | FAIL | FAIL | FAIL | |
| 19 | FAIL | FAIL | FAIL | NO DATA | FAIL | FAIL | FAIL | FAIL | FAIL | |

Table 1a – Service following results for receivers manufactured before 2010

| | |
|---|---------------------------------------|
|  | Green Block indicates a use case PASS |
|  | Red Block indicates a use case FAIL |
|  | Grey Block indicates No Data |

| Year of Manufacturer (2010 to 2012) | Service Following test cases (see Note 1) | | | | | | | | | |
|--|---|-----|-----|-----|-----|------|------|-----|-----|----------------------|
| OEM Reference | A.1 | A.2 | A.3 | A.4 | A.5 | A.6a | A.6b | A.7 | A.8 | Time to Switch (sec) |
| 1 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | 5-10 |
| 10 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 21 | | | | | | | | | | |
| 22 | | | | | | | | | | |
| 23 | | | | | | | | | | |
| 24 | | | | | | | | | | |
| 25 | | | | | | | | | | |
| 26 | | | | | | | | | | |

Table 1b – Service following results for receivers manufactured between 2010 and 2012

| Year of Manufacturer (Next Generation products) | Service Following test cases (see Note 1) | | | | | | | | | |
|--|---|-----|-----|-----|-----|------|------|-----|-----|----------------------|
| OEM Reference | A.1 | A.2 | A.3 | A.4 | A.5 | A.6a | A.6b | A.7 | A.8 | Time to Switch (sec) |
| 2 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 27 | | | | | | | | | | |

Table 1c – Service following predicted results for next generation receivers

3.1.1

Key to Table 1 - service following use cases

- A.1, DAB to DAB link in Multi-Frequency Networks
- A.2, Linking to the same service on different Ensembles
- A.3, Linking regional variations of a service on different Ensembles
- A.4, Linking technology variations of a service on different Ensembles
- A.5, Soft linking of services
- A.6a, Linkage of DAB and FM-RDS services (implicit linkage)
- A.6b, Linkage of DAB and FM-RDS services (explicit linkage)
- A.7, Linkage of DAB and FM-RDS services with time varying network relationships
- A.8 , Preventing implicit linkage to FM-RDS

3.1.2 Description of results

- Many of the receivers did not implement service following at all
- Where service following was implemented by the receiver, only partial support was provided (i.e. not all use cases were implemented)
- Where service following was implemented by the receiver, it was found that hard linked DAB to FM RDS services (where DAB Sid codes are identical to the FM PI codes) switched and worked correctly
- There was no trial evidence that soft linkage was supported by any manufacturer
- There was no trial evidence that use of the linkage actuator flag signaling was supported by any manufacturer
- Manufacturers have queried the rapid activation and deactivation of hard linked sets
- Manufacturers have queried the signaling and usage of the OE Fig header flag
- Manufacturers have queried whether the Reference Service Id in FIG 0/06 was correctly signaled in all cases
- Linked Regional Services could benefit from further signaling optimisation to improve receiver performance when switching
- Many receivers have Service Following disabled by default

3.2 Announcement Switching

| OEM Reference | Announcement Switching Test cases (See Note 2) | | | |
|---------------|--|-------|-------|-------|
| | ASw.1 | ASw.2 | ASw.3 | ASw.4 |
| 1 | | | | |
| 2 | Green | Red | Green | Green |
| 3 | | | | |
| 4 | Green | Red | Green | Green |
| 5 | Green | Red | Green | Green |
| 6 | Green | Red | Green | Green |
| 7 | Red | Red | Green | Green |
| 8 | Green | Red | Green | Green |
| 9 | | | | |
| 10 | Green | Red | Green | Green |
| 11 | Green | Red | Green | Green |
| 12 | Green | Red | Green | Green |
| 13 | Green | Red | Green | Green |
| 14 | Green | Red | Green | Green |
| 15 | Green | Red | Green | Green |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | | | | |
| 23 | | | | |
| 24 | | | | |
| 25 | | | | |
| 26 | | | | |
| 27 | | | | |

| | |
|--|---------------------------------------|
| | Green Block indicates a use case PASS |
| | Red Block indicates a use case FAIL |
| | Grey Block indicates No Data |

Table 2. Announcement switching receiver results

3.2.1 Note 2.

Key to Table 2 – Announcement switching use cases

- ASw.1 Announcements carried on same Ensemble
- ASw.2 Announcements carried on Other Ensembles
- ASw.3 FM Announcements interrupts DAB
- ASw.4 Compliant usage of DAB Cluster ID

3.2.2 Description of results

- Where traffic announcement functionality was supported by a receiver, it was implemented correctly
- There was one case of incorrect receiver behavior found. A domestic HI-FI receiver interrupted services by vectoring listeners to other announcement channels carried on the same DAB Ensemble
- There was no trial evidence that announcement switching to other Ensembles was supported

4.0 Recommendations and next steps

This paper makes the following suggestions as next steps.

1. Launch a technical group to resolve issues caused as a result of Digital Radio Switchover:

- Draft a set of implementation guidelines for manufacturers and broadcasters on how to implement service following and traffic announcements correctly. This will point to relevant international technical specifications.
- Reach a broadcaster agreement on scope of service linking, including soft linking. As part of this Ofcom will be required to write a set of guidelines for broadcasters
- Relevant ETI files should be made available to all manufacturers distributing in the UK, in order to test the functionality of specific service following and traffic announcement elements of the UK Minimum Specification
- The industry should carry out a switchover trial in a specific area of the UK to investigate the consumer opinion surrounding traffic announcements (Do people want them? Are they useful?)
- Further trialing of DAB functionality should take place, such as EPG, DL+, Journaline and TPEG services. The DRAP's Optional Specification Paper is a suitable reference in identifying which functionality should be trialed
- Provide feedback to manufacturers who raised technical queries during the trial

2. Roll-out service following and traffic announcements on the UK DAB infrastructure:

- The trial infrastructure for DAB-DAB and DAB-FM service following should be restored as soon as is reasonably practicable across all Ensembles on the trial route, to provide manufacturers with a reference implementation
- Where DAB-DAB and DAB-FM linking is in place already in the UK, this should be implemented correctly. However, if it is implemented incorrectly on any UK DAB Ensemble, it should be removed

- The trial infrastructure for traffic announcement signaling should be restored as soon as is reasonably practicable across all Ensembles on the trial route, to provide manufacturers with a reference implementation.
- A coordinated plan by stakeholders to implement service following and traffic announcements should be sought for the whole UK DAB network as soon as possible

5.0 Acknowledgements

The authors would like to thank all who participated in the trial, and the organisations that have generously permitted their staff to participate. Due to the confidentiality requirements of this report, it is not possible to mention them by name, thank you – they know who they are.

6.0 References

1. ETSI EN 300 401 V1.4.1 (2006-06) Radio Broadcasting Systems; Digital Audio Broadcasting (DAB) to mobile, portable and fixed receivers
2. ETSI TS 103 176 V1.1.1 (2012-08) Digital Audio Broadcasting (DAB); Rules of implementation; Service information features.
3. ETSI TR 101 496-2 v1.1.2 (2001-05) Digital Audio Broadcasting (DAB); Guidelines and rules for implementation and operation; part2: System features technical report.
4. UNITED KINGDOM DIGITAL RADIO ACTION PLAN UK (DRAP) TECHNICAL EQUIPMENT GROUP (TEG) MINIMUM SPECIFICATIONS FOR DAB & DAB+ IN-VEHICLE DIGITAL RADIO RECEIVERS AND ADAPTORS. DRAP-TEG-03 V01
5. UNITED KINGDOM DIGITAL RADIO ACTION PLAN (DRAP) TECHNICAL EQUIPMENT GROUP (TEG) MINIMUM SPECIFICATIONS FOR DAB & DAB+ PERSONAL & DOMESTIC DIGITAL RADIO RECEIVERS. DRAP-TEG-002 V02

Annex A: Receiver behavior on a response form

Annex B: Details of the Ensembles and Services participating in the trial

Annex C: Service following tables

Annex D: Manufacturers questionnaire

Annex A: Trial route and Receiver behavior on a response form

6.1 Trial Route

The trial route has been designed to exploit the service following feature to give the maximum benefit to receiver manufactures. It should be used in conjunction with Figure 1.

| Road | Distance (miles) | Directions Route (A – B – C – D – E – F – G – H – A) as shown in Figure 1. | |
|------|------------------|--|--|
| | 0.0 | Start out on Fort Lane Reigate Transmission Site Grid Ref:TQ256521 | A – Coverage is provided by the London 1 & London 2 DAB Ensembles |
| M25 | 0.20 | At Reigate Hill interchange roundabout, join M25 Motorway Signposted Gatwick Airport, Dartford, Brighton | A Receiver with low DAB signal strength should switch to the FM alternative service between Points A to B |
| | 2.92 | Continue forward at junction 7 Signposted Dartford, M11 | |
| | 7.83 | Arrive Clacket Lane Services | B – Coverage is started to be provided by Kent DAB Ensemble |
| | 0.42 | Continue forward onto the M25 | A Receiver with low DAB signal strength should switch to the DAB or FM alternative service between Points B to C |
| M26 | 4.5 | Keep in right hand lanes at junction 5 then continue forward onto the M26 signposted Channel Tunnel, Dover | |
| M20 | 17.0 | Continue forward onto the M20 signposted Maidstone, Channel Tunnel | C – Coverage from the London Ensembles is starting to fail – receivers should have followed the tuned service |

| | | | |
|-------|------|--|---|
| | | | onto the Kent Ensemble |
| | 11.0 | Travelling along M20 Arrive Charing area | D – Point D is of special interest due to potential ACI issues, BBC National Ensemble available from Charing Hill |
| A2070 | 6.9 | Leave M20 motorway at junction 10 take A2070/A292 exit to Ashford/Brenzell | A Receiver with low DAB signal strength should switch to the FM alternative service between Points C to E |
| | 0.2 | At roundabout, take the 4 th exit onto Bad Munstereifel Road/A2070 | |
| | 2.1 | Take A2070 ramp to Hastings/Lydd Airport/Hamstreet | |
| | 0.3 | At the roundabout take 2 nd exit onto A2070 | |
| | 6.7 | Arrive Snave | E - – Coverage from the Kent Ensemble is starting to fail – receivers should switch to the FM alternative |
| A259 | 1.7 | At the roundabout, take the 2 nd exit onto Straight Lane/A259 continue to follow A259 | |
| | 2.7 | Turn right to stay on A259 | |
| | 4.9 | At the roundabout, take the 1 st exit onto Fishmarket Road/A259 Continue to follow A259 | |
| | 0.6 | At the roundabout, take the 1 st exit onto Winchelsea Road/A259 Continue to follow A259 | |

| | | | |
|-----|------|---|---|
| | 2.0 | Turn right to stay on A259 | |
| | 0.4 | Take the 2 nd left onto Ferry Hill/A259 Continue to follow A259 | |
| | 2.1 | Arrive Icklesham – Continue to follow A259 | F - Coverage is started to be provided by Sussex DAB Ensemble, receivers should switch to the DAB Ensemble to follow the tuned service. |
| | 5.28 | Bear left Signposted Town centre Brighton – Continue to follow A259 | A Receiver with low DAB signal strength should switch to the FM alternative service between Points F to G |
| A27 | 12 | At Pevensey Roundabout take the 3 rd exit onto A27 signposted London, Eastbourne A22, Brighton | |
| | 3.08 | At roundabout take 2 nd exit onto the A27 signposted London, Brighton, East Grinstead, Lewes | |
| A22 | 1.71 | At roundabout take the 4 th exit onto A22 signposted London | |
| | 9.5 | Arrive Halland – continue to follow A22 | G - Coverage from the Sussex Ensemble is starting to fail – receivers should switch to the FM alternative |
| | | Continue to follow A22 | A Receiver with low DAB signal strength should switch to the FM alternative service between Points G to H |
| | 12 | Arrive Wych Cross, Forest Row – Continue to follow A22 | H - Coverage is started to be provided by London 1 & London 2 DAB Ensembles, receivers should switch to the |

| | | | |
|-----|------|--|---|
| | | | DAB Ensemble to follow the tuned service. |
| M25 | 15 | At Godstone interchange roundabout take the 2 nd exit, then join the M25 motorway | |
| | 5.0 | Leave the m25 at junction 8, and then at Reigate hill interchange roundabout take the 2 nd exit onto Fort Lane. | |
| | 1.79 | Arrive Fort Lane Reigate | A |

Table 2 – Trial route

6.2 Service following checklist

**Please note, if you are doing the trial and listening to BBC Radio Kent between 01:00 and 06:00 you will receive audio from BBC Radio 5 Live.*

1) Travel (as stated in Table 2)

At Reigate Hill interchange roundabout, join M25 Motorway Signposted "Gatwick Airport, Dartford, Brighton"

Which station are you listening (prior to the switch)?

Does your receiver do the following (please tick appropriately)?

- Switch from Capital DAB to Capital FM
- Switch from Heart DAB to Heart FM
- Switch from XFM DAB to XFM FM
- Switch from Kiss DAB to Kiss 100 FM
- Switch from Magic DAB to Magic FM
- Switch from BBC London DAB to BBC London FM
- Switch from Absolute 70s DAB to Absolute Radio FM
- Switch from Absolute 00s DAB to Absolute Radio FM
- Switch from ClassicFM (DAB) to ClassicFM (FM)
- Switch from BBC Radio 1 DAB to BBC Radio 1 FM
- Switch from BBC Radio 2 DAB to BBC Radio 2 FM
- Switch from BBC Radio 3 DAB to BBC Radio 3 FM
- Switch from BBC Radio 4 DAB to BBC Radio 4 FM

Did the switch work as intended?

If "no" to the above, are you aware of any reasons for this?

Additional comments:

2) Travel (as stated in Table 2)

Arrive Clacket Lane Services

Which station are you listening (prior to the switch)?

Does your receiver do the following (please tick appropriately)?

- Switch from Capital DAB (London mux) to Capital DAB (Kent mux)
- Switch from Capital DAB (London mux) to Capital FM
- Switch from Heart DAB (London mux) to Heart DAB (Kent mux)
- Switch from Heart DAB (London mux) to Heart FM
- Switch from Kiss DAB (London mux) to Kiss DAB (Kent mux)
- Switch from BBC London to BBC Radio Kent DAB
- Switch from XFM DAB (London mux) to XFM DAB (Kent mux)

Did the switch work as intended?

If “no” to the above, are you aware of any reasons for this?

Additional comments:

3) Travel (as stated in Table 2)

Continue forward onto the M25

Which station are you listening (prior to the switch)?

Does your receiver do the following (please tick appropriately)?

- Switch from BBC Radio Kent DAB to BBC Radio Kent FM
- Switch from Capital DAB to Capital FM
- Switch from Heart DAB to Heart FM
- Switch from ClassicFM (DAB) to ClassicFM (FM)
- Switch from BBC Radio 1 DAB to BBC Radio 1 FM
- Switch from BBC Radio 2 DAB to BBC Radio 2 FM
- Switch from BBC Radio 3 DAB to BBC Radio 3 FM
- Switch from BBC Radio 4 DAB to BBC Radio 4 FM

Did the switch work as intended?

If “no” to the above, are you aware of any reasons for this?

Additional comments:

4) Travel (as stated in Table 2)

Continue forward onto the M20 signposted Maidstone, Channel Tunnel

| |
|---|
| Which station are you listening (prior to the switch)? |
|---|

Does your receiver do the following (please tick appropriately)?

- Switch from Capital DAB (London mux) to Capital DAB (Kent mux)
- Switch from Capital DAB (London mux) to Capital FM
- Switch from Heart DAB (London mux) to Heart DAB (Kent mux)
- Switch from Heart DAB (London mux) to Heart FM
- Switch from Kiss DAB (London mux) to Kiss DAB (Kent mux)
- Switch from BBC London to BBC Radio Kent DAB
- Switch from XFM DAB (London mux) to XFM DAB (Kent mux)

| |
|---|
| Did the switch work as intended? |
|---|

| |
|---|
| If “no” to the above, are you aware of any reasons for this? |
|---|

| |
|-----------------------------|
| Additional comments: |
|-----------------------------|

5) Travel (as stated in Table 2)

Travelling along M20 Arrive Charing area

Which station are you listening (prior to the switch)?

Does your receiver switch to a BBC national service? _____

Which station? _____

If “no” to the above, are you aware of any reasons for this?

Additional comments:

6) Travel (as stated in Table 2)

Leave M20 motorway at junction 10 take A2070/A292 exit to Ashford/Brenzell

Which station are you listening (prior to the switch)?

Does your receiver do the following (please tick appropriately)?

- Switch from BBC Radio Kent DAB to BBC Radio Kent FM
- Switch from Capital DAB to Capital FM
- Switch from Heart DAB to Heart FM
- Switch from ClassicFM (DAB) to ClassicFM (FM)
- Switch from BBC Radio 1 DAB to BBC Radio 1 FM
- Switch from BBC Radio 2 DAB to BBC Radio 2 FM
- Switch from BBC Radio 3 DAB to BBC Radio 3 FM
- Switch from BBC Radio 4 DAB to BBC Radio 4 FM

Did the switch work as intended?

If “no” to the above, are you aware of any reasons for this?

Additional comments:

7) Travel (as stated in Table 2)

Arrive Snave

Which station are you listening (prior to the switch)?

Does your receiver do the following (please tick appropriately)?

- Switch from BBC Radio Kent DAB to BBC Radio Kent FM
- Switch from Capital DAB to Capital FM
- Switch from Heart DAB to Heart FM

Did the switch work as intended?

If “no” to the above, are you aware of any reasons for this?

Additional comments:

8) Travel (as stated in Table 2)

Arrive Icklesham – Continue to follow A259

Which station are you listening (prior to the switch)?

Does your receiver do the following (please tick appropriately)?

- Switch from Capital DAB (Kent mux) to Capital DAB (Sussex mux)
- Switch from Capital DAB (Kent mux) to Capital FM
- Heart DAB (Kent mux) to Heart DAB (Sussex mux)
- Heart DAB (Kent mux) to Heart FM
- Kiss DAB (Kent mux)to Kiss DAB (Sussex mux)
- XFM DAB (Kent mux) to Sussex DAB (Kent mux)

Did the switch work as intended?

If “no” to the above, are you aware of any reasons for this?

Additional comments:

9) Travel (as stated in Table 2)

Bear left Signposted Town centre Brighton – Continue to follow A259

Which station are you listening (prior to the switch)?

Does your receiver do the following (please tick appropriately)?

- Switch from BBC R Sussex DAB to BBC R Sussex FM
- Switch from Capital DAB to Capital FM
- Switch from Heart DAB to Heart FM
- Switch from ClassicFM (DAB) to ClassicFM (FM)
- Switch from BBC Radio 1 DAB to BBC Radio 1 FM
- Switch from BBC Radio 2 DAB to BBC Radio 2 FM
- Switch from BBC Radio 3 DAB to BBC Radio 3 FM
- Switch from BBC Radio 4 DAB to BBC Radio 4 FM

Did the switch work as intended?

If “no” to the above, are you aware of any reasons for this?

Additional comments:

10) Travel (as stated in Table 2)

Arrive Halland – continue to follow A22

Which station are you listening (prior to the switch)?

Does your receiver do the following (please tick appropriately)?

- Switch from BBC R Sussex DAB to BBC R Sussex FM
- Switch from Capital DAB to Capital FM
- Switch from Heart DAB to Heart FM

Did the switch work as intended?

If “no” to the above, are you aware of any reasons for this?

Additional comments:

11) Travel (as stated in Table 2)

Continue to follow A22

Which station are you listening (prior to the switch)?

Does your receiver do the following (please tick appropriately)?

- Switch from BBC R Sussex DAB to BBC R Sussex FM
- Switch from Capital DAB to Capital FM
- Switch from Heart DAB to Heart FM
- Switch from ClassicFM (DAB) to ClassicFM (FM)
- Switch from BBC Radio 1 DAB to BBC Radio 1 FM
- Switch from BBC Radio 2 DAB to BBC Radio 2 FM
- Switch from BBC Radio 3 DAB to BBC Radio 3 FM
- Switch from BBC Radio 4 DAB to BBC Radio 4 FM

Did the switch work as intended?

If “no” to the above, are you aware of any reasons for this?

Additional comments:

12) Travel (as stated in Table 2)

Arrive Wych Cross, Forest Row – Continue to follow A22

Which station are you listening (prior to the switch)?

Does your receiver do the following (please tick appropriately)?

- Switch from Capital DAB (Sussex mux) to Capital DAB (London mux)
- Switch from Capital DAB (Sussex mux) to Capital FM
- Switch from Heart DAB (Sussex mux) to Heart DAB (London mux)
- Switch from Heart DAB (Sussex mux) to Heart FM
- Switch from Kiss DAB (Sussex mux) to Kiss DAB (London mux)
- Switch from Kiss DAB (Sussex mux) to Kiss FM
- Switch from XFM DAB (Sussex mux) to XFM DAB (London mux)

Did the switch work as intended?

If “no” to the above, are you aware of any reasons for this?

Additional comments:

Annex B: Details of the Ensembles and Services participating in the trial

BBC National

Ensemble Information

| | |
|-----------|-------------------|
| Label | BBC National DAB |
| Eid | CE15 |
| Frequency | 12B (225.648 MHz) |

Service Information

| Service | Sid | SubChn Id | |
|------------------|----------|-----------|--------------------|
| BBC Radio 1 | C221 | 1 | DAB Audio |
| BBC Radio 2 | C222 | 2 | DAB Audio |
| BBC Radio 3 | C223 | 3 | DAB Audio |
| BBC Radio 4 | C224 | 4 | DAB Audio |
| BBC Radio 5 Live | C225 | 5 | DAB Audio |
| BBC Radio 1Xtra | C22A | 10 | DAB Audio |
| BBC Radio 6Music | C22B | 11 | DAB Audio |
| BBC Radio 4Extra | C22C | 12 | DAB Audio |
| BBC AsianNetwork | C236 | 7 | DAB Audio |
| BBC WorldService | C238 | 9 | DAB Audio |
| BBC Guide | E1C79E5E | 62 | EPG – Packet Data |
| BBC Travel | E1C79E60 | 62 | TPEG – Packet Data |

Frequency Information (Fig 0/21)

| Frequency Description | OE | Identifier | Bearer | Continuity | Frequency List |
|-----------------------|----|------------|--------|------------|------------------------|
| BBC R 5 Live AM | 0 | C205 | AM | False | 639kHz, 909kHz, 990kHz |

Linkage Information (Fig 0/06)

| Link Description | OE | LA | Soft/Hard | LSN (Hex) | List Id | Id List |
|----------------------|----|--------|-----------|-----------|-------------|------------|
| BBC Radio 1 DAB - FM | 0 | Active | Hard | 0x01 | RDS PI | C221, C201 |
| BBC Radio 2 DAB - FM | 0 | Active | Hard | 0x03 | RDS PI | C222, C202 |
| BBC Radio 3 DAB - FM | 0 | Active | Hard | 0x05 | RDS PI | C223, C203 |
| BBC Radio 4 DAB - FM | 0 | Active | Hard | 0x07 | RDS PI | C224, C204 |
| BBC Radio 5 DAB - AM | 0 | Active | Hard | 0x09 | AM Dummy | C225, C205 |

Other Ensemble Services (Fig 0/24)

| OE Services Description | OE | Identifier | Id List |
|-------------------------|----|------------|---------|
| | | | |

D1 National

Ensemble Information

| | |
|-----------|---|
| Label | D1 National |
| Eid | C181 |
| Frequency | 11D (222.064 MHz) England, Wales & Northern Ireland 12A (223.936 MHz) Scotland |

Service Information

| Service | Slid | SubChn Id | |
|------------------|----------|-----------|--------------------|
| Absolute R 80s | C4C1 | 14 | DAB Audio |
| Absolute R Extra | C0C1 | 3 | DAB Audio |
| Absolute Rad 90s | C4C0 | 12 | DAB Audio |
| Absolute Radio | C1C0 | 3 | DAB Audio |
| BFBS Radio | C3C0 | 9 | DAB Audio |
| Classic FM | C2A1 | 1 | DAB Audio |
| Jazz FM | C0C2 | 11 | DAB Audio |
| Planet Rock | C2C0 | 5 | DAB Audio |
| PremierChristian | C7C1 | 6 | DAB Audio |
| Smooth Radio 70s | C3C5 | 15 | DAB Audio |
| Smooth Radio UK | C6C0 | 8 | DAB Audio |
| talkSPORT | C0C0 | 2 | DAB Audio |
| Test A | C7C0 | 4 | DAB Audio |
| UCB UK Christian | C4CA | 7 | DAB Audio |
| Whats's On | E1C000B1 | 25 | EPG – Packet Data |
| Traffic Master | E1C000B8 | 26 | TPEG – Packet Data |
| INRIX UK TPEG | E1C000BA | 35 | TPEG – Packet Data |

Frequency Information (Fig 0/21)

| Frequency Description | OE | Identifier | Bearer | Continuity | Frequency List |
|-----------------------|----|------------|--------|------------|--------------------------|
| D1 MFN | 0 | C181 | DAB | True | 222.064 MHz, 223.936 MHz |
| Absolute Radio – FM | 0 | C4B4 | FM | false | 105.8 MHz |

Linkage Information (Fig 0/06)

| Link Description | OE | LA | Soft/Hard | LSN (Hex) | List Id | Id List |
|---------------------------|----|--------|-----------|-----------|---------|------------------|
| Absolute Radio – FM | 0 | Active | Hard | 0x192 | RDS PI | C1C0, C4B4 |
| Absolute "Group Services" | 0 | Active | Soft | 0x192 | DAB | C1C0, C1C2, CDC1 |

Other Ensemble Services (Fig 0/24)

| OE Services Description | OE | Identifier | Id List |
|-------------------------|----|------------|---------|
| | | | |

London 1

Ensemble Information

| | |
|-----------|-------------------|
| Label | London 1 |
| EId | C185 |
| Frequency | 12C (227.360 MHz) |

Service Information

| Service | Slid | SubChn Id | |
|---------------|----------|-----------|-------------------------|
| Capital | C479 | 1 | DAB Audio |
| Choice | C37B | 3 | DAB Audio |
| Heart | C460 | 6 | DAB Audio |
| heat radio | CDCE | 16 | DAB Audio |
| KISS | C483 | 5 | DAB Audio |
| LBC 97.3 | C478 | 12 | DAB Audio |
| LBC News 1152 | C5C2 | 8 | DAB Audio |
| MAGIC | C788 | 4 | DAB Audio |
| Sunrise Radio | CCC1 | 2 | DAB Audio |
| EPG+Slideshow | E1C00098 | 30 | EPG – Packet Data |
| EPG+Slideshow | E1C00098 | 30 | Slideshow – Packet Data |

Frequency Information (Fig 0/21)

| Frequency Description | OE | Identifier | Bearer | Continuity | Frequency List |
|--|----|------------|--------|------------|--|
| Adjacent Cambridge DAB Ensemble carrying linked services | 0 | C1AF | DAB | false | 220.352 MHz |
| Adjacent Kent DAB Ensemble carrying linked services | 0 | C1AB | DAB | false | 220.352 MHz |
| Adjacent Peterborough DAB Ensemble carrying linked services | 0 | C1A1 | DAB | false | 229.072 MHz |
| Adjacent Berks & N Hants DAB Ensemble carrying linked services | 0 | C1AD | DAB | false | 229.072 MHz |
| Adjacent Essex DAB Ensemble carrying linked services | 0 | C19C | DAB | false | 229.072 MHz |
| Adjacent South Hants DAB Ensemble carrying linked services | 0 | C1A3 | DAB | false | 220.352 MHz |
| Adjacent Sussex DAB Ensemble carrying linked services | 0 | C1A9 | DAB | false | 218.640 MHz |
| Capital FM | 0 | C479 | FM | false | 95.8MHz |
| Capital FM | 0 | C870 | FM | false | 103.2 MHz |
| Heart FM | 0 | C361 | FM | false | 97.0, 97.4, 102.6, 102.9, 103.4 |
| Heart FM | 0 | C362 | FM | false | 95.9, 96.1, 97.0, 102.8, 103.1 |
| Heart FM | 0 | C363 | FM | false | 96.6, 96.9, 97.6, 103.3 |
| Heart FM | 0 | C364 | FM | false | 96.1, 96.3, 97.5, 101.7, 102.6 |
| Heart FM | 0 | C368 | FM | false | 96.9, 97.5, 102.0, 102.4, 102.7, 103.5 |
| Heart FM | 0 | C36A | FM | false | 97.4, 102.7, 103.0 |
| Heart FM | 0 | C36C | FM | false | 96.4, 97.1, 102.4 |
| Heart FM | 0 | C460 | FM | false | 106.2 |
| Kiss 100 FM | 0 | C483 | FM | false | 100.0 |
| Magic FM | 0 | C788 | FM | false | 105.4 |

Linkage Information (Fig 0/06)

| Link Description | OE | LA | Soft/Hard | LSN (Hex) | List Id | Id List |
|-------------------------|----|----------|-----------|-----------|---------|--|
| Capital - DAB | 0 | switched | Hard | 0x196 | DAB | C479, C47F, C370, C371, C372, C377, C37A, C670, C671, C777, C870 |
| Capital – DAB | 0 | Active | Soft | 0x196 | DAB | C479, C47F, C370, C371, C372, C377, C37A, C670, C671, C777, C870 |
| Capital – Networked DAB | 0 | Switched | Hard | 0x1A9 | DAB | C479, C47F |
| Capital – FM | 0 | switched | Hard | 0x196 | FM | C479, C370, C371, C372, C377, C37A, C670, C671, C870 |
| Capital – FM | 0 | Active | Soft | 0x192 | FM | C479, C370, C371, C372, C377, C37A, C470, C471, C477, C47A, C570, C571, C577, C57A, C670, C677, C671, C777, C870 |
| Heart - DAB | 0 | switched | Hard | 0x197 | DAB | C460, C361, C362, C364, C365, C366, C368, C369, C36A, C36B, C36C, C467, C560, C566, C56A, C665, C66B, C869 |
| Heart – DAB | 0 | Active | Soft | 0x197 | DAB | C460, C361, C362, C364, C365, C366, C368, C369, C36A, C36B, C36C, C467, C560, C566, C56A, C665, C66B, C869 |
| Heart – Networked DAB | 0 | Switched | Hard | 0x1A7 | DAB | C460, C560 |
| Heart – FM | 0 | switched | Hard | 0x197 | FM | C460, C361, C362, C363, C364, C365, C366, C368, C369, C36A, C36B, C36C, C36E, C36F, C467 |
| Heart – FM | 0 | Active | Soft | 0x197 | FM | C460, C361, C362, C363, C364, C365, C366, C368, C369, C36A, C36B, C36C, C36E, C36F, C461, C462, C463, C464, C465, C466, C467, C468, C469, C46A, C46B, C46C, C46E, C46F, C561, C562, C563, C564, C565, C566, C568, C569, C56A, C56B, C56C, C56E, C56F, C661, C663, C664, C665, C668, C669, C66B, C66C, C66F, C761, C763, C764, C768, C769, C76B, C76F, C864, C869 |
| KISS - DAB | 0 | Active | Hard | 0x193 | DAB | C483, C0C9, C2C3, C2C4, C2C5, C3A5, C4C3, C6C1, C7C7, C883, C8C4, C8CA, C9CB, CAC5, CAC8, CBC3, CBCA, CE83 |

Other Ensemble Services (Fig 0/24)

| OE Services Description | OE | Identifier | Id List |
|-------------------------|----|------------|------------------------------------|
| Capital Other Ensembles | 0 | C47F | C1A9, C1AD, C1AF, C19C, C1AB, C1A1 |
| Capital Other Ensembles | 0 | C870 | C1A3 |
| Heart Other Ensembles | 0 | C36A | C1AF |
| Heart Other Ensembles | 0 | C362 | C1AB |
| Heart Other Ensembles | 0 | C56A | C1A1 |
| Heart Other Ensembles | 0 | C361 | C1AD |
| Heart Other Ensembles | 0 | C364 | C19C |
| Heart Other Ensembles | 0 | C365 | C1A3 |
| Heart Other Ensembles | 0 | C368 | C1A9 |
| KISS Other Ensembles | 0 | C883 | C1AF, C1A1 |
| KISS Other Ensembles | 0 | CBCA | C1AB |
| KISS Other Ensembles | 0 | CAC8 | C1AD, C1A9 |
| KISS Other Ensembles | 0 | CACA | C19C |
| KISS Other Ensembles | 0 | C483 | C1A3 |

Announcement Support (Fig 0/18)

| Announcement Description | SId | Cluster Id | Support Flags |
|--------------------------|------|------------|-------------------------------------|
| Capital | C479 | 0x06 | Road Traffic Flash, Transport Flash |
| Heart | C460 | 0x08 | Road Traffic Flash, Transport Flash |
| KISS | C483 | 0x03 | Road Traffic Flash, Transport Flash |
| Magic | C788 | 0x05 | Road Traffic Flash, Transport Flash |

Announcement Switching (Fig 0/19)

| Announcement Description | Cluster Id | Switching Flags | SubChn Id |
|--------------------------|------------|--------------------|-----------|
| Capital | 0x06 | Road Traffic Flash | 1 |
| Heart | 0x08 | Road Traffic Flash | 6 |
| KISS | 0x03 | Road Traffic Flash | 5 |
| Magic | 0x05 | Road Traffic Flash | 4 |

London 2

Ensemble Information

| | |
|-----------|-------------------|
| Label | London 2 |
| Eid | C186 |
| Frequency | 12A (223.936 MHz) |

Service Information

| Service | Sid | SubChn Id | |
|------------------|------|-----------|-----------|
| Absolute Rad 00s | CDC1 | 1 | DAB Audio |
| Absolute Rad 70s | C1C2 | 14 | DAB Audio |
| BBC London | CC31 | 9 | DAB Audio |
| French Radio Ldn | COCF | 3 | DAB Audio |
| Gold - London | C8D3 | 5 | DAB Audio |
| KERRANG! | C7CE | 11 | DAB Audio |
| Punjabi Radio | CBCB | 10 | DAB Audio |
| Sout Al Khaleej | CFC1 | 6 | DAB Audio |
| Spectrum Radio | CCC0 | 12 | DAB Audio |
| The Hits | CCCC | 4 | DAB Audio |
| UCB Gospel | CED0 | 8 | DAB Audio |
| UCBinspirational | CFD0 | 7 | DAB Audio |
| Voice of Russia | CCCF | 13 | DAB Audio |
| XFM | C474 | 2 | DAB Audio |

Frequency Information (Fig 0/21)

| Frequency Description | OE | Identifier | Bearer | Continuity | Frequency List |
|--|----|------------|--------|------------|----------------|
| Adjacent Cambridge DAB Ensemble carrying linked services | 0 | C1AF | DAB | false | 220.352 MHz |
| Adjacent Kent DAB Ensemble carrying linked services | 0 | C1AB | DAB | false | 220.352 MHz |
| Adjacent Peterborough DAB Ensemble carrying linked services | 0 | C1A1 | DAB | false | 229.072 MHz |
| Adjacent Berks & N Hants DAB Ensemble carrying linked services | 0 | C1AD | DAB | false | 229.072 MHz |
| Adjacent Essex DAB Ensemble carrying linked services | 0 | C19C | DAB | false | 229.072 MHz |
| Adjacent South Hants DAB Ensemble carrying linked services | 0 | C1A3 | DAB | false | 220.352 MHz |
| Adjacent Sussex DAB Ensemble carrying linked services | 0 | C1A9 | DAB | false | 218.640 MHz |
| Adjacent D1 DAB Ensemble carrying linked services | 0 | C181 | DAB | False | 222.064 MHz |
| Un-Adjacent D1 DAB Ensemble carrying linked services | 0 | C181 | DAB | False | 223.936 MHz |
| XFM FM | 0 | C474 | FM | false | 104.9 MHz |
| BBC London | 0 | CC11 | FM | false | 94.9 MHz |

Linkage Information (Fig 0/06)

| Link Description | OE | LA | Soft/Hard | LSN (Hex) | List Id | Id List |
|----------------------|----|----------|-----------|-----------|---------|------------------|
| XFM - DAB | 0 | Switched | Hard | 0x198 | DAB | C474, C574 |
| XFM - DAB | 0 | Active | Soft | 0x198 | DAB | C474, C574 |
| XFM - FM | 0 | switched | Hard | 0x198 | FM | C474, C574 |
| XFM - FM | 0 | Active | Soft | 0x198 | FM | C474, C574 |
| Absolute Group - DAB | 0 | Active | Soft | 0x192 | DAB | C1C2, CDC1, C1C0 |
| BBC R London | 0 | Active | Hard | 0x4D | DAB | CC31, CC11 |

Other Ensemble Services (Fig 0/24)

| OE Services Description | OE | Identifier | Id List |
|-------------------------|----|------------|--|
| XFM Other Ensembles | 0 | C474 | C1AF, C1AB, C1A1, C1AD, C19C, C1A3, C1A9 |

Kent

Ensemble Information

| | |
|-----------|-------------------|
| Label | Kent |
| Eid | C1AB |
| Frequency | 11C (220.352 MHz) |

Service Information

| Service | Sid | SubChn Id | |
|----------------|----------|-----------|-------------------|
| BBC Radio Kent | C631 | 6 | DAB Audio |
| Capital | C47F | 9 | DAB Audio |
| Gold - Kent | C7D2 | 2 | DAB Audio |
| Heart Kent | C362 | 1 | DAB Audio |
| Kiss | CBCA | 12 | DAB Audio |
| Kmfm Extra | C4CF | 5 | DAB Audio |
| Pop Up Radio | CFCF | 10 | DAB Audio |
| XFM | C474 | 3 | DAB Audio |
| EPG Kent | E1C000C2 | 21 | EPG – Packet Data |

Frequency Information (Fig 0/21)

| Frequency Description | OE | Identifier | Bearer | Continuity | Frequency List |
|---|----|------------|--------|------------|--|
| Adjacent London 1 DAB Ensemble carrying linked services | 0 | C185 | DAB | false | 227.360 MHz |
| Adjacent London 2 DAB Ensemble carrying linked services | 0 | C186 | DAB | false | 220.352 MHz |
| Adjacent Essex DAB Ensemble carrying linked services | 0 | C19C | DAB | false | 229.072 MHz |
| Adjacent Sussex DAB Ensemble carrying linked services | 0 | C1A9 | DAB | false | 218.640 MHz |
| Capital FM | 0 | C479 | FM | false | 95.8MHz |
| Capital FM | 0 | C870 | FM | false | 103.2 MHz |
| Heart FM | 0 | C362 | FM | false | 95.9, 96.1, 97.0, 102.8, 103.1 |
| Heart FM | 0 | C363 | FM | false | 96.6, 96.9, 97.6, 103.3 |
| Heart FM | 0 | C364 | FM | false | 96.1, 96.3, 97.5, 101.7, 102.6 |
| Heart FM | 0 | C368 | FM | false | 96.9, 97.5, 102.0, 102.4, 102.7, 103.5 |
| Heart FM | 0 | C36C | FM | false | 96.4, 97.1, 102.4 |
| Heart FM | 0 | C460 | FM | false | 106.2 |
| Heart FM | 0 | C462 | FM | false | 102.8 |
| Heart FM | 0 | C562 | FM | false | 95.9, 96.1, 97.0, 103.1 |
| Kiss 100 FM | 0 | C483 | FM | false | 100.0 |
| XFM FM | 0 | C474 | FM | false | 104.9 MHz |
| BBC R Kent | 0 | C619 | FM | false | 96.7, 97.6, 104.2 MHz |

Linkage Information (Fig 0/06)

| Link Description | OE | LA | Soft/Hard | LSN (Hex) | List Id | Id List |
|-------------------------|----|----------|-----------|-----------|---------|--|
| Capital - DAB | 0 | switched | Hard | 0x196 | DAB | C47F, C479, C370, C371, C372, C377, C37A, C670, C671, C777, C870 |
| Capital – DAB | 0 | Active | Soft | 0x196 | DAB | C47F, C479, C370, C371, C372, C377, C37A, C670, C671, C777, C870 |
| Capital – Networked DAB | 0 | Switched | Hard | 0x1A9 | DAB | C47F, C479 |
| Capital – FM | 0 | switched | Hard | 0x196 | FM | C47F, C370, C371, C372, C377, C37A, C479, C670, C671, C870 |
| Capital – FM | 0 | Active | Soft | 0x196 | FM | C47F, C370, C371, C372, C377, C37A, C470, C471, C477, C479, C47A, C570, C571, C577, C57A, C670, C677, C671, C777, C870 |
| Heart - DAB | 0 | switched | Hard | 0x197 | DAB | C362, C361, C460, C364, C365, C366, C368, C369, C36A, C36B, C36C, C467, C560, C566, C56A, C665, C66B, C869 |
| Heart – DAB | 0 | Active | Soft | 0x197 | DAB | C362, C361, C460, C364, C365, C366, C368, C369, C36A, C36B, C36C, C467, C560, C566, C56A, C665, C66B, C869 |
| Heart – Networked DAB | 0 | Switched | Hard | 0x1A7 | DAB | C460, C560 |
| Heart – FM | 0 | switched | Hard | 0x197 | FM | C362, C361, C460, C363, C364, C365, C366, C368, C369, C36A, C36B, C36C, C36E, C36F, C467 |
| Heart – FM | 0 | Active | Soft | 0x197 | FM | C362, C361, C460, C363, C364, C365, C366, C368, C369, C36A, C36B, C36C, C36E, C36F, C461, C462, C463, C464, C465, C466, C467, C468, C469, C46A, C46B, C46C, C46E, C46F, C561, C562, C563, C564, C565, C566, C568, C569, C56A, C56B, C56C, C56E, C56F, C661, C663, C664, C665, C668, C669, C66B, C66C, C66F, C761, C763, C764, C768, C769, C76B, C76F, C864, C869 |
| KISS - DAB | 0 | Active | Hard | 0x193 | DAB | CBCA, C0C9, C2C3, C2C4, C2C5, C3A5, C4C3, C6C1, C7C7, C883, C8C4, C8CA, C9CB, CAC5, CAC8, CBC3, C483, CE83 |
| XFM - DAB | 0 | Switched | Hard | 0x198 | DAB | C474, C574 |
| XFM – DAB | 0 | Active | Soft | 0x198 | DAB | C474, C574 |
| XFM – FM | 0 | switched | Hard | 0x198 | FM | C474, C574 |
| XFM – FM | 0 | Active | Soft | 0x198 | FM | C474, C574 |
| BBC R Kent - DAB | 0 | Switched | Hard | 0x09 | DAB | C631, C225 |
| BBC R Kent - FM | 0 | Active | Hard | 0x43 | FM | C631, C619 |

Other Ensemble Services (Fig 0/24)

| OE Services Description | OE | Identifier | Id List |
|-------------------------|----|------------|------------------|
| Capital Other Ensembles | 0 | C47F | C19C, C1A9 |
| Capital Other Ensembles | 0 | C479 | C185 |
| Heart Other Ensembles | 0 | C460 | C185 |
| Heart Other Ensembles | 0 | C364 | C19C |
| Heart Other Ensembles | 0 | C368 | C1A9 |
| KISS Other Ensembles | 0 | CAC8 | C1AD, C1A9 |
| KISS Other Ensembles | 0 | CACA | C19C |
| KISS Other Ensembles | 0 | C483 | C1A3 |
| XFM Other Ensembles | 0 | C474 | C186, C19C, C1A9 |

Announcement Support (Fig 0/18)

| Announcement Description | SId | Cluster Id | Support Flags |
|--------------------------|------|------------|-------------------------------------|
| Capital | C47F | 0x06 | Road Traffic Flash, Transport Flash |
| Heart Kent | C362 | 0x08 | Road Traffic Flash, Transport Flash |
| KISS | CBCA | 0x03 | Road Traffic Flash, Transport Flash |

Announcement Switching (Fig 0/19)

| Announcement Description | Cluster Id | Switching Flags | SubChn Id |
|--------------------------|------------|--------------------|-----------|
| Capital | 0x06 | Road Traffic Flash | 9 |
| Heart | 0x08 | Road Traffic Flash | 1 |
| KISS | 0x03 | Road Traffic Flash | 12 |

Sussex Coast

Ensemble Information

| | |
|-----------|-------------------|
| Label | Sussex Coast |
| Eid | C1A9 |
| Frequency | 11B (218.640 MHz) |

Service Information

| Service | Sid | SubChn Id | |
|------------------|----------|-----------|-------------------|
| BBC Sussex | CD32 | 7 | DAB Audio |
| Capital | C47F | 9 | DAB Audio |
| Gaydar Radio | CBCE | 5 | DAB Audio |
| Gold - Sussex | C0D3 | 3 | DAB Audio |
| Heart | C368 | 1 | DAB Audio |
| Juice Digital | C099 | 6 | DAB Audio |
| Kiss | CAC8 | 14 | DAB Audio |
| Pop Up Radio | CFCF | 15 | DAB Audio |
| XFM | C474 | 2 | DAB Audio |
| EPG Sussex Coast | E1C000CB | 22 | EPG – Packet Data |

Frequency Information (Fig 0/21)

| Frequency Description | OE | Identifier | Bearer | Continuity | Frequency List |
|--|----|------------|--------|------------|--|
| Adjacent London 1 DAB Ensemble carrying linked services | 0 | C185 | DAB | false | 227.360 MHz |
| Adjacent London 2 DAB Ensemble carrying linked services | 0 | C186 | DAB | false | 220.352 MHz |
| Adjacent Essex DAB Ensemble carrying linked services | 0 | C19C | DAB | false | 229.072 MHz |
| Adjacent South Hampshire DAB Ensemble carrying linked services | 0 | C1A3 | DAB | false | 220.352 MHz |
| Capital FM | 0 | C479 | FM | false | 95.8MHz |
| Capital FM | 0 | C870 | FM | false | 103.2 MHz |
| Heart FM | 0 | C361 | FM | false | 97.0, 97.4, 102.6, 102.9, 103.4 |
| Heart FM | 0 | C362 | FM | false | 95.9, 96.1, 97.0, 102.8, 103.1 |
| Heart FM | 0 | C368 | FM | false | 96.9, 97.5, 102.0, 102.4, 102.7, 103.5 |
| Heart FM | 0 | C460 | FM | false | 106.2 |
| Heart FM | 0 | C468 | FM | false | 96.9, 103.5 |
| Heart FM | 0 | C568 | FM | false | 102.4 |
| Heart FM | 0 | C668 | FM | false | 102.0 |
| Heart FM | 0 | C768 | FM | false | 97.5, 102.7 |
| Kiss 100 FM | 0 | C483 | FM | false | 100.0 |
| XFM FM | 0 | C474 | FM | false | 104.9 MHz |
| BBC R Sussex | 0 | CD12 | FM | false | 95.0, 95.1, 95.3, 104.5, 104.8 MHz |

Linkage Information (Fig 0/06)

| Link Description | OE | LA | Soft/Hard | LSN (Hex) | List Id | Id List |
|-------------------------|----|----------|-----------|-----------|---------|--|
| Capital - DAB | 0 | switched | Hard | 0x196 | DAB | C47F, C479, C370, C371, C372, C377, C37A, C670, C671, C777, C870 |
| Capital – DAB | 0 | Active | Soft | 0x196 | DAB | C47F, C479, C370, C371, C372, C377, C37A, C670, C671, C777, C870 |
| Capital – Networked DAB | 0 | Switched | Hard | 0x1A9 | DAB | C47F, C479 |
| Capital – FM | 0 | switched | Hard | 0x196 | FM | C47F, C370, C371, C372, C377, C37A, C479, C670, C671, C870 |
| Capital – FM | 0 | Active | Soft | 0x196 | FM | C47F, C370, C371, C372, C377, C37A, C470, C471, C477, C479, C47A, C570, C571, C577, C57A, C670, C677, C671, C777, C870 |
| Heart - DAB | 0 | switched | Hard | 0x197 | DAB | C368, C361, C460, C364, C365, C366, C362, C369, C36A, C36B, C36C, C467, C560, C566, C56A, C665, C66B, C869 |
| Heart – DAB | 0 | Active | Soft | 0x197 | DAB | C368, C361, C460, C364, C365, C366, C3682C369, C36A, C36B, C36C, C467, C560, C566, C56A, C665, C66B, C869 |
| Heart – Networked DAB | 0 | Switched | Hard | 0x1A7 | DAB | C460, C560 |
| Heart – FM | 0 | switched | Hard | 0x197 | FM | C368, C361, C460, C363, C364, C365, C366, C362, C369, C36A, C36B, C36C, C36E, C36F, C467 |
| Heart – FM | 0 | Active | Soft | 0x197 | FM | C368, C361, C460, C363, C364, C365, C366, C362, C369, C36A, C36B, C36C, C36E, C36F, C461, C462, C463, C464, C465, C466, C467, C468, C469, C46A, C46B, C46C, C46E, C46F, C561, C562, C563, C564, C565, C566, C568, C569, C56A, C56B, C56C, C56E, C56F, C661, C663, C664, C665, C668, C669, C66B, C66C, C66F, C761, C763, C764, C768, C769, C76B, C76F, C864, C869 |
| KISS - DAB | 0 | Active | Hard | 0x193 | DAB | CAC8, C0C9, C2C3, C2C4, C2C5, C3A5, C483, C4C3, C6C1, C7C7, C883, C8C4, C8CA, C9CB, CAC5, CBC8, CBC3, CBCA, CE83 |
| XFM - DAB | 0 | Switched | Hard | 0x198 | DAB | C474, C574 |
| XFM – DAB | 0 | Active | Soft | 0x198 | DAB | C474, C574 |
| XFM – FM | 0 | switched | Hard | 0x198 | FM | C474, C574 |
| XFM – FM | 0 | Active | Soft | 0x198 | FM | C474, C574 |
| BBC R Sussex - FM | 0 | Active | Hard | 0x72 | FM | CD32, CD12 |

Other Ensemble Services (Fig 0/24)

| OE Services Description | OE | Identifier | Id List |
|-------------------------|----|------------|------------------|
| Capital Other Ensembles | 0 | C47F | C1AB |
| Capital Other Ensembles | 0 | C479 | C185 |
| Capital Other Ensembles | 0 | C870 | C1A3 |
| Heart Other Ensembles | 0 | C460 | C185 |
| Heart Other Ensembles | 0 | C362 | C1AB |
| Heart Other Ensembles | 0 | C365 | C1A3 |
| KISS Other Ensembles | 0 | CBCA | C1AB |
| KISS Other Ensembles | 0 | C483 | C1A3, C185 |
| XFM Other Ensembles | 0 | C474 | C186, C1AB, C1A3 |

Announcement Support (Fig 0/18)

| Announcement Description | SId | Cluster Id | Support Flags |
|--------------------------|------|------------|-------------------------------------|
| Capital | C47F | 0x06 | Road Traffic Flash, Transport Flash |
| Heart | C368 | 0x08 | Road Traffic Flash, Transport Flash |
| KISS | CAC8 | 0x03 | Road Traffic Flash, Transport Flash |

Announcement Switching (Fig 0/19)

| Announcement Description | Cluster Id | Switching Flags | SubChn Id |
|--------------------------|------------|--------------------|-----------|
| Capital | 0x06 | Road Traffic Flash | 9 |
| Heart | 0x08 | Road Traffic Flash | 1 |
| KISS | 0x03 | Road Traffic Flash | 14 |

Berks N. Hants

Ensemble Information

| | |
|-----------|-------------------|
| Label | Berks & N Hants |
| Eid | C1AD |
| Frequency | 12D (229.072 MHz) |

Service Information

| Service | Sid | SubChn Id | |
|------------------|----------|-----------|-------------------|
| BBC Radio Berks | CD31 | 5 | DAB Audio |
| Capital | C47F | 11 | DAB Audio |
| Gold Berks/Hants | CD31 | 5 | DAB Audio |
| Heart Berkshire | C361 | 1 | DAB Audio |
| KISS | CAC8 | 4 | DAB Audio |
| NME Radio | CEC1 | 15 | DAB Audio |
| Pop Up Radio | CFCF | 14 | DAB Audio |
| XFM | C474 | 3 | DAB Audio |
| EPG Berks/Hants | E1C000BB | 21 | EPG – Packet Data |

Frequency Information (Fig 0/21)

| Frequency Description | OE | Identifier | Bearer | Continuity | Frequency List |
|--|----|------------|--------|------------|--|
| Adjacent London 1 DAB Ensemble carrying linked services | 0 | C185 | DAB | false | 227.360 MHz |
| Adjacent London 2 DAB Ensemble carrying linked services | 0 | C186 | DAB | false | 220.352 MHz |
| Adjacent Swindon DAB Ensemble carrying linked services | 0 | C1A4 | DAB | false | 220.352 MHz |
| Adjacent South Hampshire DAB Ensemble carrying linked services | 0 | C1A3 | DAB | false | 220.352 MHz |
| Capital FM | 0 | C479 | FM | false | 95.8MHz |
| Capital FM | 0 | C870 | FM | false | 103.2 MHz |
| Heart FM | 0 | C361 | FM | false | 97.0, 97.4, 102.6, 102.9, 103.4 |
| Heart FM | 0 | C363 | FM | false | 96.6, 96.9, 97.6, 103.3 |
| Heart FM | 0 | C368 | FM | false | 96.9, 97.5, 102.0, 102.4, 102.7, 103.5 |
| Heart FM | 0 | C460 | FM | false | 106.2 |
| Heart FM | 0 | C461 | FM | false | 97.0, 103.4 |
| Heart FM | 0 | C561 | FM | false | 102.9 |
| Heart FM | 0 | C661 | FM | false | 102.6 |
| Heart FM | 0 | C761 | FM | false | 97.4 |
| Kiss 100 FM | 0 | C483 | FM | false | 100.0 |
| XFM FM | 0 | C474 | FM | false | 104.9 MHz |
| BBC R Berkshire | 0 | C71A | FM | false | 94.6, 95.4, 104.1, 104.4 MHz |

Linkage Information (Fig 0/06)

| Link Description | OE | LA | Soft/Hard | LSN (Hex) | List Id | Id List |
|-------------------------|----|----------|-----------|-----------|---------|--|
| Capital - DAB | 0 | switched | Hard | 0x196 | DAB | C47F, C479, C370, C371, C372, C377, C37A, C670, C671, C777, C870 |
| Capital – DAB | 0 | Active | Soft | 0x196 | DAB | C47F, C479, C370, C371, C372, C377, C37A, C670, C671, C777, C870 |
| Capital – Networked DAB | 0 | Switched | Hard | 0x1A9 | DAB | C47F, C479 |
| Capital – FM | 0 | switched | Hard | 0x196 | FM | C47F, C370, C371, C372, C377, C37A, C479, C670, C671, C870 |
| Capital – FM | 0 | Active | Soft | 0x196 | FM | C47F, C370, C371, C372, C377, C37A, C470, C471, C477, C479, C47A, C570, C571, C577, C57A, C670, C677, C671, C777, C870 |
| Heart - DAB | 0 | switched | Hard | 0x197 | DAB | C361, C362, C364, C365, C366, C368, C369, C36A, C36B, C36C, C467, C560, C566, C56A, C665, C66B, C869 |
| Heart – DAB | 0 | Active | Soft | 0x197 | DAB | C361, C362, C364, C365, C366, C368, C369, C36A, C36B, C36C, C467, C560, C566, C56A, C665, C66B, C869 |
| Heart – Networked DAB | 0 | Switched | Hard | 0x1A7 | DAB | C460, C560 |
| Heart – FM | 0 | switched | Hard | 0x197 | FM | C361, C362, C460, C363, C364, C365, C366, C368, C369, C36A, C36B, C36C, C36E, C36F, C467 |
| Heart – FM | 0 | Active | Soft | 0x197 | FM | C361, C362, C460, C363, C364, C365, C366, C362, C369, C36A, C36B, C36C, C36E, C36F, C461, C462, C463, C464, C465, C466, C467, C468, C469, C46A, C46B, C46C, C46E, C46F, C561, C562, C563, C564, C565, C566, C568, C569, C56A, C56B, C56C, C56E, C56F, C661, C663, C664, C665, C668, C669, C66B, C66C, C66F, C761, C763, C764, C768, C769, C76B, C76F, C864, C869 |
| KISS - DAB | 0 | Active | Hard | 0x193 | DAB | CAC8, C0C9, C2C3, C2C4, C2C5, C3A5, C4C3, C6C1, C7C7, C883, C8C4, C8CA, C9CB, CAC5, C483, CBC3, CBCA, CE83 |
| XFM - DAB | 0 | Switched | Hard | 0x198 | DAB | C474, C574 |
| XFM – DAB | 0 | Active | Soft | 0x198 | DAB | C474, C574 |
| XFM – FM | 0 | switched | Hard | 0x198 | FM | C474, C574 |
| XFM – FM | 0 | Active | Soft | 0x198 | FM | C474, C574 |
| BBC R Berkshire - FM | 0 | Active | Hard | 0x19 | FM | CD31, C71A |

Other Ensemble Services (Fig 0/24)

| OE Services Description | OE | Identifier | Id List |
|-------------------------|----|------------|------------|
| Capital Other Ensembles | 0 | C47F | C1A4 |
| Capital Other Ensembles | 0 | C479 | C185 |
| Capital Other Ensembles | 0 | C870 | C1A3 |
| Heart Other Ensembles | 0 | C460 | C185 |
| Heart Other Ensembles | 0 | C366 | C1A4 |
| Heart Other Ensembles | 0 | C365 | C1A3 |
| KISS Other Ensembles | 0 | C8C4 | C1A4 |
| KISS Other Ensembles | 0 | C483 | C1A3, C185 |
| XFM Other Ensembles | 0 | C474 | C186, C1A4 |

Announcement Support (Fig 0/18)

| Announcement Description | Sid | Cluster Id | Support Flags |
|--------------------------|------|------------|-------------------------------------|
| Capital | C47F | 0x06 | Road Traffic Flash, Transport Flash |
| Heart Berkshire | C361 | 0x08 | Road Traffic Flash, Transport Flash |
| KISS | CAC8 | 0x03 | Road Traffic Flash, Transport Flash |

Announcement Switching (Fig 0/19)

| Announcement Description | Cluster Id | Switching Flags | SubChn Id |
|--------------------------|------------|--------------------|-----------|
| Capital | 0x06 | Road Traffic Flash | 11 |
| Heart | 0x08 | Road Traffic Flash | 1 |
| KISS | 0x03 | Road Traffic Flash | 4 |

Annex C: Service following tables

| Heart | | | | | | | | | |
|--------------|----------|---------|---------|----------------|-------------|---------|---------|-----------|--------------|
| | London 1 | Kent | Sussex | Berks N. Hants | South Hants | Essex | Swindon | Cambridge | Peterborough |
| EId | C185 | C1AB | C1A9 | C1AD | C1A3 | C19C | C1A4 | C1AF | C1A1 |
| Block | 12C | 11C | 11B | 12D | 11C | 12D | 11C | 11C | 12D |
| Frequency | 227.360 | 220.350 | 218.640 | 229.072 | 220.350 | 229.072 | 220.350 | 220.350 | 229.072 |
| SId | C460 | C362 | C368 | C361 | C365 | C364 | C366 | C36A | C56A |
| LSN | 0X197 | 0X197 | 0X197 | 0X197 | 0X197 | 0X197 | 0X197 | 0X197 | 0X197 |

| Capital | | | | | | | | | |
|----------------|----------|---------|---------|----------------|-------------|---------|---------|-----------|--------------|
| | London 1 | Kent | Sussex | Berks N. Hants | South Hants | Essex | Swindon | Cambridge | Peterborough |
| EId | C185 | C1AB | C1A9 | C1AD | C1A3 | C19C | C1A4 | C1AF | C1A1 |
| Block | 12C | 11C | 11B | 12D | 11C | 12D | 11C | 11C | 12D |
| Frequency | 227.360 | 220.350 | 218.640 | 229.072 | 220.350 | 229.072 | 220.350 | 220.350 | 229.072 |
| SId | C479 | C47F | C47F | C47F | C870 | C47F | C47F | C47F | C47F |
| LSN | 0X196 | 0X196 | 0X196 | 0X196 | 0X196 | 0X196 | 0X196 | 0X196 | 0X196 |

| XFM | | | | | | | | | |
|------------|----------|---------|---------|----------------|-------------|---------|---------|-----------|--------------|
| | London 2 | Kent | Sussex | Berks N. Hants | South Hants | Essex | Swindon | Cambridge | Peterborough |
| EId | C186 | C1AB | C1A9 | C1AD | | C19C | C1A4 | C1AF | C1A1 |
| Block | 12A | 11C | 11B | 12D | | 12D | 11C | 11C | 12D |
| Frequency | 223.936 | 220.350 | 218.640 | 229.072 | | 229.072 | 220.350 | 220.350 | 229.072 |
| SId | C474 | C474 | C474 | C474 | | C474 | C474 | C474 | C474 |
| LSN | 0X198 | 0X196 | 0X196 | 0X196 | | 0X196 | 0X196 | 0X196 | 0X196 |

| Kiss | | | | | | | | | |
|-------------|----------|---------|---------|----------------|-------------|---------|---------|-----------|--------------|
| | London 1 | Kent | Sussex | Berks N. Hants | South Hants | Essex | Swindon | Cambridge | Peterborough |
| Eid | C185 | C1AB | C1A9 | C1AD | C1A3 | C19C | C1A4 | C1AF | C1A1 |
| Block | 12C | 11C | 11B | 12D | 11C | 12D | 11C | 11C | 12D |
| Frequency | 227.360 | 220.350 | 218.640 | 229.072 | 220.350 | 229.072 | 220.350 | 220.350 | 229.072 |
| Sid | C483 | CBCA | CAC8 | CAC8 | C483 | C8CA | C8C4 | C883 | C883 |
| LSN | 0X193 | 0X193 | 0X193 | 0X193 | 0X193 | 0X193 | 0X193 | 0X193 | 0X193 |

| Magic | | | | | | | | | |
|--------------|----------|------|--------|----------------|-------------|-------|---------|-----------|--------------|
| | London 1 | Kent | Sussex | Berks N. Hants | South Hants | Essex | Swindon | Cambridge | Peterborough |
| Eid | C185 | | | | | | | | |
| Block | 12C | | | | | | | | |
| Frequency | 227.360 | | | | | | | | |
| Sid | C788 (8) | | | | | | | | |
| LSN | | | | | | | | | |

| BBC Local Services | | | | | | | | | |
|---------------------------|----------|---------|---------|----------------|-------------|---------|---------|-----------|--------------|
| | London 2 | Kent | Sussex | Berks N. Hants | South Hants | Essex | Swindon | Cambridge | Peterborough |
| Eid | C186 | C1AB | C1A9 | C1AD | C1A3 | C19C | C1A4 | C1AF | C1A1 |
| Block | 12A | 11C | 11B | 12D | 11C | 12D | 11C | 11C | 12D |
| Frequency | 223.936 | 220.350 | 218.640 | 229.072 | 220.350 | 229.072 | 220.350 | 220.350 | 229.072 |
| Sid | CC31 | C631 | CD32 | CD31 | C932 | CE31 | CA32 | C43A | C53A |
| LSN | | 0X09 | | | | | | | |

Annex D: Manufacturers questionnaire

| Query Number | Tuner | Function support Query | Comments |
|--------------|----------------------|--|----------|
| 1 | FM | Number of independent FM tuners | |
| 2 | | FM to FM RDS service linking methods (A / B / EON) | |
| 3 | | FM to FM RDS Regionalisation PI nibble 2 | |
| 4 | | FM to FM RDS linkage – Extended Generic | |
| 5 | DAB/DAB+ to DAB/DAB+ | Number of independent DAB tuners | |
| 6 | | DAB To DAB service Linking Same service alternate frequency (MFN) (Sid=SID and Eld = Eld) method to determine alternative frequency i.e. scan/search or FIG 0/21 | |
| 7 | | DAB To DAB service Linking Same service alternate Ensemble (Sid=Sid and Eld ≠ Eld) Hard Linked | |
| 8 | | DAB To DAB service Linking Same Regional service alternate Ensemble (Sid ≠ Sid and Eld ≠ Eld) Hard Linked | |
| 9 | | DAB To DAB service Linking Same Regional service alternate Ensemble (Sid ≠ Sid and Eld ≠ Eld) Soft Linked | |
| 10 | | DAB To DAB service Linking Related service alternate Ensemble (Sid ≠ Sid and Eld ≠ Eld) Soft Linked | |
| 11 | | Can the state of DAB FIG 0/6 Linkage Actuator (LA) flag Enable or Disable a link | |
| 12 | | Is FIG 0/21 used in service following Region = 0 | |
| 13 | | Is Fig 0/21 and Fig 0/11 regionalisation implemented | |
| 14 | | Is FIG 0/24 used in service following | |
| 15 | DAB/DAB+ to FM | DAB to FM implied (Sid = PI) | |
| 16 | | DAB to FM Explicit (Sid ≠ PI) Hard Link | |
| 17 | | DAB to FM Explicit (Sid ≠ PI) Soft Link | |
| 18 | | Is FIG 0/21 used in service following Region = 0 | |
| 19 | Other | Is Service following enabled or disabled by default | |
| 20 | | Time to switch to alternative Service | |
| 21 | | Are Audio levels equalised during switching | |
| 22 | | Is audio delay introduced during switching | |