OFCOM Consultation on

Digital Dividend : clearing the 800 MHz band

RESPONSE FROM DIGITAL UK LTD

20 April 2009

OFCOM CONSULTATION ON

Digital Dividend : clearing the 800 MHz band

RESPONSE FROM DIGITAL UK LTD

Introduction

Digital UK is the organisation formed by broadcasters at the behest of Government to oversee television Digital Switchover (DSO) in the UK. Its primary responsibilities are to co-ordinate the re-engineering of the transmitter network and to communicate with viewers about the DSO process.

Digital UK welcomes the recognition by Ofcom that its proposals for clearing the 800 MHz band - and in particular Channels 61 and 62 - should be implemented in a manner and at a time which avoids any disruption to DSO.

This response to the Consultation is designed to underpin that requirement and, therefore, only addresses those questions where we believe that there is a likelihood of an impact on the DSO process.

As further work is done to understand the requirements of the 800 MHz project and its potential impact on DSO, we would like to work with Ofcom to compile a DSO impact assessment, explicitly recognising any risks posed to the DSO Programme and the proposed mitigations. This impact assessment should then be considered as part of the approvals process for the 800 MHz project, where we would expect Ofcom and other organisations involved in governance of the project to acknowledge and respond to the risks identified.

The Digital Switchover Process

The DSO process involves the re-engineering of the entire analogue television transmitter network of over 1100 sites. Planning for this complex project started around 5 years ago and implementation is well underway.

The Consultation document sets out in some detail the planning stages from international spectrum agreement to regional system design. All are time consuming, most sequential and many interdependent so it is not a trivial task to interrupt the work flows in order to analyse proposed policy shifts. In addition, the nature of the project is iterative, evolving and cyclical. It is very difficult, if not impossible, to introduce significant changes without delay to the programme.

Nevertheless, there may be some sites for which DSO is scheduled towards the end of the programme in 2012 where it may be possible to accommodate frequency changes without disruption to the programme. Digital UK will support such changes in the interest of cost savings and to minimise disruption to broadcasts and the impact on viewers of multiple retunes in those areas.

International Co-ordination

The Consultation (1.17 and elsewhere) notes the need for urgent negotiations with neighbouring countries in order to conclude revised international agreements on frequency assignments.

Digital UK has the following concerns about this activity:

- We believe that it is unlikely to be concluded in the suggested timetable (i.e. by the end of 2009) and, since other planning activity depends on its outcome, any delay in planning would extend the whole programme for delivering clearance of the 800 MHz band.

- There is a danger that negotiations with international neighbours will now be dominated by the discussions about the 800 MHz band since there is a clear political imperative to progress this as quickly as possible across Europe. As a result, discussion about DSO sites for which there has not yet been agreement may be delayed and/or these sites may become bargaining chips in the wider debate. If that were to happen, the completion of DSO would likely be delayed.

- Spectrum Planning resource is a scarce commodity which is required for both DSO and international co-ordination planning. In order to manage the inevitable tensions between the two activities Digital UK believes it is essential that there is a transparent ordering of priorities for Frequency Planners under the auspices of the JPP Management Board.

Costs

The Consultation (3.27, 3.28, 3.29) identifies two potential sources of funding for this project:

- The Government and/or
- new licensees

If the latter source is chosen we believe that it could have a fundamental impact on the timetable since none of the planning activity could commence until the funding is in place. New licensees would, understandably, want to be closely involved in the governance of the project if they are to fund it so, unless other financial underwriting is in place, any cost generative activity may not commence until those licences have been awarded.

The costs and benefits of clearing the 800MHz band

Question 1: Do you agree that clearing DTT from channels 61 and 62 and PMSE from channel 69 to align the upper band of cleared spectrum in the UK with the emerging dividend in other European countries is likely to further the interests of citizens and consumers to the greatest extent?

So long as this does not impact on the agreed timetable and action plan for DSO, Digital UK does not have a view.

But we are concerned that DSO would be adversely affected if some Arqiva resources – such as the Network and Regional design Teams – were to be diverted away from DSO planning.

Moving DTT from channels 61 and 62

Question 2: Do you agree that the proposed DTT migration criteria are proportionate and appropriate? If not, please explain why and clearly identify any other criteria you believe should be adopted and why.

Digital UK supports the migration criteria set out in para. 4.11. – in particular in relation to the need to avoid any negative impact on the DSO programme.

Question 3: Do you have views on the options identified and our assessment of them? Do you believe there are other, superior options, and, if so, why? Do you agree that the hybrid option is most consistent with the DTT migration criteria?

On the basis of the analysis so far undertaken Digital UK supports the hybrid option but it is noted that only 97 stations have been examined whereas one or both of channels 61 and 62 are used at 233 sites in the switchover plan. Additionally, a further 220 relays will need to have input channels changed as they currently receive PSB services on either channel 61 or 62. It is also possible that more sites will be affected because of the impact of interdependencies once the final network plan is devised.

Nevertheless, the hybrid option has the potential to reduce the number of household aerial issues. Digital UK is sensitive to this because of the carefully crafted messaging in its viewer communications and it would not be helpful to the credibility of DSO if those messages were brought into question during or shortly after DSO.

We note that in para. 4.35 Ofcom has assumed that the Digital Switchover Help Scheme will still be in place to assist elderly and vulnerable viewers during this new project. That is a matter for the DCMS and the BBC to consider or confirm.

We also note the suggestion that DSO-related communications should reference the project (with details or a link to further details). Digital UK believes that it is too early to judge whether or not this would be appropriate and that these matters should be for discussion and agreement between Digital UK and the governance body for the new project.

Question 4: Do you have views on the implementation - timing options identified and our assessment of them? Do you agree that DSO-integrated implementation is most consistent with the DTT migration criteria? If not, why not?

Digital UK's views on the three options are as follows:

- **Re-cast DSO:** this would be unacceptable to Digital UK due to the disruption to the DSO timetable, including the likely need to re-order the regional switchover plan (which would then not meet the Government's 2005 regional delivery timetable) and the probable delay in completing DSO. Significant costs would be incurred in communicating the revised timetable, there would almost certainly be viewer confusion and the credibility of the DSO programme would be undermined. It would also entail a significant increase in the use of Parking Channels with the associated requirement for viewer retuning.

- **Post-DSO implementation:** this would be acceptable to Digital UK

- **DSO-integrated implementation:** this would be acceptable to Digital UK so long as it was unambiguously agreed that DSO implementation was the priority. DSO must be the priority because clearing channels 61 and 62 cannot be achieved without DSO.

  We are happy to co-operate with Ofcom and others involved in the project governance body to identify those sites in the latter stages of DSO rollout where frequency changes could be implemented without impact on the DSO timetable. However, as noted in the consultation, DSO implementation and detailed regional planning is well advanced in almost all regions and the scope for change is already very limited.

  Because DSO and the new 800 MHz project will be dependent upon many of the same resources we do not believe that it will be feasible to start planning the new project before 2010 without adversely affecting DSO. Since international co-ordination of a new frequency plan will not be completed until the end of 2009 at the earliest this should not unduly delay the new project.

  In addition to the international co-ordination, a new transition plan following on from B16 would need to be developed to mitigate the new Code of Practice interactions that would arise. The new frequency plan and transition plan are inputs to the new region by region RBL analysis that would be required. This in turn defines the equipment requirements at relay sites.

  Given the amount of detailed planning required before equipment orders can be placed and implementation commenced we believe that it is optimistic to contend that the 800 MHz band can be cleared completely during 2013. It should be noted that the planning activity will coincide with the time when the DVB-T2 roll out (Freeview HD) is being managed as well as DSO.

It is too early to predict when the clearance of the 800 MHz band will be completed because of the numerous interdependencies that have yet to be resolved such as funding, governance, international co-ordination, spectrum planning and regional system design including network resilience.

Digital UK welcomes Ofcom's proposal to examine these interdependencies with DUK and Arqiva in detail. Transparent working between these three organisations will be vital if the DSO and 800 MHz objectives can be safely delivered.

We note that Ofcom has commissioned Arqiva to undertake an initial scoping study and we look forward to participating in discussions about its conclusions.

In summary, therefore, Digital UK supports either post DSO implementation or DSO-integrated implementation on certain conditions but believes that the timescales assumed by Ofcom are likely to prove optimistic.

Digital UK has asked the B16 Group to comment on the options and a summary of their response is given below:

- The B16 Group consists of representatives of the Infrastructure Provider, Spectrum Planners, Digital UK, Ofcom and Broadcasters. The Group is responsible for making recommendations about the DSO Roll Out Order programme on behalf of Digital UK, taking advice from the expertise within the Group. It was responsible for devising the B15 plan which was adopted in November 2008. The Group expects to propose an updated B16 plan by the end of 2009.

- In constructing its recommendations, the Group takes into account a number of factors but its principal concern is to prepare detailed DSO regional roll out plans which minimise the impact on viewers in neighbouring regions and meet requirements of international agreements on interference while maintaining the integrity of existing analogue and low power DTT transmissions.

- The comments which follow relate to the plan for clearing Channels 61 and 62 and its impact upon DSO regional rollout planning. The comments may not necessarily reflect the views of all of the member organisations within the B16 Group, but Digital UK believes that the Group members are uniquely qualified to comment on the issues and that full weight should be given to their views.

"A change to the DSO frequency plan, at the simplest level, results in either a change to the output frequency of those sites that transmit on channels 61 and / or 62, or a change to the RBL input frequency of the relay stations where the parent station uses 61 or 62 for PSB services. There are approximately 450 stations that therefore require changes, including 23 of the main 6-mux stations (11 with dependent relays affected), serving 30% of the UK population in total. This is without adding in stations that change frequency as the result of a two step change (Ofcom's preferred planning approach).

If it is then assumed that all these sites need to be visited by engineers at the time of the frequency changes (Arqiva would need to confirm this), then to change to the new frequency plan is likely to have to happen on a main station basis, as per the DSO roll out. As the consultation noted, development of the B15 Plan took 9 months, although this was the time taken to refine the plan already existing under B14. The development of a new Implementation Plan to move away from Channels 61 and 62 could therefore take considerably longer, as discussed below.

The timescales required for international co-ordination will also impact on the start point for moving towards the new frequency plan. The Spectrum Planners consider that the timescale proposed by Ofcom for achieving international co-ordination for high power stations by the end of 2009 as being highly challenging. These timescales are also partially outside the control of the United Kingdom, as they are dependent on the co-operation and resources available to the neighbouring administrations. However, without agreement for the high power stations, an implementation plan cannot be progressed, as it is believed that it will not be acceptable for high power main stations to be operated on a No Interference, No Protection basis.

Ofcom have proposed 3 options for the timing of implementation:

- *Recast DSO*
- *Post DSO Implementation*
- *DSO Integrated Implementation*

These three options are reviewed from the viewpoint of producing a new Implementation Plan.

<u>Recast DSO</u>

The Recast DSO option halts DSO until a new Frequency Plan and Implementation Plan are available. The Implementation Plan would have to take account of the impact of High Power DSO services on analogue and low power DTT reception, using Ofcom's Code of Practice as a basis for evaluation.

It should be noted that some of the most problematic interactions occur as a result of PSB services that are not using existing analogue frequencies (conversions). This is because new interactions that do not exist in the current network are created, but PSB services are limited in their mitigation techniques because they need to be at or close to their final DSO ERPs in order to provide the required coverage. Therefore, the only approach may be to significantly change the order in which roll out takes place, or to increase the number of sites having concurrent DSOs.

An example of the problem that this implementation method could create is given:

Winter Hill may use Ch 51 in the New Plan. This frequency is currently used for analogue services at Emley Moor, which currently does not DSO until 18 months after Winter Hill. Therefore, a new implementation plan may require Winter Hill DSO to be moved to on or after the DSO date for Emley Moor. Such a move is likely to have significant resource implications and so it may be necessary to investigate the further use of parking channels as an alternative.

The B16 Group consider that a Recast DSO approach is likely to require considerable use of parking channels in order to protect existing services whilst moving switch-over services to the new frequency plan. These parking channels will require international co-ordination, which would have to be achieved at the same time as agreeing the final frequency plan, and before an implementation plan can start. It is the view of the Spectrum Planners that this is unlikely to be achievable with the resources available both within the UK, and particularly with our neighbouring administrations in the timescales required by Ofcom and Government. Therefore, there is likely to be a significant delay to DSO by adopting this approach.

The consultation pointed out that the production of the B15 roll out plan took 9 months. The type of changes necessary to accommodate the channel 61 and 62 changes through a recast of DSO would take considerably longer. Making significant changes to the roll out plan has previously been discussed at an SPG meeting. At the meeting, it was highlighted that the B15 plan is based on a convergence of planning work over a three year period and any major change to the roll out plan would be expected to take considerable time and resources to complete.

Recasting DSO in order to accommodate the release of channels 61 and 62 is therefore seen by the B16 Group as disruptive and the halt in existing plans would endanger achievement of the digital switchover programme dates published by government.

<u>Post DSO Implementation</u>

The Post DSO Implementation option waits until DSO is completed in 2012 before sites are re-visited to implement the New Plan. Under this method, a new Code of Practice would be required to assess the impact of interference from frequency plan changes to sites that have not yet had their frequency plan change. However, it is likely that this will be the simplest method of implementing the frequency plan change, probably in a two step way:

1. *Move stations that have frequencies between channels 48 and 53 to 39 and 40, as there will be no existing services in these frequencies;*
2. *Move stations that use 61-62 to 48-53.*

However, the disadvantage of this approach is that channels 61 and 62 will not be available to new users until towards the end of the implementation phase.

<u>DSO Integrated Implementation</u>

Under the DSO Integrated Implementation, the Implementation Plan needs to 'actively seek to integrate clearing DTT from channels 61 and 62 with DSO where this is feasible'. It is therefore assumed that the B16 (or subsequent plan) timetable is followed. This approach could cover a range of options depending on the feasibility of integrating with DSO in 2010, 2011 or 2012. It would be clearer if this option was called "Partial DSO Integrated Implementation", as the B16 Group consider it unlikely that channels 61 and 62 could be cleared before 2013-14 using this approach.

It is unlikely that the B16 Group would be able to comment on exactly how feasible this approach is until a new plan is available. However, the implementation plan would have to build in protection for existing analogue and low power DTT (where transmitting) and both the old and new DSO frequency plan (where applicable). This will increase the complexity of the roll out plan compared to Post DSO Implementation. It is likely that a DSO Integrated Implementation approach could only be applied to a limited number of stations in 2012, and even then it should be noted that there are a number of high power stations that are currently planned to use 61 and / or 62 that do not DSO until 2012, such as Pontop Pike, Midhurst, Limavady, Dover and Bluebell Hill. These sites would need their new frequencies to be available at the point of DSO, which may mean that stations using these frequencies, such as Hannington, Guildford, Sandy Heath, Tacolneston, Emley Moor and Chatton, may need to be moved to their new plan frequencies. Therefore, any Integrated Implementation Approach is likely to focus on the enabling changes that clear channels 48-53 in 2012, subject to protection requirements of existing analogue and low power DTT and is unlikely to release channels 61 and 62 in any part of the UK by the end of 2012.

In addition, it is worth highlighting that by the time a conclusion to the consultation process is reached, it is likely that the use of channels 61 and 62 at the vast majority of sites will already have been committed to, either through contractual build obligations or through necessity in ensuring that DSO published dates are complied with. The scope for integration with DSO may therefore be limited, and the B16 Group believe it will still be 2013-14 before the implementation programme to clear channels 61 and 62 is completed."

Question 5: Do you agree that a programme-control and -governance arrangement such as that outlined above is appropriate?

Digital UK agrees that there needs to be clarity of structure for the project especially if the two organisations (Digital UK and the 800 MHz Project) are to work together in managing a DSO-integrated implementation plan. However, it is too early to say whether the illustrative programme structure shown at Figure 8 in the Consultation will be appropriate. Fundamental to the answer to that question is the source of funding (which will presumably have associated rights within the project) and a clear identification of who is the "client".

Changes to the transmitter network will need to be undertaken by Arqiva under change control mechanisms in their MTS contracts with broadcasters. So the broadcasters will be the client at that level.

However, unlike DSO, the funding for those changes will be from another unconnected source. That source will at a minimum want audit rights of the manner and cost of the infrastructure changes and quite possibly more involvement than that. This will probably lead to tensions between the funding source and the users of the network - one wanting speed of implementation and lowest cost ; the other continuity of service to viewers and a robust, resilient transmission network.

It will be for the main players to determine how to structure the project to overcome these potential issues. Digital UK's concern will be to ensure that DSO remains the priority and that its programme is not delayed or damaged by the parallel project. Therefore, Digital UK will want to ensure that it is represented at the appropriate levels to ensure that it can protect the interests of DSO – safe delivery of which is vital to clearing the 800 MHz frequencies.

We note that Ofcom has commissioned Deloittes to identify a preferred option for meeting the management, project control and governance requirements of the project and we look forward to the opportunity of assisting them to frame their proposals.

The Digital UK Broadcast Team is responsible for co-ordinating the management of the DSO network roll-out on behalf of broadcasters and consideration will need to be given to the role of that team in any Channel 61 and 62 implementation programme. It would be extremely inefficient and probably unworkable to have a separate team working on a parallel roll-out plan for the same network.

Equally, Digital UK has built considerable experience in communicating re-tune events which should be of great value to the 800 MHz project.

Question 6: Do you agree that the four cost categories adequately capture the costs associated with clearing DTT from channels 61 and 62? Are there any costs that do not appear to have been accounted for in any of these categories?

The four broad cost categories of spectrum planning, infrastructure re-engineering, communications and support and programme management would appear to be all encompassing but the devil will be in the detail and this can only be identified once more is known about the project structure and funding. Each of the organisations involved in planning and implementing the project will incur costs which they will expect to be funded by the project and, depending upon the project structure, these may or may not fall within the ambit of the four broad categories identified.

As it is not at all clear how the cost estimates in the consultation have been compiled it is not possible to identify what costs have been accounted for and, therefore, what might be missing. However, there is no explicit reference to the cost of the planning and design activity required once spectrum planning is complete and before infrastructure re-engineering can commence.

The region by region RBL analysis will have to be repeated, which may in turn lead to additional infrastructure costs as sites may need RBL antenna upgrades, re-transmitter upgrades or line feeds that were not required for the original DSO baseline.

In relation to infrastructure costs, the project will need to identify the additional costs associated with the clearance of Channels 61 and 62 over and above the costs that broadcasters will incur anyway as a result of the DSO programme. In order to assess this cost delta it will first be necessary to understand the baseline for DSO. This will require a continuing prioritisation of resources - frequency planners (B16 rollout plan; Code of Practice, RBL Analysis) and Arqiva design and costing teams - in favour of DSO. Only once this DSO baseline is complete would it be sensible to try to understand the additional costs of the clearance project.

From the communications perspective, Digital UK's experience suggests that the following viewer related activities will probably need to be funded:

- Above the line communications (advertising of the need to re-tune DTT receivers
- Viewer support functions (a website and a contact centre). Contact centre support will be a significant cost element.
- Any aerial replacement scheme that is agreed as part of the 800 MHz project
- Practical outreach support on the ground for those needing face to face advice with re-tuning.
- Subject to agreement with the BBC and DCMS, an extension of the Help Scheme or similar to assist Help Scheme customers with re-tuning.
- Media handling, stakeholder management and public affairs.
- Trade communications costs, particularly to electrical retailers and aerial installers, who will need to be made aware of the changes.
- Communication to the Housing sector including landlords whose communal aerial systems will need to be re-channelised.

Question 7: Do you agree that our cost profile is a reasonable basis for planning the capital expenditure for clearing DTT from channels 61 and 62?

Digital UK agrees with parts of the cost profile but not others:

- **Spectrum planning:** the assessment seems about right.

- **Infrastructure engineering:** given that regional system design cannot commence until after the production of a revised frequency plan and completion of international co-ordination we would not expect that orders for transmitter equipment could be placed much before 2011. We would expect the bulk of network engineering works to take place in 2013 and 2014 not 2012/13. For the reasons explained above, we believe that the number of DSO sites that can be integrated into the project would be limited so the majority of implementation work would be post-DSO.

  We think it is highly optimistic to believe that it would be possible to produce a work plan, cost estimates and cost profile by spring 2009. The resources required for much of this activity are currently dedicated to DSO and are unlikely to become available at a significant level until 2010.

- **Communications and support:** we would expect that these activities would continue into 2014.

- **Programme management:** it appears highly optimistic that the programme-management and governance structures will be in place from late spring 2009 and we would expect this activity to be required at some level throughout the programme until 2014.

  It is vital that Digital UK manage all network changes that take place up to the completion of the DSO programme in 2012 in order to streamline Arqiva's work on the network, and not jeopardise DSO. After DSO is complete in 2012, and Digital UK disbands, the broadcasters would need to decide how to co-ordinate their contracts with Arqiva and the continued evolution of the DTT network.

Moving PMSE from channel 69

Question 8: Do you agree that these are the most appropriate criteria to assess which spectrum is the best alternative to channel 69 for PMSE?

Since this does not impact on DSO, Digital UK does not express a view.

Question 9: Do you agree with our technical and coverage analysis of the possible alternatives to channel 69 for PMSE?

Since this does not impact on DSO, Digital UK does not express a view.

Question 10: Do you agree with our economic assessment of the realistic alternatives to channel 69 for PMSE?

Since this does not impact on DSO, Digital UK does not express a view.

Question 11: Do you agree that channel 38 is the best alternative to channel 69 for PMSE?

Since this does not impact on DSO, Digital UK does not express a view.

Question 12: Do you agree that we should award channel 38 to the band manager on the same terms as would have applied to channel 69?

Since this does not impact on DSO, Digital UK does not express a view.

Question 13: Do you agree with our proposal to maintain PMSE access to channel 36 on 12 months' notice to cease and to the rest of the cleared spectrum (channels 31-35, 37 and 61-69) until DSO is completed in the UK in late 2012?

Digital UK believes that this is a sensible option.

Question 14: Do you agree with our approach to determining eligibility for, and our assessment of the level of, funding to move PMSE from channel 69?

Since this does not impact on DSO, Digital UK does not express a view.

Question 15: Do you agree that three years is long enough for PMSE to move from channel 69?

Since this does not impact on DSO, Digital UK does not express a view.

Impact Assessment

Question 16: Do you agree with our analysis of the key impacts of our policy options? Are there any other key impacts we should assess?

Since for the most part the Impact Assessment examines issues that do not directly affect DSO, Digital UK does not express a view. However, there are a number of specific points we should like to highlight:

A5.45: we agree that there is a high level of risk that international negotiation of all the affected sites will take considerably longer than assumed in the base case. Other sequential activities are dependent upon completion of this.

A5.101: we note that it is anticipated here that international negotiations are unlikely to conclude until 2010 - with which we concur - and this needs to be taken into account in assessing the rest of the timetable.

A5.104: we believe that it is unlikely that the changes to frequencies will be completed by 2013. It would be more realistic to assume 2014. We note the statement that this programme would operate in parallel to DSO and would be overseen by the main stakeholders affected, including broadcasters, the transmission network provider, Ofcom and Government. We believe that it is premature to be definitive about the appropriate governance structure. The identity of the source of funding will be critical to determining who are the stakeholders. It is also necessary to take account of the contractual relationship between broadcasters and the transmission provider. It is vital that Digital UK has full overview of both the DSO project and the 800 MHz project in order to be able to co-ordinate the two projects, which would be delivered by Arqiva in an overlapping timetable.

Section 6

Securing the UK's interests in international negotiations

Digital UK agrees with Ofcom's assessment of the need for negotiations with the UK's international neighbours. However, as already registered, we have two concerns:

- In suggesting that these negotiations can be completed by the end of 2009 Ofcom itself has noted that this is an aggressive timetable. Digital UK believes that it is highly unlikely that all affected sites would be co-ordinated in that timescale. That would affect the delivery of the project, because completion of Regional System Design relies on the availability of a frequency plan for all transmitters in a region.

- The emphasis on negotiations for clearing the 800 MHz band carries the significant risk that co-ordination of outstanding DSO sites might be delayed and/or that they might become bargaining chips in the wider negotiation. In either event, the DSO programme would likely be delayed.

Section 7

Next Steps

In paragraph 7.10 Ofcom sets out a summary of its expected timetable for the project. Digital UK has a number of concerns about whether or not this is realistic and believes that a credible plan can only be put in place once there is:

- More certainly on the major variables such as funding; and
- Greater analysis of the many activities which would be sequential and highly interdependent.

In particular, Ofcom suggests that “in the summer (2009) ... we would expect to commission an implementation programme and publish further details of that plan”. It is difficult to understand how details of the plan could be published at the same time as the commissioning of the implementation programme. Furthermore, in 4.63 of the main consultation Ofcom does not anticipate programme - management and governance structures - to be established until “late spring 2009” which would leave practically no time for moving from that stage to the next.

In order to preserve the principle that there should not be a material adverse effect on DSO, Digital UK would note the following concerns:

- The timetables proposed are probably unrealistic anyway for the reasons expressed above.

- Even if they were realistic, they could only be achieved by diverting resources required for the successful and timely delivery of DSO - thereby jeopardising that programme.

We would urge Ofcom to allow time for the project governance body (including Digital UK) to make a proper assessment of the realistic timescales once there is a better view of:

- the source and timing of funding (and how that would be made available to the various elements of the project)

- the timetable for international negotiations

- the impact on resources required for DSO.

As further work is done to understand the requirements of the 800 MHz project and its potential impact on DSO, we would like to work with Ofcom to compile a DSO impact assessment, explicitly recognising any risks posed to the DSO Programme and the proposed mitigations. This impact assessment should then be considered as part of the approvals process for the 800 MHz project, where we would expect Ofcom and other organisations involved in governance of the project to acknowledge and respond to the risks identified.

20 April 2009

GLOSSARY

DSO	Digital Switchover
DVB- T2	The transmission mode to be used for HD services on DTT
ERP	Effective Radiated Power
RBL	Re-broadcast Link (between parent site and relay or between relays)