

*everything
everywhere™*

*Everything Everywhere
response to Ofcom's
second consultation on
coexistence of new
services in the 800 MHz
band with digital
terrestrial television*

Non-confidential

19 April 2012



T-Mobile

Table of contents

1	Introduction	2
2	High level comments	2
2.1	The benefits available from the Digital UK experience and the difference in circumstances.....	2
2.2	MitCo ownership and incentives	3
2.3	Timing	3
2.4	MitCo's budget and a 98% coverage obligation.....	3
3	Response to consultation questions	4

1 Introduction

This is Everything Everywhere's response to Ofcom's second consultation on co-existence of new services in the 800 MHz band with digital terrestrial television.

As well as being more developed and detailed, Ofcom's proposals have also been modified in a number of ways. Importantly the notion of a 'tariff mechanism', which we think would simply have been a 'tax on network roll out' has been withdrawn. We are also pleased to see that the amended proposals do not place the cost uncertainty associated with mitigation on bidders prior to the auction, which would potentially have given some unfortunate 'winners curse' issues. Overall, we are therefore pleased that the current proposal is better than the outline proposal presented in the first consultation document and we appreciate the work Ofcom has undertaken to drive this forward, despite the diverse opinions of the many stakeholders. This does not mean we agree with all aspects of the current proposal and we explain in this response the areas where we believe further improvement could be achieved.

Our response has two sections beyond this introduction:

- Section 2 summarises the high level comments; and
- Section 3 provides our detailed answers to the consultation questions.

2 High level comments

2.1 The benefits available from the Digital UK experience and the difference in circumstances

We consider that Ofcom and Government should give further thought to how MitCo can best capture the knowledge, tools and brand to the benefit of consumers arising from the experiences of Digital UK and its successful stewardship of the Digital Switch Over (DSO) process.

Ofcom and Government should work to ensure Digital UK's experience and tools are made available to MitCo. For instance, Digital UK has experience in identifying which dwellings might have communal aerials, which is no easy task. Digital UK also has highly trained employees who could assist in skills and knowledge transfer to MitCo. We note that any skills transfer, if it was appropriate and agreeable with Digital UK, would need to take place in a timely manner given the key deliverables of the DSO project are near complete.

Equally MitCo needs broadcasting coverage models and Ofcom/the Government will need to assist MitCo in acquiring that input from the parties who hold that information.

At the same time there needs to be recognition that the MitCo task will not be not an easy one and in some respects rather different to Digital UK's task in relation to DSO:

- Digital UK was tasked to provide access to multi-channel platform services, as opposed to restoring lost service, as will be the case for MitCo. Whereas consumers may have been happy to switch from analogue to digital on the prospect of getting access to more digital only TV channels, they will be extremely concerned with losing existing channels.
- It is also the case that unlike Digital UK, where the broadcasters were faced with fewer financial constraints, the Government wants mitigation achieved within a fixed budget. Consumers will unsurprisingly be less enamoured with the body tasked with delivering that message particularly in the light of our first point.
- This important contextual difference between the roles of Digital UK and MitCo means that added care needs to be taken when setting KPIs to ensure MitCo is incentivised to minimise loss of TV services to consumers whilst not unfairly punishing MitCo for loss of service beyond its operational control. We believe the KPIs as currently drafted are unreasonable in this latter regard.

2.2 MitCo ownership and incentives

We also consider that Ofcom and Government should give further thought to how MitCo's joint ownership and incentives will work on an operational, day to day, basis:

- Ownership of MitCo and the 'gain share' mechanism provided by Ofcom does not give MitCo the right incentives, but it appears to us that this could at least partially be addressed by letting MitCo buy network based mitigation, on a case by case approach and where practical.
- MitCo management has a far greater impact on mitigation outcomes than the Supervisory Board - yet there is less detail on how the former will work.
- There needs to be further development of the governance arrangements to explain in more detail how the joint owners of MitCo will make joint management decisions on a day to day basis consistent with competition law;
 - For example, MitCo needs to receive commercially sensitive information on network equipment and deployment by individual MNOs to forecast loss of service. The current proposals do not clearly explain the working arrangements that will need to be put in place to deal with joint decision making based on such information. It could be argued that at best MNO ownership is irrelevant because of the Chinese walls required (if effective), or at worst there could be practical difficulties in joint management due to the confidentiality of the information required by MitCo to do its job.
 - We also note there could be management disputes as the 800 MHz licensees do not necessarily have well aligned incentives, given the commercially sensitive nature of the individual network operator data required to make day to day decisions

2.3 Timing

Timing - it is important that MitCo is set up as soon as possible in order not to delay rollout:

- Ofcom and/or Government need to step into the void and start organising MitCo now. MitCo needs interim funding and a CEO and staff to drive setup so it is ready to begin its work. MitCo needs to be up and running by the time its owners are identified by the completion of the auction to ensure there are no delays to the roll out of 4G mobile services to consumers.
- Practically, we see little likelihood of MNOs being able to play a leadership role in this, given the proximity of the auction and the concerns about information-sharing that the auction process will provoke; however, Everything Everywhere is keen to support Government or Ofcom, if it initiates any form of officially endorsed activity prior to the auction.;

2.4 MitCo's budget and a 98% coverage obligation

Finally, we have concerns that the MitCo budget of £180 million may understate the total funds required to undertake consumer based mitigation. This is because the interference modelling undertaken by Ofcom may not take into consideration the revised proposal for a 98%+ population coverage obligation, presented in Ofcom's second consultation on the auction.¹ Such an obligation is likely to increase the number of base stations at which LTE800 is rolled out. This in turn could increase the number of DTT households who could be affected by interference and therefore require receiver filters.

¹ "Second consultation on assessment of future mobile competition and proposals for the award of 800 MHz and 2.6 GHz spectrum and related issues", Ofcom, published 12 January 2012

3 Response to consultation questions

Question 7.1: Do you agree that it is best to seek to establish MitCo in advance of the auction for later transferral to 800MHz licensees?

Everything Everywhere believes that it is essential that MitCo is set up before the combined award of 800 MHz and 2.6 GHz. If not, mitigation will almost certainly delay rollout of 4G mobile services and we cannot accept any further delays to the rollout of LTE 4G in the UK. With the auction having been delayed to conduct a second consultation, the earliest issuance of licences following a completed auction is now Q4 2012, with a possible latest date shown as June 2013.² Although there may be restrictions on operations in 800 MHz in some regions until the end of 2013, it is essential that the new licensees can deploy services as soon as possible after the auction without any further delay in the geographical regions where channel 61 and 62 clearance has been completed.

Whilst Everything Everywhere agrees MitCo must be established in advance of the auction, we do not agree that ownership of MitCo should be transferred to the 800 MHz licensees because we do not consider the licensees need to own or operate MitCo in order to give them the right incentives to co-operate with MitCo or for MitCo to be incentivised to carry out its task effectively. See also our answer to Q7.4 and our comments above in relation to knowledge transfer from Digital UK.

Question 7.2: Do you agree with our initial views on MitCo's constitution and governance?

Everything Everywhere disagrees in principle that MitCo should be jointly owned and operated by the 800 MHz licensees for the reasons outlined below in our answer to Q7.4.

We nonetheless agree that the factors listed in paragraph 7.42 of the consultation document are important factors relevant to the constitution and governance of MitCo should the Government and Ofcom pursue an approach where the 800 MHz licensees will own MitCo. Developing a solid management and reporting structure for MitCo (aside from the Supervisory Board) will be critical to ensure the smooth operation of a body whose owners are in all other respects engaged in fierce commercial rivalry and subject to competition law. Despite listing the critical factors for MitCo's constitution and governance, we see no solutions proposed for this in the consultation document. It seems more weight has been placed on setting out full proposals for the Supervisory Board when in fact the management and reporting arrangements for MitCo are equally important and challenging to design, particularly in the event that Government and Ofcom insist that MitCo must be owned by the 800 MHz licensees. We consider these factors (including those listed in paragraph 7.42) should now be given further consideration and the work to set up MitCo should begin immediately.

Question 7.3: Do you have any views on the proposed approach to the Supervisory Board.

Everything Everywhere considers that the proposals are broadly acceptable. We note that the proposals envisage the inclusion of the appropriate stakeholders, including 800 MHz licensees, DTT broadcasters and a consumer representative; and we note the observation role of Ofcom to ensure its independence from the performance assessment of MitCo.

Question 7.4: We propose that the 50% gain share be split between 800 MHz licensees based on the volume of spectrum they hold in the 800 MHz band. Do you have any comments on this proposal?

² "Notice of proposed variation of Everything Everywhere's 1800 MHz spectrum licences to allow use of LTE and WiMAX technologies", Ofcom, published 13 March 2012

Everything Everywhere accepts the simple principle that the contribution to funding of MitCo and equally the share of any surplus should be based on the proportion of 800 MHz spectrum held.

However, we consider that the question of how the 50% 'gain share' should be split amongst MitCo's owners is of secondary importance in terms of ensuring that MitCo has the right incentives to undertake mitigation effectively, including to deploy network based mitigation where that would be efficient.

The gain share mechanism as proposed gives the 800 MHz licensees 50% of any surplus and it requires individual licensees to fund any network mitigation directly whereas consumer based mitigation is paid by the MitCo funds. We note that this implies that a very high cost of consumer based mitigation threshold must be met before network mitigation will be undertaken and does not necessarily encourage the deployment of the least cost mitigation measures. If the 800 MHz licensees get 50% of MitCo's surplus they are only incentivised to implement network based mitigation when the cost of consumer based mitigation is twice as high as network based mitigation. Add to that the fact that an 800 MHz licensee would have to bear the costs of any network based mitigation directly and assume there were three licensees in MitCo, then an individual licensee would only implement network mitigation if their share (say one third in case of equal 800 MHz holdings) of the cost saved on consumer based mitigation outweighed the total cost of network based mitigation. That means individual licensees would only be willing to implement network based mitigation if the cost of consumer based mitigation was more than three times the costs of network mitigation. Acknowledging both these effects, we conclude that network based mitigation would only be implemented by 800 MHz licensees if the cost of consumer based mitigation was six times higher than consumer based mitigation.

The muted incentive to implement network based mitigation is not a significant problem in our view however, it is relatively straight forward to fix. In practice, the 800 MHz licensees are unlikely to be willing to implement network based mitigation involving power reductions (because of the loss in coverage) or choosing site locations other than from their existing portfolios (because of the high costs and lengthy timescales involved in acquiring new sites). However, we believe licensees would be more willing to implement network transmit filters where practical if they were compensated by MitCo for the cost of doing so. This means that the incentive problem can be addressed by allowing MitCo's owners to share 100% of any surplus and by MitCo paying for transmit filters to be installed in the same way it would pay for receiver filters for consumers, or even in preference if that were more cost effective.

Question 7.5: Are the information parameters defined above and in Annex 5 sufficient to allow MitCo to accurately and reliably forecast the scale and scope of households affected by DTT interference and therefore in regards to interference mitigation functions under MitCo?

We consider that the parameters set out in Annex 5 appear sensible in regards to network deployment and design considerations in general.

Everything Everywhere notes that 800 MHz licensees will consider this information highly commercially sensitive and there will need to be strict controls on information flows so that whilst such information will be required to be provided to MitCo, it should not under any circumstance be shared between MitCo's owners nor forwarded to any third parties, including members of the Supervisory Board.

Furthermore there may be risks that to the extent that Government has a stake in MitCo that highly sensitive information about roll out plans or base station parameters could become subject to a Freedom of Information or Environmental Information Regulation request. We note that the current Sitefinder case with respect to whether mobile base station location and related information is exempt from disclosure under the Environmental Information Regulations illustrates the

seriousness of this concern. Indeed, the possible disclosure of the sensitive information to be provided to MitCo would be even more serious.

Question 7.6: Do you agree the KPIs related to MitCo's activities are appropriate and robust?

Everything Everywhere considers that while Ofcom has defined a set of relevant KPIs (1-6) there are some shortcomings in the working and practical effect of KPI 2 and KPI 6.

For instance, KPI 2 (reactive filter requests) needs to have regard to additional qualitative data including the reason for the request for reactive filters to ascertain whether there has been material and manifest failure by MitCo to proactively distribute DTT receiver filters. As currently drafted KPI 2 appears to inadvertently include within the 90% threshold the possibility of reactive filter requests related to factors beyond the operational control of MitCo's filter distribution. For example:

- failures to deliver by couriers and related delays in redelivery (e.g. contractual or SLA failures or industrial action);
- effectiveness of the receiver filter once delivered if not installed correctly; or
- other factors that may be difficult to predict (e.g. customers did not like non-functional aspects of the filter or expected provision of multiple receivers for multiple TV sets, when in fact the scheme provides for only one receiver filter per household).

For these reasons, and as set out below, we believe that either:

- qualitative factors must also be considered; or
- a more generous reactive filter request range of between 10-20% be set,

thereby, allowing for factors that may arise outside the direct control of MitCo but that may still prompt a reactive request for a filter compared to the proportion of forecast households receiving a proactive filters before interference is experienced. The Supervisory Board could then have discretion not to impose operational conditions in the event of unforeseen factors outside MitCo's control driving the number of reactive filter requests.

We are also concerned that the operational conditions for KPI 2 appear to propose a dual routing of reports of loss of service by DTT users to licensees as well as to MitCo. Annex 6, Part B, KPI 2 Operational Conditions 2(3) a (ii) states:

"where [the licensee] provides information under (i), ensure that such information also includes contact details for itself, and for the Contact Centre, and make it clear to members of the public that, should they experience interference to their DTT equipment during the "testing phase", they may contact either the licensee or the Contact Centre and report such interference;"

This is liable to cause confusing for DTT users as the responsibilities will be unclear and a DTT user who contacts a licensee will simply have to wait to be re-routed to MitCo's contact centre. All reports should be to MitCo as the single point of contact for DTT users with MitCo then sharing the information with the relevant licensee as appropriate.

KPI 6 is also unreasonable as currently drafted. Again, the enforcement of the KPI appears unconcerned with whether the complaint is legitimate and resulting from manifest failure by MitCo or whether the complaint relates to factors outside the control of MitCo. In the absence of any discretion or reliance on additional qualitative factors, the KPI incentivises MitCo to gold plate in order to minimise the number of overall complaints.

Question 7.7: Do you agree that the KPI for incentivising and measuring the proactive supply of DTT receiver filters to households affected by interference should be based on an assessment of the outcomes rather than the activities performed by MitCo?

We agree that in principle, where outcomes (in contrast to processes) are easily observable and measurable, then these provide better means for ensuring compliance with the objectives of MitCo. Accordingly we accept that an assessment of the proportion of how many DTT consumers reactively request a filter is an important outcome to be considered for MitCo's performance in proactively supplying filters. However for the reasons mentioned above in our response to Q7.6, it cannot be the only outcome measure. Qualitative factors leading to the request also need to be considered given that there may be legitimate factors outside the control of MitCo leading to the reactive filter request.

Question 7.8: Do you agree with the approach we have outlined for incentivising KPI achievement and managing cases of non-compliance with KPIs?

See our response to 7.6 and 7.7 above

Question 7.9: Do you agree with our proposed approach for managing MitCo's performance against other elements of service delivery that are not captured by KPIs?

See our response to 7.6 and 7.7 above.

Question 7.10: Do you think a hard or soft limit should be set in relation to platform changes? Do you have any other comments in relation to the platform change cap?

Everything Everywhere disagrees with imposing a hard limit on the number of platform changes that can be undertaken by MitCo (currently Ofcom forecasts there to be around as few as 10,000 households requiring this solution). A hard limit could result in inefficient and costly network based mitigation by MitCo where there was no detriment to the consumer from having their TV services restored through a platform change.

See our response to 7.6 above.

Question 7.11: Do you agree with the requirements we propose to place on licensees to address interference after MitCo closes?

Everything Everywhere does not agree with Ofcom's proposals on the grounds that it should, in principle, be up to MitCo's owners to decide if and when its functions fall away based on their own network roll out and extent of distribution of filters. We agree there should be a firm back stop date beyond which the obligations of licensees towards MitCo end. However, it should be up to MitCo's owners to continue MitCo or transfer it into another venture as they see fit.

Question 8.1: Do you have any views on the nature or detail of the requirements we propose may be necessary as set out in this Section?

Everything Everywhere considers that the requirements on licensees for the period beyond MitCo's possible closure as set out in paragraph 8.17 are too onerous. These are not workable in the case of network reconfigurations (minor or major reconfigurations, e.g. as with the network consolidation following the T-Mobile and Orange merger) and we consider it unnecessary that licensees should proactively inform Ofcom of any or all of its planned network changes.

Assuming that the 4G licences will have similar provisions to those in the 2G and 3G licences whereby Ofcom can request information about the location of network equipment, Ofcom could rely on standard licence terms and conditions for these information requirements.