

Second consultation on coexistence of new services in the 800 MHz band with digital terrestrial television

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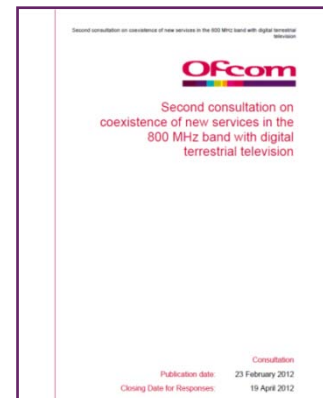
26th March 2012

Agenda

- **Introduction**
- **Government decisions**
- **Second consultation**
 - How and when MitCo will be established
 - The Supervisory Board
 - Managing MitCo: Key performance indicators
 - Managing MitCo: Operational conditions
 - Gainshare mechanism
 - Closing down MitCo
 - Dealing with interference after MitCo has closed
- **Q&As**

Introduction

- On the **23 February 2012**, we published a second consultation setting out the options for implementing the Government's policy decisions relating to DTT coexistence.
- The closing date for responses is the **19 April 2012**.
- The purpose of this session is to assist stakeholders who wish to respond to the consultation document, by;
 - Outlining the key elements of the proposals
 - Providing the opportunity to clarify certain elements of the proposals and to answer any specific questions
- We are happy to arrange individual meetings with stakeholders who would like to discuss any particular elements of the consultation.



Government decisions

The Government has taken the following policy decisions in relation to DTT coexistence:

- A single implementation body (**MitCo**) will be set up to manage the delivery of DTT interference mitigation and to provide support to DTT consumers. This will be **led by the new 800 MHz licensees**.
- MitCo will be provided with funding of **£180m**. There will be a **50:50 gainshare** of any underspend between new licensees and Government when MitCo is closed down. Government will bear the risk of any overspend.
- MitCo will provide support to DTT consumers. This will include **information** and providing **DTT receiver filters** to households **proactively and reactively**. **Platform changes** will also be offered to households where filters do not solve the issue of interference.
- A **Supervisory Board** will be established to monitor MitCo's performance and advise Ofcom accordingly.
- Additional support will be provided to **vulnerable consumers**, including installation support

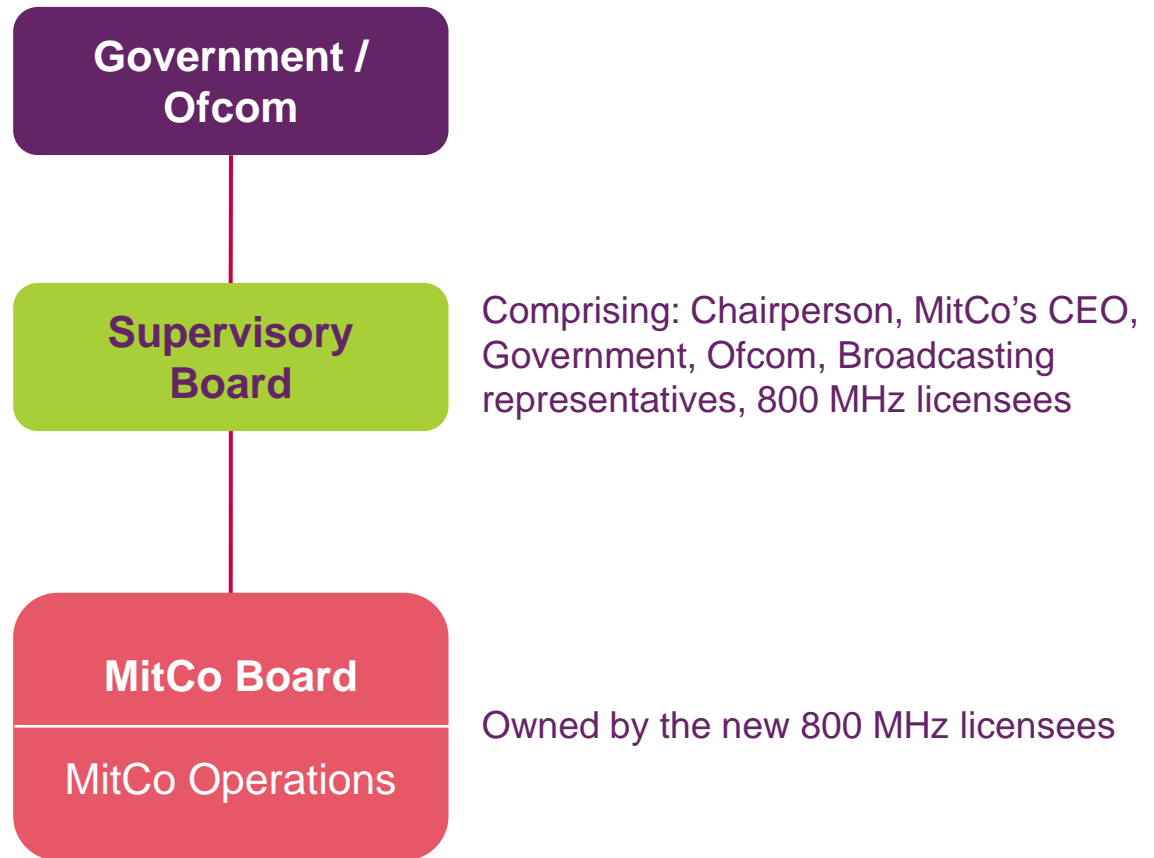
Second consultation

The consultation focuses on options for implementing the Government's decisions. In particular:

- When and how **MitCo** should be established
- How the **Supervisory Board** might be established
- **Managing MitCo** (through the 800 MHz licensees) using a set of **key performance indicators** (KPIs)
- A set of **operational conditions** that new licensees will automatically have to implement, should they, through MitCo, breach any of the KPIs
- How the **gainshare** should be split among new 800 MHz licensees.
- The process for **close down of MitCo** and managing interference afterwards

Our analysis and policy proposals are presented in **Section 7** of the consultation document.

MitCo governance



When and how should MitCo be established?

We have set out two options:

1) Government establishing MitCo before the auction	2) The new licensees establishing MitCo after the auction
<ul style="list-style-type: none"> • Government set up MitCo before the auction as a limited company • Government, on behalf of MitCo, begin negotiations with suppliers • After the auction, new licensees become shareholders in / owners of MitCo 	<ul style="list-style-type: none"> • An obligation in each 800 MHz licence for new licensee to establish a single body to manage interference <p>or</p> <ul style="list-style-type: none"> • Government enter into a contractual agreement with each 800 MHz licensee to form MitCo for the purpose of undertaking mitigation
<p>Benefit – Key aspects of MitCo’s constitution can be established and clarified ahead of the auction.</p>	<p>Benefit – Allows 800 MHz licensees to take detailed decisions on establishing MitCo and determining how it will operate.</p>
<p>Potential problems – Removes some potentially key decisions related to the efficient operation of MitCo from the new licensees.</p>	<p>Potential problems – More time is needed after the auction for MitCo to reach an operational state.</p>

We consider that option 1 is the preferable option.

The Supervisory Board

Key functions:

- **Monitor MitCo** on an ongoing basis against the key performance indicators
- **Accredit significant one-off aspects** of MitCo's service
- **Advise MitCo** on general issues of performance
- **Advise Ofcom** (or Government) on reported non-compliance by MitCo or the licensees with the terms of their licenses, in particular the KPIs.

The constitution of the Supervisory Board should be designed so as to enable it to act quickly and effectively. It will need to be:

- Streamlined in terms of decision-making processes;
- Representative of the range of stakeholder interest in DTT mitigation
- Technically capable to understand the detail of MitCo's performance.

Proposed approach to the Supervisory Board

Senior membership

Chairperson, MitCo's CEO, Government, Ofcom, Technical/audit advisor, Consumer interest advisor, MuxCo-representative, PSB-representative, COM-representative, 800 MHz licensee 1, 800 MHz licensee 2, 800 MHz licensee 3

Secretariat

- Supports the Supervisory Board members in preparing information and manages the following two functions

Technical modelling

- Provides expert modeling capability to allow the SB to challenge and evaluate MitCo's performance against forecast interference and KPIs

Audit

- Provides sufficient expertise to conduct audits of information provided by MitCo on a quarterly basis, as well as its financial management

Managing MitCo – Key performance indicators (KPIs)

The proposed set of KPIs is designed to ensure that the level of consumer support chosen by Government is delivered by MitCo.

All 800 MHz licensees should be collectively responsible for ensuring that MitCo complies with its KPIs.

The KPIs proposed have been designed to:

- **Incentivise MitCo** to deliver the level of consumer support determined by Government and deliver to a high standard;
- **Provide a clear and objective framework** to assess MitCo's performance on an ongoing basis;
- **Allow for the timely and responsive identification of areas of poor performance** to help minimise the impact of DTT interference on affected consumers.

Proposed KPI framework

KPI	Service objective
1) Information supply	Affected households supplied with sufficient information in good time before interference occurs to enable them to make appropriate mitigation decisions
2) Proactive filter supply	A proportion of households forecast to be affected by DTT interference have the problem corrected before it occurs
3) Reactive filter supply	Households experiencing interference receive mitigation in a timely manner
4) Vulnerable consumer support	Eligible households who are unable to self-install filters receive installation support in a timely manner with minimal disruption
5) Platform change supply	Households where filters are ineffective receive a platform change in a timely manner
6) Consumer complaints	MitCo seeks to minimise the occurrence of consumer complaints and responds promptly to issues

Managing MitCo – Operational Conditions

In the event that MitCo fails to meet the performance standards set out in the KPIs, the 800 MHz licensees must automatically comply with operational conditions.

We anticipate that the operational conditions will apply to all licensees in circumstances where KPIs have not been met.

The operational conditions we propose to apply are:

- **Delay base station activation**
- **Operate new base stations under test conditions**
- **Reduce base station power**

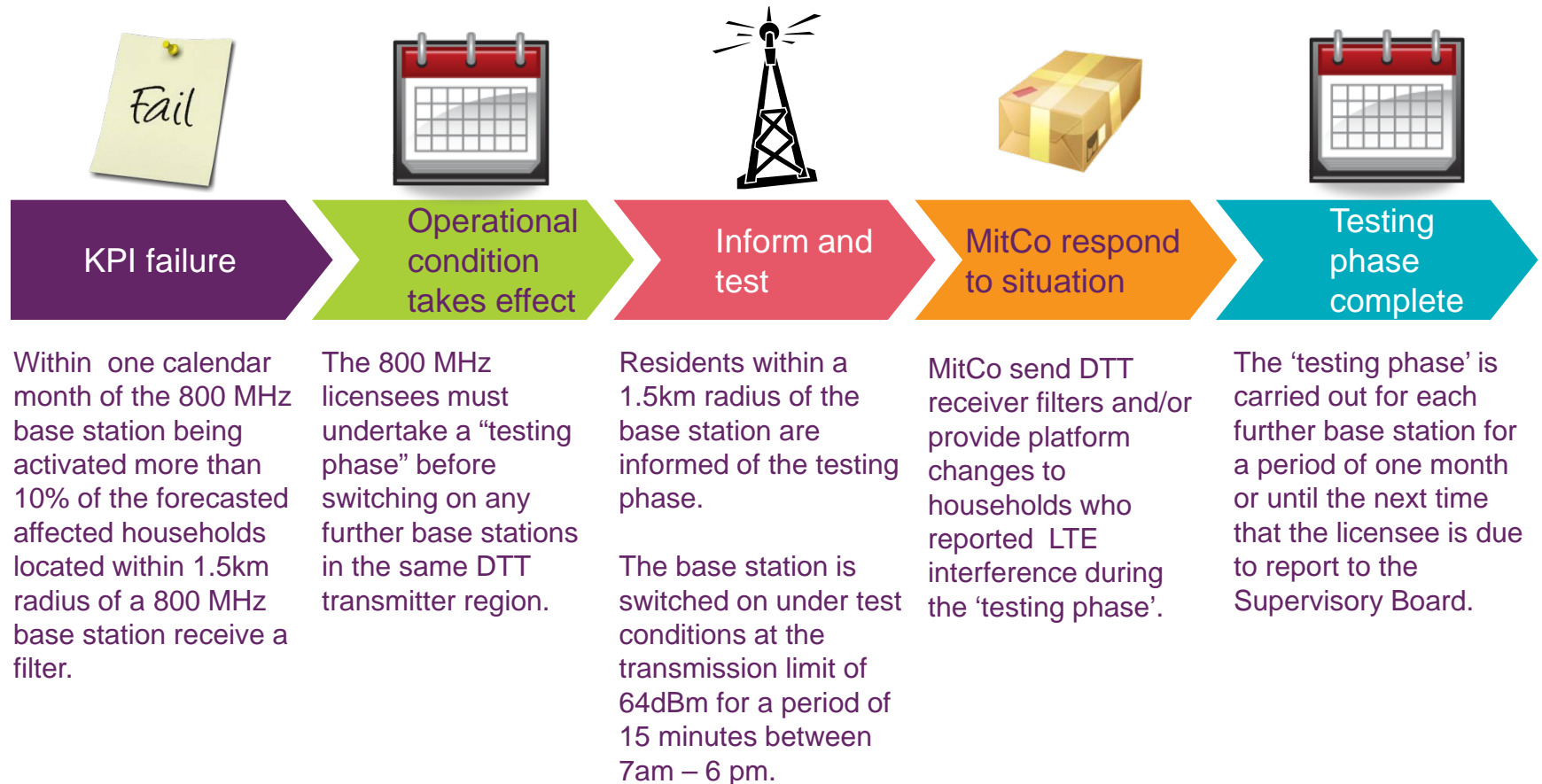
Example – KPIs for reactive filter supply

KPI 3: Reactive filter supply



Example – Operational condition for proactive filter supply

KPI 2: Proactive filter supply



Gainshare

The aim of the gainshare mechanism is:

- To **encourage** the shareholders in MitCo to **run the organisation efficiently**
- To provide an **incentive** for new licensees to **undertake network mitigation** where it is efficient for them to do so

The split of the gainshare could be determined in two ways:

1. Based on an assessment of what contribution each licensee makes to interference and hence to the costs of MitCo
2. Split between the licensees based purely on the amount of spectrum (in MHz) each licensee holds.

In our view the difference in interference levels between the blocks and the likely scale of the gainshare are not large enough to justify the first option.

We propose that the gainshare should be divided in proportion to each licensee's 800 MHz spectrum holdings.

The process for close down of MitCo

Government has decided that MitCo should continue to operate for **one year after the completion of network roll-out** and should have a back-stop date of **2017**.

We propose that MitCo will close no later than the end of 2017, but that licensees will have the opportunity to request that MitCo closes earlier.

This request would have to be made **unanimously** by licensees to the Supervisory Board, with the final decision resting with **Ofcom**.

Features of closing

- Operation of the **gainshare** mechanism
- Government **audit** of MitCo
- Disbanding the **Supervisory Board**
- Licensees '**ownership** of MitCo will cease
- Certain elements of MitCo's **intellectual property** will pass to Government

Managing interference after MitCo has closed

We expect that the vast majority of interference to DTT will be mitigated during MitCo's lifetime.

To take into account the potential of further interference after MitCo has closed, we propose to place certain requirements on the 800 MHz licensees and MitCo. These are:

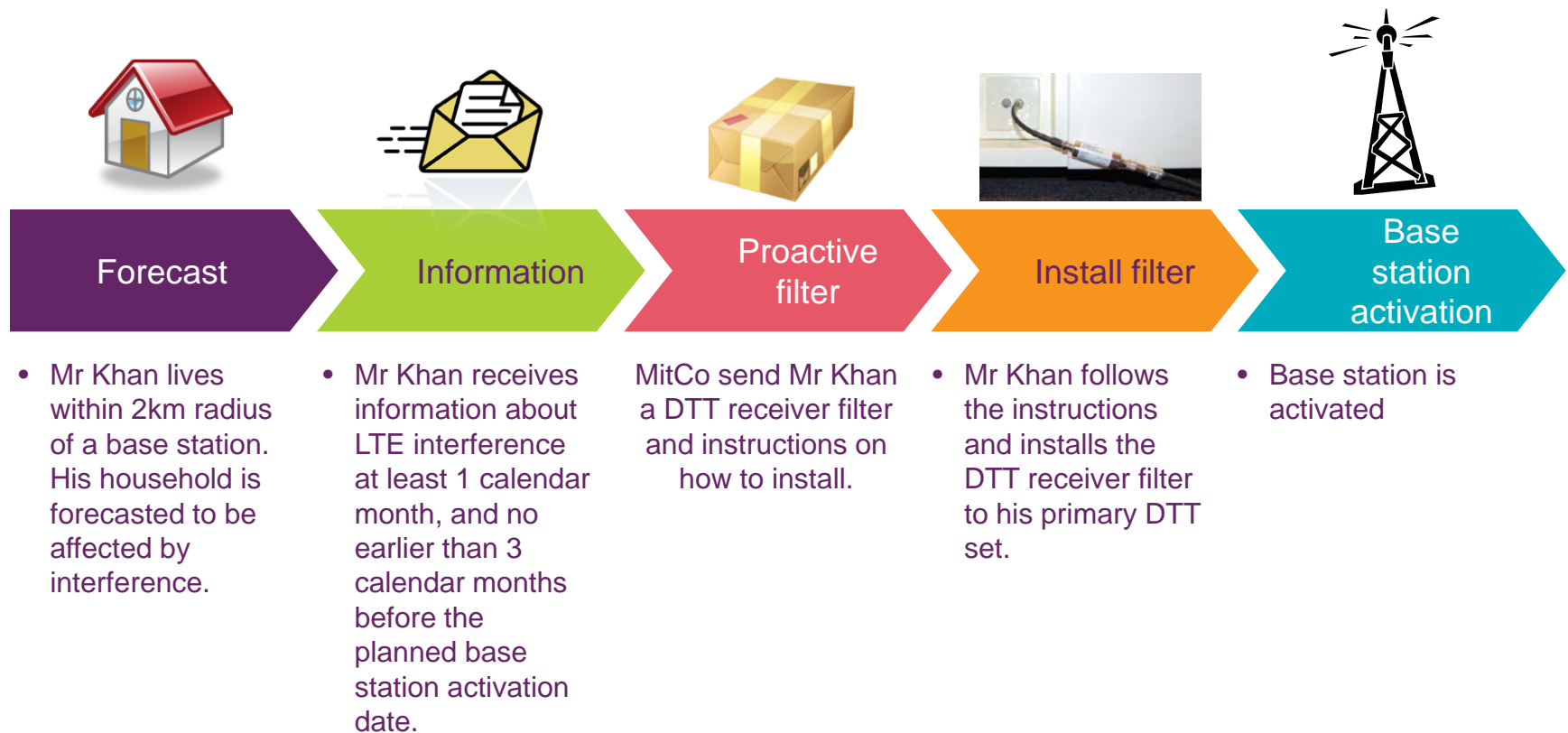
- A requirement for MitCo to provide Ofcom with a **register of base stations** that have had changes applied to them to assist with protection of DTT.
- A condition in the 800 MHz licences allowing Ofcom to incorporate this information on **network-based mitigation** to the licence as a binding condition.
- A requirement for licensees to supply Ofcom with information on any **new base stations built or power increases** at existing sites for five years from the date of MitCo's closure.

Questions?



Annexes

Working example – Proactive filter supply



KPI 1 :
Information Supply

KP2:
Proactive filter supply

Working example – Platform change supply



- Mr Allen installs a DTT receiver filter that was provided by MitCo on a proactive basis.
- A base station close to Mr Allen's house is activated
- Mr Allen begins to experience interference to his primary DTT set. He reports this to MitCo.
- MitCo investigates the issue of interference to Mr Allen's house.
- MitCo concludes that the household requires a platform change.
- Mr Allen is provided with a platform change within 8 days of confirmation of a platform change requirement by the contact centre.

KPI 5:
Platform change

Working example – Vulnerable consumer support



- Miss Patel is sent information about LTE interference at least 1 calendar month, and no earlier than 3 calendar months before the planned base station activation date.
- Miss Patel contacts MitCo regarding the information she has received.
- MitCo confirms that Miss Patel is eligible for vulnerable consumer support
- Miss Patel receives installation support within 8 working days from visit requirement confirmation by the Contact centre.

KPI 4:
Vulnerable consumer support.

Working example– operational condition for information supply



- Households forecast to experience interference to their reception of DTT services within a 2km radius of a base station do not receive information at least 1 calendar month in advance of the base station being switched on
- Switch on of the base station is delayed until such a time as MitCo can satisfy the Supervisory Board that the KPI standard has been met.
- MitCo send out information packs to those households forecasted to experience interference within a 2km radius of the base station.
- The Supervisory Board are satisfied that MitCo have adequately responded to the situation and that the standard has been met.
- Base station activated

Working example – operational condition for consumer complaints



- More than 5% of households who are entitled to request a filter, and have done so, complain, either to the licensee or to the contact centre, that they have not received a filter within five working days of making the request.
- The in-block transmission levels for the base stations are reduced by 6dB until such time as the Supervisory Board is satisfied that the Licensee is able to meet the required standard.
- MitCo take steps to resolve the situation and respond to the consumer complaints.
- The Supervisory Board is satisfied that the Licensee is able to meet the required standard.
- In-block transmission level restrictions are lifted.

**KPI 6 :
Consumer complaints**