

Response to Consultation and Preliminary Position:

The 2500 – 2690 MHz Spectrum Band

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Table of Contents

Executive Summary	3
1. Introduction	4
2. Background.....	5
3. Analysis of Responses and MCA’s Preferred Position	6
3.1 Technology and Service Neutrality.....	6
3.2 Assignment Process.....	7
3.3 Reserve for New Entrant	8
3.4 Spectrum Assignment Block	8
3.5 Pricing.....	10
3.6 Trading	11
3.7 Conditions of rights of use.....	11
4. Conclusion	13

Executive Summary

In line with the direction taken in the 'Strategic Framework for the Management of Radio Spectrum 2007-2010', on the 15 January 2008 the MCA published a consultation paper on the 2500 – 2690 MHz band. This paper gave a detailed overview of the international developments in this band, both on a regulatory and technical level as well as an analysis of the current local situation. The main thrust of the consultation was to elicit feedback from interested parties on their views vis-à-vis a number of issues.

By the end of the consultation period on the 28 February 2008, the MCA received four responses namely from:

- GO
- Melita Cable
- Vodafone Malta Ltd.
- WiMax Forum

The responses received were varied but on the whole the market response has shown that for the time being there is no latent demand for the spectrum. Moreover in the coming months the MCA will be analysing other frequency bands. It is foreseen that the outcome of this analysis and any resulting assignments will directly influence the demand for the 2500-2690 MHz band.

This paper outlines the responses received and presents the MCA's current preferred position. This position will serve as a basis for the establishment of the final spectrum assignment methodology. The final assignment methodology and licensing conditions will only be established at the time of assignment, either following a formal request for spectrum or as a result of a Government decision to issue the spectrum in question. This is to ensure that the position will reflect any developments that may have taken place in the intervening time.

1. Introduction

In line with the direction taken in the 'Strategic Framework for the Management of Radio Spectrum 2007-2010', on the 15 January 2008 the MCA published a consultation paper on the 2500 – 2690 MHz band. This paper gave a detailed overview of the international developments in this band, both on a regulatory and technical level as well as an analysis of the current local situation. The main thrust of the consultation was to elicit feedback from interested parties on their views vis-à-vis a number of issues.

By the end of the consultation period on the 28 February 2008, the MCA received four responses namely from:

- GO
- Melita Cable
- Vodafone Malta Ltd.
- WiMax Forum

The responses received were varied and in some cases exposed divergent views.

The scope of this paper is to first and foremost provide a detailed analysis of the responses received. In addition, this paper also incorporates an analysis of the developments that have taken place since January. This assessment forms the basis for the formulation of the position presented in this paper.

The overall assessment of the responses received indicates that for the time being there is no pressing demand for the spectrum. Moreover, in line with the above-mentioned Strategic Framework, the MCA will in the coming months be consulting on other frequency bands that can be considered relevant to the whole scenario. It is foreseen that these developments will directly influence the demand for the 2500-2690 MHz band.

In view of this the MCA will not be taking a final position on this band at this stage. The MCA is here presenting its preferred position. This preferred position will eventually serve as a basis for the establishment of the final assignment methodology and licensing conditions that will be adopted and which will only be established at the time of assignment, either following a formal request for spectrum or as a result of a Government decision to issue the spectrum in question. This is to ensure that the final position will reflect any developments that may have taken place in the intervening time.

2. Background

Since the publication of the consultation paper on the 2500 – 2690 MHz band a number of developments have taken place. These are outlined in this section and have been taken into consideration in drawing up MCA’s preferred position as outlined in this paper.

EU Commission

In April 2008, the Radio Spectrum Committee approved a draft decision on the 2500 – 2690 MHz band. This decision has been formally adopted by the European Commission in June 2008. The decision designates this band for systems capable of providing electronic communications services and establishes specific technical parameters that will enable the introduction of technology and service neutrality in this band, in line with the WAPECS concept. These parameters are based on the results of numerous CEPT studies conducted in the last couple of years.

Locally, this decision will be adopted by the end 2009, through an amendment of the National Frequency Plan.

Other Countries

Following Norway’s auction last November, Sweden auctioned spectrum in this band earlier this year. Other jurisdictions, such as the Netherlands, have announced similar auctions, whilst in others, notably the United Kingdom, the assignment originally scheduled for July 2008 has been postponed to a later date. The results of these assignments will in time give a clearer picture on the industry’s needs and preferences on a number of issues.

Technology

Of particular interest from the technological perspective were the numerous announcements by major exponents of the 3G and WiMAX camps on future standard evolutions.

The MCA will keep on monitoring the situation not only to keep abreast with these developments but also to better understand the impact these could have on the quality of life of the citizens both in terms of bridging the digital divide as well in making healthcare, education and other essential elements more accessible.

3. Analysis of Responses and MCA's Preferred Position

This section treats the specific questions put forward in the consultation.

3.1 Technology and Service Neutrality

In the consultation paper the MCA proposed that the principles of technology and service neutrality are upheld in an eventual assignment.

All respondents were in principle favourable to these concepts, however some parties emphasised the following specific concerns/proposals:

- that technology neutrality should be introduced gradually;
- that deployment is dependent on international standards;
- that a level playing field must be ensured.

The MCA is of the opinion that in most instances the benefits resulting from the implementation of technology and service neutrality exceed by far any resulting challenges.

The flexibility granted to the operators to deploy the most efficient technologies and the possibility to offer better services has a positive effect not only on the operators themselves but also on the end users through the deployment of innovative services.

In addition technology and service neutrality is being adopted within the parameters established by a number of technical studies thus ensuring that a technology neutral approach can effectively be implemented.

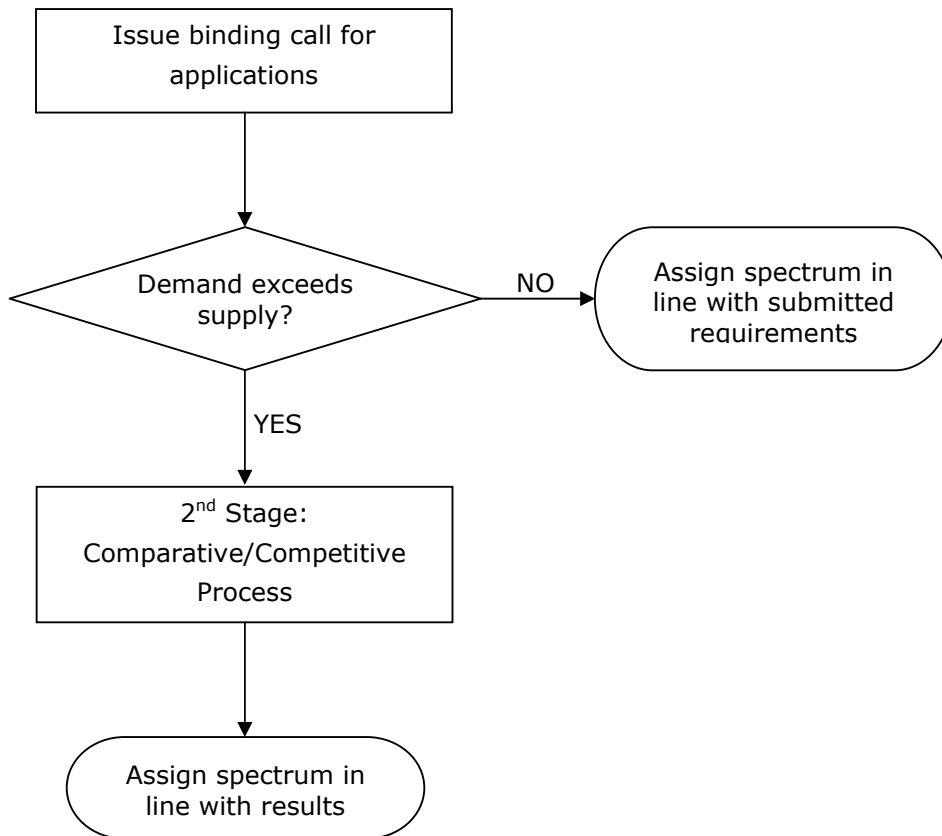
The consultation also sought to identify possible services that could be deployed in the said band. Some of the respondents stated that they would consider services that complement their existing portfolio while others deemed it premature to comment on this point.

In view of this and considering that the relevant studies have been carried out by CEPT with the results being adopted by the European Commission through decision 2008/477/EC, the MCA is of the opinion that:

The principles of technology and service neutrality are to be upheld

3.2 Assignment Process

The assignment process proposed by the MCA in the consultation paper was as follows:



All respondents were in favour of MCA's proposal to perform a market assessment as a first stage of the assignment process to determine if demand exceeded supply. On the other hand, respondents presented conflicting views in terms of the assignment methodologies to be used if demand had to exceed supply with both beauty contest and auctions being favoured. Respondents also highlighted that in the case of auctions the model chosen was crucial and that MCA should publicly consult also on this aspect.

The MCA is therefore of the view that the assignment process should be in the form of a two-stage process. As outlined in the consultation paper, the initial stage would be a binding call for applications. This application would be tied to a bank guarantee, or similar measures, meant to, as a minimum, safeguard the whole process and ensure an effective assessment of market demand.

Should demand exceed supply, a second stage of the assignment process will be undertaken. MCA's current opinion is that given the propensity towards technology and service neutrality the most appropriate award mechanism in this case would be an auction.

The MCA's current position is therefore that:

- **The assignment process will take the form of a two-stage process**
- **The first stage will be in the form of a binding call for applications**
- **An auction is favoured should demand exceed supply;**
- **The exact process will be established in the final policy which will be published closer to the date of actual assignment.**

3.3 Reserve for New Entrant

All the responses received argued that there was no need to establish a reserve for new entrants. The arguments put forward were as follows:

- a well-designed auction was adequate to promote market entry;
- a beauty contest allows new entrants an equal chance based on a sound business case as against the financial implications of an auction; and
- that there should not be discrimination against existing operators and that this might be legally questionable.

In view of the above arguments, and considering that a number of options can be considered during the design phase of the assignment process, the MCA is currently of the opinion that:

An expressed reservation of spectrum for new entrants should be avoided.

3.4 Spectrum Assignment Block

3.4.1 Channelling Arrangements

In the consultation paper the MCA had put forward a proposal to use a minimum 5MHz channel bandwidth and at the same time elicited interested parties to air their views in terms of whether preference should be given to FDD or TDD channelling arrangements.

Whilst all respondents supported the proposal to use 5MHz channels, conflicting views were presented on whether paired or unpaired allocations should be put in place. This is mainly due to the high correlation between the choice of technology and the channelling arrangements. In fact the European Commission's decision gives considerable flexibility to Member States to determine the channelling arrangements.

As a result the MCA is of the opinion that a minimum 5MHz channel bandwidth should be adopted. However given the numerous implications related to the choice on mode of operation and the impact future technological developments could have on this decision, it is decided that the exact channelling arrangement will be established at the time of assignment to better reflect the market situation at the time.

The MCA is inclined towards maintaining the flexible approach provided by the decision and will therefore determine the final channelling arrangement on the basis of the demand received in an effort to provide a best-fit. MCA's preliminary position is that:

A minimum channel bandwidth of 5MHz is to be adopted

The exact channelling arrangement will be determined at the time of assignment.

3.4.2 Spectrum caps

The consultation paper brought forward the concept that if demand exceeds supply, spectrum caps should be introduced in the second stage of assignment. This proposal caused mixed reactions from the respondents.

Some supported a spectrum cap as an effective way to ensure market entry and that no single entity is allowed to dominate the assignment process. Others sustained that spectrum should be allocated in such a way that the maximum efficiency is derived from such an assignment.

The MCA is of the view that spectrum caps can help safeguard the process in terms of limiting any potential for hoarding. This will, as much as possible, preserve efficient use of spectrum and ensure equitable access, particularly considering that at this stage considerable interest in the band would have been evidenced. If set at an adequate level, spectrum caps need not limit the flexibility of the participants or the viability of subsequent deployments.

Given the high correlation between the size of the spectrum cap and the operator's requirements, the consultation paper tried to assess what the latter would be.

However, some of the respondents felt it was premature to comment on the potential spectrum requirements they might have in the future whilst others provided indicative figures, some of them based on existing studies. Moreover, technology is evolving at a very fast pace and tomorrow's requirements could be substantially different from those envisaged today.

MCA's current position is therefore that:

The concept of spectrum caps in an eventual second assignment stage should be upheld

The exact amount of the cap will be determined in the final policy.

3.4.3 Guard Bands and Spectrum Masks

A number of interference mitigation techniques are possible, with the most popular being the use of guard bands or spectrum masks. Respondents have shown conflicting views on the subject, with some supporting the view that block edge masks allow for increased spectrum efficiency, while others simply stated that they favour guard bands.

The MCA has considered the fact that spectrum masks support spectrum efficiency and that very clear technical parameters based on studies carried out by CEPT have been established in order to minimise the risks related to such a solution.

Furthermore, the endorsement of spectrum masks in an eventual assignment does not in any way preclude the successful operators from implementing more rigid forms of mitigation techniques such as guard bands.

Therefore within this context the MCA's preferred position is that:

Allocation of spectrum will be based on the premise that spectrum masks can be used as a mitigation technique.

3.5 Pricing

In its paper the MCA discussed a number of issues related to pricing and solicited industry's view on the subject. The following points were put forward by the respondents.

- Price should be reflective of price for comparable spectrum; and
- Preference for a low reserve price as a basis for an auction.

The value of spectrum is in itself related to a number of factors including but not limited to the technical developments and the possibility of services to be deployed. Therefore in order to ensure that the price reflects the true value of the spectrum, this will be established at the time of assignment and will take into consideration the points raised above.

Pricing to be established in the final policy, closer to the time of assignment

3.6 Trading

The consultation paper put forward the concept of spectrum trading and how this would possibly affect the licensees.

While most of the respondents favoured spectrum trading, some of them pointed out that in their view this should only be introduced after a careful study that took into account several issues.

Considering the EU-wide debate on the proposed amendment to the regulatory framework, MCA's current position is that:

The introduction or otherwise of spectrum trading will be established in the final policy and will take into consideration developments in respect of the regulatory framework.

3.7 Conditions of rights of use

The MCA consulted on the establishment of a 36-month rollout timeframe.

Some respondents were not in favour of such measures given that these conflict with an auction proposal. While others considered it premature to comment on specifics at this early stage.

The MCA is of the view that any conditions linked to the rights of use, including but not limited to the maximum rollout timeframes, if announced prior to the assignment, can be adequately taken into account by the participants during an eventual auction assignment. The interested participants would be fully aware of the said conditions and therefore would be in a position to factor these in their bidding strategy, including the maximum price they would be ready to pay for the spectrum in question.

Given the implications both the assignment methodology as well as the review of the regulatory framework could have on potential conditions linked to the rights of use, the MCA is currently of the view that:

The conditions to be attached to the rights of use will be established as part of the final policy, closer to the time of assignment.

4. Conclusion

The following is a summary of MCA's current preferred position as discussed in this paper:

- The concepts of technology and service neutrality should be upheld
- A two-stage assignment process to be established
- Demand assessment to take place through a binding call for applications
- Should demand exceed supply, an auction process is preferred
- Should demand exceed supply, spectrum caps to be introduced
- Spectrum masks to be adopted as the preferred interference mitigation technique

At this stage it is not envisaged that a call for applications for rights of use of spectrum in this band will be issued by the MCA, unless there is market demand or following Government's initiative. In such a case, a further round of consultation will be undertaken to establish the final spectrum assignment process. This process will take into account the MCA preferred position outlined in this document as well as the developments that would have taken place by then.

Ing Philip Micallef

Chairman

19 November 2008