

Response to Consultation:

The Future of the 900 MHz and 1800 MHz Spectrum Bands

Annex to MCA Decision on the Assignment Methodology and Licence Conditions

Document No:	MCA/10/45/O
Date:	16 July 2010

Malta Communications Authority

Valletta Waterfront, Pinto Wharf, Valletta FRN1913, Malta, Europe

Telephone: +356 21 336 840

Facsimile: +356 21 336 846

Web: <http://www.mca.org.mt>

Table of Contents

1. Introduction	3
2. Analysis of Responses and MCA's Position	4
2.1 Assignment Process.....	4
2.2 Spectrum Assignment Block	7
2.3 Spectrum Caps	9
2.4 Spectrum Pricing.....	10
2.5 Licence Conditions	11
2.6 Other Considerations	13

1. Introduction

The 900 MHz (880 – 915 MHz / 925 – 960 MHz) and the 1800 MHz (1710 – 1785 MHz / 1805 – 1880 MHz) bands provide 110 MHz of paired spectrum. Since 1990, a number of licences were assigned to local operators in these bands. These rights of use are due to expire in 2010 and 2011.

In February 2009, a consultation paper was published outlining a proposed strategy for the future of the 900 MHz and 1800 MHz bands in Malta¹. Submissions were received from:

1. Ericsson
2. GO plc
3. Mater Dei Hospital
4. Melita plc
5. Vodafone (Malta) Ltd

This paper provides an analysis of the responses received and the position taken with respect to the various matters raised by the respondents.

The outcome of this analysis was taken into account in the Final Decision concerning these bands.

¹ <http://www.mca.org.mt/newsroom/openarticle.asp?id=695&source=2>

2. Analysis of Responses and MCA's Position

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

2.1 Assignment Process

2.1.1 MCA's Consultation Proposals

In the consultation paper the MCA proposed that the assignment process would be carried out in two stages. The first step would entail an assessment of the market demand for the spectrum in question, through a binding call for applications. If, following the first phase, it results that demand for the available spectrum exceeds supply then the MCA proposed that an auction would be the most appropriate assignment mechanism for the various channels in the two bands.

The consultation paper also proposed that the two bands (900 MHz and 1800 MHz) would be issued simultaneously. The paper also considered the possibility that the supply and demand situation in the two bands would be different and a number of options for dealing with such a situation were put forward for consideration. In summary the options put forward were:

Option 1: Direct assignments of channels in a band are carried out only if demand for spectrum in that band does not exceed supply, while if demand for spectrum in a band exceeds supply, all the channels in this band are auctioned.

Option 2: Where demand for channels in a band does not exceed supply, the requested amount of channels will be directly assigned. Any remaining spectrum in this band will be auctioned together with spectrum in the band where demand exceeds supply.

Option 3: Spectrum in both bands is auctioned if demand in any band exceeds supply.

2.1.2 Responses Received

The responses received presented significantly divergent views on the subject. A respondent favoured auctions while another respondent expressed its preference for a beauty contest justifying this on the grounds that this takes into account factors other than the price.

One of the respondents also suggested that the two bands are assigned through similar but sequential processes with the 900 MHz band being assigned first.

With regards to the possibility of different demand scenarios in the two bands, one of the respondents indicated that it would prefer if there was a provisional assignment in the band where demand didn't exceed supply (Options 1 and 2). On the other hand, another respondent was of the opinion that, should this situation arise, it would be best if both spectrum bands were auctioned simultaneously (Option 3).

2.1.3 Response Evaluation

Comparative and competitive assignment processes answer different regulatory requirements. Auctions do not take into account any considerations, other than the price, awarding the spectrum to the applicants that value the spectrum most. On the other hand, a beauty contest involves a more complex evaluation and does not give any weighting to financial considerations.

The Authority has therefore put together a process that aims to strike a balance between the two approaches, by making the necessary evaluations to ensure the ability of the applicant to utilise the spectrum effectively, whilst still awarding the spectrum on the basis of an auction in the event that demand exceeds supply.

The first step in the process will be a qualification phase which will take the form of an extended due diligence. This step in the process has the objective of establishing those applicants that can be considered for the award of spectrum and will not establish any applicant ranking.

The spectrum requests of the qualifying applicants will be assessed in order to establish if demand for the number of channels in any particular band exceeds supply in which case the award process will proceed to the second step.

With respect to the second step, the Authority has taken note of respondents' concerns that auctions could lead to substantially increased spectrum costs. In order to mitigate this eventuality the Authority is reserving the option to introduce into the process a set of brokered meetings, aimed at identifying an assignment arrangement that addresses the requirements of all the qualifying applicants thereby avoiding the need for an auction. If the proposed assignments arrived at through the said meetings are accepted by all the parties, the Authority will proceed with the granting of rights of use according to the agreement reached.

With respect to the separation of the assignment processes of the two bands, the Authority continues to be of the opinion that, given the considerable complementary and substitutable characteristics of the bands in question, the separation of the assignment process would result in increased uncertainty. By the MCA treating requests for, and awarding, the rights of use of spectrum in both bands in the same process, applicants would be in a position to fully exploit the complementarity and substitutability of spectrum in the two bands.

In terms of the options available to deal with the different demand scenarios, each option presented in the Consultation has its advantages and disadvantages. In cases where demand for the number of channels in a particular band exceeds supply, the Authority will seek to reach an agreement with all qualifying applicants as to how the spectrum is to be divided between them without resorting to an auction. For this purpose the MCA will consider holding brokered meetings with all applicants to seek to achieve consensus on the number and type (i.e. in which band) of channels to be assigned to each of the applicants.

If such agreement is not reached, the Authority envisages the possibility to reach an agreement with applicants on the assignment of part of the available spectrum by awarding a minimum number of channels to each of the qualifying applicants, whilst the remaining amount of channels will be auctioned.

In the absence of consensus, or should the MCA decide not to hold brokered meetings, then no partial assignments will be made and all the spectrum in both bands will be auctioned.

Summary of MCA position:

The assignment process for the 900 MHz and 1800 MHz bands will be carried out simultaneously.

The assignment process will be launched by a binding call for applications. Interested persons will be requested to apply for their desired number of channels in the two bands. The applicants will be asked to express their preferences for any particular channel(s) in the bands.

The assignment process will be as follows:

The first step will be a qualifying phase based on an extended due diligence process. Following this process, in the event that the number of channels in a particular band applied for by those applicants that would have passed the scrutiny does not exceed supply the assignment will be concluded after this phase.

The second step, will take place at the Authority's discretion, and will kick in should demand for a number of channels in a particular band exceed supply. This stage will involve brokered meetings aimed at finding an assignment that is acceptable to all parties.

If no acceptable solution is arrived at, or should the MCA decide not to hold brokered meetings, an auction will be held.

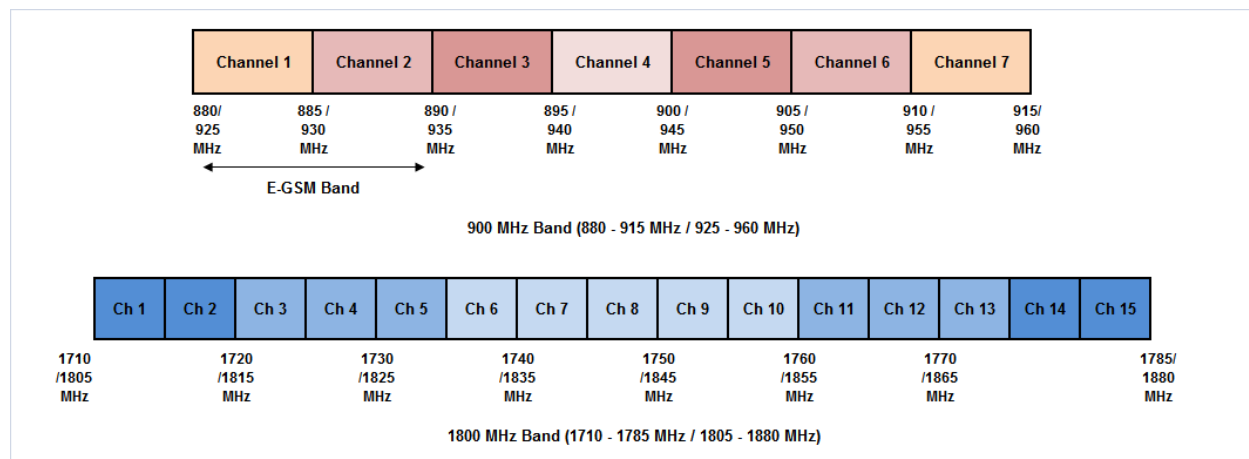
In the brokered meetings, applicants will have the option to accept an assignment of part of the spectrum with the remaining spectrum going to auction. Such an approach will be adopted if all applicants take up this option. If a common agreement cannot be reached, then all the spectrum in both bands will be auctioned.

2.2 Spectrum Assignment Block

2.2.1 MCA's Consultation Proposals

In the consultation paper the MCA considered that a paired allocation with 5 MHz channel bandwidth would be the most appropriate so as to maximise flexibility in spectrum usage by the operators.

The MCA also proposed that no guard bands were to be established between the different spectrum assignments resulting in the following channelling plan:



This setup also implied that each channel would constitute a spectrum lot on its own right.

2.2.2 Responses Received

Two of the respondents fully agreed with the proposals put forward, subject to the successful applicants being granted a contiguous assignment. Another respondent, whilst in agreement with the overall channelling plan, expressed some misgivings on the proposal of single spectrum lots. This respondent however did not suggest an alternative solution.

2.2.3 Response Evaluation

Since the publication of the consultation paper, the Commission Decision 2009/766/EC on the harmonisation of the 900 MHz and 1800 MHz bands was adopted. This establishes technical parameters that are based on a channelling plan identical to that originally proposed by the MCA. This channelling plan has now also been formally adopted in the National Frequency Plan.

The response to consultation has revealed diverging spectrum requirements amongst the respondents and hence in order to safeguard and ensure equitable access to spectrum for all the interested parties, the MCA is of the opinion that spectrum channels should not be packaged into pre-defined lots.

Summary of MCA position:

The channelling plan as established in the National Frequency Plan applies.

The bands will be divided into single 5 MHz paired channel lots.

2.3 Spectrum Caps

2.3.1 MCA's Consultation Proposals

In the consultation paper the MCA had proposed that at the call for application stage no spectrum caps would be defined however should demand exceed supply, a spectrum cap would be introduced as follows:

- an overall cap of eight (8) 5 MHz-channels will be established with a limit of four (4) channels in the 900 MHz band.

2.3.2 Responses Received

Three of the respondents commented on the stage for introduction of the spectrum caps suggesting that the spectrum caps should be introduced at the call for application stage.

Four respondents provided their views on the proposed quantum of the spectrum caps. However, they gave conflicting views in terms of the details of the spectrum cap's composition.

2.3.3 Response Evaluation

The Authority is of the view that capping the maximum number of channels that may be assigned to applicants is conducive to greater efficiency in spectrum usage. By setting reasonable caps the MCA should be able to strike the balance between the operators' will to maximise the usage of the spectrum available, and enhancing a greater number of licence holders and hence greater competition, to the benefit of the end user.

The Authority therefore agrees with respondents' view that given the strategic importance of this spectrum and the level of anticipated demand in the 900 MHz band, the introduction of an overall spectrum cap, and a spectrum cap for this band at the call for applications

stage will help to manage the demand. The Authority has therefore revisited its initial proposal and will be introducing spectrum cap at the call for applications stage.

With regards to the size of the spectrum cap, the Authority does not consider the need to limit the maximum cap in the 900 MHz band further to that proposed in the consultation. In doing so the MCA seeks to strike the balance between allowing applicants that value this spectrum most to acquire it via the assignment process and ensuring the desired level of competition in the market. In such a scenario the spectrum cap *per se* does not give a clear advantage to any player.

Based on this analysis, the following will be adopted:

The following spectrum caps will be introduced at the call for application stage:

an overall cap of eight (8) 5 MHz-channels will be established with a limit of four (4) channels in the 900 MHz band.

2.4 Spectrum Pricing

2.4.1 MCA's Consultation Proposals

The consultation paper indicated a base price of €2,250,000 for a block of 5 MHz of paired spectrum for the proposed licence duration of 15 years for both the 900 MHz and 1800 MHz bands.

Since, the adoption of a one-off fee structure can result in onerous obligations for market players, particularly new entrants, a number of payment options were put forward for consultation.

2.4.2 Responses Received

Three of the respondents requested further clarifications from the MCA regarding the mechanism adopted to establish the base price. One of these respondents further claimed that the proposed spectrum fee was higher than the existing fees and that a lower price for the 1800 MHz band should be considered.

With regards to the payment options, two of the respondents preferred staggered payments, one of which proposed a payment timeframe shorter than the 15 years

envisaged in the consultation paper. The other respondent proposed that the MCA should consider the waiving of any interest charges on operators and that the fees should be 'tapered to accommodate better the impact on a start-up operator'. Other than this no preference for any of the proposed payment options was expressed.

2.4.3 Response Evaluation

Taking into account these responses Government has decided that in order to limit the impact on operators the spectrum fee will be established as an annual fee set at €224,000 for a 5 MHz channel. This fee will apply to both the 900 MHz and 1800 MHz bands.

In the event of an auction the base price for the auction will be €224,000 for every 5 MHz block. The auction price will need to be paid upon conclusion of the auction and will replace the first year fees. In subsequent years, the annual fee of €224,000 for every 5 MHz block will apply.

This new fee structure will replace the existing fees established in the Eleventh Schedule of the Electronic Communications Networks and Services (General) Regulations (S.L.399.28 of the Laws of Malta) through an amendment of the said Regulations.

2.5 Licence Conditions

2.5.1 MCA's Consultation Proposals

In the consultation paper the MCA proposed that the spectrum be assigned for a licence term of fifteen (15) years. The MCA also proposed that the licence conditions be in line with the proposed EU decision on the harmonisation of the 900 MHz and 1800 MHz bands, namely the licence conditions would:

- make this spectrum available primarily for GSM and UMTS; and
- include specific technical conditions aimed at ensuring the co-existence of GSM and UMTS in the same bands.

The MCA was also of the view that any rights of use of spectrum in the 900 MHz and 1800 MHz bands should be service neutral.

The consultation paper also proposed a 24 month nationwide service roll out obligation with sanctions including 'use it or lose it' clauses being included in the licence.

2.5.2 Responses Received

Licence Term:

Two of the respondents were in favour of the licence term duration. Other respondents didn't register any objection.

Technology Neutrality

Three of the respondents were in favour of technology neutrality. However one of these respondents was of the opinion that the concept of technology neutrality should be taken further and successful applicants should be allowed to deploy other technologies apart from GSM and UMTS.

Service Neutrality

Three of the respondents were in favour of service neutrality. Other respondents didn't register any objection.

Rollout obligations

Two of the respondents were in favour of the rollout obligations. Other respondents didn't register any objection.

Sanctions

Responses that addressed this matter were in favour.

2.5.3 Response Evaluation

Given that responses were in support of the proposed licence term, service neutrality concept, the rollout obligations and sanctions, these will be maintained as proposed.

With respect to the technology neutrality concept, the Commission Decision 2009/766/EC adopted in 2009 refers to GSM and UMTS. It also states that, whilst Member States may allow other technologies to be deployed in these bands, Member States have to ensure non-interference with GSM and UMTS. The MCA will be issuing these licences for GSM and UMTS

technologies reflecting the requirements of the Commission Decision. Any possibility for the introduction of other technologies will be considered separately and at a time when new technical parameters are established at an EU level to ensure the optimum spectrum utilisation.

In view of the above, the Authority will be taking the following position:

Rights of use will be granted for a fifteen year term.

The technical conditions will be in line with 2009/766/EC. Rights of use will be service neutral.

Successful applicants will be required to make their services available nationwide within 2 years from the grant date.

Sanctions including a 'use it or lose it' clauses will be included in the licence.

2.6 Other Considerations

2.6.1 MCA's Consultation Proposals

The consultation paper proposed that the assignment process would start immediately after the publication of the Authority's final position. At the time it was envisaged that the decision would be published in Q2 2009.

The MCA had also requested interested parties to put forward any issues related to the subject which were not specifically raised in the consultation document.

2.6.2 Responses Received

Two of the respondents stated that in their opinion the re-assignment process should be carried out at later date than indicated in the consultation document, i.e. Q3 2009.

A respondent highlighted the fact that to-date a paging network, providing emergency services, operates on the 900 MHz band. It was highlighted that given the nature of the service, the proposed fees were too high to ensure financial viability in the future of such a network.

Another respondent expressed the view that given that current spectrum requirements would change if a full migration to UMTS had to happen within the timeframe of the licence, and given the substantial fees involved, successful applicants should be given the possibility to hand back the spectrum in the 1800 MHz band prior to the expiry of the licence.

Moreover two of the respondents requested clarifications on interim arrangements that would be put in place to cover the period from the expiry of the current licences to the date when the new rights of use of spectrum would become effective.

2.6.3 Response Evaluation

Timing of the Assignment

The timing of the assignment has been delayed from that originally proposed in the consultation. The revised timings take into consideration the current licence termination dates.

Paging Services

Emergency services are undoubtedly important and they must continue to be provided. At the same time the co-existence of paging and mobile technologies has a negative impact on the considerable economic potential of this band as it results in considerable swathes of the 900 MHz band remaining unassigned. On the basis of an impact assessment that has been carried out, Government has decided to issue the spectrum in line with the directive and not to make any special provisions for the maintenance of a national paging network on this band.

Handback Clause

The MCA is of the view that a hand back clause increases the risk of distorting the outcome of the auction. It is therefore of the view that this should only be considered in instances where at any stage of the process demand for spectrum in that particular band did not exceed supply.

Interim Arrangements

In order to ensure a smooth migration, short extensions should be given to existing licensees to cover the period from the individual termination dates to the date on which the new rights of use of spectrum would become effective. Such an extension should in no way be construed as an automatic renewal of the existing rights of use.

In view of the above, the Authority will be taking the following position:

The assignment process for the 900 MHz and 1800 MHz band should start shortly after the publication of the MCA Decision.

Hand back of spectrum will be allowed in those bands where demand never exceeded supply throughout the course of the assignment process.

Short extensions will be given to existing licensees to cover the interim period.