

## **The Future of the 900 MHz and 1800 MHz Bands**

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MCA Decision on the Assignment Methodology and Licence Conditions

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## 1. Introduction

The purpose of this document is to inform the public of the assignment process that will be adopted in respect of the 900 MHz and the 1800 MHz bands.

This document also provides information as to the steps that will be taken by the Malta Communications Authority (MCA) in respect of the assignment of these frequencies and sets out a clear course for the selection of prospective rights of use holders.

This document also captures the outcome of the public consultation launched in February 2009 with respect to the assignment of spectrum in these bands.

### 1.1 Background

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, three licences<sup>1</sup> have been assigned to local operators in these bands. These rights of use are due to expire in the period between 2010 and 2011.

In February 2009, the Malta Communications Authority (the 'Authority') published a consultation paper outlining a proposed methodology for the reassignment of spectrum in these bands<sup>2</sup> together with the applicable licence conditions. Responses to consultation were received from the following entities:

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

The submissions received put forward a number of considerations and differing opinions regarding the proposed assignment process. The Authority held further discussions with these respondents to better assess their positions. The Authority's evaluation of the response to consultation is captured in the annex to this document.

The MCA takes the opportunity to thank all respondents for their contributions.

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<sup>1</sup> MobIsle Ltd, Telepage Ltd and Vodafone Malta Ltd

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

## **1.2 Principles Underpinning Spectrum Management**

The assignment of spectrum is based on a set of fundamental principles:

- spectrum is a limited national resource and must be used efficiently and effectively;
- operators have time-bound rights of use of spectrum and NOT ownership;
- if demand exceeds supply, a fair, transparent and non-discriminatory competitive assignment process is necessary to determine who is entitled to hold the rights of use; and
- a competitive selection process for the award of radio spectrum can be based on qualitative (beauty contest) and/or quantitative (auction) criteria depending on circumstances.

The above principles underpin the assignment methodology and the licence conditions that are being put forward in this decision.

## 2. Spectrum to be Awarded

### 2.1 Spectrum Bands

The spectrum bands that are the subject of this decision are the 900 MHz (880 – 915 MHz / 925 – 960 MHz) and the 1800 MHz (1710 – 1785 MHz / 1805 – 1880 MHz) bands. These provide a total of 110 MHz of paired spectrum. These bands will be issued simultaneously.

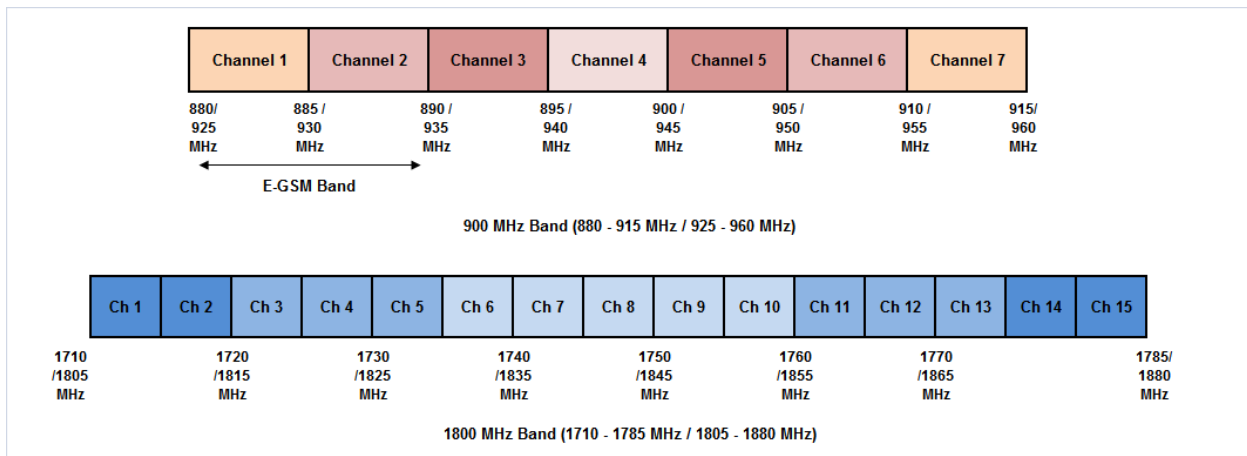
### 2.2 Technology

The grants of rights of use of this spectrum will be subject to the technical conditions stipulated in the EU decision 2009/766/EC on the harmonisation of the 900 MHz and 1800 MHz bands.

### 2.3 Channelling Plan and Interference Mitigation Technique

The 900 MHz and 1800 MHz bands will be divided into a number of paired 5 MHz channels. No guard bands will be established between the 5 MHz blocks and the technical parameters established in the Commission Decision 2009/766/EC and Commission Directive 2009/114/EC will be applied.

In view of this, the channelling plan for the 900 MHz and 1800 MHz bands will be as follows:



## 2.4 Spectrum Caps

In order 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, the following spectrum cap will be applied at the call for application stage:

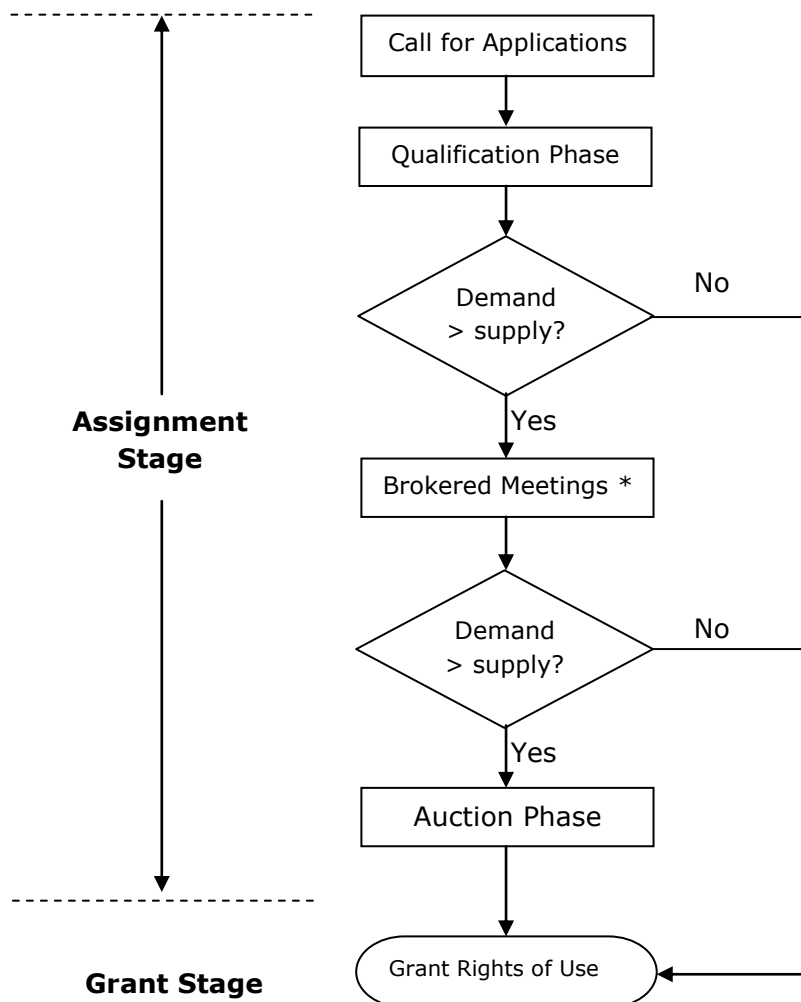
An overall cap of eight (8) 5 MHz-channels will be applied over both bands with a limit of four (4) channels in the 900 MHz band.

This spectrum cap will also apply following the finalisation of the re-assignment process and no person shall hold more than one licence for the rights of use of spectrum in these bands. The amount of spectrum awarded to any one single applicant will not exceed the spectrum cap established above.

### 3. Assignment Process

#### 3.1 Process Overview

The process for the assignment of spectrum in these bands will be as follows:



\* The Brokered Meetings will be held at the Authority's discretion

The process is divided into two main stages the Assignment stage and the Grant stage.

The **Assignment Stage** will establish the number and type (i.e. in which band) of lots awarded to each successful applicant. Each 5 MHz paired channel will be considered a single lot.

The **Grant Stage** will establish the specific lots that will be awarded to the successful applicants and will be concluded with the issuance of the rights of use documents.

## 3.2 Assignment Stage

### 3.2.1 Call for Applications

The process will be launched with a Call for Applications ('Call').

As part of their submission, the applicants will be required to:

- pay a non-refundable application fee;
- submit an appropriate bid bond/performance guarantee. The bid bond is intended to ensure an applicant's commitment to the assignment process, lasting up to the award of a grant of rights of use. In the case of unsuccessful applicants the bid bond will be released at the end of the assignment process and once the successful applicants have been announced. In the case of successful applicants the bid bond will be maintained as a performance guarantee. The performance guarantee will serve as evidence of good faith, to guarantee that the licensee will honour the winning bids and will abide by the licence conditions; and
- submit an appropriate deposit which will be reflective of the first year spectrum fees and the applicant's spectrum requirements.

Applicants will not apply for specific frequencies in the two bands but for a number of paired 5 MHz channels (lots) in each of the two bands. Applicants will need to state the maximum number of lots in each band that they may eventually apply for throughout the course of the process ('Maximum Interest').

In addition applicants will be required to state their preferred combination of channels in the two bands ('Preferred Option'). The overall demand for channels in each of the bands will be determined by the MCA on the basis of the Preferred Option submitted by all the applicants.

In addition to the Preferred Option, applicants will be required to indicate alternative options that would suit their needs in the case that demand for the spectrum exceeds supply ('Alternative Options'). This information will be used in the event that brokered meetings are required.

In expressing both their Preferred and Alternative Options, the applicants must abide by the spectrum caps mentioned in Section 2.4 and any application containing an option that exceeds the spectrum cap will be disqualified.

In no case shall the number of channels in each band expressed by the applicants in their Preferred and Alternative Options exceed the Maximum Interest declared by them as mentioned above.



### 3.2.2 Qualification Phase

The qualification process will assess whether applicants have the necessary standing to fulfil the licence obligations should they be successful in acquiring the spectrum rights. It will not rank applicants. The outcome of this phase will be a pass/fail result based on a set of criteria including but not be limited to:

- The applicant's credentials;
- The applicant's experience in the establishment, operation and commercialisation of electronic communications networks;
- The applicant's business plan;
- The financial viability of the project; and
- Access to adequate financing for the venture.

At the end of the Qualification Phase an assessment of the demand for spectrum by the qualifying applicants will be carried out. If demand in each band (as expressed in the applicants' Preferred Options) does not exceed supply, then the rights of use of spectrum will be granted directly to the applicants in line with the process outlined in section 3.3 below.

### 3.2.3 Brokered Meetings

In the event that demand exceeds the availability of spectrum in any of the bands, the Authority reserves the right at its own discretion and without binding itself to do so, to carry out a set of brokered meetings with the qualifying applicants. The objective of these meetings will be to reach an agreement on an assignment plan that addresses the requirements of all the qualifying applicants. In order to protect commercial interests, the meetings will be held separately with each qualifying applicant.

In developing the proposals cognisance will be taken of the spectrum requests put forward by the applicants, the preferences indicated, their business and technical plans and the outcome of the discussions during the meetings.

If the proposal so developed is accepted by all the parties then the Authority will proceed with the granting of rights of use in accordance with the agreement reached.

In the absence of a full agreement being reached at the end of the brokered meetings, an attempt will be made to reach agreement, to assign parts of the spectrum, whereby only the remaining channels would be auctioned.

Any proposed solution reached between the MCA and each of the qualifying applicants will be binding on the individual applicants but not on the MCA in view of the fact that the MCA must first ensure that the proposed solution reached fits within an overall solution acceptable to all the qualifying applicants.

In the event that no agreement (whether full or partial) is reached between the qualified applicants and the MCA, or should the MCA decide not to hold brokered meetings, all the spectrum in both bands will be auctioned.

### 3.2.4 Auction

The auction design will take due account of the complementary and substitutable characteristics of the bands in question and will provide for:

- package bidding: applicants will be required to simultaneously bid for lots in the 900 MHz and 1800 MHz bands<sup>3</sup>. All combination bids submitted by each applicant at any stage of the auction must be in line with its expressed "maximum interest", the spectrum caps mentioned above and any other criteria that will be established in the Auction Rules as part of the Call for Applications; and
- avoidance of default by bidders: measures such as deposit top-ups will be in place.

Qualifying applicants will be obliged to take part in at least the first round of the auction stage. Failure to do so will result in a forfeit of the bank guarantee.

## 3.3 Grant Stage

As part of their submissions to the Call, interested parties will be invited to indicate their ranked preferences for particular frequency channels in a given band/s and provide a justification for such preference. This in no way would tie down the Authority to assign the frequencies in accordance with the expressed preferences of applicants. The Authority would have the sole and unlimited discretion to award the particular channels in the way it deems best in the interest of spectrum efficiency.

Once the outcome of the assignment stage<sup>4</sup> is known, the Authority will proceed to the award of the specific contiguous swathes of spectrum to each successful applicant. Should there be no way to easily reconcile the applicants' preferences, then a lottery will be used to determine the band assignments.

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<sup>3</sup> For sake of clarity it is being emphasised that applicants will apply and eventually bid for "a number" (quantity) of channels in each of the two bands and not for specific (identified) channels in each of the two bands

<sup>4</sup> The **Assignment Stage** establishes the number of lots in each band awarded to each successful applicant.

### **3.4 Future of Unassigned Spectrum**

In the event that any spectrum remains unassigned, the Authority will establish whether to make a fresh call for applications or whether to wait for further market interest to be expressed to trigger a call.

## **4. Conditions of Rights of Use and Spectrum Charges**

### **4.1 Spectrum Pricing**

Government has established that the annual spectrum fee for a 5 MHz channel in both the 900 MHz and 1800 MHz band will be €224,000.

As outlined in Section 3.2.1, applicants will need to submit an appropriate deposit which will be reflective of this fee and the applicant's spectrum requirements. Upon conclusion of the assignment process, and prior to the issue of the rights of use, the successful applicants will be required to pay the difference in price between the deposits made and the first year spectrum fee of €224,000 for every 5 MHz block.

In the event of an auction, the successful bidder will also be obliged to pay the difference in price between the said €224,000 for every 5 MHz block, and his final bid price. This balance will have to be paid immediately upon conclusion of the auction.

The starting price for every bid will be that of €224,000.

In addition to the above, the successful bidder will have to pay an annual fee of €224,000 for every 5 MHz block for the entire duration of the licence for the rights of use of the spectrum awarded to him.

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.

### **4.2 Licence Duration**

The rights of use of spectrum will be assigned for a term of fifteen (15) years.

### **4.3 Service Neutrality and Technology**

Rights of use will be granted under the technical conditions stipulated in the EU decision 2009/766/EC on the harmonisation of the 900 MHz and 1800 MHz bands. The rights of use will therefore enable holders to deploy either GSM and/or UMTS technology over the awarded frequencies.

The Authority retains its right to amend the assignments made, and any of the terms and conditions of the licence to reflect legal developments that are imposed upon it, EU

harmonisation requirements and to cater for other pressing needs that the local market may have during the duration of the licence, taking due account of its obligations at law.

No limitations with respect to the services that may be offered over the spectrum acquired in this process will be imposed. However the MCA will reserve unto itself the power to impose certain service obligations in accordance with law.

#### 4.4 Network Coverage and Rollout Obligations

In order to ensure maximum benefits for all the users, licensed operators will be required to make any service they offer available on a nationwide basis. Successful applicants will have up to 24 months from the date of assignment to come in line with this obligation and to maintain it from then onwards for the whole duration of the licence.

#### 4.5 Handback clause

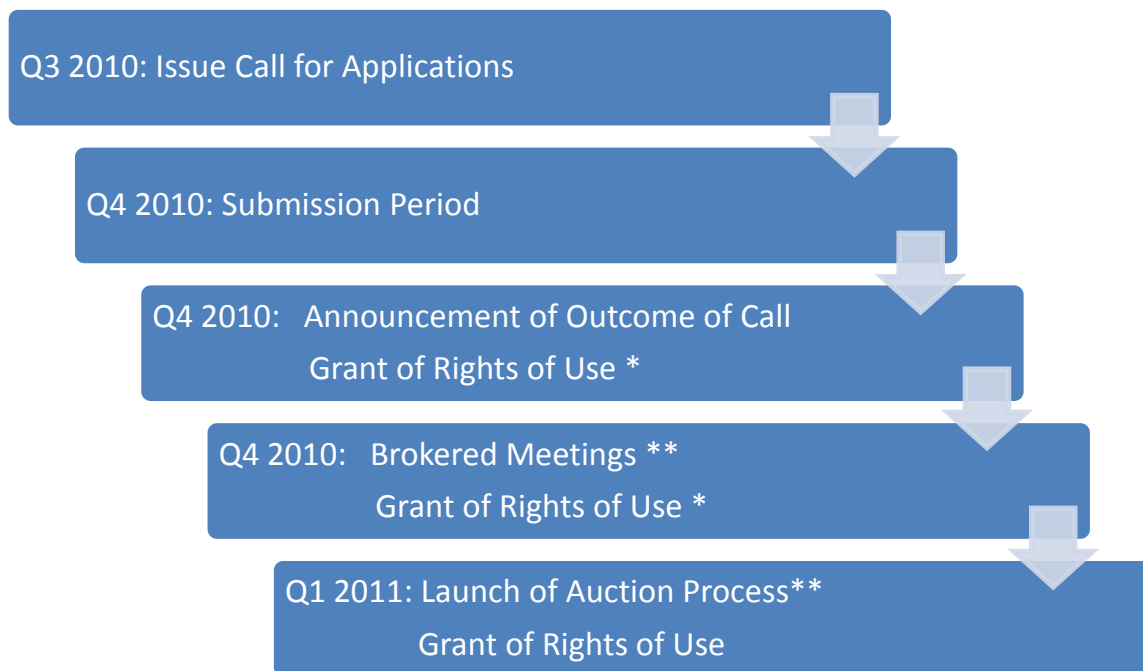
In the case that demand for spectrum in a given band does not exceed supply at any stage in the assignment process, then successful applicants will be able to hand back all or part of their spectrum assignment in **that** band. In this case these applicants will not be required to pay any future spectrum fees related to the channels handed back, but will not be entitled to a refund of those fees already paid or that were due by them until the date of the handback.

The handback provision however does not exonerate the applicant in question from honouring its rollout obligations in accordance with the licence awarded to it. In the event that the applicant fails to comply with these obligations, penalties including, but not limited to, a forfeit of the bank guarantee, will apply.

## 5. Implementation

To date the existing licences in the 900 MHz and 1800 MHz bands have different termination dates. In order to ensure a smooth migration, the existing GSM licences are being extended until the commencement of the licences that will be awarded in accordance with this process.

With respect to the re-assignment process, the envisaged timeframes are as follows<sup>5</sup>:



\* If demand does not exceed supply

\*\* If required

### Note:

The above timeframes are indicative and do not bind the Authority to adhere to them.

It should also be noted that following the re-assignment process a migration plan might need to be developed between the interested parties in order to enable the new rights of use to take effect. In this case, further extensions to the existing licences may need to be granted to avoid gaps in between the cut-off date of the existent licences and the commencement of the new licences.

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<sup>5</sup> The envisaged timelines do not bind the MCA to adhere strictly to the timings laid down. Whereas the MCA shall make all reasonable endeavours to comply with the said timings, it shall not be responsible in any way whatsoever for any deviation from these envisaged timelines, and may change these as it deems fit according to the circumstances.

## 6. Summary of MCA Decision

- A binding Call for Applications will be issued for spectrum in both the 900 MHz and 1800 MHz bands.
- The assignment process for the 900 MHz and 1800 MHz bands will be carried out simultaneously.
- Spectrum will be assigned in multiples of paired 5 MHz channels.
- The assignment process will be as follows:
  - The first step will be a qualifying phase based on a number of criteria.
  - Should the available spectrum be sufficient to cater for the registered demand, then the spectrum will be assigned directly to all qualified applicants in line with their requirements.
  - The second step will kick in should demand exceed supply. The Authority reserves the right to hold brokered meetings with the qualifying applicants aimed at finding an acceptable assignment for all parties.
  - If no solution is arrived at, or should the MCA decide not to hold brokered meetings, an auction for all the spectrum in both bands will be held.
- If the MCA decides to attempt a solution through brokered meetings, applicants may be given the option to accept a partial assignment of spectrum with only part of the 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.
- No guard bands will be established between the 5 MHz blocks.
- Spectrum caps will be introduced at the call for application stage.
- An overall cap of eight (8) 5 MHz-channels will be applied across both bands, with a limit of four (4) channels in the 900 MHz band.
- Rights of use will be granted for a fifteen year term.
- Rights of use will be service neutral.
- Rights of use will be granted under the technical conditions stipulated in the EU decision 2009/766/EC on the harmonisation of the 900 MHz and 1800 MHz bands.
- The successful applicants will be required to make their services available nationwide within 2 years from the grant date.
- Sanctions such as a 'use it or lose it' clauses will be included in the licence.
- Hand back of spectrum will be allowed in those bands where demand never exceeded supply throughout the course of the assignment process.

**Ing. Philip Micallef**

**Chairman**