

# Numbering Resources for M2M/IoT Connectivity Services

(and other Non-Interpersonal Communications Services (Non-ICS))

Consultation to update the MCA Decision 'Development of the Numbering Plan'

29th March 2019

MCA/C/19-3510



# TABLE OF CONTENTS

1.	Purp	ose of Consultation	1
2.	Defin	itions	2
3.	Back	ground and Proposed Approach	4
	3.1	General	4
	3.2	National Numbering Resources	4
4.	Numb	ering Resources for M2M/IoT Connectivity Services and Other Non-ICS	6
	4.1	Current Interim Numbering Solution for M2M/IoT Services	6
	4.2	Proposed Numbering Framework for Non-ICS	7
	4.3	Extra-Territorial Use of Numbers	. 11
5.	Numl	ber Charging	. 14
6.	Corre	ect Use of National Numbering Resources	. 17
7.	Subn	nission of Responses	. 18



# 1. PURPOSE OF CONSULTATION

Due to the potential of a high proliferation of Machine-to-Machine (M2M)/Internet of Things (IoT) connectivity services and other non-interpersonal communications services (Non-ICS), the Malta Communications Authority (MCA) is proposing a revision to the numbering framework especially to cater specifically for these technologies by means of this consultation paper. Since the current national numbering framework was established back in 2006 prior to this market development, numbering related requirements specific to these services are currently not being catered for.

Whilst it has always been the MCA's objective to ensure that the Maltese regulatory framework is conducive to accommodate such emerging technologies, on the other hand it also needs to ensure that this is achieved with the least possible impact on, and in harmony with, existing conventional electronic communications services. This is also the case if foreign numbering resources are utilised for Non-ICS.

The scope of this consultation is to provide interested parties with the opportunity to contribute towards this initiative intended to update the MCA decision 'Development of the Numbering Plan' of 2006 to cater for these technologies.



# 2. DEFINITIONS

# Machine-to-Machine (M2M)/Internet of Things (IoT)

Interpretations on the distinctions between these two terms within the industry are varied, however in this document 'M2M' refers to device-to-device communication generally not involving any human intervention. On the other hand the term 'IoT' denotes a service which includes a higher complexity of applications involving data analysis and resulting action, possibly emanating from a network of 'M2M' devices. In fact 'M2M' is often referred to as a subset of 'IoT'.

For clarity, the term M2M/IoT within this document may also include electronic communication which may not involve device-to-device communication but is still provided within a M2M/IoT context, such as in the case of communication with autonomous devices (e.g. remote setting of devices, etc.). Some of these M2M/IoT services may also incorporate a 'voice element', such as in the case of eCall, autonomous calls from security systems, etc.

# **Non-Interpersonal Communications Services (Non-ICS)**

Non-ICS encompass those electronic communications services which are not of an interpersonal communications services nature (such as in the case of conventional fixed and mobile telephony, SMS services, Over-The-Top (OTT) telephony and messaging services, etc.). Such Non-ICS include internet access services and services consisting wholly or mainly in the conveyance of signals such as transmission services used for the provision of M2M/IoT services and for broadcasting.

# **ITU-T Recommendation numbering resources**

E.118 – used for the integrated circuit card identifier (ICCID) which is utilised as a unique identifier of the physical SIM in conventional SIMs. In the case of embedded SIMs (eSIMs), the ICCID is associated with a SIM profile that is stored logically on the eSIM. The ICCID contains a maximum of 19 digits including an Issuer Identification Number (maximum of 7 digits with prefix 89 for the telecom industry, followed by 1-3 digits with the E.164 country code and the last 1-4 digits with the Issuer Identifier Number), the next digits before the last are the Individual Account Identification Number and the final digit is a Luhn check digit.

E.164 – used in numbering plans for public telephone systems including a 1-3 digit country code (e.g. 356 in the case of Malta) and a subscriber number (maximum 12-14 digits), up to a maximum of 15 digits in total.



E.212 – used for the International Mobile Subscription Identity (IMSI) which is associated with a SIM profile and uniquely identifies a subscription in mobile networks. The IMSI is utilised for various mobile network procedures including when the user equipment attaches to the mobile network. It includes a 3 digit Mobile Country Code (e.g. 278 in the case of Malta), a 2-3 digit Mobile Network Code (e.g. 2 digit in the case of European countries) and a Mobile Subscription Identification Number (maximum 10 digits), up to a maximum of 15 digits in total.

# **Publicly Available Telephony Service (PATS)**

An electronic communications service made available to the public for originating and receiving, directly and indirectly, national or national and international calls through a number or numbers in a national or international telephone numbering plan.

# **Subscriber Identity Module (SIM)**

An integrated circuit which securely stores different information including IMSI, ICCID and authentication key in order to provide secure, identifiable and authenticated access to mobile networks. While a conventional SIM is a piece of hardware that the end-user can easily remove from the user equipment, an embedded SIM is physically integrated into a device and cannot be removed from the device. The term 'SIM' is being used throughout this document to refer to both conventional and embedded SIMs unless specifically stated otherwise.

# **Proposed Decision 1**

This list of definitions found in this section shall be reproduced *ad verbatim* in the MCA decision entitled 'Development of the Numbering Plan'.



# 3. BACKGROUND AND PROPOSED APPROACH

# 3.1 GENERAL

As mentioned earlier M2M/IoT connectivity services are considered as Non-ICS which encompass different types of services including internet access services through various means (e.g. fixed broadband connection, WiFi, SIMs providing internet, etc.), M2M/IoT services and other services also provided within a M2M/IoT context such as in the case of communication with autonomous devices (e.g. remote setting of devices, etc.). Some of these M2M/IoT services may also incorporate a 'voice element', such as in the case of eCall, autonomous calls from security systems, etc.

In the case of M2M/IoT connectivity services and other Non-ICS the requirement for numbering resources may vary depending on the services and/or the provider in question. Whilst some Non-ICS would require the entire numbering resource types generally utilised by conventional telephony providers, others might only require specific numbering resources (e.g. a E.212 Mobile Country/Network Code) or possibly not requiring any type of numbering resources whatsoever.

Although every effort has been made to take into consideration the contents of the new European Electronic Communications Code, since on the date of the publishing of this consultation this Code has not as yet been transposed into national legislation, besides updating its decision entitled 'Development of the Numbering Plan', the MCA reserves the right to update and/or replace any other decision emanating from this consultation in the future if deemed necessary.

# 3.2 NATIONAL NUMBERING RESOURCES

Article 10 of the Electronic Communications (Regulation) Act (Cap. 399 of the Laws of Malta) specifies that the MCA is responsible to establish and manage the national telephone numbering resources and to control the allocation and assignment of all national numbering resources.

The MCA decision entitled 'Development of the Numbering Plan' published in June 2006 (updated on a number of occasions with minor contributions to reflect developments), covers the various aspects relating to national numbering resources which include and are not limited to, applicable allocation processes, rights of use conditions, charging mechanisms, interconnection obligations, etc.

The Maltese E.164 National Numbering Plan is established in such a way whereby the first digit denotes the type of electronic communications service (ECS). Besides creating a solid base to enable a user-friendly tariff transparency system, it also provides for a clear numbering structure to the benefit of all stakeholders. The decision 'Development of the Numbering Plan' referred to above also specifies the service description, allocation criteria



and the rights of use for numbering resources that are applicable for each of the different service type categories in accordance with their respective numbering prefix.

Each first digit prefix and its corresponding type of electronic communications service is currently listed in the Maltese National Numbering Plan as follows:

'0' - Intl. Access & NP routing prefixes '5' - Premium Rate '1' - Short Codes and C/S Codes '6' - Free (not utilised)

'2' - Fixed PATS telephony '7' - Mobile PATS Telephony

'3' - Non-PATS ECS '8' - Freephone

'4' - Free (not utilised) '9' - Mobile PATS Telephony

Since none of the above identified electronic communications service types is specific to Non-ICS, the MCA is proposing to dedicate the '4' number range (which is currently not being utilised) specifically and solely for such use. A separate number range for Non-ICS is being proposed due to the different nature of the services falling under this category, the potentially high demand on numbering resources, and to cater for the potential need of extra-territorial use of numbers some of these services may carry.

It is the MCA's objective to ensure that the availability of numbering resources for Non-ICS is set up in such a way which would result in a negligible or very minimal impact on conventional electronic communications services.

For clarity's sake the Authority would like to point out that the 'Non-PATS ECS' number range utilising the first digit prefix '3' is intended for *Interpersonal Communications Services* (ICS) without the rights and obligations generally associated with those services classified as PATS.



# 4. NUMBERING RESOURCES FOR M2M/IOT CONNECTIVITY SERVICES AND OTHER NON-ICS

# 4.1 CURRENT INTERIM NUMBERING SOLUTION FOR M2M/IOT SERVICES

As specified earlier in this document the current National Numbering Plan does not provide for the allocation of national numbering resources specific for M2M/IoT connectivity services.

In order not to stifle any M2M/IoT initiatives requiring local E.164 number ranges until the National Numbering Plan is updated, the MCA has been adopting a temporary solution by allowing the utilisation of numbering resources for the provision of M2M/IoT connectivity services specifically to end-users in Malta from Publicly Available Telephone Services (PATS) number ranges currently allocated to authorised providers. This is subject to the requirement that the provider in question keeps a record of any sub-ranges allocated specifically for M2M/IoT connectivity services and adheres to the condition that these numbering resources are not utilised on an extra-territorial basis which is being treated in more detail in sub-section 4.3 within this same section.

In order to be exempted from adhering to all PATS obligations, service providers utilising this interim numbering solution may inform the MCA of the sub-ranges they have allocated specifically for M2M/IoT connectivity services. In turn the Authority would indicate the sub-ranges allocated specifically for M2M/IoT connectivity services in its National Numbering Plan Allocations matrix found on the MCA website.

# **Proposed Decision 2**

The MCA is proposing to include the text found below under sections 17 and 19 of the 'Development of the Numbering Plan' Decision as follows:

# 17.4 (19.4) Interim Numbering Solution for M2M/IoT Services

In the absence of a number range dedicated to M2M/IoT services, in the past years the MCA authorised the utilisation of numbering resources from the 7(9) range for the provision of M2M/IoT connectivity services as an interim solution. This is subject to the requirement that the service provider in question keeps a record of any sub-ranges allocated specifically for M2M/IoT connectivity services and adheres to the condition that these numbering resources are not utilised on an extra-territorial basis.

In order to be exempted from adhering to all PATS obligations, those service providers currently utilising such numbering resources from the 7(9) range as an interim solution specifically for M2M/IoT connectivity services may inform the MCA so it can indicate



that such sub-ranges have been allocated specifically for M2M/IoT connectivity services in its National Numbering Plan Allocations matrix found on the MCA website.

As from <day and month when Part C of Eighth Schedule of S.L. 399.28 is revised>2019, the allocation of new numbering resources for M2M/IoT connectivity services from the 7(9) range will not be permitted. Service providers should ensure that any numbering resources allocated from the 7(9) range as an interim solution are replaced by numbering resources from the 4 range at the earliest possible opportunity and by not later than the 31st December 2024.

# 4.2 PROPOSED NUMBERING FRAMEWORK FOR NON-ICS

The MCA is proposing to dedicate the number range prefixed with the number '4' from the National Numbering Plan specifically and solely for M2M/IoT connectivity services and other Non-ICS use. The following 'Proposed Decision 3' includes the proposed text to replace the text found under the current section 14 entitled 'The 4 range' in the Decision entitled 'Development of the Numbering Plan' depicted with stricken through text.

# **Proposed Decision 3**

The MCA is proposing to update the text found under section 14 of the 'Development of the Numbering Plan' Decision as follows:

# 14 THE 4 RANGE

This range is reserved for future expansion and should not be used for any new services.

Some numbers in the 4 range are currently used for a small number of miscellaneous network specific services. These services may continue but the operators are advised to migrate these services to other numbers as the MCA may require the range to be cleared in the future.

# 14.1 Service Description

Dedicated specifically and solely for M2M/IoT connectivity services and other non-interpersonal communications services (Non-ICS) requiring national E.164 numbering resources.

The term Non-ICS encompasses different types of services which include mobile internet access services (SIMs used for the provision of internet access), M2M/IoT services and other services also provided within a M2M/IoT context such as in the case of communication with autonomous devices (e.g. remote setting of devices, etc.).



Although M2M/IoT services may also incorporate a 'voice element', as in the case of eCall and autonomous calls from security systems, the utilisation of numbering resources from the '4' range is subject that they would not be utilised for interpersonal communications services, since this would require the utilisation of numbering resources from number ranges allocated specifically for interpersonal communications services e.g. PATS.

No set parameters for terminating rates are applicable for services utilising numbering resources from this range.

# 14.2 Numbering format

Due to Malta's limited population size, the length of a conventional telephone number is limited to 8 digits (excluding country code). However since emerging Non-ICS, such as M2M/IoT services, could potentially require much larger volumes of numbering resources and do not typically require human intervention, the individual number length to be used in this range shall be that of 10 digits (excluding country code) increasing the numbering capacity within this range by a hundred-fold. If it transpires that the utilisation of numbering resources from this range is leading to capacity constraints, the MCA could then consider increasing the number digit format of unallocated sub-ranges from 10 digits to a maximum of 12 digits (excluding country code).

# 14.3 Allocation method

Initially the MCA will allocate blocks of 100,000 numbers solely within 10 digit subranges 40YYY XXXXX to 42YYY XXXXX.

Additional blocks will normally be allocated only when existing allocations have already been used to a reasonable level. In selecting which blocks to allocate, the MCA will aim to allow appropriate space for expansion so that an undertaking's allocation can be contiguous and not interleaved, but the MCA cannot guarantee that this will always be possible and the amount of expansion space that can be allowed will depend on the amount of unallocated numbering capacity remaining.

Requests for allocations that go beyond an applicant's immediate needs will be considered only in justified circumstances.

In terms of the choice of number blocks, the MCA will take account of the applicant's wishes but cannot undertake that they will always be met if they are not compatible with the further development of the numbering plan.

Undertakings will not be able to reserve blocks.

The MCA reserves the right to withdraw any allocated but unused number blocks.



# 14.4 Criteria for the range

The following criteria apply:

- The undertaking is authorised to provide Non-ICS in the Maltese territory.
- No obligation to provide number portability although numbers in the '4' range may be ported subject to a voluntary agreement between the donor and recipient operators.
- Due to the cross-border nature of some M2M/IoT services and other Non-ICS, the MCA may authorise the extra-territorial use of numbers in the '4' range in other EU/EEA Member States. Any authorised extra-territorial use of numbers shall be subject to the faculty of the other Member States in question to permit such use and that their regulatory requirements and conditions are adhered to, including the requirement for a General Authorisation, consumer protection requirements and other rules related to the use of numbering resources in the Member States where those resources will be used.
- Undertakings may not sub-allocate numbers in this range to other operators and/or service providers.
- There could be circumstances when Non-ICS service providers will be required
  to support electronic communications services to the Maltese emergency
  services when the device with the number in the '4' range is located within the
  Maltese territory if technically possible (e.g. numbers from this range utilised for
  eCall services).
- In cases where electronic communications services to emergency services are supported, if technically possible the location of the network termination point shall be provided on request for the support of location information to be associated with calls to the emergency services when/if applicable.
- Where it is considered appropriate and/or technically possible, any services
  offered using numbering resources in the '4' range shall be in line with the
  applicable Legal Interception and Calling Line Identification obligations.
- Undertakings allocated numbers in the '4' range are required to utilise the infrastructural and/or technical connectivity solutions of local authorised 'Public Communications Networks' providers.



The following 'Proposed Decision 4' includes the proposed text to replace the text found under the current section 20 entitled 'Summary of the Main Number Ranges' in the Decision entitled 'Development of the Numbering Plan'.

# **Proposed Decision 4**

The MCA is proposing to update the text found under section 20 of the 'Development of the Numbering Plan' Decision as follows:

# 20 SUMMARY OF THE MAIN NUMBER RANGES

Figure 7 gives a high level view of the revised numbering plan proposed in this document. The column on number charging states the current position and may be changed in the future.

Range	Detail	Allocations	PATS	Number Portability	Emergency Access	Revenue Sharing	Nomadicity or Roaming	Number Charging
0 - Access Codes	00 - International access	1	1	1	1	1	1	No
	05XX - Number Portability Codes	1	-	No	-	-	-	No
	1XX/X/X - Short codes	1	-	No	-	-	-	No
1 - Other Codes	10XX - Carrier selection	1	-	No	-	-	-	No
	116XXX - HESC	1	-	No	-	-	-	No
	118X - Directory services	1	-	No	-	-	-	No
2 - Fixed PATS	2XXX XXXX	10k	Yes	Yes	Yes	No	Yes	Yes
3 - Fixed non-PATS	3XXX XXXX	10k	No	No	No*	No	Yes	Yes
4 - Non-ICS	4[0-2]XXX XXXXX	100k	No	No	No*	No	Yes	Yes
5 - Premium	50XX XXXX - Legacy & SMS PRS	1k	Yes	Yes	No	Yes	No	No
5 - Fremium	5YT0 Z0XX - Voice PRS	100	Yes	Yes	No	Yes	No	No
6 - Spare for future use		-	-	-	-	-	-	-
7 - Mobile PATS	7XXX XXXX	10k	Yes	Yes	Yes	No	Yes	Yes
8 - Freephone	800X XXXX	1k	Yes	Yes	No	Yes	No	No
9 - Mobile PATS	9XXX XXXX	10k	Yes	Yes	Yes	No	Yes	Yes

<sup>\*</sup> Except in particular circumstances

Updated <month when Part C of Eighth Schedule of S.L. 399.28 is revised> 2019

Figure 7: Revised numbering plan



# 4.3 EXTRA-TERRITORIAL USE OF NUMBERS

For the scope of this document the term 'extra-territorial use of numbers' refers to the use of a particular country's numbering resources by a foreign service provider in its home country. Hence, this term does not refer to permanent roaming situations.

# 4.3.1 Extra-Territorial Use of Numbers from the Maltese National Numbering Plan

Extra-territorial use of numbers from the Maltese National Numbering Plan in the case of conventional telephony and any other interpersonal communications services is not permitted, however due to the different characteristics and the cross-border nature of some M2M/IoT connectivity services and other Non-ICS, the extra-territorial use of numbers in the '4' range may be permitted subject to MCA's authorisation depending on the circumstance.

# 4.3.2 Extra-Territorial Use of Other Countries' Numbers in the Maltese Territory

In the case of conventional telephony and any other interpersonal communications services, extra-territorial use of foreign numbers is not permitted in Malta. However if it deems justified the MCA may authorise the extra-territorial use of numbers for M2M/IoT connectivity services and other Non-ICS, and would be subject to adherence to all local regulatory and commercial general authorisation requirements.

One of the MCA's assessment criteria in determining whether numbering resources pertaining to EU/EEA Member States may be permitted for Non-ICS extra-territorial use in Malta shall be that these numbering resources are included in the specific database on the numbering resources with a right of extra-territorial use within EU/EEA Member States managed by the 'Body of European Regulators for Electronic Communications' (BEREC) for those types of numbering resources included in this database once it becomes available.

When determining whether the extra-territorial use of numbers of countries which are not in the EU/EEA for M2M/IoT connectivity services and other Non-ICS should be permitted in Malta, a more rigorous assessment will be required.

The utilisation of global numbering resources allocated directly by the ITU-T (e.g. E.164 country code = 882/883) is not considered as extra-territorial use of numbers. The MCA may authorise the utilisation of such global numbering resources by authorised Non-ICS providers in Malta for M2M/IoT connectivity services and other Non-ICS, subject that all local regulatory and commercial general authorisation requirements are met.

In this respect, the MCA is proposing to replace the text found under current section 8 entitled 'Numbers for Data Terminals' in the Decision entitled 'Development of the Numbering Plan' with the text found in this section and shall be entitled 'Extra-Territorial Use of Numbers'.



The rationale behind the proposal to replace the current section 8 in its entirety is based on the lack of demand for numbers for data-only terminals and considerations to the way in which the industry has evolved with respect to M2M/IoT connectivity services and other Non-ICS. The text depicted in this section is being included *ad verbatim* in *'Proposed Decision 5'*.

# **Proposed Decision 5**

The MCA is proposing to replace the text found under section 8 of the 'Development of the Numbering Plan' Decision as follows:

# 8. NUMBERS FOR DATA TERMINALS

The MCA proposed to open the 97 range for data-only terminals used for applications that do not involve call termination and only involve communications of a closed user group nature so that tariff transparency and number portability are not needed.

Whilst one of the respondents was against the use of the 97 range and proposed the 59 range with sub-ranges for each operator, another did not agree with the proposal and feared that concentrating data applications in a single range might attract hacking attacks.

In view of these comments, the MCA does not propose to allocate any number range for data-only closed user group applications at present. Such applications may be accommodated in existing ranges. The MCA is however ready to re-open this issue if requested in the future.

# 8. EXTRA-TERRITORIAL USE OF NUMBERS

For the scope of this document the term 'extra-territorial use of numbers' refers to the use of a particular country's numbering resources by a foreign service provider in its home country. Hence, this term does not refer to permanent roaming situations.

# 8.1 Extra-Territorial Use of Numbers from the Maltese National Numbering Plan

Extra-territorial use of numbers from the Maltese National Numbering Plan in the case of conventional telephony and any other interpersonal communications services is not permitted, however due to the different characteristics and the cross-border nature of some M2M/IoT connectivity services and other Non-ICS, the extra-territorial use of numbers in the '4' range may be permitted subject to MCA's authorisation depending on the circumstance.



# 8.2 Extra-Territorial Use of Other Countries' Numbers in the Maltese Territory

In the case of conventional telephony and any other interpersonal communications services, extra-territorial use of foreign numbers is not permitted in Malta. However if it deems justified the MCA may authorise the extra-territorial use of numbers for M2M/IoT connectivity services and other Non-ICS, and would be subject to adherence to all local regulatory and commercial general authorisation requirements.

One of the MCA's assessment criteria in determining whether numbering resources pertaining to EU/EEA Member States may be permitted for Non-ICS extra-territorial use in Malta shall be that these numbering resources are included in the specific database on the numbering resources with a right of extra-territorial use within EU/EEA Member States managed by the 'Body of European Regulators for Electronic Communications' (BEREC) for those types of numbering resources included in this database once it becomes available.

When determining whether the extra-territorial use of numbers of countries which are not in the EU/EEA for M2M/IoT connectivity services and other Non-ICS should be permitted in Malta, a more rigorous assessment will be required.

The utilisation of global numbering resources allocated directly by the ITU-T (e.g. E.164 country code = 882/883) is not considered as extra-territorial use of numbers. The MCA may authorise the utilisation of such global numbering resources by authorised Non-ICS providers in Malta for M2M/IoT connectivity services and other Non-ICS, subject that all local regulatory and commercial general authorisation requirements are met.



# 5. NUMBER CHARGING

The MCA is proposing that usage fees of €700 per block of 100,000 allocated numbers shall be paid on an annual basis for numbering resources in the '4' range.

The following 'Proposed Decision 6' includes the proposed text to be included in Part C of the Eighth Schedule of the Electronic Communications Networks and Services (General) Regulations (S.L. 399.28).

# **Proposed Decision 6**

The MCA is proposing to update the text found under Part C of the Eighth Schedule of the Electronic Communications Networks and Services (General) Regulations (S.L. 399.28) as follows:

# Part C. Usage fees for numbers to be paid on an annual basis:

(a) Numbers in the '2', '3', '7' and '9' number ranges excluding such numbers as the Minister may, after consultation with or on the advice of the Authority, from time to time establish by order in the Gazette.

€700 per allocated numbering block of 10,000 numbers or proportionate depending on the size of the allocated block

(b) Numbers in the '4' number range excluding such numbers as the Minister may, after consultation with or on the advice of the Authority, from time to time establish by order in the Gazette.

€700 per allocated numbering block of 100,000 numbers

(c) Carrier select/pre-select codes

€5,000 for each code

The amendments at law implementing the revised usage fees for numbers are dependent on Ministerial approval and would come into effect as from the date of publication of the decision notice which includes the introduction of the '4' range.

The following 'Proposed Decision 7' includes the proposed text to replace the text found under the current section 10 entitled 'Number Charging' in the Decision entitled 'Development of the Numbering Plan'. Any updated or additional text is shown underlined.



# **Proposed Decision 7**

The MCA is proposing to update the text found under section 10 of the 'Development of the Numbering Plan' Decision with the underlined text as follows:

#### 10 NUMBER CHARGING

(This section has been updated in (<u>day and month when Part C of Eighth</u> Schedule of S.L. 399.28 is revised> 2019 to reflect current legislation)

Numbers are currently charged in accordance with Eighth Schedule Part C of the Electronic Communications Networks and Services (General) Regulations (Subsidiary Legislation 399.28).

Fixed and mobile numbers including DDI numbers are charged per annum, at €700 per block of 10,000 allocated numbers. Numbers for M2M/IoT connectivity services and other Non-ICS are also charged per annum, at €700 per block of 100,000 allocated numbers.

Carrier selection codes are charged at €5,000 per annum.

The MCA considers that the following arrangements for charging for ported numbers (when number portability is applicable) are in line with the current regulations and are fair to the operators:

- When a number is imported, the recipient is not required to pay an annual charge for the number block that contains the number.
- When a number is exported, the block operator will continue to pay the annual charge for the number block that contains the number even if they are not serving other numbers in the block. The likelihood of all numbers in a block being ported is low provided that operators are allocating numbers efficiently.

The operators shall therefore report on this basis and pay the MCA accordingly.

Where a large proportion of the numbers in a block are ported, the MCA has considered the option of re-allocating the block to the recipient, but appreciates that this could cause an element of confusion with respect to the allocation tables and the operation of onward routing as the identity of the block operator would change. The MCA is therefore not proposing to make re-allocations, but is open to reconsidering this approach if requested by the operators and if there is a high proportion of blocks where all numbers are ported.



# **Decision 5:**

Where numbers are ported, the following charging arrangements shall apply in accordance with Eighth Schedule Part C of the Electronic Communications Networks and Services (General) Regulations (Subsidiary Legislation 399.28):

- When a number is imported, the recipient is not required to pay an annual charge for the number block that contains the number.
- When a number is exported, the block operator will continue to pay the annual charge for the number block that contains the number even if they are not serving other numbers in the block.



# 6. CORRECT USE OF NATIONAL NUMBERING RESOURCES

So far the contents of this document has focused mainly on ITU E.164 numbering resources which are generally those conventional telephone numbers which are visible to the general public. Other types of numbering resources are also used, including and not limited to those used in the case of mobile services such as ITU E.212 IMSIs and ITU E.118 ICCIDs which all incorporate specific digits denoting the country of operation not necessarily using the same national E.164 code (e.g. Malta E.164/E.118 = 356, E.212 = 278). It is imperative that whenever Maltese numbering resources are utilised for the provision of any electronic communications service, not solely for M2M/IoT connectivity services and other Non-ICS, the national code in all these types of numbering resources associated with the same subscription profile pertains to the same country (i.e. Malta).

Due to the different nature of M2M/IoT connectivity services and other Non-ICS, Maltese national numbering resources utilised for Non-ICS shall be kept distinct from those utilised for interpersonal communications services.

To this effect, the MCA is proposing the introduction of a new section 21 entitled 'Correct Use of National Numbering Resources' in the Decision entitled 'Development of the Numbering Plan' as reflected in 'Proposed Decision 8'.

# **Proposed Decision 8**

The MCA is proposing to introduce a new section 21 in the 'Development of the Numbering Plan' Decision as follows:

# 21 CORRECT USE OF NATIONAL NUMBERING RESOURCES

Whenever Maltese national numbering resources are utilised for the provision of any electronic communications service, the national code in all the various types of numbering resources associated with the same subscription profile shall pertain to Malta (i.e. national codes 356 and 278 for E.164/E.118 and E.212 numbering resources respectively).

Maltese national numbering resources utilised for M2M/IoT connectivity services and other Non-ICS shall be kept distinct from those utilised for interpersonal communications services. When one takes into consideration that the '4' number range is being dedicated specifically and solely for Non-ICS, such a separation on E.164 numbering resources would be accomplished automatically. However in the case of IMSIs and ICCIDs, service providers should dedicate specific sub-ranges for Non-ICS even when an undertaking utilises the same ITU-T E.212 Mobile Network Code (MNC) and ITU-T E.118 Issuer Identifier Number (IIN) for both interpersonal communications services and Non-ICS.



# 7. SUBMISSION OF RESPONSES

In accordance with the requirements under Article 4A of the Malta Communications Authority Act [Cap 418 of the Laws of Malta], the MCA welcomes written comments and representations from interested parties and stakeholders on the proposed numbering-related decisions put forward in this consultation paper.

The Authority appreciates that respondents may provide confidential information in their feedback to this consultation paper. This information is to be included in a separate annex and should be clearly marked as confidential. Respondents are also requested to state the reasons why the information should be treated as confidential. The Authority will take the necessary steps to protect the confidentiality of all such material as soon as it is received at the MCA offices in accordance with the MCA's confidentiality guidelines and procedures. Respondents are however encouraged to avoid confidential markings wherever possible.

For the sake of openness and transparency, the MCA will publish a list of all respondents to this consultation on its website.

The MCA will, after taking into consideration the responses received to this consultation, make its numbering-related decisions. The Authority will also submit to Government the proposed changes to the numbering usage fees found in the Eighth Schedule of the Electronic Communications Networks and Services (General) Regulations (S.L. 399.28).

All responses should be submitted to the Authority, in writing or by email, by not later than 12:00 CET on the 29<sup>th</sup> April 2019 and addressed to:

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