



TECHNOLOGY, MEDIA AND TELECOMMUNICATIONS

Numbering range for machine-to-machine services

ANACOM consultation on the allocation of a specific range

1. Introduction

Transmission services used in the provision of M2M services are growing in importance. As a result, in May 2019 ANACOM (the Portuguese communications regulatory authority for) launched a public consultation¹ to collect input on the possible creation of a specific range in the national numbering plan (*plano nacional de numeração* - PNN) to accommodate these services. According to ANACOM, the aim of opening this range would be to respond to the significant increase in demand for numbers for machine-to-machine (M2M) services.

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The European Electronic Communications Code (“EECC”) approved in 2018 was only incorporated into Portuguese law in August 2022. However, the public consultation conducted by ANACOM in 2019 was already aligned with the EECC. It states that the possibility of granting rights of use of numbering resources should be taken into account, considering the significant increase of several services of the Internet of Things (“IoT”).²

Following the procedure of the first consultation, ANACOM now intends to obtain additional contributions on this matter. To this end, it has launched a new public consultation, and has drawn up a set of questions for which it considers stakeholder feedback to be essential. Responses can be submitted until 8 November 2022.

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¹ ANACOM, *Notice of the Start of the Regulatory Procedure on the creation of a specific range in the national numbering plan for machine-to-machine services*, available at [here](#).

² See Recital 250, Article 93(2) of Directive 2018/1972 of 11 December 2018 establishing the European Electronic Communications Code.

ANACOM's aim is to gather input in order to properly prepare the draft regulation on the use of numbers for the provision of transmission services used for M2M communications.³

2. The need to create a specific range in the PNN for M2M services

M2M communications are processed automatically between machines over electronic communications networks, with little or no human intervention, and fall under the concept of electronic communications services.⁴

There is a large number of connected devices and the use of M2M communications, which include the provision of IoT services and the eCall⁵ service, is growing. Therefore, it is important to ensure efficient management and use of numbering resources by companies which are not providers of electronic communications networks or services. This must be done in accordance with the objectives of regulation and the principles of effectiveness, equality and non-discrimination that should govern ANACOM's actions in the efficient management of numbering resources.

The creation of a specific range may be justified, given that the use of the current ranges intended for mobile services would be unsustainable in the long term.

M2M services are currently provided using numbering range 9 (intended for the provision of mobile services). However, ANACOM's position is that the creation of a specific range may be justified, given that the use of the current ranges intended for mobile services (i.e., the 91, 92, 93 and 96 ranges) would be unsustainable in the long term. Such a situation would culminate in the exhaustion of the PNN, especially with the resources in numbering range 9 being assigned to companies that are not providers of electronic communications networks or services for the provision of M2M services. This is because of the large number of companies that provide these services and the terminal points/equipment to which the numbering would be assigned.⁶ Moreover, the creation of a specific range could also be justified on the basis that these services may be provided outside Portugal. Therefore, it is important to ensure that the range used does not violate the Electronic Communications Law's rule that

prohibits PNN numbers from being used outside the country (with the exception of non-geographic numbers that ANACOM makes available for this purpose and mobile roaming services).

Under the public consultation document, ANACOM intends to collect contributions regarding the following points:

- What is the most appropriate range between level 4 and 9 for opening in the PNN for the purposes of M2M⁷ services, bearing in mind that it may be used outside the country?

3 ANACOM, *Regulatory procedure on the creation of a specific numbering range for transmission services used for the provision of machine-to-machine (M2M) services - Collection of additional contributions* Available [here](#).

4 Article 3(f) of Law 16/2022 of 16 August (Electronic Communications Law).

5 The provision of IoT services is a more widespread technology than M2M services, as it connects people to their devices and allows them to access the data they contain or to activate certain features remotely. eCall services, on the other hand, are emergency calls from a vehicle (Article 3(2) and (10) of Regulation (EU) 2015/758 of the European Parliament and of the Council of 29 April 2015).

6 *Ibid.*

7 According to the information collected in 2022 under CEPT, 23 countries have a specific range for M2M. These are: Belgium, Bulgaria, Czech Republic, Croatia, Denmark, Slovakia, Slovenia, Spain, Russian Federation, Finland, France, Greece, Hungary, Ireland, Iceland, Latvia, Lithuania, Luxembourg, Malta, Norway, the Netherlands, Poland, and Sweden.

The definition of a numbering range and of the conditions applicable to it will imply a significant change in the current way of providing M2M services.

- The minimum size of numbering blocks and length of numbers.
- The possibility of allocating rights of use for numbering resources in the new range to companies not providing electronic communications networks or services, as well as obligations to ensure number portability.
- Inclusion of the new range in the list of ranges eligible for sub-allocation⁸
- The time needed to implement the new range and estimated quantity of numbers needed over the next three years.

3. Final Note

The definition of a numbering range and of the conditions applicable to it will imply a significant change in the current way of providing M2M services. This will have to be done by enabling an exponential increase in M2M communications and in the number of connected devices.

This consultation is therefore a second opportunity for companies intending to provide or use this type of service to express their vision on the use of numbers for the provision of M2M services. They will thus be able to contribute to the design of a regulation that takes into consideration the conditions that the market must meet to provide these services.

For this reason, it is desirable for there to be a high level of participation and for the contributions submitted to assist the regulator in designing a regulatory framework that encourages investment in M2M and IoT applications and services.

Although 5G services are already offered, the penetration level of this technology in Portugal is low. It represents only 1.67% of traffic on mobile networks. However, 5G allows uninterrupted and ubiquitous communication between humans and machines. As a result, it is the technology per excellence for the widespread implementation of the IoT applications that can be used in various sectors of the economy. Accordingly, it is expected that a regulatory framework that encourages the growth of M2M and IoT services and applications will generate economies of scale for operators who have invested in 5G. It will also allow greater dynamism and competitiveness in the supply of innovative products and services on the market. ■

⁸ Regulation 1028/2021 of 29 December (Regulation on number sub-allocation)