

# **Numbering plan for mobile numbers**

*Consolidated version applicable as from 23 November 2017 (Administrative Order No 11/2011, Official Gazette No 04/2011 of 23 February 2011, amended by Administrative Order No 36/2013, Official Gazette No 14/2013 of 31 July 2013, Administrative Order No 43/2013, Official Gazette No 17/2013 and Administrative Order No 78/2017, Official Gazette No 16/2017 of 23 August 2017)*

## **1. Legal basis**

Mobile numbers are numbers in accordance with section 3 para 13 of the Telecommunications Act (TKG) of 22 June 2004 (Federal Law Gazette I page 1190), as amended by Article 4(108) of the Act of 7 August 2013 (Federal Law Gazette I page 3154).

This Administrative Order defines the structure and configuration of the number range for mobile services in accordance with section 66(1) second sentence of the TKG and the Telecommunications Numbering Ordinance (TNV) of 5 February 2008 (Federal Law Gazette I page 141), as amended by Article 4(110) of the Act of 7 August 2013 (Federal Law Gazette I page 3154).

The application procedure for mobile numbers is published separately as a Communication (Communication No 63/2011, Bundesnetzagentur Official Gazette No 04/2011 of 23 February 2011, amended by Communication No 343/2013, Bundesnetzagentur Official Gazette No 17/2013 of 11 September 2013).

## **2. Number format and subdivision of the number range**

### **2.1 Number range provided**

The German numbering space for public telecommunications is defined by Recommendation E.164 of the International Telecommunication Union (ITU). In this numbering space a number range is provided for mobile services, consisting of the number subranges (0)15, (0)160, (0)162, (0)163 and (0)17.

### **2.2 Basic structure**

Mobile numbers commence with a two-digit service code. The service code is followed by a subscriber number consisting of a block code and a terminal equipment number. When dialling the number from a German landline or mobile number, the number must be preceded by the prefix "0".

### **2.3 Number subrange (0)15**

Until 19 September 2013 numbers from the number subrange (0)15 were assigned in blocks of 10,000,000 subscriber numbers. In these blocks each subscriber number consists of a two-digit block code and a seven-digit terminal equipment number. Mobile numbers assigned in this manner hence have the following structure:

Prefix	National (significant) number (11 digits)		
0	Service code 15	Subscriber number (9 digits)	
	(2 digits)	Block code (2 digits)	Terminal equipment number (7 digits)

In the case of blocks in the number subrange (0)15 newly assigned as from 20 September 2013, the block code comprises three digits and the terminal equipment number six digits. Each subscriber number hence has nine digits and the national number eleven digits:

Prefix	National (significant) number (11 digits)		
0	Service code 15	Subscriber number (9 digits)	
	(2 digits)	Block code (3 digits)	Terminal equipment number (6 digits)

Service code 15 and a three-digit block code identify number blocks comprising 1,000,000 subscriber numbers each.

The 15 000, 15 300, 15 400, 15 500, 15 600 and 15 800 blocks cannot be assigned as provided for by section 4.2 below.

Until revocation (see section 6 below), the technical and operational procedures in the telecommunications networks may be designed as if an assignee with a block of 1,000,000 numbers that is part of a block of 10,000,000 numbers were assigned the whole 10,000,000-number block.

#### **2.4 Number subranges (0)160, (0)162, (0)163 and (0)17**

In the number subranges (0)160, (0)162, (0)163 and (0)17 the block code has a single digit and the terminal equipment number has seven or eight digits (see section 4.3.1 a) below). Each subscriber number hence has eight or nine digits and the national number ten or eleven digits:

Prefix	National (significant) number (10 or 11 digits)		
0	Service codes 16 and 17	Subscriber number (8 or 9 digits)	
	(2 digits)	Block code (1 digit)	Terminal equipment number (7 or 8 digits)

Service code 16 with the block codes 0, 2 and 3 and service code 17 with the block codes 0 to 9 identify number blocks each comprising 10,000,000 subscriber numbers (where ten-digit numbers are used) or 100,000,000 subscriber numbers (where eleven-digit numbers are used).

The number subranges (0)160, (0)162, (0)163 and (0)17 are not used for new primary assignments.

## 2.5 Numbers for voicemail services

A voicemail number is formed by inserting two digits in the subscriber number (infix). The following infixes and infix positions are to be used, depending on the service code and block code:

Table 1: One-digit and two-digit block codes

Service code and block code	Infix	Infix position
151x	13	The infix is inserted between the first and second digits of the block code
160, 170, 171, 175	13	The infix is inserted between the block code and the terminal equipment number
152x, 162, 172, 173, 174	55	
157x, 163, 177, 178	99	
159x, 176, 179	33	

Table 2: Three-digit block codes

Service code and block code	Infix	Infix position
151xx	13	The infix is inserted between the first and second digits of the block code
150xx, 153xx, 154xx, 155xx, 156xx, 158xx	00	
152xx	55	The infix is inserted between the second and third digits of the block code
157xx	99	
159xx	33	

## 3. Purpose of use

Mobile numbers may be used exclusively for mobile services.

Mobile services are services with the following characteristics:

- a) The service must enable subscribers to make calls to public telephone networks via a public cellular mobile network.
- b) As far as the routing is concerned, it is permissible for outgoing calls made by the mobile subscriber and for calls to the mobile subscriber not to be routed via a public cellular mobile network.
- c) The refinancing of the service may not be focussed primarily on triggering mobile termination rates for connections where termination does not take place via the air interface of a public cellular mobile network.

- d) The service is not a premium service.

Please note: mobile numbers should not be used if it is expected that the use of the numbers will result in mass call traffic liable to cause network overload.

A voicemail number as described in section 2.5 above may be used for the following purpose only: if a voicemail facility is available to a subscriber in connection with a mobile number, the corresponding voicemail number is used to enable the voicemail box to be accessed from other networks as well.

#### **4. Type of assignment and requirements for assignment**

##### **4.1 Type of assignment**

Mobile numbers are assigned in a two-stage procedure as primary and secondary assignments according to section 4(2) paras 2 and 3 of the TNV:

- a) Numbers are assigned in blocks of 1,000,000 numbers to entitled telecommunications service providers in accordance with section 4(2) para 2 of the TNV (primary assignment).
- b) Numbers are assigned to subscribers (as a secondary assignment) in accordance with section 4(2) para 3 of the TNV by the primary assignee of the number block.

##### **4.2 Primary assignment**

###### **4.2.1 Procedure**

The application procedure is published separately as an administrative instruction (Communication No 63/2011, Bundesnetzagentur Official Gazette No 04/2011 of 23 February 2011, as amended by Communication No 343/2013, Bundesnetzagentur Official Gazette No 17/2013 of 11 September 2013).

###### **4.2.2 Prerequisites**

###### ***4.2.2.1 General prerequisites***

A primary assignment is made only if the following requirements are met:

- a) The applicant offers a service in accordance with section 3 above or will be able to do so within 12 months of filing the application.
- b) The applicant has been assigned a carrier portability code and has taken measures to ensure that provider switching as set forth in section 46 of the TKG is possible.
- c) The applicant has submitted a business registration, an up-to-date extract from the commercial register or, if the applicant's headquarters are not in Germany, proof as specified in section 13e(2) of the German Commercial Code (HGB).
- d) The applicant must give an address for summons (residential or business address and (if the applicant is a legal entity) legal representative) in Germany. Applicants with headquarters in another country must specify an authorised recipient with an address for summons in Germany.

#### 4.2.2.2 Follow-up application

An application submitted by an applicant already in possession of a number block (follow-up application) will only be granted if, in addition to the general prerequisites (see section 4.2.2.1 above), one of the following prerequisites is met:

- a) the total utilisation ratio of all number blocks assigned so far exceeds 50%. The utilisation ratio is calculated as follows:

$$\text{Utilisation ratio (\%)} = \frac{\text{sum of all secondary assignments}}{\text{sum of all primary assignments}} \times 100$$

The sum of all secondary assignments also includes any numbers ported to other network operators.

Number blocks in the subranges (0)160, (0)162, (0)163 and (0)17 are included in the calculation of the numbers assigned on a primary basis, depending on their actual use with 10,000,000 or 100,000,000 numbers.

- b) Number blocks have been reserved for the applicant (see section 4.2.4 below) and the applicant has signed a network usage agreement with a telecommunications network operator permitting the operator to use the numbers.

Proof of compliance with the application requirements must be submitted as specified in the application procedure.

#### 4.2.3 Acquired rights

With the assignment the primary assignee acquires the following rights:

- a) assignment of numbers on a secondary basis,  
 b) connection of secondary assigned numbers or arrangements for having secondary assigned numbers connected using the assignee's own carrier portability code. In the case of number transfer under section 46 of the TKG, this right is transferred with the changing subscriber to his new contractual partner for the duration of the contract.  
 c) use for necessary network-related technical purposes.

Under section 4(2) para 3 of the TNV, the right to assign numbers on a secondary basis also includes the possibility of contracting third parties to make the secondary assignment. Depending on the contractual arrangements, the secondary assignees may be contractual customers of the primary assignee or of the third party. The carrier portability code of the primary assignee must continue to be used even if a third party is involved.

#### 4.2.4 Reservations

In the course of an application procedure the number blocks (0)15-10 to 19, (0)15-20 to 29, (0)15-50 to 59, (0)15-70 to 79 and (0)15-90 to 99, each comprising 10,000,000 numbers, were reserved for individual operators of public cellular mobile networks in September 2000.

Only those companies for whom number blocks have been reserved are entitled to apply for the blocks reserved for them or for blocks of 1,000,000 numbers that are part of these blocks.

Companies for whom number blocks have been reserved and which have not yet been assigned all the blocks reserved for them are only entitled to apply for those reserved in their name or for blocks of 1,000,000 numbers that are part of these blocks.

The Bundesnetzagentur is entitled to withdraw a reservation if applications for number block assignment have to be rejected because all blocks have been assigned or reserved.

### **4.3 Secondary assignment**

#### **4.3.1 Procedure and requirements**

Numbers are assigned on a secondary basis under a contract on the provision of network access between a primary assignee, or a third party authorised by the primary assignee, and a subscriber. The following conditions need to be observed:

- a) In the number subrange (0)15 eleven-digit numbers are assigned. In the number subranges (0)160, (0)162, (0)163 and (0)17 it is up to the primary assignee to decide whether ten-digit or eleven-digit numbers are assigned.
- b) Number blocks assigned on a primary basis must be used efficiently. The amount of numbers which may be assigned on a secondary basis for each customer and each SIM card is limited to the amount of numbers required for the services requested by the customer. The Bundesnetzagentur reserves the right to make more detailed regulations concerning the amount of numbers assignable on a secondary basis at a later point in time.

#### **4.3.2 Acquired rights**

With the assignment the secondary assignee acquires the following rights:

- a) Use of the number assigned, or transferred in accordance with section 46 of the TKG, under the contract.
- b) Number transfer in accordance with section 46 of the TKG.

As part of machine-to-machine communication within the meaning of section 7.1 no 2, the secondary assignee is permitted to use a mobile number for a third party within the scope of a service. Such use is deemed to exist where a third party requests the secondary assignee to provide, by means of the mobile number, a service corresponding to the intended purpose of use of the number for the third party. Contractual arrangements amounting to a transfer of the right of use by the assignee to the third party are not permitted (see section 4(5) of the Telecommunications Numbering Ordinance).

The use of a mobile number by the third party for another third party ("third tier use") is permissible in machine-to-machine communication and may even happen repeatedly if the business model requires this.

### **4.4 Assignment of numbers for voicemail services**

The primary assignment of a mobile number also implies the primary assignment of the corresponding voicemail number as described in section 2.5 above, without this being explicitly stated in the assignment notice.

In assignment terms, a voicemail number is inseparable from the mobile number from which it has been derived as described in section 2.5 above.

## **5. Other conditions of use**

### **5.1 Beginning of use**

Primary assignees may not use assigned blocks of 1,000,000 numbers until the Bundesnetzagentur has determined the general usability of the blocks.

General usability is taken to mean that

- a) assignees are able to technically implement the number blocks assigned to them so that the numbers are generally accessible from all telecommunications networks,
- b) all necessary cross-company preparations for porting numbers in these blocks from and to all providers have been made, and
- c) compliance with section 46 of the TKG by those under obligation thereafter is possible.

The Bundesnetzagentur will determine the general usability of number blocks by means of an Administrative Order.

### **5.2 Deadline for beginning of use**

Assignees must start using their mobile numbers within a period of 180 calendar days after the assignment takes effect.

In the case of blocks of 1,000,000 numbers, this period does not begin until the general usability of the numbers in such blocks has been determined as specified in section 5.1 above.

### **5.3 Requirement to report on general usability**

Primary assignees are required to report to the Bundesnetzagentur by 31 December 2013 on the completion of the measures for the purpose of general usability as described in section 5.1 above.

### **5.4 Return of number blocks in the case of non-usage**

If – contrary to section 5.2 above – the number block is not used within 180 days after the assignment took effect or if its use is not planned for a period of 180 days beginning with the date of assignment or the date of its last usage, the number block for mobile services must be returned immediately by making a written declaration to the Bundesnetzagentur as provided for by section 9(1) in conjunction with subsection (4) first sentence of the TNV.

When returning a number block, the status of all numbers previously assigned on a primary basis (used/unused; network operator to whom numbers were ported, where applicable) must be indicated.

### **5.5 Notification of changes of name or address**

Primary assignees are required to inform the Bundesnetzagentur immediately, in writing and on their own initiative, of any change in their name, address for summons or legal representative. Applicants with headquarters in another country must also inform the Bundesnetzagentur of any change in their authorised recipient or the authorised recipient's address for summons in Germany.

If any changes are made to an entry in the commercial register or equivalent of another country, up-to-date extracts must be submitted to the Bundesnetzagentur immediately.

## **6. Revocation clause**

The authorisation given in section 2.3 eighth sentence above – for the technical and operational procedures in the telecommunications networks to be designed as if an assignee with a block of 1,000,000 numbers that is part of a block of 10,000,000 numbers were assigned the whole 10,000,000-number block – can be revoked if

a) facts give reason to believe that the implementing measures to be taken by the mobile network operators for the purpose of determining general usability will not be completed in time for the beginning of 2014, or

b) facts give reason to believe that a shortage of mobile numbers is to be expected.

## **7. Extra-territorial use for machine-to-machine (M2M) communications**

### **7.1. Definitions**

For the purposes of this Administrative Order

1. "extra-territorial use" means the use of mobile numbers with the country code (CC) 49 outside the Federal Republic of Germany on a permanent basis. Permanent use can take place by way of permanent activation of the mobile numbers in a foreign telecommunications network or by way of international roaming (permanent roaming). The use of mobile numbers with the country code 49 during temporary roaming is not considered as extra-territorial use;
2. "M2M communications" means the predominantly automated exchange of information between technical devices such as machines, vending machines, vehicles or measuring equipment (eg electricity, gas and water meters) or between the devices and a central data processing unit. Communications can be either wire-based or wireless. A human is not usually involved in the communications, although limited human involvement does not preclude classification as M2M communications.

If limited human involvement is part of a service, this does not preclude classification as M2M communications for the purposes of the numbering plan at least in the following cases:

- activation/operation/control/monitoring of an M2M application or an M2M device using technical equipment such as a computer, smartphone, tablet, etc by a human in either a private (eg smart home) or an industrial environment;
- activation of an application that enables individual communication in the sense of a preselected point-to-point communication but not a call to a freely selectable number. Examples of this are eCalls in vehicles, private emergency calls in lifts and/or vehicles, and concierge services in vehicles.

This list is not exhaustive and is without prejudice to an assessment of new business models.

*Please note: the Bundesnetzagentur will in due course publish a list of other services with human involvement that are classified as M2M communications for the purposes of the numbering plan.*

## **7.2 Admissibility of extra-territorial use**

By way of derogation from the principle of the inadmissibility of the extra-territorial use of German numbers, the extra-territorial use of secondary assigned mobile numbers with the country code 49 for M2M communications is permitted, provided that the primary assignee who makes the mobile numbers available for extra-territorial use as part of telecommunications services notifies the Bundesnetzagentur of this in advance.

A notification is only necessary if, against the backdrop of the extra-territorial use, the subscriber data for the German numbers are not collected pursuant to section 111 TKG and thus cannot be retrieved pursuant to sections 112 and 113 TKG using the automatic or manual information procedure. The notification should state which numbers fulfil the above criterion. Notifications should be made on the form provided in the annex.

The Bundesnetzagentur may revoke the admissibility of the extra-territorial use of secondary assigned mobile numbers for M2M communications in individual cases, for specific business models or generally if it finds that through the extra-territorial use there is

- a) detriment to public interests (eg public safety, number shortage), or
- b) detriment to rights of third parties (eg competition, consumer protection).

Upon revocation it will determine whether and if so the time frame in which existing applications are to cease.

*Note 1: The extra-territorial use of German numbers as allowed by the Bundesnetzagentur implies nothing about the legality of the use of these numbers in foreign countries. The assignment holder and/or the user of the number must at their own responsibility clarify the legal framework for the extra-territorial use of German numbers in the foreign country concerned and obtain any permission required for such use. Thus the secondary assignment holder and/or the number user is/are responsible for the admissibility under the applicable foreign law of the extra-territorial number use initiated by the holder and/or user. The holder of the number block assignment should draw the contractual partner's attention to these facts.*

*Note 2: Admissibility of the use of foreign numbers for M2M communications in the Federal Republic of Germany is regulated in Administrative Order No 80/2017 (Official Gazette No 16/2017 of 23 August 2017).*

*Note 3: Due to the partial revocation of existing assignments of mobile numbers, the permissibility of extra-territorial use and the corresponding obligation to give notice also apply to extra-territorial uses of mobile numbers which existed before the entry into force of this Administrative Order.*

## **8. Entry into force**

This Administrative Order enters into force on 9 March 2011.

### **Rights of appeal**

An appeal against this Administrative Order may be lodged within one month of its issue. The protest must be lodged in writing with the Bundesnetzagentur, Tulpenfeld 4, 53113 Bonn, or any other Bundesnetzagentur office, or placed on record.

The requirement of written form is met if electronic media are used. In this case, the electronic document must be signed with a qualified electronic signature as defined in the German Electronic Signatures Act (SigG). Attention is drawn to the information on the

Bundesnetzagentur's website at [www.bundesnetzagentur.de](http://www.bundesnetzagentur.de) – *Die Bundesnetzagentur > Über die Agentur > Elektronische Kommunikation.*

An appeal does not have suspensory effect. Filing an appeal does not change the effect or enforceability of the notice in any way.

Annex

Form for the notification of an extra-territorial use of mobile numbers for M2M communications without collection of subscriber data pursuant to section 111 TKG.

**Notification of an extra-territorial use of mobile numbers  
for M2M communications without collection of subscriber data pursuant to  
section 111 TKG**

Bundesnetzagentur  
Section IS 14  
Canisiusstr. 21  
55122 Mainz

The data requested below are required and used by the Bundesnetzagentur for the information procedure pursuant to section 112 et seq TKG. Data may also be used by the Bundesnetzagentur in the fulfilment of its numbering duties pursuant to section 66(1) TKG and in the investigation of number misuse pursuant to section 67(1) TKG.

**I. Details of notifying party (primary assignee)**

\_\_\_\_\_  
Name (company)

\_\_\_\_\_  
Street address (no PO Box address)

\_\_\_\_\_  
Postcode, town

\_\_\_\_\_  
Legal representative (for legal persons)

\_\_\_\_\_  
Contact person (if different from above)

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
Fax

\_\_\_\_\_  
Email

**Authorised recipient in Germany (if different from the notifying party; this information is required if the notifying party is resident in another country):**

\_\_\_\_\_  
Name (company)

\_\_\_\_\_  
Street address (no PO Box address)

\_\_\_\_\_  
Postcode, town

\_\_\_\_\_  
Legal representative (for legal persons)

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
Fax

\_\_\_\_\_  
Email

## **II. Information on the intended extra-territorial use**

It is intended to use the following German mobile numbers extra-territorially for M2M communications in such a way that there is no provision of telecommunications services in Germany and therefore no collection of subscriber data pursuant to section 111 TKG.

### **1. Numbers used**

(+49)1

Block code (identical first digits for all affected numbers)

\_\_\_\_\_  
Start of block (numerically lowest number, without block code)

\_\_\_\_\_  
End of block (numerically highest number, without block code)

### **2. Place of use**

- The extra-territorial use will take place in the following country:  
\_\_\_\_\_
- The extra-territorial use will take place in the following countries: \_\_\_\_\_  
\_\_\_\_\_
- It is not possible to provide details of the place of extra-territorial use, as it may take place worldwide, but not in Germany (**note: if use takes place in Germany, this notification is not required, but a collection of subscriber data pursuant to section 111 TKG is**).

### **3. Start of use**

The extra-territorial use of the numbers given above is to start on the following date:

\_\_\_\_\_

\_\_\_\_\_  
Place

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature (of the notifying party/authorised representative(s))