Central reference database for telephone numbers – ZR-DB

Usage notifications NEW

FAQs

Answers to the most frequently asked questions in connection with the changeover of the usage notification system

VERSION: 1.00
version history:

<table>
<thead>
<tr>
<th>version / Date</th>
<th>modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00 / 20.06.2022</td>
<td>initial creation</td>
</tr>
</tbody>
</table>

# Inhalt

**Definitions:**

1. What is the ZR-DB? ................................................................. 3
2. What does "usage" mean? .......................................................... 4
3. WHO is required to provide usage notifications? ....................... 4
3.1 I am a reseller, do I also have to provide usage notifications? .. 5
4. Where can I find the legal obligation to transmit usage notifications to RTR? .. 5
5. Are entries in the ZR-DB changed by the transmission of notifications of use? 6
6. For which numbers do usage notifications have to be transmitted? ........ 6
6.1 Exception for value-added service numbers (8xx, 9xx) ....................... 6
7. How often do usage notification have to be submitted? .................. 7
7.1 What is a usage notification on a daily basis? ............................ 7
7.2 What is a usage notification by file upload? ............................... 7
8. What are the usage statuses? ...................................................... 8
8.1 When do I have to use the "UR" status for reserved numbers? ............. 8
9. What are the categories of use? .................................................. 8
10. What parameters must the usage notification contain? ...................... 9
11. What should the file name be? ................................................... 9
12. Is it possible to delete a file that has already been registered? .......... 10
13. Error messages ........................................................................ 10
13.1 Registration on a daily basis / registration of individual numbers .......... 10
13.2 FULLFILES/Fileupload: ................................................................ 10
13.3 What happens if a usage notification is made for a call number for which the KDB/KNB has no right of use? ......................................................... 10
14. Is there an overview or a current data status of all the usage notifications I have submitted? ................................................................. 10
15. From when is there an obligation to transmit usage notifications via the ZR-DB? ........................................................................ 11
16. HOW to participate and register? ................................................... 11
17. Are there testing facilities? .......................................................... 11
18. What are the consequences of NOT participating? ............................ 12
19. Where can I find further information? ............................................. 12
20. Are documents concerning the ZR-DB also available in English? ........... 12
21. Where do I turn if I have problems or further questions? ................... 12
**Definitions:**

| **ZR-DB** | Central reference database for telephone numbers, entire application incl. interfaces |
| **ZR-DB user, operator** | A natural or legal person authorized to use the ZR-DB. These are all communication network operators and communication service providers |
| **communications Network Operator (KNB)** | Operator of a communications network within the meaning of Art. 4 Z 25 TKG 2021 |
| **communications service provider (KDB)** | Operator of a communications service within the meaning of Art. 4 Z 36 TKG 2021 |
| **decision holder** | The party to whom a telephone number, number range or number block was assigned by official decision under Art. 114 Par 3 TKG 2021, or its legal successor |
| **main user** | A user assigned to an operator via e-RTR with extended user rights |
| **user** | A user assigned to an operator via e-RTR who is created by the main user and who receives appropriate authorizations from the main user to use the ZR-DB |
| **Web-GUI** | Web portal through which all defined business cases, defined queries, setting of authorizations and notifications can be carried out and business cases can be viewed and which is connected to the ZR-DB. |
| **(tele-) phone number** | A telephone number in accordance with the Communications Parameters, Fees and Value-Added Services Ordinance 2009 (KEM-V 2009), Federal Law Gazette II No. 265/2009 (https://www.rtr.at/kem-v) |
| **tariff** | tariff field in the ZR-DB - tariff for target network tariffed numbers |
| **Charged in the terminating network** | Numbers starting with 43118, 43810, 43820, 43821, 43900, 43901, 43930, 43931 or 43939 |
| **Passing on** | Contractual transfer of rights to use telephone numbers pursuant to Art. 10 Par. 5 KEM-V 2009. |
| **Pass Optional** | A single telephone number is passed on to (must be a communications service provider) another communications service provider (only applies to mobile telephone numbers, geographical telephone numbers, telephone numbers from the (0)720 range) |
| **Pass Exclusive** | The exclusive passing on of a number range by a decision holder (must be a communications service provider) to another communications service provider |
| **date_reported** | Reporting date of usage |
1 What is the ZR-DB?

The ZR-DB (Central Database for Telephone Numbers) is a database in which the status of each individual assigned telephone number concerning

- decision holder of an allocation notice/decision
- the associated communications service provider
- the associated communications network operator
- the associated anchor communications network operator and
- the associated anchor communications service provider

is recorded and retrievable.

In other words, it should be possible to query each telephone number,

- who is the decision holder of the notification for a telephone number
- which communications service provider is currently responsible for this telephone number (porting status)
- which communications network has assumed the anchor network function for a telephone number
- the communications network to which the telephone number is currently ported/routed.

Furthermore, it serves as a reference for the routing tables of the operators, which also supports a quick correction of errors or "direct routing".

2 What does "usage" mean?

Definition of usage:

„The capability of reaching the target within the public communications network or the communications services addressed by the telephone number.“

The status of a telephone number / telephone number range at RTR is indicated by means of usage notifications.

Available statuses: see Section 8 (What usage statuses are available?).

In the case of value-added service numbers, the current content service provider(csp) for the number must be transmitted in addition to the usage status (this information is required for the value-added service directory to be maintained by RTR).
3 WHO is required to provide usage notifications?

Obligation to report the use of telephone numbers concerns:

- Communications service providers who are decision holders of telephone numbers and use these numbers themselves or have assigned telephone numbers to subscribers for use.
- Communications service providers who act as communications service providers for other decision holders (who have been assigned numbers without RTP and RTM) and "serve" these numbers for the respective decision holder (e.g. 05, 118, individual numbers from the 8xx and 9xx range).
- Communications service providers who have been exclusively passed numbers by a decision holder and use these numbers themselves or have assigned numbers to subscribers for use.
- Communications service providers who operate or import numbers from the 8xx and 9xx ranges to themselves.

3.1 I am a reseller, do I also have to provide usage notifications?

It depends:

With the exception of value-added services (see item 6 [exception of value-added services]), only the use of

- assigned numbers (assignment by RTR-GmbH),
- exclusively passed on (=received) numbers,
- serviced numbers for other (e.g.: 05)

have to be submitted.

If the above conditions do not apply to you - your number portfolio is limited to geographical, mobile or 0720 numbers - no usage notifications need to be submitted, as you are obliged to register every optional transfer, porting at KDB level in the ZR-DB and are also obliged to register every porting at network level or porting back in the ZR-DB in a timely manner. Each of these transactions, which are also referred to as "transaction types" in the ZR-DB, automatically triggers a usage notification within the system.

4 Where can I find the legal obligation to transmit usage notifications to RTR?

Since 01.03.2022, there is an obligation to submit notifications of use via the ZR-DB.

Section 12 para 1 ZR-DBV (https://www.rtr.at/zr-dbv):

"Communications service providers are obliged to enter the usage status of each telephone number for which they are registered as communications service providers
within 14 days of the cut-off date of 31.3. of each year or to keep the usage status up-to-date on an ongoing basis."

With regard to used numbers, the ZR-DB will serve to record the use of numbers. It is primarily intended to enable an efficient administration of communication parameters and to replace the previous procedure of registration by e-mail.

5 Are entries in the ZR-DB changed by the transmission of notifications of use?

Usage notifications do NOT change the attributes (KNBaktuell, KDBaktuell, KNB, KDB, rtp/rtm etc) of the telephone numbers contained in the ZR-DB. Usage notifications are processed completely independently of the other business cases in the ZR-DB and have NO influence on the data shown in the ZR-DB. These are NOT changed by the usage notifications!

ZR-DB will only be used to record usage notifications.

6 For which numbers do usage notifications have to be transmitted?

The usage notification of telephone numbers is divided into 3 categories and depends on how you have received telephone numbers for use.

Usage notifications must be submitted for the following number ranges (these are grouped into categories):

- mobile numbers
- geographical numbers and numbers from the 720 range
- service numbers (ranges 5, 10, 86, 89, 96, 97, 111, 118, 718, 8xx, 9xx and "*”).

The usage (independent of the category) must be indicated for the following numbers:

- own assigned numbers (assignment by RTR),
- exclusively passed on (=received) call numbers,
- for other serviced numbers (e.g. 05).

IMPORTANT: Porting (imports/exports), pass optional and porting back are processed automatically via the ZR-DB. Each porting, pass optional and backporting automatically triggers a usage notification (activation/deactivation).

6.1 Exception for value-added service numbers (8xx, 9xx)

The use of value-added service numbers must be registered on a daily basis with information on the content service provider (name and address of the content service provider [= text field in the ZR-DB]) - also in the case of porting (IMPORT).
Value-added service numbers:

- (0)810, (0)820
- (0)900, (0)901, (0)930, (0)931, (0)939

7 How often do usage notification have to be submitted?

In principle, there is the option to register either "on a daily basis" or "at least once a year with the overall status (with a cut-off date of 31 March of each year, maximum 14 days thereafter)".

Exception: The use of value-added service numbers in the 8xx9xx range must be registered on a DAILY basis!

If the registration is not updated on a daily basis, a total status of used numbers per category with a cut-off date of 31.03.202X must be submitted at least ONCE PER YEAR by means of FILE-UPLOAD; however, "full files" may also be uploaded several times per year (e.g., if a usage level for subsequent assignments must be verified or a temporary assignment is to be changed to an unlimited assignment by means of a usage notification).

The previous weekly/monthly/quarterly transmission of usage notifications (cf. § 15 par. 6-8 KEM-V 2009) is no longer necessary as of 01.07.2022.

7.1 What is a usage notification on a daily basis?

The term "on a daily basis" means that every change in the use of a number or number range must be reported (also numbers no longer in use) in order to comply with the requirement to "keep the data up-to-date" (cf. § 12 para. 1 ZR-DBV and EB).

To be registered is therefore:

- Activation
- Deactivation
- Change of content service provider behind value-added service numbers

The use of value-added service numbers in the 8xx9xx range must be registered on a DAILY CURRENT basis!

7.2 What is a usage notification by file upload?

A file upload can only be done via WEBGUI (zrdb-portal.rtr.at), this is not supported via REST-IF! The business case to be used in the WEBGUI is: "usage display".

Permissible formats for the upload are "csv" (columns separated by semicolons) and "ZIP" (must contain one or more CSV file(s)). The size of a csv file and a zip file is limited to a maximum of 50 MB.
A TOTAL of used numbers per category must always be transmitted. As a rule, switched-off numbers are not to be listed, except in the case of an entire area being switched off.

It is also possible to transmit total statuses related to individual area codes (e.g., a full file for NDC 664, a full file for NDC 665; transmission of the usage status of individual local networks if this is required for proof of the usage level in subsequent applications).

8 What are the usage statuses?

A usage status must be specified for each number:

- **UA**: number active, assigned to a subscriber for use.
- **UR**: numbers reserved for use. Example: Prepaid SIM cards issued to merchants but not yet activated.
- **UT**: numbers for technical use in own networks. Example: MSRN numbers in mobile networks etc.
- **UM**: numbers which are used for machine-to-machine communication.
- **US**: numbers which are used for SMS services.
- **UI**: number has been deactivated, no longer assigned to a subscriber or no subscriber is served under this number.

8.1 When do I have to use the "UR" status for reserved numbers?

The status "UR" is a special case for mobile telephony, e.g. for issued SIM cards that have not yet been activated. As soon as the number is activated, the status must be changed to UA.

For geo/0720, only the status "UA" or "UI" should be used, even if the number is "reserved" before activation.

9 What are the categories of use?

- Geographical/720
- mobile
- Service numbers (ranges 5, 10, 86, 89, 96, 97, 111, 118, 718, 8xx, 9xx and "**")

In future, there will be a SINGLE format for all categories.
10 What parameters must the usage notification contain?

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Explanation</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>number_start</td>
<td>Telephone number starting in the format 43 + NDC + SN</td>
<td>obligatory</td>
</tr>
<tr>
<td>number_end</td>
<td>Telephone number ending in the format 43 + NDC + SN, when registering a single number: number_end = number_start</td>
<td>obligatory for REST-IF / WEB-GUI; optional for file upload:</td>
</tr>
<tr>
<td>date_reported</td>
<td>Reporting date of usage</td>
<td>obligatory</td>
</tr>
<tr>
<td>type</td>
<td>Usage status of the telephone number (UA, UT, UR, UI, UM, US)</td>
<td>obligatory</td>
</tr>
<tr>
<td>csp</td>
<td>Name and summonable address of the information service provider</td>
<td>obligatory for 118, 8xx and 9xx; optional for all other ranges</td>
</tr>
<tr>
<td>note</td>
<td>corresponding-0800 for &quot;**&quot;. Remarks for all ranges</td>
<td>obligatory for &quot;**&quot;; optional for all other ranges</td>
</tr>
</tbody>
</table>

Fields in the file:

number_start;number_end;date_reported;type;csp;note

11 What should the file name be?

Filename: aaaa_TYP_yyyymmdd.csv

- aaaa: Operator code of the KDB (KDB-ID, visible in the ZR-DB in the "Overview of Business Cases" in the top left-hand corner) which transmits the file.
- TYP: number range to be transmitted:
  - mobile: mobile telephone numbers
  - fix-720: geographical numbers and service numbers from the (0)720 range
  - DRN: service numbers from the ranges f. private networks (05), 86, 89, 96, 97, 111, 118, (0)718, (0)8xx and (0)9xx
• yyyymmdd: Date of file creation. If several files are used by one operator for this data transmission according to this point, the differentiation of the individual files must be made in the file name.

Please note that no password protection of the file is set!

12 Is it possible to delete a file that has already been registered?
No, but a new upload of a file of the same category automatically overwrites the old file.

13 Error messages

13.1 Registration on a daily basis / registration of individual numbers
The error validation takes place immediately when the entry is sent. If the validation was not successful, then the transaction is rejected.

13.2 FULLFILES/Fileupload:
An error message is displayed during upload if the format is incorrect or the file is too large. The error evaluation will only take place after the file has been processed. Error reports will be sent to the contact person(s) for notifications of use ("AP NA") stored in eRTR as before.

13.3 What happens if a usage notification is made for a call number for which the KDB/KNB has no right of use?
In this case, both KDBs/KNBs are notified from time to time by means of data synchronisation. A correction is possible by transmitting a new file.

14 Is there an overview or a current data status of all the usage notifications I have submitted?
No, because usage notifications do not generate a „business-case“-id in the ZR-DB.
15 From when is there an obligation to transmit usage notifications via the ZR-DB?

- **FULLFILES/Fileupload:**
  - First transmission of the full files (overall statuses): **Deadline 30.06.2022**
  - File upload must take place no later than 14 days after the cut-off date (thus for the first time **no later than 14.07.2022 eod**).
  - Thereafter at least once a year with a cut-off date of 31.03 of each year, maximum 14 days after the cut-off date.

- **registration on a daily basis / registration use of individual numbers:** possible from 01.07.2022 onwards

16 HOW to participate and register?

The registration of data or processing of business cases can be done in 2 different ways or via 2 different interfaces:

- **REST interface:** REST interface for ZR-DB users who want to connect their systems directly to the ZR-DB in order to be able to carry out the registration process automatically.
- **Web-GUI:** Web interface that enables the operation of all functions necessary for an operator via a browser.

Entry: [https://zrdb-portal.rtr.at](https://zrdb-portal.rtr.at)

When logging in via the API endpoint, only registration of individual numbers can be made.

When logging in via WEBGUI, both registration of individual numbers and file uploads are possible.

17 Are there testing facilities?

A separate "ZR-DB test environment“ is available.

Until the start of the "usage notifications-NEW", testing can be carried out in a separate "ZR-DB test environment”:

- **API:** [https://zrdb-api-test.rtr.at/api/v1](https://zrdb-api-test.rtr.at/api/v1)
- **WEBGUI:** [https://zrdb-portal-test.rtr.at](https://zrdb-portal-test.rtr.at)
Business cases: "usage display" and "usage display-upload".

**ATTENTION:**

Currently, ONLY TEST NUMBERS (for registered test operators) are included in the database. However, the usage notifications themselves can also be tested with real data.

The filling of the test system with REAL DATA (transfer of data from the productive system) will take place at a later date.

Credentials for the LOGIN are the same as on the PROD system.

18 What are the consequences of NOT participating?

Apart from the fact that a violation of a regulation may result in a corresponding supervisory procedure, we would like to STRONGLY point out that NOT registering data and NOT participating in the ZR-DB may result in the NON-accessibility of your participants due to the routing obligation present in the ZR-DBV ([https://www.rtr.at/zr-dbv](https://www.rtr.at/zr-dbv))!

19 Where can I find further information?

Further information on the ZR-DB usage notifications (specification, presentation Info-Days) can be found at: [https://www.rtr.at/zrdb](https://www.rtr.at/zrdb)

20 Are documents concerning the ZR-DB also available in English?

The presentation on the conversion of the usage notification system as well as the specification are available in both German and English: [https://www.rtr.at/zrdb](https://www.rtr.at/zrdb)

21 Where do I turn if I have problems or further questions?

If you have any problems or further questions, please contact us directly at: zrdb@rtr.at