

BIK ■ RSSE
Random Sampling System Europe

The Random Sampling System EUROPE provides country-specific selection criteria for the random sampling of landline subscriber surveys.

Cellular mobile telephony samples from country-specific cellular mobile telephony selection criteria and cellular mobile telephony market structures can also be provided upon request.

Methodology profile CATI sampling criteria

■ **Telecommunications market landline / cellular mobile telephony**

Compilation of various information / statistics on the telecommunication market of BIK ■ RSSE countries, such as: landline / cellular mobile telephony penetration, allocated connection lines according to connection types, number porting, Internet telephony

Sources: Directories of National Institutions / Authorities / International Telecommunications Union / Eurostat

■ **Formation selection criteria**

Gabler and Häder developed a sampling approach for Germany at the Centre for Surveys, Methods and Analytics (ZUMA), in the mid-1990s that offers registered and unregistered telephone numbers the same chance of being included in the sample (cf. Gabler and Häder 1997). On account of the fact that in recent years the so-called density of telephone book entries in many European countries is declining (fewer households register their connection to the public telephone directory), this procedure is also used in the preparation of BIK ■ RSSE. This approach shall be briefly presented below:

- For each local area network, it is possible to identify exactly the 100-subscriber number block in which at least one registered telephone number occurs.
- There are often large gaps between these 100 subscriber number blocks, which are the main reason for the low efficiency in the application of pure random number dialling. It can be assumed that there are no unregistered numbers in these gaps.
- For each of the 100 subscriber number blocks occupied by at least one registered number, all possible digit sequences are subsequently generated, i.e. in the case of all registered numbers, the last two digits are truncated, and the resulting blocks are then filled again in the range of 00-99 with as many numbers generated as necessary.

Excluded from this block formation are "service numbers", purely commercial fax numbers, double entries as well as blocks, which consist only of a purely commercial phone number.

From this set (e.g., fully randomly or stratified), a predetermined number of sequences of numbers is ultimately sampled.

The Gabler-Häder design thus combines the advantages of Random Digit Dialling (RDD) and Randomize Last Digits (RLD) without assuming their disadvantages. In contrast to RLD, the method offers the same probability of inclusion, but at the same time is significantly more efficient (higher hit rate) than RDD.

■ Regional localization

In the case of the generated numbers, it is not known to which municipality these numbers belong. However, in order to realize a regional stratification / sampling of all call numbers, a distribution of the registered call numbers allocated to the municipality/(ies), is created in the 100-subscriber number block. Based on this distribution, an allocation of regional probabilities for the generated numbers is then made within the subscriber number block.

■ PAM (PVG) file

A systematic file is created with all combinations of **p**ostal code, **a**rea code and **m**unicipality code.

■ Municipality file / stratification features

This file contains all information necessary for the allocation at the municipality level to population and households and is enriched by region-specific characteristics for the stratification, such as, for example, municipality size classes, agglomeration areas.

Basis: official (country-specific) systematic information and administrative as well as relevant non-administrative territory divisions

■ Inner city differentiation

In the case of large cities with more than 500,000 inhabitants, if possible, the regional localisation of the numbers is differentiated within the city (official urban district / neighbourhood level).

■ Random sampling

The random sampling is effected pursuant to random procedures and on the basis of allocation criteria of the previously defined basic population.

■ Predictive dialling of the samples

It is technically possible to check whether a telephone number is actually active. Technically, this is done by polling the selected connection line, by means a dialler via ISDN, for a maximum 5-seconds. The feedback codes of this dialler are standardized according to international standards (ETSI = European Telecommunications Standards Institute). This can be used to exclude phone numbers that cause unnecessary waiting times for the interviewer in the CATI studio.

Please do not hesitate to contact us in case of further inquiries.

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