

Strengthening of the Residents' Register and the Voters' Register in Berlin

1 Executive Summary

The use of registers for administrative purposes has a long tradition in Germany. Nevertheless, there is a strong demand for improvement regarding quality management in Berlin and the integrative and cross-sectional use of registers, especially considering their use for official statistics. This is notably true against the background of e-government, the desire for fast and citizen-friendly administrative procedures, less cost-intensive surveys, less redundant and more consistent data storage, and an exclusively register-based census. The database of eligible voters is also created from the residents' register.

The correctness and completeness of the residents' register required by the German Federal Registration Act means in detail: all persons who must be registered based on the statutory provisions must be in the register; persons who may no longer be registered should be de-registered. The correct address must be stored for all persons to enable official contact. All other personal data should also be complete and accurate. However, project experience over the past three years shows that quality management is only possible to a limited extent within the current framework and is too time-consuming and human resource-intensive. The main reasons for this are the lack of appropriate digital support for administrative organs and the lack of coordination between data providers and data users. The need for legal adjustments, especially regarding responsibilities for quality assurance, should be examined, but there is also potential within the existing legal framework. The major findings are:

- The current situation is unsatisfactory because the residents' register, a crucial planning document for Berlin, a city of nearly 4 million inhabitants, lacks the necessary timeliness and quality.
- The legal obligation of users of the register data to report back errors must be made possible digitally in the future via appropriate interfaces of the IT systems. Otherwise, the barriers to fulfilling the reporting obligation will remain too high: errors are recognized but would not be corrected. The possibility of reporting errors via a standard interface then also enables more timely corrections, which saves additional effort and costs.
- In addition, a standardized procedure for the correction at the registration authorities is to be defined and monitored on a binding basis. This also includes the elimination of methodological inconsistencies between the residents' register and the official population statistics.
- Quality problems can be avoided by enriching the residents' register with information about residential buildings and apartments.
- It seems at least questionable whether the current institutional framework of the register landscape in Berlin is suitable to use the residents' register as a backbone for a variety of administrative planning processes.
- The project results point to the necessity of cooperation and data exchange between the register holding institutions. The situation in Berlin is further complicated by the lack of an interdepartmental body for quality assurance of registries and the lack of data analysts in the public administration. In the administration, the awareness that systematic analysis of registry data must become part of everyday business has not yet taken hold.

2 Introduction

It goes without saying that population figures are of utmost importance for many purposes¹ (Poulain & Herm 2013; Rockmann 2019). Currently, there are two sources for population figures in Germany: the official population statistics in the responsibility of the federal and regional statistical institutes (NSI/SSI), and the figures from the de-centralized residents' registers under the responsibility of public administration of the Länder (federal states) and municipalities.

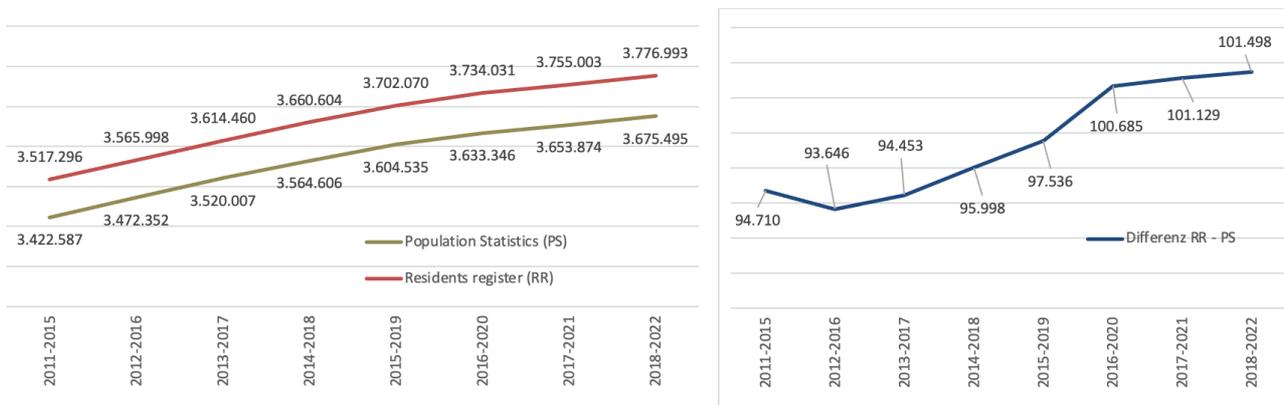
¹ See also UN requirements: <https://unstats.un.org/unsd/demographic/sources/popreg/popregmethods.htm#4> [accessed 6.2.2023]

The *official statistics population figures* are used in Germany for the distribution of budgetary funds and value added tax between the federal states to ensure equal living conditions throughout the country, for the calculation of indicators such as GDP per person, the determination of constituencies boundaries for German and European elections, etc. Official population statistics are based on the results of the census. For the population figures in the years between two censuses, data from the residents' registers and registry offices are used.

The German *Residents' Registers* (RR) were originally created for regional administration and planning, and not for official statistical purposes². The 16 federal states and the municipalities use them on a general and individual level. The RRs are the central data basis for many administrative processes, e.g., for checking entitlements, determining needs, notifying about school enrollment, creating personalized offers, providing information for specific target groups such as Covid vaccination letters, notification of upcoming elections or for the necessary exchange of driver's licenses.

The *2011 census* was the first census in Germany after a 30-year gap. It was the first census after the unification of the two German states and the first so-called register- and sample-based census, in which the population registers provided the central input, and a 10% sample was drawn. The sample was needed for the data not covered in the RR, for instance education and employment indicators. All in all, it was no surprise to statisticians that the residents' registers overestimated the resident population in some municipalities, especially in those with high fluctuation. In particular, the city states of Hamburg and Berlin showed significant differences: In Berlin, the residents' register has about 100,000 more citizens than the final census result (see also fig. 1).

Fig. 1: Berlin population according to (left) official populations statistics, residents' register and (right) difference (both SMA - 5 years grouped), 2011 to 2021 and 30.6.2022³



This large difference between the census result and the RR posed enormous problems for the government of Berlin. It shook Berlin's credibility vis-à-vis the other federal states. This is particularly true regarding the state fiscal equalization system because each additional inhabitant meant a plus of about 5,000 Euros in Berlin's state treasury for that year. As a result, Berlin received too much money from the Länder fiscal equalization scheme over a period of years, and reimbursement was time-barred for a number of years in the past.

² Nevertheless, the register in anonymized form is not available for scientific purposes, unlike the situation in other European countries.

³ Source: own calculations based on <https://www.statistik-berlin-brandenburg.de/search-results?searchPressRelease=true&searchBlogPost=true&searchStaticReport=true&searchPage=false&searchMethodik=false&searchArchJobOffer=false&category=%2Fdff4ff71ef6b7fff%2Fa903a36e28bef8ca%2Fd2203f305fff9572¤tPageId=d2203f305fff9572&q=Bev%C3%B6lkerung&pageNumber=1#results>; <https://www.statistik-berlin-brandenburg.de/search-results?searchPressRelease=true&searchBlogPost=true&searchStaticReport=true&searchPage=false&searchMethodik=false&searchArchJobOffer=false&category=%2Fdff4ff71ef6b7fff%2Fa903a36e28bef8ca%2Fd2203f305fff9572¤tPageId=d2203f305fff9572&q=Einwohner&pageNumber=1#results>; <https://statis.statistik-berlin-brandenburg.de/webapi/jsf/tableView/tableView.xhtml> [accessed 6.2.2023]

The BSOC runs the central digital residents' register for the Land Berlin. The BSOC is responsible for all related IT procedures. Only the BSOC has access to the entire data stock, therefore systematic quality analyses can only be performed by the BSOC. Beside other problems, these analyses are limited by human resources – especially by the lack of data analysts. Additionally, the BSOC provides access to and transmission of data to all authorized institutions and bodies within Berlin (BlnAGBMG §1 Sec. 3). Furthermore, the BSOC is responsible for all data transfers beyond the borders of Berlin¹¹.

4 The Basic Adjustment

The project started out with the census 2011 results: They showed a net difference of more than 100,000 persons less than indicated in the residents' register (fig. 1). This difference, which is subject to some fluctuations over the years, is still present at the end of 2021. It accounts for roughly 2.7% of Berlin's population.

The persistent gap is in line with expectations: Since it is forbidden in Germany to transmit individual data from official statistics back to the registration offices ("backward transmission ban", "Rückspielverbot"¹²), the results obtained from the census 2011 for individuals could not be used for an amendment of the register. But even without the ban, the effects would have been small because the census in Berlin was only a 5 % sample. Furthermore, official population statistics mainly used data from registration offices for their updating between censuses and had little independent supplementary information. Therefore, it came as no surprise that the gap should persist until the 2022 census. A reduction in the difference would have been expected only for RR adjustments, for which there would have been a reason to refrain from making adjustments to the official statistics figures.

4.1 QA-Approach

The results of the 2011 census pointed to two characteristics (and their interaction) that led to significant discrepancies: *citizenship* and *age*.

- Individuals not having a German citizenship and residing in the country just for a certain period of time—e. g., international students and scholars, craftsmen, embassy staff, etc.—are often not aware that they have to de-register when they give up their residence in Germany. The Residents' Registration Office will not determine their departure until the next official contact with the person or their family, whenever that will be. For individuals with a European passport, this could be the notification letter for local or European elections. For all other foreigners, administrative contact is required when their residence permit expires. However, this may also be the case long after they have left the country.
- Individuals belonging to the highly mobile age group (25 - 40 years) are another cause of the gap between the two data sources. Because students often live in dormitories, the differences between the census and RR results differ by district of residence (fig. 3 left).

Based on these findings, a basic cleanup began, taking into account the following aspects: 1) residential environment, 2) activities of the administration for purposes other than quality assurance, and 3) administrative procedures related to foreigners.

4.2 Data input

The project began with 97,000 already known evaluation cases originating from former undeliverable election notifications and cases from the Berlin Foreigners' Registration Office. The additional 67,000 cases were achieved through 1) landlord interviews, 2) undeliverable mail of the administration and 3) the Berlin election office during the project duration.

¹¹ The standards for IT-communication are set and coordinated by https://www.xoev.de/wir_ueber_uns-8159 [accessed 6.2.2023]

¹² See https://www.zensus2022.de/DE/Veranstaltungen/Fachgesprach_Landingpage/FAQ/e_datenschutz.html [accessed: 6.2.2023]

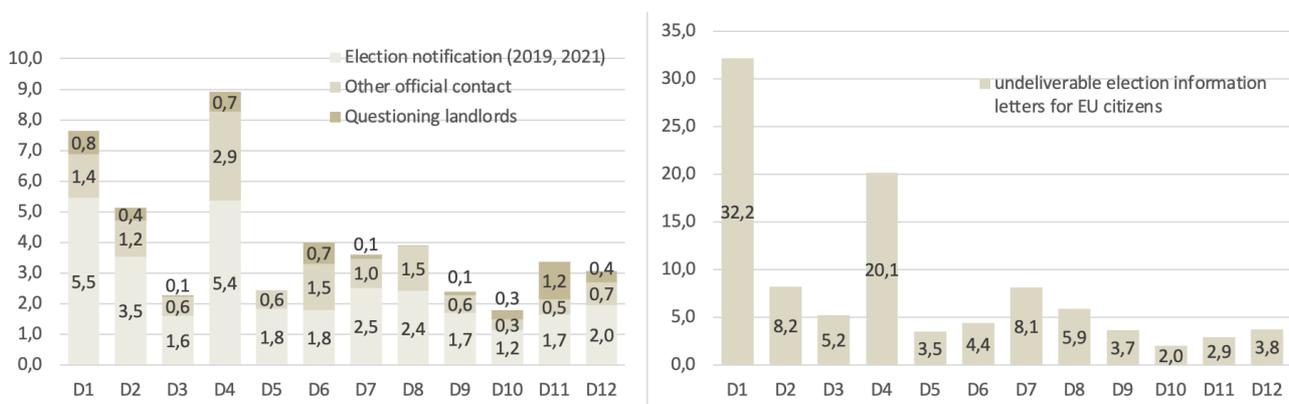
1. The Residents’ Registration Act states that all *landlords* must cooperate in the necessary administrative clarifications as to whether their tenants are correctly registered in the residents’ register¹³. In light of the census results, it made sense to question the landlords of the large housing and large student accommodations in particular: All persons who have a rental contract should be registered in the residents’ register. Further, no persons should be registered at the respective addresses who no longer have a rental contract. The project experienced that not all landlords were aware of this obligation.
2. The project period overlapped with the COVID pandemic. The *Berlin Health Administration* informed all residents about hygiene standards, vaccination options, etc. This information campaign by postal mail was very useful for the project because it included groups of people—non-EU-foreigners, persons younger than 16 years old—who are excluded from other large-scale mailings, such as for elections. Furthermore, all inhabitants older than 60 years were requested to participate in the senior elections independent from their citizenship.
3. The *Berlin election office* informed 2021 all Berlin inhabitants eligible to vote¹⁴ for Bundestag, Berlin and district elections via postal mail about their polling station, opening hours etc. In a further letter, around 256,000 people who hold a European but not a German citizenship were informed about their right to vote in the local elections.

The regular contact attempts of the Berlin administration cover a large part of the Berlin population and is therefore well suited for QA—if one additionally takes into account the necessary contacts when a family has school-age or kindergarten children or receives social assistance. For non-EU foreigners¹⁵, the situation is different: It can happen more easily that all these measures are not relevant for them and thus their departure stays unnoticed if they do not de-register and their visa or Blue Card is still valid. All standardization processes must keep this aspect in mind.

4.3 Audit cases by district

As shown in figure 3 (left), the mailing of election notifications is a valuable source of quality assurance—at least for all persons holding an EU citizenship. In local and EU elections, where non-German persons with an EU citizenship are also eligible to vote, it is noticeable that for them the letters are undeliverable disproportionately often: 27,700 (11%) of the information letters on the 2019 EU elections could not be delivered (fig. 3, right). For persons with German citizenship the percentage was less than 1%. In particular, people with a Polish, Bulgarian, Romanian, French, Italian or Spanish citizenship could often not be reached mainly registered in the districts D1 (Berlin-Mitte) and D4 (Charlottenburg-Wilmersdorf).

Fig. 3: left: Audit cases by district and information origin as a share of the population in the respective district as of June 30, 2022; right: Undeliverable EU election information letter 2019 for EU citizens registered in Berlin by district.



¹³ In Germany, there is no register in which all buildings with living space and all apartments with their square meterage are recorded.

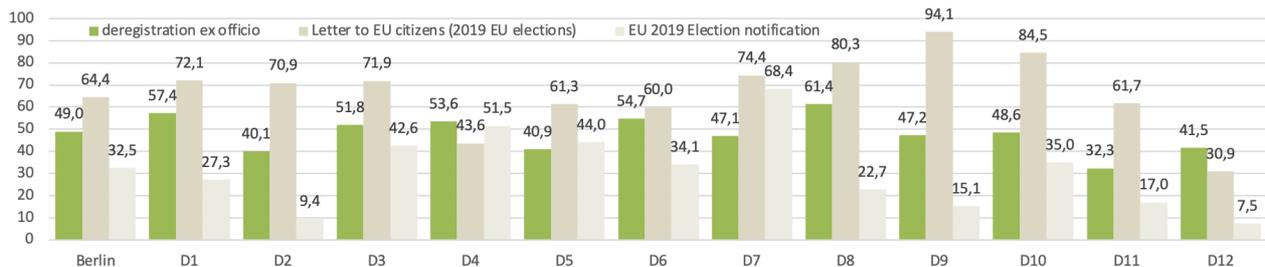
¹⁴ On September 26, 2021, 2,468,919 individuals were eligible to vote in the federal election, 2,447,600 in the Berlin election, and 2,737,562 in the district elections. The figures differ due to the divergent underlying laws.

¹⁵ Persons with a nationality from Iceland, Liechtenstein or Norway are treated on an equal footing with persons with an EU nationality and do not need a residence permit.

4.4 Results

Since, due to lack of human resources, the audit cases were not processed in a timely manner, the same case may appear in multiple data sources during the two-year project period. At the end of the project in March 2022, 59% of the audit cases had been closed; of these, 49% were completed with an ex officio de-registration (fig. 4). Almost two thirds of the undeliverable letters sent to EU citizens living in Berlin led to an ex officio de-registration. The number of de-registrations was significantly lower regarding election notifications, which were sent to 2,490,435 Germans eligible to vote and to 18,000 EU citizens registered in the election database.

Fig. 4: De-registration of audit cases by district



5 Conclusions

A central problem of all QA approaches up to now is not the lack of knowledge about what to do, but the lack of information and digital tools and, as a consequence, the lack of human resources to do it in a timely manner. Problems could be avoided, for example, if more information about residential buildings and apartments were available during the resident registration process: If the registration authorities knew that ten people were already registered in a 40-square-meter apartment, possible errors would become obvious at an early stage. Another example is that currently the information about undeliverable election notifications has to be exported from the IT election system to a spreadsheet and then transmitted to the residents' registration offices. Manual data entry is required there. This time-consuming procedure seems to be completely outdated. It also shows the lack of flexibility of the IT systems currently in use, which may have made sense 30 years ago, but are no longer suitable today.

Literature

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