Strategies for Measuring Homelessness in a Federally Organised State – The Case of Austria

Philipp Schnell & Robert Musil

Instutite for Urban and Regional Research, Austrian Academy of Sciences, Vienna, Austria

Abstract_ *The measurement of homelessness is a challenging issue, in particular in federally organised states. This is also true for the case of Austria, where the measurement of homelessness is located partly on the national level, and partly on the level of sub-national federal provinces. Social services for people experiencing homelessness vary in the nine Austrian federal provinces as far as funding arrangements as well as homelessness monitoring systems are concerned. Political engagement regarding this issue also varies considerably. Consequently, the current state of homelessness monitoring in the nine federal provinces, including data coverage and quality, is unclear. Against this background, this paper intends, first, to survey the measurement of homelessness in the multi-scalar welfare system of Austria. Second, it aims to develop suggestions for comprehensive homelessness measurement in Austria. With this purpose in mind, we have conducted 27 expert interviews and organised a workshop with stakeholders from national institutions, federal provinces, and social-service organisations. Accordingly, this paper provides a comprehensive overview of existing measurement practices, data sources, and data quality in Austria. Additionally, we have formulated three measurement models that address the different levels or scales of the federal state.*

Keywords_ *Measurement of Homelessness, Methods, Federal State, Federal Provinces, Austria, Homelessness Monitoring Models.*

ISSN 2030-2762 / ISSN 2030-3106 online

Introduction

To combat homelessness successfully, the availability of comprehensive data on its extent and profile is a crucial precondition (Busch-Geertsema, 2010; Demaerschalk et al., 2018; Hermans, 2023). Homelessness is described as a heterogenous and elusive phenomenon (Lee et al., 2021). As such, generating reliable data is still challenging in many European countries. Fuzzy definitions and incomplete statistics, in combination with a high degree of hidden homelessness, often hamper the successful implementation of existing policy strategies. Consequently, the monitoring of homelessness became a salient issue on the European level: the ETHOS Light typology provides a new comparable standard for common definitions and measurement strategies (Edgar et al., 2007). Furthermore, the declaration of Lisbon and the foundation of the EPOCH-network in 2021, as well as an OECD workshop in November 2023 (OECD, 2023), highlight the political will to harmonise definitions and measurement approaches on homelessness to develop adequate strategies.

In Austria, the measurement of homelessness likewise remains challenging. The Austrian welfare state provides a comprehensive social-security and health system, but social services are largely funded and organised on the sub-national level (Dimmel, 2015). Consequently, the measurement and publishing of data on homelessness is mainly organised on the level of the federal provinces. Due to different funding and reporting systems, the depth and detail of available data and data reports vary considerably among the nine Austrian federal provinces. Only register-based data (in particular the Austrian Central Population Register; Statistik Austria, 2023) and the EU-SILC survey (BMSGPK, 2023) record data at the national level. As such, the current homelessness data landscape in Austria is patchy, displaying varying degrees of coverage of different regions and ETHOS Light types (BAWO, 2019a; 2019b).

Against this background and in the context of the growing commodification of the Austrian housing market (Musil et al., 2022), the overall aim of this paper is, first, to provide an overview of existing data on homelessness in Austria, with reference to the ETHOS Light typology. Second, we present three measurement models which consider the specific situation of the federally organised Austrian welfare system. For this purpose, we have conducted 27 in-depth interviews with experts at the national and sub-national levels, as well as with experts from research and social-service institutions. Furthermore, we have organised a workshop to discuss and evaluate existing data for each ETHOS Light type in Austria and to identify critical aspects of a national strategy to measure homelessness. Based on this, we have developed three models for measuring homelessness in Austria.

In this contribution, we discuss challenges and strategies regarding the measurement of homelessness in Europe in the following section. Then we provide an overview on existing measurement approaches and types of data relevant for this study, followed by a short description of the role of state organisations for the measurement of homelessness. After explaning the research methods used in this study, we present the current context of homelessness measurement in the federally organised welfare state of Austria. In the next section, we describe existing data and measurement practices in Austria on the three relevant scales of the social welfare system: the national scale, the scale of the nine federal provinces, and the scale of social-service organisations. We continue by presenting key principles for designing a measurement toolkit in Austria and, subsequently, we discuss three basic measurement models. Finally, we formulate policy recommendations for drafting a comprehensive monitoring strategy in a federally organised welfare state and draw final conclusions.

The Challenge of Measuring Homelessness: Homelessness as an Elusive Phenomenon

Measuring homelessness is described as a challenging issue, mainly for three reasons: First, homelessness is a heterogenous phenomenon, ranging from rough sleeping to insecure or inadequate housing, with many gradually differing forms ranging between these two poles (Daly, 1992). This variety is well mirrored in the six categories of homelessness included in the ETHOS Light Typology. Second, homelessness is a dynamic phenomenon, characterised by high mobility between its different forms, and by different pathways leading in and out of homelessness; consequently, homelessness is described as a 'moving target' by Lee et al. (2021). Finally, from a geographical perspective, the six types of homelessness show a high degree of spatial variation between urban and rural regions. This becomes apparent, as these types display different levels of visibility, particularly in rural areas (Demearschalk et al., 2019; Snelling, 2017). Also, people experiencing homelessness perceive their lifeworlds differently, according to their current housing status (Schnell, 2021).

Additionally, the phenomenon of hidden homelessness – e.g., persons living temporarily with friends or family (ETHOS Light 6) – complicates the comprehensive capture of homelessness data. These hidden populations are neither visible in public space, nor are they in contact with social-service institutions. They often do not even perceive themselves as being homeless. The recurring Austrian Survey on Living Conditions and Wellbeing (BMSGPK, 2023) estimates that around 69% of all people affected by homelessness in their lifetime can be allocated to ETHOS Light category 6. Although homelessness is often perceived as an urban phenomenon,

empirical findings also point to a high level of hidden homelessness in rural areas (Snelling, 2017), which can be explained by a weak network of service institutions, a high level of social stigmatisation, and a limited supply of affordable housing (Cloke et al., 2000). In general, the share of hidden homelessness is estimated at up to 70% of the total homeless population (Eberle et al., 2009).

For effective data generation on homelessness, Pleace and Hermans (2020) mention two crucial aspects: first, the definition and delimitation of homelessness in its various forms ('Who counts as homeless?'), and second, the adequate statistical recording of these groups ('How can those who are homeless be counted?'). These aspects have become apparent on a European scale, as the European countries represent different national housing and welfare systems (Matznetter, 2002), wherein the types of homelessness are perceived and defined in different ways. The ETHOS Light Typology (Edgar et al., 2003; 2007) – which has become a European standard for the definition and delimitation of homelessness – made visible the differences in the perception, definition, and measurement of homelessness among European countries (Busch-Geertsema, 2010; Geyer et al., 2021).

Measurement Approaches

The adequate measurement of homelessness faces three challenges: the heterogeneity of the overall phenomenon, the problem of hidden homelessness, and the mobility of affected people among the different forms of homelessness. Against this background, it is widely acknowledged that a comprehensive measurement of the extent and profile of homelessness should rely on multiple data collection methods and data sources, addressing different dimensions of this phenomenon (Demaerschalk et al., 2018): the stock of households or persons affected by homelessness at any given point in time; the flow of households or persons that move between or into/out of different forms of homelessness in a specific time period; the prevalence of homelessness, measuring the number of people that have experienced homelessness over a certain timespan, and, finally, the incidence of homelessness or the number of people who have become homeless during a specific period of time (Hermans, 2023).

Considering that there are differences in the national definitions of homelessness, available data sources, and political interest in the overall topic, the applied measurement regimes also vary significantly. However, almost all national statistics on homelessness in the EU rely on at least one of four methods of quantitative data collection (Busch-Geertsema et al., 2014; Geyer et al., 2021): counts (street counts/

service-based counts), surveys, administrative data of social-service institutions, and public census or register data. The degrees of coverage of different forms of homelessness as well as strengths and weaknesses are discussed below for each method.

Counts include street counts, recording the number of rough sleepers, primarily in large cities, e.g., in Paris, Barcelona, or Brussels. Street counts are point-in-time-counts usually conducted during one night in the entire city, potentially including places outside the city limits that are of special interest to the homeless population (Drilling et al., 2020). In addition to rough sleepers, city counts usually also include certain groups of sheltered people experiencing homelessness, such as people staying in emergency accommodation or in transitional housing. Typically, city counts also include questionnaires, going beyond the mere counting of sheltered and unsheltered people experiencing homelessness. In contrast to this, service-based counts are conducted among a broad range of social-service institutions, reaching people in different ETHOS Light categories. They efficiently measure the extent and profile of homelessness, but rely on the network of service institutions and their willingness to take part in the surveys (Demaerschalk et al., 2018).

Quantitative surveys are based on representative statistical samples. Surveys are conducted at various levels, primarily at the national, but in federally organised countries, also at the sub-national level (e.g., Flanders Household Survey, Statistiek Vlaanderen, 2021). At the European level, the EU-SILC survey collects microdata in a module on housing difficulties and the prevalence of homelessness since 2018 (European Commission, 2024). These data provide comprehensive (and ideally comparable longitudinal) insights into the phenomenon of homelessness. Household surveys are also subject to certain shortcomings, such as the severe underrepresentation of rough sleepers or the inability to produce data on the current homelessness situation. In this context, Germany has recently taken an innovative approach by taking a representative sample of people experiencing homelessness in three stages in cities and municipalities throughout the nation to arrive at a reliable estimate of rough sleepers and individuals in concealed homelessness (GISS/Kantar Public, 2022).

Administrative data of social-service institutions constitute an efficient data source, based on information on service users. If personal data are available for individuals, these can also be linked to registry data. Some countries analyse administrative data, e.g., the systematic analysis of night-shelter data in Ireland (Daly, 2019), or national registration systems for monitoring homelessness in Denmark, Slovenia, and Hungary (Demaerschalk et al., 2018). In certain federally organised countries (e.g., Germany), regional authorities established a monitoring system that relies on administrative data (BMAS, 2022). The main weakness of this type of data source is described as the ‘service paradox’ (Hermans, 2023): density and quality of the

service system have a strong impact on data output; people that are not entitled to use or are not in touch with social-service institutions are not recorded. Furthermore, regions with a weak network of service institutions are only mapped partially.

Register data are drawn from national censuses, which are conducted every 10 years in many countries, as well as from public registers, in particular the central population register. Central population register data are available in most European countries. These can be linked to other registers, providing comprehensive insight on socioeconomic structure, education, or the health situation of the population. As these data rely on individual registration, people in precarious housing conditions as well as people experiencing homelessness are often severely underrepresented in official numbers. As such, register-based data can only represent a minimum level of homelessness (Busch-Geertsema et al., 2014).

The Role of State Organisations for the Measurement of Homelessness

Methods for measuring homelessness not only differ in relation to different forms of homelessness (ETHOS Light types), but also in regional coverage. Some methods are applied on a national scale, while others are often limited to the regional scale. The following section demonstrates how the spatial range of measurement methods is often compromised by the spatial organisation of the state.

For instance, *register data* (mostly aggregated at the national scale in European countries) usually cover the whole country, as the central population register is centralised in many European countries, even if the registration of people experiencing homelessness might vary between (urban and rural) regions. However, some European countries, such as Germany, do not record people experiencing homelessness at all via the central population register. Furthermore, survey data also provide good spatial coverage on the national level, e.g., the EU-SILC survey. However, due to sampling size, survey data do not allow for comprehensive spatial differentiation, particularly in individual regions (European Commission, 2022). Additionally, in federally organised countries, surveys are also conducted on the sub-national level (e.g., Flanders; Demaerschalk et al., 2018).

Methods that rely on data provided by *social-service institutions*, e.g., via service-based counts or administrative data, show the highest variation of spatial coverage. In centralised countries such as Norway or Denmark, service-based counts are coordinated by independent research institutions on the national level (Benjaminsen et al., 2020; Dyb and Zeiner, 2021). The Danish 'mapping' is conducted in two steps (Benjaminsen, 2022): first, the identification of a broad range of relevant social-service institutions, followed by the inclusion of these institutions in a comprehen-

sive survey of people affected by homelessness. According to the Danish mapping method, only a national research agency and social-service institutions are involved in the count. Finland, a centralised state, likewise conducts an annual survey based on administrative data, coordinated by the national 'Housing Finance and Development Centre of Finland' (ARA). Data are generated in 293 municipalities, collected from various service institutions, and forwarded to ARA (ARA, 2023). Regardless of survey design, a centralised agency conducts the survey on the national level in both cases, in cooperation with actors at the local scale – service providers and municipalities.

In federally organised states, the measurement of homelessness can be highly fragmented. For instance, between Flanders and Wallonia, register data are not comparable, as the two regions have different registration systems. Even within Wallonia registration systems vary (Demaerschalk et al., 2018). Beyond that, the federal structure of Belgium also hampers the implementation of a nation-wide service-based count. Although planned and coordinated by a national agency, the 'Centre for Care Research & Consultancy' (LUCAS; Mertens et al., 2023), service-based counts have been implemented in a 'bottom-up strategy', motivating and increasing the number of participating municipalities one after the other. Here, recurring counts in different municipalities result in steep learning effects and gradual improvements in methodology over time, even if national numbers are still missing. Street or city counts are furthermore usually organised on the municipal level, covering entire cities or certain districts (Drilling et al., 2020). Germany, on the other hand, provides a positive example of how the fractalisation of data generation in a federally organised state can be overcome by prescribing by law (1) an annual count of sheltered persons affected by homelessness, and (2) a biennial survey on persons experiencing rooflessness and hidden homelessness (BMAS, 2022).

Even if the case studies mentioned above represent extreme examples for data collection in centralised vs. federally organised states, they demonstrate that the degree of decentralisation (in particular of the welfare state) can have strong implications for the coverage of different forms of homelessness. In the following sections we will discuss the current situation and possibilities for a nation-wide, comprehensive measurement of homelessness in Austria. Against this background, we aim to answer the following research questions:

1. What is the current degree of coverage of different ETHOS Light categories by different data sources on the national, federal-province, and organisational level in Austria?

2. How can different measurement strategies be applied on a nationwide scale to obtain a comprehensive insight into the extent and profile of homelessness?

Methods

The main intention of this paper is to gain insight into existing data sources for measuring homelessness in the federally organised state of Austria and to develop a comprehensive nation-wide measurement model. For this purpose, we conducted broad desk-research to analyse the existing forms of measurement on the three spatial levels of the Austrian welfare system: nation state, federal provinces (sub-national level, 'Bundesländer'), and social-service institutions. First, it was essential to establish a knowledge base about how and to which extent homelessness is already measured by different entities at different scales in Austria. Second, we analysed the current coverage of different forms of homelessness, according to ETHOS Light, by various measurement techniques, including deficiencies in measurement.

Based on this, we conducted 27 expert interviews with stakeholders of national institutions (Ministry of Social Affairs, Statistik Austria), social welfare organisations in federal provinces, as well as social-service institutions. These interviews, which have been conducted in person (15) or via Zoom meetings (12) in October and November 2023, allowed us to obtain comprehensive insight into social-service systems for the homeless and current measurement techniques, which are organised in different ways in the nine federal provinces in Austria. We generated information on data quality, availability, and coverage of different forms of homelessness in different Austrian regions. In combination with our desk-research, the expert interviews allowed us to develop a catalogue of detailed information on the measurement of homelessness for the ETHOS-Light categories (Musil et al., 2024) on the one hand, and at varying spatial scales on the other hand: the national level, the nine federal provinces, and the network of social-service organisations, operating in the federal provinces, cities, and regions.

Based on these results, we designed an initial basic model for measuring homelessness, taking into account the spatial scales of the Austrian welfare system. In a next step, we invited 18 experts active on different levels of the welfare state – federal state, federal provinces, and social-service institutions –, as well as researchers. We organised (1) an in-depth workshop to discuss our basic model; (2) a world café (Freimuth and Barth, 2014) to reflect on the challenges of counting persons in each ETHOS Light category, and (3) an in-depth workshop on various crucial aspects of a nationwide measuring model, including networking and incentive systems, the role of federal provinces, national coordination, and data management.

Measuring Homelessness: The Case of Austria – A Conservative, Federally Organised Welfare State

Austria's welfare system can be described by two main characteristics: First, in Esping-Andersen's (1991) typology, Austria has repeatedly been classified as the ideal type of a conservative, familialistic welfare regime (Matznetter, 2002). Second, Austria can be described as a federally organised welfare state with a complex allocation of competences between the federal state and nine federal provinces ('Bundesländer'). As such, social welfare legislation and social housing policy are the responsibility of the federal provinces (Dimmel, 2015). In 2019, a new framework for social welfare legislation has been created by the central government to be translated into law in the federal provinces. However, only six of the nine federal provinces have adopted the new framework and enacted corresponding laws (Carinthia, Lower Austria, Salzburg, Styria, Upper Austria, Vorarlberg). Hence, social welfare legislation, which contains regulations on social assistance, social housing, and housing for the homeless, shows considerable disparities among the nine federal provinces (BMSGPK, 2024). This impedes a comprehensive overview of the landscape of social services addressing homelessness as well as its measurement in Austria.

As is the case with social-service legislation, the extent of social assistance payments as well as the system for their administration vary in each federal province (Dimmel, 2015). Social welfare usually covers direct payments to people experiencing homelessness in the form of social assistance, but it also covers the cost of housing, which is paid to housing institutions either separately for each person living there in certain federal provinces (subject-based funding: Salzburg, Vienna, Vorarlberg) or in the form of a yearly overall subvention paid to the housing institution, based on revolving funding agreements (object-based funding: Burgenland, Carinthia, Lower Austria, Styria, Tyrol, Upper Austria). The existence of these two systems, combined with different legislative backgrounds and varying interest in the overall topic of homelessness, implies that different data of varying quality are exchanged between social-service providers and federal provincial governments.

In addition to the fragmented legal framework, different funding systems, and varying practices of data collection at the sub-national level, data are also collected at the national level (federal state) and at the level of social-service institutions in federal provinces. On the national level, the Austrian Central Population Register ('Zentrales Melderegister') records every person taking residence in an Austrian municipality (Statistik Austria, 2015). This system also registers people experiencing homelessness and people living in housing institutions for the homeless. Moreover, on the organisational scale, social-service institutions, such as night shelters, temporary and long-term housing institutions, day-care centres, social advisory

centres, social housing institutions, and organisations for medical and psychological assistance record data on their clients. These data are collected for different purposes and aggregated in different internal or external data management systems (BAWO, 2019a; 2019b). Finally, in the federal provinces of Salzburg and Vorarlberg, two umbrella organisations conduct yearly homeless counts among the extended social-service network (ARGE Wohnungslosenhilfe, 2022; Forum Wohnungslosenhilfe Salzburg, 2023).

Hence, data generation in the social-service system varies among the three spatial scales on the vertical axis, but also among the nine federal provinces on the horizontal axis. In the following, we provide an overview on existing data sources and the quality of data produced within the Austrian system of social services for people experiencing homelessness.

Current Data Sources on State, Federal Province, and Organisational Level

As indicated above, data is generated at different scales or levels in Austria, including the national, federal-province, and organisational scale. Furthermore, approaches to data generation, types, and quality of data vary in each federal province. Consequently, data sources are manifold, albeit fragmented, providing great potential for developing a unified approach to the measurement of the extent and profile of homelessness. Subsequently, we will describe different measurement techniques at different scales and we will summarise the results of our analysis on data coverage in the federal provinces in figure 1.

Figure 1: Coverage of ETHOS Light categories by different measurement techniques (ISR)

	Vienna	Salzburg	Vorarlberg	Styria	Upper Austria	Lower Austria	Tyrol	Burgenland	Carinthia
1	ACR	ACR	ACR	ACR	ACR	ACR	ACR	ACR	ACR
	ORG	ORG	ORG	ORG	ORG	ORG	ORG	ORG	ORG
	STW	STW	STW	STW	STW	STW	STW	FPO	FPO
	FPO	FPO	FPO	FPO	STC	FPO	FPO		
		Count	Count		FPO				
2	ACR	ACR	ACR	ACR	ACR	ACR	ACR	ACR	ACR
	ORG	ORG	ORG	ORG	ORG	ORG	ORG	ORG	ORG
	FPO	FPO	FPO	FPO	FPO	FPO	FPO	FPO	FPO
		Count	Count						
3	ACR	ACR	ACR	ACR	ACR	ACR	ACR	ACR	ACR
	ORG	ORG	ORG	ORG	ORG	ORG	ORG	ORG	ORG
	FPO	FPO	FPO	FPO	FPO	FPO	FPO	FPO	FPO
		Count	Count						
4	ORG	ORG	ORG	ORG	ORG	ORG	ORG	ORG	ORG
	FPO	FPO	FPO	FPO	FPO	FPO	FPO	FPO	FPO
		Count	Count						
5	ORG	ORG	ORG	ORG	ORG	ORG	ORG	ORG	ORG
	STW	STW	STW	STW	STW	STW	STW	STW	STW
	FPO	FPO	FPO	FPO	FPO	FPO	FPO	FPO	FPO
		Count	Count						
6	ACR	ACR	ORG	ACR	ACR	ACR	ACR	ACR	ACR
	ORG	ORG	FPO	ORG	ORG	ORG	ORG	ORG	ORG
	FPO	FPO	Count	FPO	FPO	FPO	FPO	FPO	FPO
		Count							

Legend: light grey = extensive coverage, middle grey = average coverage, dark grey = reduced coverage, ACR = Austrian Central Population Register, ORG = Administrative data of social service organisations, STW = Steet work, STC = Street count, Count = Yearly service-based counts, FPO = Federal provincial organisations

National scale – the Austrian Central Population Register

The Austrian Central Population Register is kept by municipalities, recording every resident in their administrative area. People experiencing homelessness can be recorded as 'without permanent residence' (homeless) or as residing in a housing institution for the homeless via a list of corresponding institutions (institutional housing). These data are aggregated at the national scale and published annually by Statistik Austria (2022; 2023). In 2022, 19 450 people were recorded as homeless, with 11 701 people registered at least once in institutional housing, and 8 973 people registered at least once as acutely homeless. [1] This system generally covers people

[1] Persons switching between homeless registration and registration in institutional housing account for the sum of the two numbers being higher than the overall total. Double counts are avoided within the two registration types through applying a unique personal identifier.

in ETHOS Light categories 1, 2, and 3, largely neglecting the remaining three categories (BAWO, 2019b). Further shortcomings include the underrepresentation of certain subgroups (e.g., women, youths, illegal migrants, or the hidden homeless) or the conceptual exclusion of asylum seekers (BAWO, 2019a). Coverage via the Austrian Central Population Register depends on individual and institutional willingness to record clients, e.g., reflected in reduced coverage in Vorarlberg, where social-service organisations do not regularly register people sleeping rough or shelter users (ETHOS Light 1 and 2).

Scale of federal provinces

In each federal province, numbers regarding the activities, serviced clients, and use of budgets of organisations providing social services for the homeless are aggregated in a different form, according to two general funding principles: subject-based funding (funding for single clients via social assistance payments) and object-based funding (yearly funding for entire organisations or facilities), which have direct implications for data available at the federal provincial level.

Under *subject-based funding schemes,* all persons receiving payments for housing in homeless institutions are recorded with their full social security data. Hence, data regarding recipients, the amounts paid, as well as the institutions providing housing and other services, should be available at any time. Subject-based funding has been implemented in Vienna, Salzburg, and Vorarlberg. Depending on which organisations are attributed to the homelessness service network, persons in all ETHOS Light categories can be reached. Normally, ETHOS Light categories 2 and 3 are extensively covered, including detailed personal data of clients (see figure 1 FPO-coverage in Vienna, Salzburg, and Vorarlberg), while coverage of ETHOS Light 1, 4, 5, and 6 depends on the client's use of social services, social housing, and social advisory organisations, which usually makes it difficult to collect data on these groups on a reliable scale.

Object-based funding schemes are based on funding contracts between the federal provinces' departments of social affairs and organisations providing services or shelter for the homeless. The funded organisations are obliged to provide reports on their activities regularly, including information about the number of clients served. Anonymised, aggregated client data for entire years or quarters are then transferred to and analysed by federal provincial departments, forming the basis of future funding agreements. These data usually cover ETHOS Light categories 1 to 3 in varying degrees of detail, not however including personal data, except in certain housing institutions in Lower Austria (see figure 1). Additional data on persons in categories 4, 5, and 6 can be made available through social-service, social housing, and social advisory organisations. In aggregated form, these data are

not suitable for providing a reliable account of the actual homelessness situation, since double counts cannot be avoided without using a unique identifier for each person recorded.

Scale of organisations

Organisational data sources comprise data recorded for administrative or documentation purposes by organisations providing services or accommodation for the homeless. In addition, network organisations, such as the 'Network Housing Assurance' in Upper Austria (Land Oberösterreich, 2020) provide multiple access points for people experiencing homelessness, with varying coverage in different regions and social strata. To access different service offers, under subject-based and object-based funding alike, clients usually have to provide personal data to the respective organisations. Hence, organisations' administrative data, recorded for internal or external (e.g., funding) purposes, constitute a rich source of data, potentially covering all ETHOS Light categories and most regions in Austria.

There are no systematic street counts in Austria; only Upper Austria reports on the numbers of rough sleepers (ETHOS Light 1) that have been reached via street work each year (Amt der Oberösterreichischen Landesregierung, 2022). In other cities with street-work activities, such as Vienna or Graz, data on the number of rough sleepers are not systematically recorded – hence, no reliable data can be provided.

In two provinces – Salzburg (Forum Wohnungslosenhilfe Salzburg, 2023) and Vorarlberg (ARGE Wohnungslosenhilfe, 2022) – central homeless network organisations conduct a yearly service-based homeless count. The counts, which have been held since 1995 and 2013 respectively, allow for following trends in homelessness numbers based on yearly results and for identifying changes in the size of sub-populations, although data collection techniques vary over time. Depending on the social-service organisations included in the count, persons in all six ETHOS Light categories can be accounted for, as reflected in figure 1. By including organisations in urban as well as in rural parts of the federal provinces, regional coverage can be expanded. Cooperation with provincial hospitals or social-service agencies can further increase the reach of the count (Forum Wohnungslosenhilfe Salzburg, 2023). Compared to the methods described above, ETHOS Light categories 4 to 6 can be reached more efficiently. This is reflected in the fact that a share of roughly 45% of all recorded persons in the Salzburg count can be assigned to these categories (Forum Wohnungslosenhilfe Salzburg, 2024).

In the following, we first describe three key principles for a comprehensive measurement that were formulated by the experts during the workshops. Then we outline three models for measuring data on homelessness in Austria based

on these principles to potentially overcome the fragmentation of Austria's administrative landscape and collect data across different data sources and administrative scales.

Key Principles for Designing a Comprehensive Measurement Toolkit in Austria

Coordination and networking

As indicated by Demaerschalk et al. (2018), the design of a national measurement regime should be integrated into a nationwide homelessness strategy, providing a general framework for data monitoring and use. Coordination by a central state institution or an independent research institution is paramount for study design and a controlled nationwide rollout (Hermans, 2023). Additionally, federal provincial governments will take a more or less active role coordinating efforts for data generation and aggregation, according to their role in overall study design. Intense networking activities by local umbrella organisations will be essential for ensuring broad participation by social-service organisations. Furthermore, legal provisions at the national level need to be translated into federal provincial law to provide a consistent legal basis for data generation and data management. Necessary resources, such as funding, know-how, and personnel, need to be made available by the Austrian Ministry of Social Affairs to support local organisations and to ensure seamless implementation. This also includes technical and administrative infrastructure for data collection at different administrative levels of the welfare state. In order to maximise coverage of different ETHOS Light categories, it is paramount to broaden the network of social-service organisations taking part in a national measurement regime. By including, e.g., housing advisory organisations, debt counselling services, municipal housing agencies, hospitals, or penitentiaries, coverage in ETHOS Light categories 4 to 6 can be increased by maximising contact points for people in these groups.

Data management and storage

First, different types of data must be specified, including data items, format, expected quality, and levels of aggregation. The model proposed here for an Austrian homelessness measuring system should contain three data sources: (1) street or city counts, (2) administrative data of social-service organisations or data of an extended service-based count, and (3) Central Population Register data. To combine the three data streams, first, a decision about timing has to be taken to align data collection periods of data streams (2) and (3). Second, a personal identifier is to be applied to avoid double counts in these two data streams. Third, as street or city counts do not usually record clients' personal data, data generated in

those counts cannot be combined with the other data sources identified above. They can, at best, supply a snapshot of the current number of people sleeping on the street in cities or regions willing to take part in street or city counts. A shared system for data collection, aggregation, and transfer across different data sources must ensure seamless rollout among all participating social-service providers at the organisational scale. After completing data collection, data ownership should be transferred to agencies at federal provincial or national levels, who should then aggregate data and control data consistency and quality. In a next step, data collected from organisations can be combined with Central Population Register data at the national level by introducing a unique personal identifier, avoiding double counts. Street or city count data can complete this picture, even if these cannot easily be combined with other data sources. In general, the system of data generation, aggregation, and transfer should be accompanied by detailed legal regulation on data ownership and data storage.

Data analysis and data use

After the collection and aggregation of data as well as the combination of data sources, pooled data should be provided to state entities or independent research institutions (to avoid political bias) for further analysis. Research interests of institutions on different national and sub-national scales can be addressed and relevant insights for policy design and evaluation can be derived at this stage. Key indicators for different ETHOS Light categories, social sub-groups, or relevant policies can be calculated, while insights can be generated for different cities, regions, or other spatial contexts. In combination with legal provisions for data generation and transfer, data ownership and use, as well as the communication of results, also need to be regulated. Regular evaluation and revision of techniques, procedures, and processes of measurement ensure the refinement of data generation approaches over time.

Three Basic Models for the Measurement of Homelessness in Austria

Centralised measurement model with nationwide rollout

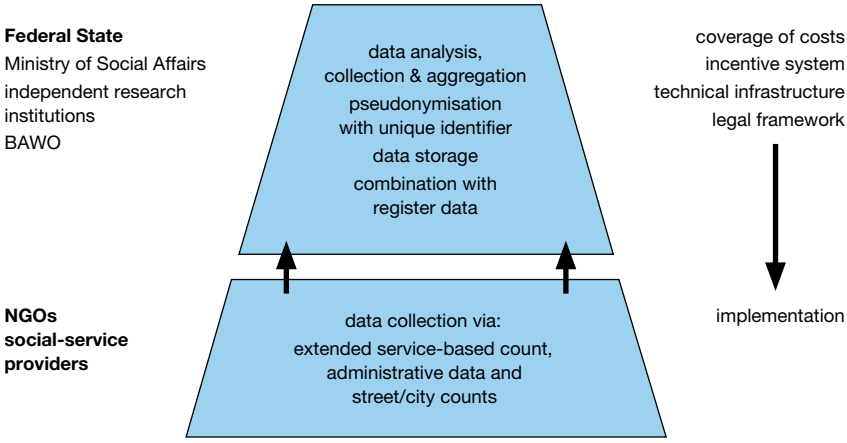
In a centralised measurement model, an organising entity on the national level – a government agency or an independent research institute – should plan and coordinate data collection among the extended service network in all Austrian federal provinces (see figure 2). This involves the realisation of a homeless count or the harvesting of administrative data on the level of social-service organisations, the aggregation of data on the national level by the centralised organising institution, and the combination of collected data with Central Population Register data using

a unique identifier. The competency to decide on administrative principles, technical realisation, and rules for data management and aggregation lies with the central organising institution, while the corresponding legal framework is to be passed by legislative entities at the national and sub-national scale.

Data on service users is directly sourced with the relevant organisations via a homeless count or the transfer of administrative data. Cooperation with national and regional umbrella organisations is paramount to ensure broad collaboration and participation in the social-service network. Participation on behalf of organisations can also be ensured by corresponding legal provisions. Data generated by organisations is directly passed on to the centralised organising entity, where it is checked for quality and consistency, and aggregated for different administrative levels (municipalities, regions, federal provinces, and the nation state).

After relevant adaptations of data and follow-ups on data collection have been concluded, organisation data should be pseudonymised using a unique identifier to combine it with Central Population Register data. By combining the two data streams, coverage of ETHOS Light categories and different regions in Austria can be maximised. In addition, street counts in selected cities can provide a snapshot of the number of rough sleepers, potentially including persons in different forms of accommodation for people experiencing homelessness in a city count. Subsequent data analysis is conducted by the central organising entity at the national scale. Hermans (2023) and Demaerschalk et al. (2018) suggest data analysis by an independent research entity to avoid political interference and potential bias. State organisations, such as Statistik Austria, the Austrian national information management institute, could also take this role. Detailed regulation on data ownership and data storage is to ensure the lawful long-term use of data. The rights to data use and the communication of results by organisations on different administrative levels likewise must be regulated in advance.

Figure 2: Centralised model with nationwide rollout (ISR)



A measurement process carried out by a central state agency or an independent research institute holds the advantage of unified management and decision-making, hence reducing possibilities for governments of federal provinces to interfere in the count. Legal provisions can be set out by national legislative bodies and translation into federal provincial legislation can potentially be bypassed. Centralised planning moreover facilitates interaction between research entities and legislative bodies, speeding up the planning process as well as technical and administrative implementation of the planned measurement processes. Disadvantages can include reduced potential for networking on the federal provincial level, or the possible exclusion of social services exclusively run by provinces (e.g., hospitals). Furthermore, as social-service organisations for the homeless are largely funded by federal provincial governments and are regulated via sub-national legislation, no legal basis for obliging local organisations to take part in the count exists ex ante.

De-centralised model with nationwide rollout

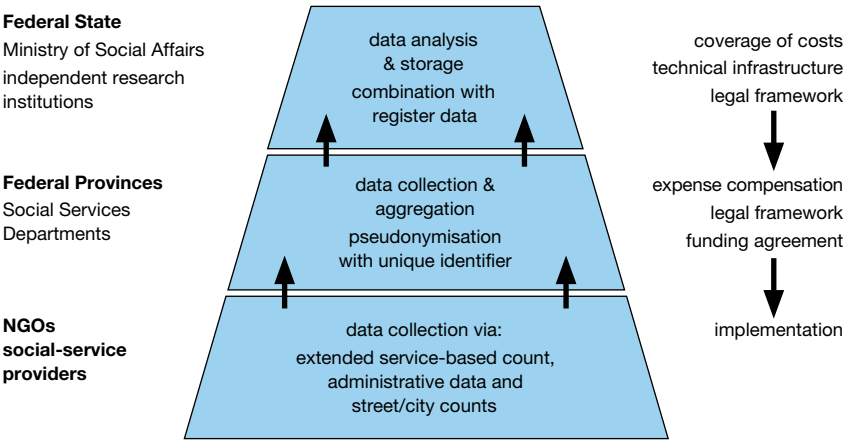
A de-centralised model for measuring homelessness in Austria may similarly be planned and organised by a central entity on the national level (see figure 3). In this model, federal provincial governments serve as local partners who organise the data generation process in the network of social-service organisations via service-based homeless counts or the collection of administrative data. National and respective federal provincial legislation defines the role of organisations acting at the national, federal provincial, and organisational scale. Clear legal provisions map the data generation process at the organisational level, the transfer of data to

federal provincial entities, the pooling and pseudonymisation of data, as well as the transfer of aggregated data to the relevant national bodies. In contrast to the first model, clear rules for data ownership, transfer, and storage need to be set out in national laws and translated into federal provincial legislation in this model.

For consistent and comprehensive data gathering at the organisational scale, federal provincial entities together with local umbrella organisations play a major role for ensuring broad participation in the social-service network. Additionally, social services or health services, run by federal provincial governments, should take part in the count to maximise coverage. As federal provincial governments fund large parts of these organisations' activities, data exchange can be included in revolving funding agreements.

After the data gathering phase, data must be collected by entities at federal provincial level, where it is monitored for quality, consistency, and completeness. Missing data can be followed up on and non-compliant organisations can be motivated to supply data. Pooling different data sources, a unique personal identifier should be applied at federal provincial level to avoid double counts. The pooled and pseudonymised data must then be transferred to entities at the national level, where data streams from federal provinces should be checked for data quality and consistency before being combined with Central Population Register data. Similar to the centralised model, a national government agency or an independent research institute should be tasked with data analysis. Data ownership rights and the rights to publication of results are to be set out in detailed legal provisions.

Figure 3: De-centralised model with nationwide rollout (ISR)



Ensuring cooperation of federal provinces can result in an even more extensive coverage of the local homelessness situation, because data generated by organisations providing services for the homeless can be combined with data from different institutions financed and run by federal provincial governments, such as hospitals and psychiatric wards. One of the risks of a de-centralised approach is possible non-participation by single provinces resulting in a partial national count. Another risk involves the effort for communication and coordination: With an additional layer of decision-making (federal provinces), complexity in the planning process can increase significantly. The willingness of federal provinces to participate is, hence, crucial for ensuring consistent outcomes and extensive coverage.

De-centralised model with partial rollout in some federal provinces

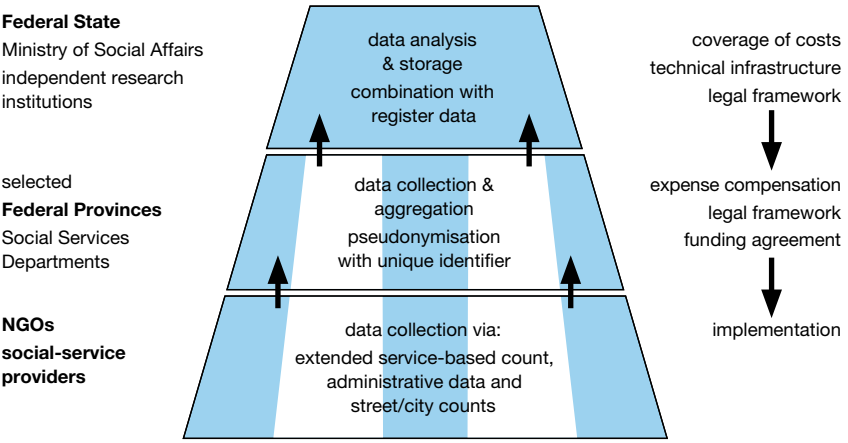
This third model takes potential resistance of governments in federal provinces and their ongoing non-compliance with social-welfare legislation into account (see figure 4). It is conceptually similar to the de-centralised model with rollout throughout Austria, but in this case, data collection is only carried out in federal provinces that are willing to participate. Planning and organisation are also executed by a national-level entity, while the necessary legal provisions for data gathering, aggregation, and storage have to be set forth in national and federal provincial law. Additionally, the role of participating federal provincial governments needs to be specified in detail. As in the nationwide de-centralised rollout, federal provincial organisations, local networks of social-service, health, and social welfare organisations, as well as umbrella organisations from the homeless sector ensure broad collaboration in the data collection process. Funding agreements between social-service organisations and federal provincial governments can provide the legal basis for consistent participation in the count.

Following the data generation phase, data should be forwarded to the respective federal provincial organisations to be monitored for quality, consistency, and completeness. Missing data can be followed up on and data sets can be completed prior to pseudonymisation and data pooling at the federal provincial level. Aggregated and pseudonymised data is then transferred to the centralised organising institution, combining it with central registry data and preparing it for analysis. Street or city counts can, again, complete the picture in selected cities or regions.

While the scope of a selective measurement approach is limited and comprehensive results can only be produced for certain parts of the country, the political willingness to contribute can be more pronounced in participating federal provinces. This may ensure closer cooperation between the network of social-service organisations and federal provincial entities, and positively affect results. Also, social-service organisations in certain federal provinces, such as Vorarlberg, Salzburg, or Vienna, dispose of detailed knowledge on data gathering and have established

extensive methods for data collection and analysis. Close cooperation with these organisations can speed up the overall process of designing a measurement approach. A clear disadvantage lies in the continuing fragmentation of Austrian homelessness data, resulting in an incomplete picture on the prevalence and profile of homelessness. This can negatively affect the realisation of a nationwide harmonised strategy for combating homelessness. Exclusion from a unified measurement approach can moreover reinforce stasis in non-compliant federal provinces.

Figure 4: De-centralised model with partial rollout (ISR)



Policy Recommendations for Measurement Strategies in a Federally Organised State

In this section we want to derive a number of policy recommendations for the creation of a system for collecting homelessness data in federally organised states. The recommendations formulated here are the synthesis of results from the previously conducted expert interviews and the expert workshop. In a nutshell, recommendations are centred on the critical question of how different scales of the Austrian welfare state can be integrated into an overarching system for measuring homelessness.

First, it is paramount to **balance interests between actors and entities at different levels of the Austrian welfare state**. The strategic decision on how and to which extent governments of federal provinces should be involved in the overall design and implementation of measurement strategies can significantly influence outcomes. Responsibilities and competencies furthermore need be to carefully assigned to organisations on national and sub-national scales, according to the

chosen measurement model. Accounting for power dynamics and potential conflicts in the design process can ensure seamless rollout and data collection during implementation. Finally, institutions at the organisational scale need to be included in the study design process to guarantee their support and participation. All this should be accompanied by an adequate allocation of financial resources, know-how, and personnel to enable swift implementation.

The motivation and involvement of stakeholders and institutions at the sub-national scale should lay the basis for subsequent networking activities, which are fundamental for **ensuring broad support by organisations in the social-service network**, including umbrella organisations, as well as organisations run and financed by federal provinces. As Hermans (2023) points out, creating awareness on behalf of federal province and regional entities can be a substantial step towards the realisation of homeless counts.

At the same time, **clear and comprehensive legal provisions on the national and sub-national levels** should clarify rights and responsibilities of entities at different scales in detail. Here, obligations to participate in the count can be defined in legal terms and eventually be combined with funding agreements. These legal provisions should include clear rules for data generation, transfer, ownership, and storage. Ultimately, rights to data use and the communication of results also must be specified in advance.

Rules and regulations for the entire data generation process, prescribed at the national level and applicable to all participating actors and entities at different scales, must also take into account different measurement techniques and their implementation in a multi-method design. The complexity arising from combining multiple measurement methods and data streams in different spatial and administrative contexts at different administrative levels of the nation state should be compensated for by a unified data collection system, including a common data format and seamless technical implementation, based on the necessary nationwide legislation underpinning a unified national homelessness measurement regime.

When involving organisations and governments of different federal provinces with different degrees of experience in measuring homelessness, **knowledge can be exchanged between federal provinces** with extensive expertise and those with little or none. This may also create awareness of the problem of existing homelessness and increase motivation to know more about its extent and profile.

Finally, any chosen measurement approach should form **part of a nationwide strategy to combat homelessness** that involves measurement and monitoring, the creation of appropriate services and housing offers, as well as an ongoing effort to end homelessness permanently. Here, the involvement of federal provinces,

cities, and regions can incite new enthusiasm to re-think current approaches, re-formulate policies, and re-consider political standpoints. Hence, a common strategy to measure the extent and profile of homelessness can spark new interest in the overall topic of preventing and counteracting homelessness at multiple scales of the nation state.

Conclusion

The main aim of this paper was, first, to provide an overview of the current situation regarding the measurement of homelessness in Austria, and, second, to develop blueprints for a new, comprehensive measurement model.

In relation to the first aim, our analysis showed how the current extent and detail of data collection, including data quality, cycles of data exchange, and the number of involved organisations, vary significantly between different federal provinces on the one hand and different scales of the Austrian nation state on the other.

The amount and detail of data produced in federal provinces depend on (1) the willingness and interest of federal provincial governments to record data, (2) funding agreements underlying the data exchange between social-service organisations and federal provincial governments, and (3) means and methods used to collect and exchange data between different organisations and government entities. Our analysis revealed that subject-based funding agreements result in extensive coverage of and high data quality related to all recorded service users at any given point in time. In the case of object-based funding, it is aggregated and anonymised data on service users that is forwarded to federal provincial entities at predetermined intervals. Depending on funding agreements, different data in different qualities are recorded for different ETHOS Light types. The use of recorded data also varies significantly, ranging from detailed strategising for a large homeless population in Vienna, to the complete omission of homelessness in official social reports, e.g., in Salzburg or Burgenland (Amt der Burgenländischen Landesregierung Abteilung 6 – Soziales und Gesundheit, 2021; Land Salzburg, 2022). This demonstrates how political decision-making and data collection are entwined on different levels and how they lead toward different outcomes.

Additionally, different measurement techniques at different national and sub-national scales of the nation state produce different types of data in varying quality. Current measurement techniques include (1) Central Population Register data at the national scale, (2) data on service users under subject- and object-based funding at the scale of federal provinces, and (3) administrative data, 'extended service-based counts', and data produced by street work or street counts at the organisational level. As described above and mentioned by Demaerschalk et al.

(2018), each of these methods entails certain strengths and weaknesses and covers different expressions of the ETHOS Light Typology. Ultimately, a combination of these methods in a multi-method design can maximise overall coverage and produce the most detailed results.

Regarding the second aim, we devised three models for measuring homelessness in Austria: (1) a centralised model with nationwide rollout, (2) a de-centralised model with nationwide rollout, and (3) a de-centralised model with partial rollout. The choice of model will ultimately depend on inherent contextual factors in different federal provinces, on the willingness of provincial governments to participate in the count, on the perspective and goals of the central government, and on the overall strategy for involving social-service organisations. However, coordination and networking, data management and data storage, as well as data analysis and data use have been identified as three main strategic areas that must be considered during decision-making on overall measurement strategies.

To summarise, the complexities arising from the fragmentation of the administrative and legal landscape in federally organised countries can be overcome by taking clear decisions on roles and responsibilities of stakeholders and entities at different national and sub-national levels. Involving relevant stakeholders at different scales according to the chosen overall measurement model can facilitate implementation and increase compliance during data generation. A clear legal framework for data collection, data aggregation, and data usage, taking into account the role of different stakeholders and organisations at different scales, will be paramount for the seamless realisation of a nationwide homelessness measurement plan. Overall measurement needs to be undergirded by adequate technical, financial, and human resources to be distributed between entities at different scales. By aligning legal provisions with the roles of social-service organisations and government entities, and furthermore with the overall model of measurement, compensation schemes, and data generation, and by carefully calibrating these with the interests of federal provinces, the fragmentation of data on homelessness in Austria can potentially be overcome, which could result in a tentative blueprint for other countries to follow suit.

Acknowledgment: This project was commissioned by the Austrian Federal Ministry for Social Affairs, Health, Care and Consumer Protection.

References

Amt der Burgenländischen Landesregierung Abteilung 6 – Soziales und Gesundheit (2021) *Sozialbericht 2019/2020 des Landes Burgenland* [Social Report 2019/2020 of the Province Burgenland] (Eisenstadt: Amt der Burgenländischen Landesregierung Abteilung 6 – Soziales und Gesundheit).

Amt der Oberösterreichischen Landesregierung (2022) *Sozialbericht 2021* [Social Report 2021] (Linz: Amt der Oö. Landesregierung, Direktion Soziales und Gesundheit).

ARA (2023) *Homelessness in Finland Report, 02/2023* (Lahti: ARA).

ARGE Wohnungslosenhilfe (2022) *ARGE Wohnungslosenerhebung* [ARGE Homeless Count] (Dornbirn: ARGE Wohnungslosenhilfe).

BAWO (2019a) *Statistisch untererfasste Formen von Obdachlosigkeit und Wohnungslosigkeit am Beispiel der Bundesländer Vorarlberg, Salzburg und Wien – Zusatzbericht der BAWO zum Bericht der Statistik Austria zur registrierten Obdachlosigkeit und Wohnungslosigkeit in Österreich* [Statistically undercounted forms of rooflessness and homelessness in the provinces Vorarlberg, Salzburg and Vienna – additional report by BAWO to the report by Statistik Austria on registered rooflessness and homelessness] (Wien: BAWO). Available at: https://bawo.at/101/wp-content/uploads/2020/04/20191018_BAWO_Zusatzbericht_final.pdf

BAWO (2019b) *Registrierte Obdach- und Wohnungslosigkeit in Österreich* [Registered rooflessness and homelessness in Austria] (Wien: BAWO). Available at: https://bawo.at/101/wp-content/uploads/2020/12/Vortrag_Beiser_RegOL_WL_cb.pdf.

Benjaminsen, L., Dhalmann, H., Dyb, E., Knutagard, M., and Lindén, J. (2020) Measurement of Homelessness in the Nordic Countries, *European Journal of Homelessness* 14(3) pp.149-170.

Benjaminsen, L. (2022) *Hjemløshed i Danmark 2022 – National kortlægning* [Homelessness in Denmark 2022 – National mapping] (Kopenhagen: VIVE).

BMAS (2022) *Ausmaß und Struktur von Wohnungslosigkeit – Der Wohnungslosenbericht 2022 des Bundesministeriums für Arbeit und Soziales* [Extent and structure of homelessness – homelessness report 2022 of the Ministry for Labour and Social Affairs] (Bonn: Bundesministerium für Arbeit und Soziales, Referat Information, Monitoring, Bürgerservice).

BMSGPK (2023) *So geht's uns heute: die sozialen Krisenfolgen im vierten Quartal 2022 – Schwerpunkt: Erfahrungen mit Wohnungslosigkeit* [This is how we do now: effects of social crises in Q4 2022 – focus: experiences with homelessness] (Wien: Bundesministerium für Soziales, Gesundheit, Pflege und Konsumentenschutz).

BMSGPK (2024) *Sozialhilfe und Mindestsicherung* [Social security and social assistance] (Wien: BMSGPK). Available at: https://www.sozialministerium.at/Themen/Soziales/Sozialhilfe-und-Mindestsicherung.html.

Busch-Geertsema, V. (2010) Defining and Measuring Homelessness, Homelessness Research in Europe, *Festschrift for Bill Edgar and Joe Doherty* pp.19-39.

Busch-Geertsema, V., Benjaminsen, L., Hrast, M., and Pleace, N. (2014) *Extent and Profile of Homelessness in European Member States – A Statistical Update* (Brussels: FEANTSA).

Cloke, P., Widdowfield, R., and Milbourne, P. (2000) The Hidden and Emerging Spaces of Rural Homelessness, *Environment and Planning A* 32(1) pp.77-90.

Daly, M. (1992) *European Homelessness – The Rising Tide: The First Report of the European Observatory on Homelessness* (Brussels: FEANTSA).

Daly, M. (2019) *ESPN Thematic Report on National Strategies to Fight Homelessness and Housing Exclusion – Ireland* (Brussels: European Social Policy Network).

Demaerschalk, E., Italiano, P., Mondelaers, N., Steenssens, K., Schepers, W., and Bircan, T. (2018) *MEHOBEL – Measuring Homelessness in Belgium* (Brussels: Belgian Science Policy).

Demaerschalk, E., Hermans, K., Steenssens, K., and Van Regenmortel, T. (2019) Homelessness Merely an Urban Phenomenon? Exploring Hidden Homelessness in Rural Belgium, *European Journal of Homelessness* 13(1) pp.99-118.

Dimmel, N. (2015) Rahmenbedingungen sozial- und wohlfahrtsstaatlicher Versorgung in Österreich [Framework of Social and Social Welfare Provisions in Austria], in: B. Wüthrich, J. Amstutz, and A. Fritze (Eds.) *Soziale Versorgung zukunftsfähig gestalten*, pp.37-52. (Wiesbaden: Springer VS).

Drilling, M., Dittmann, J., Ondrusova, D., Teller, N., and Mondelaers, N. (2020) Measuring Homelessness by City Counts – Experiences from European Cities, *European Journal of Homelessness* 14(3) pp.95-120.

Dyb, E. and Zeiner, H. (2021) *Bostedsløse i Norge 2020 – en kartlegging* [Homelessness in Norway – a survey] (Oslo: Oslo Metropolitan University).

Eberle, M., Kraus, D., and Serge, L. (2009) *Results of the Pilot Study to Estimate the Size of the Hidden Homeless Population in Metro Vancouver* (Vancouver: Moustel Research Group).

Edgar, W., Doherty, J., and Meert, H. (2003) *Second Review of Statistics on Homelessness in Europe* (Brussels: FEANTSA).

Edgar, W., Harrison, M., Watson, P., and Busch-Geertsema, V. (2007) *Measurement of Homelessness at European Union Level* (Brussels: European Commission Employment, Social Affairs and Equal Opportunities DG).

Esping-Andersen, G. (1991) *The Three Worlds of Welfare Capitalism* (Cambridge: Polity Press).

European Commission (2022) *Methodological Guidelines and Description of EU-SILC Target Variables* (Brussels: European Commission).

European Commission (2024) *European Statistics on Income and Living Conditions* (Brussels: European Commission).

Forum Wohnungslosenhilfe Salzburg (2023) *Wohnbedarfserhebung 2022. Für das Bundesland Salzburg* [Housing needs 2022. For the province Salzburg] (Salzburg: Forum Wohnungslosenhilfe Salzburg).

Forum Wohnungslosenhilfe Salzburg (2024) *Wohnbedarfserhebung 2023 – Zentrale Ergebnisse* [Housing needs 2023 – important findings] Presentation at the 'Day of Precarious Housing in Salzburg 2024' (Salzburg: Forum Wohnungslosenhilfe Salzburg).

Freimuth, J. and Barth, T. (2014) *Handbuch Moderation: Konzepte, Anwendungen und Entwicklungen* [Handbook moderation: concepts, applications, trends] (Wien: Hogrefe).

Geyer, L., Simmons, C., and Zólyomi, E. (2021) *Homelessness: Examining Data and Data Collection Methods, European Centre Reports, Policy Brief 2021/22* (Vienna: European Centre for Social Welfare Policy and Research).

GISS/Kantar Public (2022) *Forschungsbericht 605. Empirische Untersuchung zum Gegenstand nach § 8 Abs. 2 und 3 WoBerichtsG* [Research report 605. Empirical study related to § 8 par. 2 and 3 WoBerichtsG] (GISS/Kantar Public: Bremen/München).

Hermans, K. (2023) *Towards a Harmonised Homelessness Data Collection and Monitoring Strategy at the EU-level*, Position paper prepared for the European Mutual Learning Event of the European Platform on Combatting Homelessness, Brussels 23.-24.10.2023. Available at: https://event5.homeless-platform-events.eu/media/fphfbq4u/hermans_towards-a-harmonised-homelessness-data-collection.pdf Land Oberösterreich, 2020.

Land Salzburg (2022) *Sozialbericht 2021* [Social Report 2021] (Salzburg: Land Salzburg – Abteilung Soziales).

Land Oberösterreich (2020) *Sozial-Landesrätin Birgit Gerstorfer: Netzwerk Wohnungssicherung unterstützt von Delogierung bedrohte Menschen* [Social Secretary Birgit Gerstorfer: Network Housing Assurance supports people threatened by eviction] (Linz: Amt der Oö Landesregierung). Available at: https://www.land-oberoesterreich.gv.at/232684.htm

Lee, B., Shinn, M., and Culhane, D. (2021) Homelessness as a Moving Target, *The ANNALS of the American Academy of Political and Social Science* 693(1) pp.8-26.

Matznetter, W. (2002) Social Housing Policy in a Conservative Welfare State: Austria as an Example, *Urban Studies* 39(2) pp.265-282.

Mertens, N., Demaerschalk, E., and Hermans, K. (2023) *Point-in-time Homelessness Counts in Belgium*, Presentation at the 17th European Research Conference on Homelessness, 14.-15.9.2023, Leuven, Belgium.

Musil, R., Brand, F., and Punz, S. (2022) The Commodification of a Rent-Regulated Housing Market. Actors and Strategies in Viennese Neighbourhoods, *Housing Studies* [online first].

Musil, R., Schnell, P., and Djabaja, C. (2024) Obdachlosigkeit, Wohnungslosigkeit und prekäres Wohnen. Aktuelle Datenlage und Vorschläge für eine österreichweite Erhebung [Homelessness and precarious Housing. Recent Data and Suggestions for an Austrian Measurement Approach]. ISR Research Report 59. (Vienna: Verlag ÖAW).

OECD (2023) *OECD Workshop on Homelessness – Preventing Homelessness and Securing Long-term Housing Solutions*, 29.10.2023, Paris, France.

Pleace, N. and Hermans, K. (2020) Counting All Homelessness in Europe: The Case for Ending the Separate Enumeration of 'Hidden Homelessness', *European Journal of Homelessness* 14(3) pp.35-62.

Schnell, P. (2021) *Geographien der Obdachlosigkeit in Wien* [Geographies of Homelessness in the City of Vienna] (Bad Vöslau: Vienna Academic Press).

Snelling, C. (2017) *Right to Home? Rethinking Homelessness in Rural Communities* (London: Institute for Public Policy Research).

Statistiek Vlaanderen (2021) *Statistics Flanders Survey* (Brussels: Vlaamse Statistische Autoriteit). Available at: https://www.vlaanderen.be/en/statistics-flanders/sf-survey#more-info.

Statistik Austria (2015) *Registerbasierte Statistiken Haushalte – Kalenderjahr 2015* [Register-Based Statistics Households – Calendar Year 2015] (Vienna: Statistik Austria).

Statistik Austria (2022*) Wohnen – Zahlen, Daten und Indikatoren der Wohnstatistik* [Living – Numbers, Data and Indicators of Housing Statistics] (Vienna: Statistik Austria).

Statistik Austria (2023) *Wohnen 2022 – Zahlen, Daten und Indikatoren der Wohnstatistik* [Living 2022 – Numbers, Data and Indicators of Housing Statisitcs] (Vienna: Statistik Austria).