

Marcelina Terelak*

The dynamics of demand for temporary accommodation in crisis situations: strategies and insights

Abstract

In the face of migration crises, cities encounter the challenge of providing shelter for victims of natural disasters and refugees, necessitating dynamic and flexible strategies in both housing provision and aid organisation. This article focuses on humanitarian architecture, encompassing transitional housing solutions situated between emergency shelters and permanent accommodation. Using Wrocław as a case study, the paper examines the transformation of existing infrastructure in response to the influx of displaced persons following the outbreak of war in Ukraine in 2022, with a particular emphasis on the evolution of temporary housing solutions. The study explores successive stages of spatial organisation – from ad hoc interventions to institutionalised collective accommodation facilities, originally intended as short-term solutions but still accommodating residents. The article discusses both local conditions shaping the provision of shelter and the broader context of global migration crises.

The research is based on a literature review and semi-structured interviews conducted with representatives of non-governmental organisations and municipal authorities to examine the dynamics of collective accommodation centres. Additionally, an analysis of numerical data illustrates the scale of refugee arrivals and the shifting demand for housing space. A comparative assessment of different shelter organisation models allows for an evaluation of Wrocław's approach – dominated by collective accommodation centres – against solutions implemented in other countries. The review of various strategies has prompted a reflection on the potential for long-term use of such spaces and the necessity of designing them in alignment with the actual and evolving needs of refugees.

The study underscores the importance for more precise identification of these needs, which would facilitate not only more effective planning of residential spaces but also better management and adaptation of these spaces in future crises.

Key words: refugees, migration crisis, temporary accommodation, humanitarian architecture, aid organisation

Introduction

In the face of migration crises, cities are challenged with providing shelter for refugees, internally displaced persons (IDPs), and economic and climate migrants. This situation requires dynamic and flexible strategies in both housing and urban planning. Although migration is not the sole factor shaping urban development, it plays a significant role in this process (Grab 2023). Contemporary migration generates political debates and security concerns, influences social and economic processes, and serves as a point of interaction between diverse cultures and identities (Czaja 2023).

Migration, both internal and external, affects various social and age groups, with a fundamental distinction between voluntary and forced migration. According to the World Migration Report 2020, there were globally 281 million international migrants, of whom 117 million were forcibly displaced people. Those were: 35.4 million refugees, 5.4 million asylum seekers, 5.2 million people in need of international protection and 71.4 million IDPs, including 62.5 million caused by conflicts and violence, and 8.7 million by natural disasters (McAuliffe, Oucho 2024). On top of that, the World Bank research foresees that by 2050 there might be additional 216 million internal migrants due to the climate change and environmental impacts (Clement et al. 2021).

Earthquakes are among the most destructive natural disasters. Japan experiences the highest number of earthquakes in the world due to its location at the intersection of four tectonic plates. Over the past ten years, a total of 10,111 earthquakes

* ORCID: 0000-0001-6752-1263. Faculty of Architecture, Wrocław University of Science and Technology, Poland, e-mail: marcelina.terelak@pwr.edu.pl

with a magnitude of four or higher have struck the Japanese islands within a 300-kilometre radius, resulting in significant damage (Earthquakelist 2025). The largest earthquake in the last 25 years occurred in 2011 in the Tohoku region, claiming 18,500 lives and destroying hundreds of thousands of buildings and infrastructure (NPA 2021).

A notable example is Italy, which has experienced three major earthquakes in the past 25 years – in Abruzzo in 2009, Emilia in 2012, and central Italy in 2016 and 2017. Each of these events caused significant material losses and forced thousands of people to leave their homes. The 2009 earthquake in Abruzzo displaced over 67,000 people requiring temporary accommodation, while in Emilia, around 16,000. The 2016–2017 earthquake in central Italy left up to 31,000 people homeless (Di Bucci et al. 2023).

A significant example of forced migration is that caused by military operations, such as the conflict in Syria that began in 2011, which led to large migration flows primarily to Germany, Sweden, Italy, France, and Hungary. Currently, the Russian invasion of Ukraine has triggered the largest migration crisis in Europe since World War II, with nearly one-third of Ukraine's population seeking refuge in European Union (EU) member states. Between 24 February and 6 September 2022, 12.3 million people left Ukraine (Subocz, Sternicka-Kowalska and Głuszak 2024). This migration is classified as forced, spontaneous, and temporary, driven by political and military circumstances (Demianchuk et al. 2023).

The occurrence of disasters, whether natural or anthropogenic in origin, results in immediate consequences for the affected population. Primarily, these include casualties and injuries, as well as individuals who have lost their homes and require accommodation in temporary shelters (Di Bucci et al. 2023). These incidents highlight the vast scale of displacement caused by forced migration and underscore the critical challenge of providing adequate temporary housing as part of disaster management and recovery efforts.

The aim of this article is to examine the crisis triggered by the influx of people and the associated humanitarian aid systems from an architectural perspective. The assistance provided will be analysed in a local context using the example of Wrocław and compared with other temporary housing strategies that have already been implemented worldwide.

Research questions

This study aims to explore the processes involved in providing temporary accommodation for individuals displaced by crises. The following research questions have been posed to guide this exploration:

1. What are the processes driving the evolution of the number, structure and coordination of temporary accommodation in Wrocław since 2022, according to municipality and non-governmental organisations (NGOs) involved?
2. What are challenges and limitations in providing effective temporary accommodation?
3. What insights can be drawn from the experiences of refugees in various contexts to improve the planning of future temporary accommodation systems, ensuring flexibility and resilience during crises?

The article highlights the crucial role of temporary residential buildings or collective accommodation, offering spaces for affected individuals to live and gradually return to daily life (Cygańczuk, Roguski, and Tępiński 2022).

Methods

This study is descriptive and exploratory, based on a literature review and empirical data. The quantitative data was collected by the municipality and shared for the purpose of this research, including information from the crisis management department and other municipal research centres. Additionally, as part of the empirical research, the author conducted 12 in-depth interviews in person with representatives of NGOs and city authorities¹.

The qualitative study was based on the perspectives of the interviewees. Data were collected through semi-structured interviews, which were recorded and subsequently transcribed. The data were examined using content analysis. The analysis employed meaning condensation, a method that involves reducing the meanings expressed in the interviews into more concise formulations (Flick 2010). This approach was complemented by narrative analysis, which focuses on the stories told during the interviews, examining their structure and plot. The analysis involved integrating multiple stories shared by different participants into a single, more condensed and coherent narrative (Kvale 2010).

Temporary accommodation as a process

There is no universal approach to housing families after a disaster, as each situation is unique. The way in which families and individuals build or acquire shelter depends on the resources available and the actors involved in the emergency response, recovery, and reconstruction processes. **Temporary houses or transitional shelters** serve as accommodation following a disaster when other options are unavailable, and affected families, facing housing crises, are either unable or unwilling to return to their previous homes and dwellings (Wagemann 2017).

It is suggested that **shelter** refers to a place of stay during the immediate period following a disaster, which suspends daily activities, while temporary housing is associated with the return to household responsibilities and daily routines. To avoid ambiguity regarding these terms, Quarantelli (1995) proposed a division of the post-disaster housing process into four fundamental stages: **emergency shelter** (for a short period immediately after the disaster, for example, up to 72 hours in a friend's house or a public shelter), **temporary shelter** (used for no more than a few weeks after the disaster), **temporary housing** (a place where individuals can stay, typically for 6 months to 3 years), and permanent housing (Félix et al. 2015).

¹ The interviews were conducted in Wrocław with individuals managing relocation centres, coordinators of collective accommodation facilities, leaders of humanitarian aid points, and representatives of the municipal administration. They were coded in the order in which they were conducted (e.g., I1, I2, etc.).

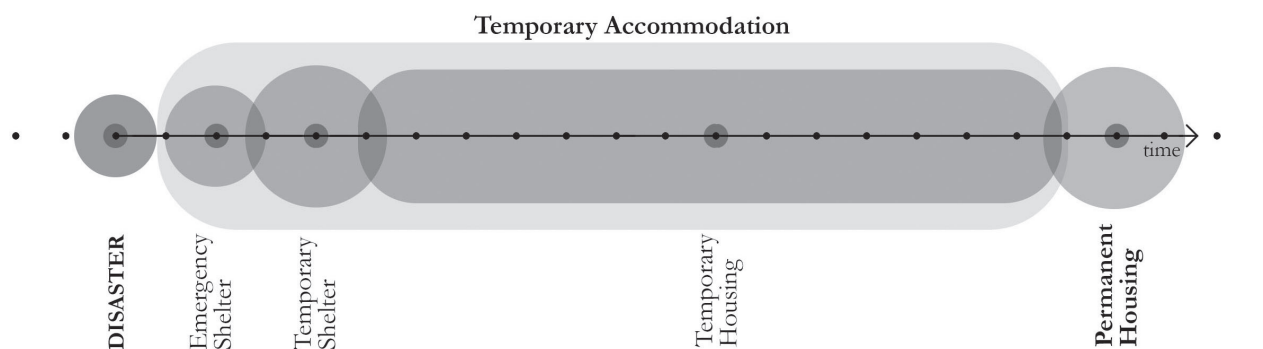


Fig. 1. Temporary accommodation phases after disaster (elaborated by M. Terelak)

Il. 1. Etapy tymczasowego zakwaterowania po katastrofie (oprac. M. Terelak)

The article also references the term “**temporary accommodation**” (Fig. 1) which, according to Johnson (2002), encompasses all forms of housing following the forced displacement from a place of residence until the transition to permanent housing.

Evolving strategies in temporary accommodation

In response to growing forced migrations, various solutions for temporary accommodation have been developed, playing a key role in restoring stability. On 11 March 2011, Japan experienced the largest recorded earthquake, the Great East Japan Earthquake, with a magnitude of 9. This

event caused a tsunami that devastated the eastern coast, destroying nearly 400,000 buildings and damaging another 750,000. In the mountainous coastal city of Onagawa, 4,500 buildings were destroyed. Due to the uneven terrain, the city lacked flat land to build temporary housing. Architect Shigeru Ban proposed the construction of nine two- and three-storey buildings made of shipping containers on the baseball field. The buildings were arranged in linear alignment to provide sufficient access to light and air (Fig. 2). The containers were stacked in a checkerboard pattern, creating a living area between them and a sleeping area with a bathroom inside the prefabricated units (Ban et al. 2014). The interior layout followed three module types – 19.8, 29.7 and 39.6 m² – designated for households of different sizes and functionally divided into bedroom, bathroom and living areas (Fig. 3). The units were equipped with basic furnishings and designed to evoke a sense of home, with the interior arrangement and furnishing supported by Voluntary Architects’ Network (Yılmaz 2021). In addition to housing for 189 families, a social centre and a learning space for children were created between the buildings. The quality of the flats meant that although the buildings were envisaged

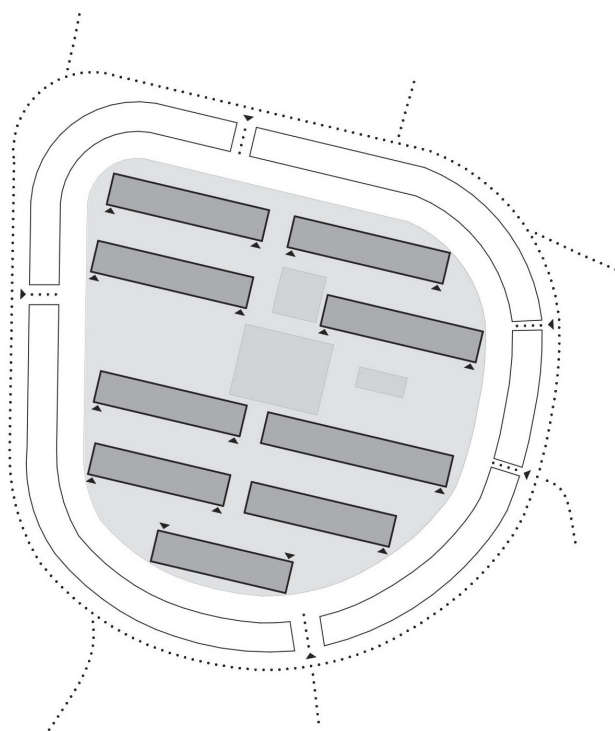


Fig. 2. Temporary container housing estate in the city of Onagawa, located on a sports field (elaborated by M. Terelak)

Il. 2. Tymczasowe osiedle kontenerowe w Onagawie zlokalizowane na boisku (oprac. M. Terelak)



Fig. 3. The interior of a living space in a container housing module used in Onagawa, built for an exhibition at Art Tower Mito in 2013 (photo by J. Łątka)

Il. 3. Wnętrze części dziennej w kontenerze mieszkalnym w Onagawie. Ekspozycja na wystawie w Art Tower Mito, 2013 (fot. J. Łątka)

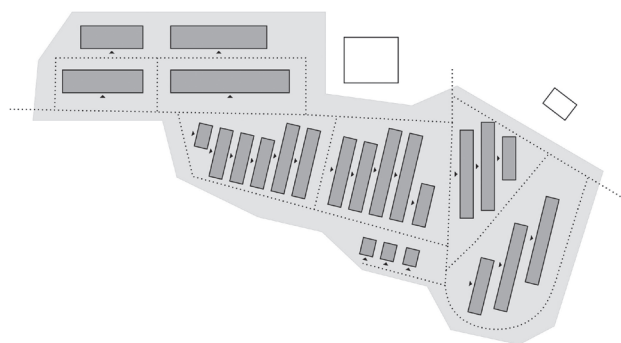


Fig. 4. Layout of a modular temporary housing settlement, similarly repeated across municipalities in the Abruzzo region around the earthquake's epicentre (elaborated by M. Terelak)

Il. 4. Układ modułowego osiedla tymczasowego, powtarzany w podobnej formie w gminach regionu Abruzji w pobliżu epicentrum trzęsienia ziemi (oprac. M. Terelak)



Fig. 5. A view of the shared space between container buildings in Lviv (photo by J. Łątka)

Il. 5. Widok na przestrzeń wspólną między zabudową kontenerową we Lwowie (fot. J. Łątka)

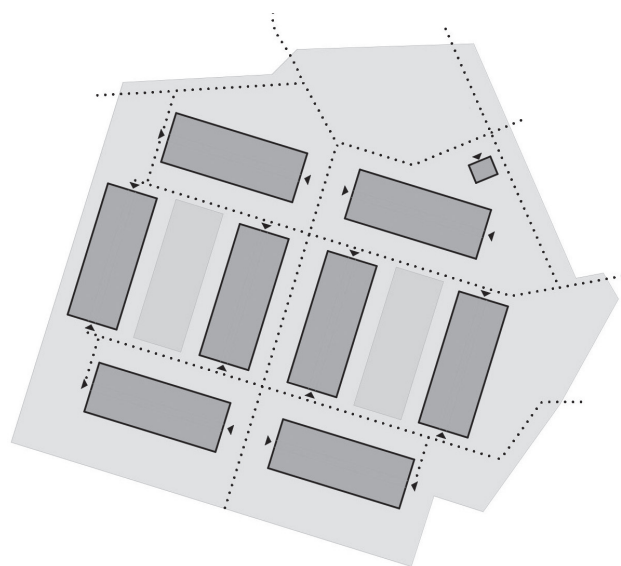


Fig. 6. Temporary container housing estate in Lviv. The complex is situated in the southern part of the city (elaborated by M. Terelak)

Il. 6. Tymczasowe osiedle kontenerowe we Lwowie. Kompleks położony na południu miasta (oprac. M. Terelak)

as temporary, after the planned period of use, the residents did not want to move out, remaining in the buildings for eight instead of four years. The project set new standards for the quality of living spaces for disaster victims.

Another example of a comprehensive temporary housing strategy was the response to the 2009 earthquake in the Abruzzo region of Italy. The disaster left approximately 34,000 private homes damaged and uninhabitable, affecting around 67,000 people (Di Bucci et al. 2023). The initial phase of response to crisis involved setting up tent camps to provide temporary shelter for those affected. By autumn 2009, these camps were dismantled, and in the later stages of the crisis, the C.A.S.E. (Complessi Antisismici Sostenibili ed Ecocompatibili) and M.A.P. (Moduli Abitativi Provvisori) projects were implemented, offering long-term and secure housing solutions (Di Bucci et al. 2023). As part of the long-term reconstruction, permanent housing was planned under the C.A.S.E. project, while M.A.P. provided transitional accommodation for approximately 6,000 people in units of varying sizes. The units were arranged in settlement layouts that were similarly repeated across 57 earthquake-affected municipalities near the epicentre (Fig. 4). The modules ranged from 40 m² for one person to 70 m² for up to six residents, catering to different family needs (Bologna 2010). The process of providing accommodation in the described region was implemented rapidly yet lacked integration of new developments with the existing urban fabric. The newly constructed buildings were characterised by a disconnection from existing infrastructure and services, limiting their functionality and accessibility for residents (Bologna 2010). Additionally, this process created a sense of exclusion among individuals who were unable to actively participate in the reconstruction planning in a way that addressed their specific needs and expectations.

The full-scale invasion of Ukraine by the Russian Federation in February 2022 led to a rapid increase in the number of Ukrainian refugees and IDPs. The peak of internal migration in May 2022 reached 8.7 million, with 600,000 registered IDPs in Lvivska Oblast between May and June (Lozynsky et al. 2023). Although this number has since declined, many of the remaining IDPs are unable to return to their homes. To accommodate these, several abandoned hostels were modernised, new multi-family houses were constructed, and modular towns were established. The use of shipping containers as housing involved adapting prefabricated units for living purposes (Pekarchuk 2023). One example of such solution was for IDPs in the Sykhiv District of southern Lviv (Fig. 5). The complex features a courtyard layout, which creates semi-private areas for daily activities, and playgrounds, enhancing supervision and care for children within the complex (Fig. 6). The buildings consist of two stories made up of 48 containers, equipped with water and electricity. The residential units are the same and consist of one double bed, built-in wardrobes and one bunk bed. This makes the rooms tight and unsuitable for different family sizes. This temporary housing complex can accommodate 1,408 IDPs and was constructed in a green area adjacent to multifamily buildings that offer services such as shops and cafes.

Dynamic responses to refugee accommodation: findings from Wrocław's experience

United Nations High Commissioner for Refugees (UNHCR) data indicate that within just a few weeks, Poland became one of the main receiving countries for refugees (Subocz, Sternicka-Kowalska and Głuszak 2024). Between 24 February and 30 April 2022, over 3.3 million individuals crossed Poland's national border (SIP 2023). Over time, successive reports have provided insights into the location of refugees, their needs, challenges, and living conditions. By 31 March 2023, data indicated that Poland was home to 997,737 Ukrainians, 81% of whom resided in cities (GUS 2023). The highest concentration of Ukrainians, exceeding 10% of Ukraine's population in Poland, was recorded in Warsaw. Significant proportions of those granted temporary protection were also reported in Wrocław (4.5%) and Kraków (3.8%) (GUS 2023).

The rapid influx of refugees into Wrocław, with a population increase by 187,281² people by April 2022, placed significant pressure on the city's housing infrastructure. By that time, the Wrocław Metropolitan Area was home to 302,467 Ukrainians, driving a growing demand for both temporary and permanent housing solutions to accommodate the displaced population (UMP 2022). To understand how organisations and municipal structures involved in refugee assistance perceived the event, responded to it, adapted to its consequences, and even reorganised various ongoing processes, the study adopted a biographical perspective, drawing on the interviews conducted for this purpose (Kvale 2010). The analysis compares experiences and aims to develop a framework for understanding how the refugee crisis has been experienced in Wrocław. The following account provides a chronological perspective on the situation from the onset of the crisis to the present. It focuses on housing conditions and architectural aspects, as well as the stages of assistance provided in response to the temporary housing crisis.

Before a structured system was developed to direct refugees to appropriate housing facilities, the initial response relied on spontaneous and largely unregulated efforts by Wrocław residents to host them in private homes. This situation posed significant risks due to the lack of a system to monitor the number, locations, and living conditions of individuals, as well as to register offers of assistance or maintain contact with hosts, complicating emergency responses (I2).

In response to the crisis caused by the war in Ukraine, the Polish government introduced the Act of 12 March 2022 on assistance to Ukrainian citizens due to the armed conflict in their country. This document, alongside provisions for the legalisation of the stay of Ukrainian citizens, also included a financial allowance for individuals providing accommodation and meals to refugees. Under the regulations, these individuals could apply for a daily payment of 40 PLN per

person they were hosting. The allowance was granted for a maximum of 120 days from the arrival of the Ukrainian citizen in Poland. However, it was abolished after 30 June 2024, following an update to the Act. The amendment, signed in June 2024, extended the legal stay of Ukrainian citizens in Poland until 30 September 2025 (UDSC 2024).

After the Polish government responded, the city's authorities were able to make alternative decisions regarding the organisation of accommodation for refugees. The first area of intervention was the organisation of the main railway station. As a result, the station was initially designated as the central hub for providing information and coordinating the relocation of refugees to various forms of collective accommodation (I5). Additionally, one of the key actions taken was the repurposing of existing spaces at the station. However, making changes there proved difficult, as existing regulations created several obstacles that slowed the response, one of which was ensuring free access to toilets. Converted support facilities included the library, offering shelter for mothers with children, and the Bureau of Artistic Exhibitions (BWA), where artistic activities were redirected to create emergency shelter (I5). To enhance privacy and comfort for those staying there, the Paper Partition System (PPS) was introduced. This system, created from paper tubes, divides large spaces into smaller units, each approximately 2 × 2 m, separated by fabric (Ban et al. 2022). The project was initiated by Shigeru Ban, in collaboration with architects, students and volunteers.

Approximately 2–3 weeks after the outbreak of the war in Ukraine, the railway station fully operated as an information and relocation point. The process for residents registering their willingness to accommodate refugees in their homes became more organised, requiring the provision of personal details. Refugees were also directed to other collective accommodation spaces, which combined elements of emergency shelter and temporary shelter. Available funds allowed for renting hotel spaces and repurposing municipal facilities like sports halls, schools, dormitories, and offices. One example was a long-closed school, quickly renovated and furnished with beds in classrooms. Relocation points, offering shared sleeping spaces, were intended for short stays of 24–72 hours or up to a week, giving refugees time to rest, eat, and plan their next steps. However, no fixed duration of stay was established.

In the initial days and weeks following the outbreak of the war, the primary challenge was the lack of coordinated management of aid efforts. Respondents stated that communication between support centres mainly relied on personal contacts, past humanitarian experience, and volunteer networks. To improve coordination and enable a more effective response, officials were assigned to maintain a continuous presence at the railway station. However, insufficient decision-making at higher administrative levels hindered an effective response to the rapidly changing situation.

And the key aspect was to establish contact with the accommodation base in location X, in the town of XYZ, and to have an understanding of its conditions (I5)³.

² The data presented in the UMP report originate from various sources, including advertisement displays viewed by unique mobile device users, which allow for the identification of parameters such as phone language. Other data are drawn from external sources, including mobile device usage indicators, operating system statistics, and information from the PESEL registry on the number of identification numbers issued to refugees from Ukraine who entered Poland after 24 February 2022.

³ All respondent statements in the text are drawn from the qualitative part of the study.

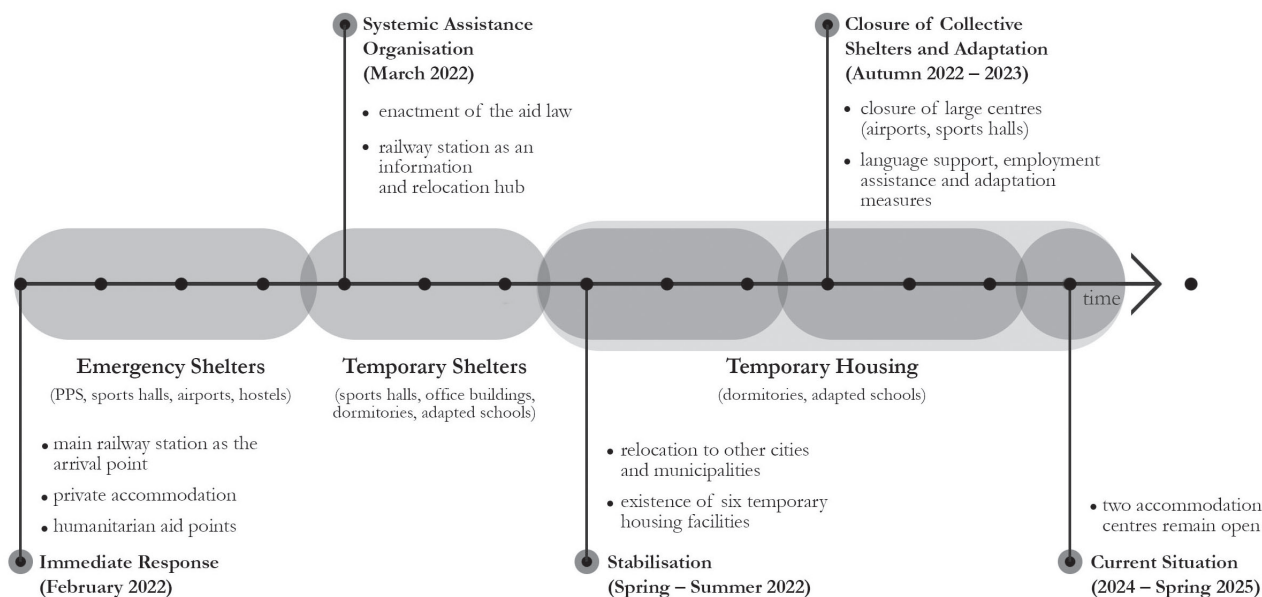


Fig. 7. The framework of refugee support in Wrocław (elaborated by M. Terelak)

II. 7. Ścieżka wsparcia uchodźców we Wrocławiu (oprac. M. Terelak)

It was crucial to identify who had arrived in Wrocław and their basic needs, such as family size and the presence of individuals with disabilities, to ensure proper relocation to suitable centres or other cities. However, due to time and logistical constraints, there was often no opportunity to properly assess these needs, leading to situations where people with limited mobility were placed in facilities lacking essential adaptations, such as accessible beds or lifts.

Respondents estimated that Wrocław had around 6–7 collective accommodation sites with varying standards and facilities, none originally intended for living. A key challenge for authorities was adjusting activity schedules, requiring the cancellation or rescheduling of events like concerts, exhibitions, and sports matches – leading to financial losses and contractual penalties. Interviewees noted that refugees were initially directed to large facilities, like sports halls or the airport, before being relocated within Wrocław or to other cities, often changing temporary residence at least twice.

The collective accommodation centres were equipped with basic sleeping arrangements, such as folding camp beds or mattresses, while coordinators were tasked with assessing the overall conditions within these spaces. In some buildings, due to poor technical condition, the floor couldn't support beds or furniture, so new residents were provided only with mattresses. Over time, a decision was made to add a chair to each sleeping space, allowing residents to store their personal belongings. No other modifications were made to the living spaces throughout the centres' use, whether they remained open for six months or three years. Only in a few locations, where space allowed, shelves or lockable cabinets were provided for additional storage. This arrangement became the standard in most centres. There were no clearly defined guidelines specifying the criteria a facility had to meet to be converted into a collective accommodation centre. These efforts were carried out urgently, often spontaneously and with the support of volunteers, enabling

the rapid adaptation or renovation of various buildings into temporary shelters.

It was all meant to be temporary, just for a short while [...], so from the very beginning, it was always a matter of "just another three months, just another six months" (I12).

Despite initial assumptions framing the assistance as "short-term" and "temporary", data provided by the Crisis Management Department indicate that between 1 March 2022 and 31 December 2024, a total of 709,515 person-days of accommodation were provided in collective housing facilities in Wrocław. In the first year following the outbreak of the war, the number of person-days in collective accommodation centres reached 343,831, decreasing to 261,390 in 2023 and 104,294 in 2024. At present, two collective housing facilities remain operational in Wrocław, providing shelter for over 100 individuals. The timeline in Figure 7 illustrates the main phases of collective accommodation in Wrocław, highlighting the transition from emergency response to the current phase of reduced shelter provision between 2022 and 2025.

Insights from the analysis of Wrocław's response

The perspectives of individuals directly involved in supporting Ukrainian refugees have facilitated the reconstruction of a coherent picture of the assistance system. Interviews highlighted the early-stage spontaneity and lack of effective coordination, which, combined with the absence of a housing monitoring system, resulted in limited knowledge about the living conditions of those accommodated in private households. Similar challenges were identified in the relocation process, where matching housing to the individual needs of refugees proved to be a significant challenge. As reported by a respondent involved in managing refugee assistance efforts:

[...] *there were no procedures, and I am not sure whether any migration procedures for receiving migrants were ever established across Poland. Everything was done based on what we thought was right and what we felt needed to be done* (I1).

The city had established operational procedures; however, it was not prepared for the scale of the refugee influx. As a result,

the support system was implemented gradually and continuously adjusted. In Wrocław some facilities were provided free of charge by businesses, while others became available following rapid renovations. However, no new forms of accommodation, such as temporary settlements, were developed (see Table 1). Most of the repurposed spaces were in central areas of the city or were well connected to the city centre, ensuring convenient

Table 1. Comparison of refugee reception, housing solutions, and spatial arrangements in four case studies (Wrocław, Lviv, Abruzzo, Onagawa) (elaborated by M. Terelak)

Tabela 1. Porównanie systemów przyjmowania uchodźców, rozwiązań mieszkaniowych i organizacji przestrzennej w czterech studiach przypadków (Wrocław, Lwów, Abruzja, Onagawa) (oprac. M. Terelak)

Category	Onagawa, Japan	Abruzzo, Italy	Lviv, Ukraine	Wrocław, Poland
Reception organisation				
Actions of central government	expansion of the public procurement system; enabled local authorities to implement alternative housing projects	central management by the Civil Defence Department; special legislation; full government control over housing project implementation	settlement organisation led by local authorities in cooperation with foreign partners (e.g., Poland)	40 PLN/day housing allowance (Ustawa 2022); in force until 30.06.2024; supported local response efforts
Actions of local authorities	project approved by Onagawa and prefectural authorities after negotiations; site allocated within a sports facility	limited influence of local authorities on settlement location and design; excluded from the planning process	land allocation, coordination of construction and site development; attention to spatial quality by local authorities	initial bottom-up response – refugees hosted by residents; then municipal coordination of aid, use of train station, halls and dormitories; development of temporary accommodation with NGOs
Role of volunteers / Community involvement	project supported by VAN (Voluntary Architects' Network); interior design and furnishing	no resident involvement in planning; later grassroots adaptations to meet personal needs	grassroots resident initiatives in organising and improving shared spaces	crucial in the initial phase; support based on informal networks, grassroots actions by residents and local volunteers
Proposed accommodation				
Type and location	ISO containers arranged in multi-storey layout on a municipal sports field, on elevated ground outside the tsunami zone; close to a hospital, schools and green areas	MAP – prefabricated units built in earthquake-affected towns, near damaged homes	container settlements located on municipal land, with access to schools, shops and public transport	accommodation in private homes, sports halls, dormitories, hostels and municipal buildings; locations dispersed throughout the city
Standard and furnishings	three module types (19.8–39.6 m ²); divided into bedroom, bathroom and living area; furnished to create a homelike atmosphere; shared spaces and services provided	modules of 40–70 m ² built to “performance specifications”; focus on transportability, safety, material recoverability and sustainability; simplified combined living–sleeping layout	regular layout; 13 m ² modules for 4 people, with 2 bunk beds, table, chairs and cupboards; shared kitchens and sanitation facilities	varying standards – from halls to flats and hostels; basic furnishings (bed + chair); no control over allocation; rooms often shared
Actual implementation				
Degree of adaptation to user needs	private entrances; furnished interiors with a homelike feel; bright, spacious modules; shared spaces encouraging social interaction	no shared spaces or services; spatial limitations; grassroots adaptations by residents (canopies, fences, façades)	no accessibility features for people with disabilities; shared sanitation facilities located up to 60 m from housing units	unsuitable for long-term stay; lack of privacy and accessibility for people with disabilities; limited adaptability; furnishings supplemented by residents
Duration of use	planned for 4 years; actually used for around 8 years due to high quality	intended as temporary; used for at least 7 years after the disaster	still in use; planned for 4 years; some settlements closed during winter due to lack of weather adaptation	temporary accommodation; some sites closed after a few months; two centres still operating over 3 years after the war began

access to services, work and other essential urban functions. The favourable location of collective accommodation sites made relocation to smaller towns or neighbouring municipalities unattractive for many refugees. It was noted that individuals assigned for relocation refused to move after arriving at their designated destination. As one interviewee noted:

[...] we only knew where they were going, but no one knew what the conditions there were like (I12).

Accounts indicate that accommodation quality was basic, resembling emergency shelter rather than temporary housing. Furnishings were minimal, and no significant improvements were introduced over time to enhance privacy or living conditions that would provide a greater sense of stability and dignity. Without private space, residents stored belongings in bags, impacting hygiene and contributing to sanitary issues. In contrast, more attention was given to communal areas, especially for children, with many centres creating play areas, small libraries, and TV rooms for social interaction.

[...] if we already have such a centre, it should not be treated as one with the lowest standard, designed simply to encourage people to move out as quickly as possible, because they will not do so. They do not want to move out, despite the standard being what it is (I12).

Interviewees highlighted that the initial assumption of “short-term accommodation” proved to be unrealistic in practice, as some individuals remained in the centres for years, becoming dependent on the assistance system. The decision to close collective accommodation centres owned by private entities, such as offices, was often driven by financial considerations. Another significant factor was the inadequate technical condition of the buildings, which included faulty installations, heating issues, leaking ceilings, and deteriorating walls. Some centres were also closed due to the decreasing number of individuals requiring assistance. This mainly applied to initial relocation points, like sports halls or airports, used during the early stages of the crisis. These

findings situate the Wrocław case within a broader comparative perspective, alongside previously discussed examples from Lviv, Abruzzo and Onagawa. Table 1 offers an overview of refugee reception models, housing typologies, and spatial arrangements in response to displacement.

Discussion

In both Italy and Wrocław, shelter provision for displaced people is marked by a chaotic approach and lack of long-term planning. Meanwhile, Onagawa’s container settlement set a new standard for temporary housing, redefining accommodation for IDPs. In contrast, the conditions in Wrocław’s collective accommodation centres raised questions about their adequacy for people who had fled war. The location of temporary accommodation played a significant role. In Italy, the absence of communal spaces, markets, and services contrasted with the more thoughtful integration of amenities in Onagawa and Lviv. In Wrocław, many respondents noted that refugees were reluctant to relocate from the city centre, where services were easily accessible. Given these challenges, the bottom-up approach that emerged due to the lack of organised support raises the question of whether a more structured framework could have ensured a more coordinated response. In some cases, participatory design approaches involving refugees have led to more context-sensitive and socially sustainable housing solutions. Existing research highlights that involving future residents in planning and decision-making can result in more appropriate and widely accepted spatial arrangements (Albadra et al. 2021). In the light of these observations, Table 2 outlines key recommendations aimed at strengthening the planning and coordination of temporary accommodation efforts. The suggestions are grouped according to levels of responsibility and spatial aspects concerning the organisation, usability and quality of the living environment.

Table 2. Proposed recommendations for management and spatial organisation in future crisis situations (elaborated by M. Terelak)
Tabela 2. Proponowane rekomendacje dotyczące zarządzania i organizacji przestrzeni w sytuacjach kryzysowych (oprac. M. Terelak)

Category	Area	Recommendations
Management and level of responsibility	central government	continuous financial and legal support for host municipalities and households, fast-track decision-making, simplified procedures, predefined maximum duration of use, integration of temporary housing into housing and urban planning policy
	local authorities	pre-identified emergency locations in local development plans, resource map (e.g., halls, hotels, schools), ongoing cooperation with NGOs; joint activation procedures
	volunteers / community	support with adaptation, integration activities (language, education, community initiatives), filling gaps in basic supplies during the initial phase
Spatial organisation	basic furnishings	minimum: bed, storage space, table, chairs, access to private or semi-private bathroom, shared spaces (e.g., kitchens, common rooms), access to Wi-Fi
	division of space	possibility to ensure privacy, zoning: private, semi-private and shared areas,
	additional elements	simple options for personalisation (curtains, shelves, decorations, space for personal belongings)

Conclusions

The analysis identified solutions and methodologies for temporary accommodation, highlighting areas for improvement based on interviews and examples from Ukraine, Japan, and Italy. A key issue was the lack of centralised coordination, which led to inconsistent relocation and accommodation strategies. Establishing clear guidelines would improve efficiency, ensure a more predictable response and help people transition to more permanent housing. Another pressing issue was the inadequate standard of living, particularly the lack of privacy and essential furnishings, which can be addressed by analysing the spatial needs of those affected. Conducting qualitative research with refugees would provide valuable insights, helping ensure that housing solutions

meet both practical and emotional needs. Additionally, clear criteria should be established for identifying locations that can be converted into temporary accommodation centres. The location of these centres emerged as a significant factor, as demonstrated by the contrast between Italy and Onagawa or Lviv. Temporary accommodation can be implemented in underused spaces such as parks or sports fields, temporarily integrating them into the urban fabric. In Wrocław, refugees' reluctance to relocate from the city centre highlights the need for a clearer system that outlines potential destinations and services. These insights underscore the importance of a strategic approach to temporary accommodation, integrating crisis planning with long-term housing policies to ensure adaptability and resilience in future crises.

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Streszczenie

Dynamika zapotrzebowania na przestrzeń w sytuacjach kryzysowych: strategie na przykładzie Wrocławia

W obliczu kryzysów migracyjnych miasta stają przed wyzwaniem organizacji schronienia dla ofiar katastrof naturalnych i uchodźców, co wymaga dynamicznych i elastycznych strategii zarówno w zakresie przestrzeni mieszkaniowej, jak i organizacji pomocy. Tematem artykułu jest architektura pomocowa, obejmująca rozwiązania przejściowe pomiędzy schronieniem natychmiastowym a stałym zakwaterowaniem. Na przykładzie Wrocławia przeanalizowano proces przekształcania miejskiej infrastruktury w odpowiedzi na napływ ludności po wybuchu wojny w Ukrainie w 2022 r., koncentrując się na ewolucji rozwiązań tymczasowego zakwaterowania. Omówiono kolejne etapy organizacji przestrzeni – od spontanicznych działań po instytucjonalne miejsca zbiorowego zakwaterowania, pierwotnie planowane jako krótkoterminowe, lecz nadal funkcjonujące. W artykule przedstawiono zarówno lokalne uwarunkowania organizacji schronienia, jak i szerszy kontekst globalnych kryzysów migracyjnych.

Przeprowadzone badania opierają się na przeglądzie literatury przedmiotu oraz częściowo ustrukturyzowanych wywiadach z przedstawicielami organizacji pozarządowych i władz miejskich. Wywiady te miały na celu zrozumienie dynamiki funkcjonowania ośrodków zbiorowego zakwaterowania. Dodatkowo, analiza danych liczbowych z Wrocławia ukazała skalę napływu uchodźców i wynikające z tego zmiany w zapotrzebowaniu na przestrzeń mieszkalną. Zestawienie różnych modeli organizacji schronienia pozwala na porównanie podejścia zastosowanego we Wrocławiu, gdzie dominowały ośrodki zbiorowego zakwaterowania, z rozwiązaniami stosowanymi w innych krajach.

Przegląd różnych strategii skłonił do refleksji nad potencjałem długoterminowego wykorzystania takich przestrzeni oraz koniecznością ich projektowania w zgodzie z rzeczywistymi, zmieniającymi się potrzebami uchodźców. Podkreślono potrzebę lepszej identyfikacji tych potrzeb, która umożliwiłaby nie tylko bardziej efektywne projektowanie przestrzeni, ale także skuteczniejsze zarządzanie i dostosowywanie do przyszłych kryzysów.

Słowa kluczowe: uchodźcy, kryzys migracyjny, tymczasowe zakwaterowanie, architektura pomocowa, organizacja pomocy