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Architectural Accessibility in Practice

European Case Studies of Inclusive Buildings

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Abstract

Accessibility in the built environment continues to reveal a persistent gap between regulatory ambition and lived experience. This paper presents a narrative synthesis of the Erasmus+ cooperation project *Open Buildings of Europe: Good Practices Collection as Tools for Accessibility Audits (OBLIGE)*, focusing on nine case studies across Austria, Romania, and Türkiye. Through a combination of on-site assessments, user experience validation, and structured evaluation criteria, the study identifies patterns of inclusive design that can be transferred across contexts. The findings show that accessibility is best understood not as a checklist of isolated interventions, but as a continuous spatial and experiential journey. Buildings that perform well integrate step-free access, adequate spatial dimensions, accessible sanitary facilities, multi-sensory information systems, and operational practices such as trained staff and clear communication. The paper situates these findings within a broader human-rights and standardisation framework and argues for a shift from compliance-based approaches toward user-centered , evidence-based design.

Introduction

Across Europe, accessibility is formally recognised as a fundamental right. International frameworks such as Article 9 of the United Nations Convention on the Rights of Persons with Disabilities define accessibility as a precondition for equal participation in society. At the same time, European standards and policies, including EN 17210 and ISO 21542, provide detailed technical guidance for achieving accessible environments. Yet, despite this regulatory maturity, a gap persists between what standards prescribe and what users encounter in everyday spaces.

The Erasmus+ project *Open Buildings of Europe (OBLIGE)* was developed precisely in response to this gap. Its central premise is simple but critical: accessibility must be understood through real buildings, real users, and real conditions. The project therefore combined systematic fieldwork with methodological development. It documented inclusive design solutions in nine buildings across three countries and translated these findings into a practical audit framework.

The project's most important conceptual contribution lies in reframing accessibility not as a static attribute of a building, but as a dynamic and continuous experience. Accessibility unfolds as a sequence of interactions, beginning with arrival and extending through entry, movement, use of facilities, information access, and safe exit. This perspective shifts attention from isolated design elements to the coherence of the entire user journey.

Figure 1 – All examined locations

Methodological Approach

The analysis presented in this paper is grounded in a mixed-method approach that combines technical evaluation with experiential validation. Each of the nine buildings was assessed through a structured methodology that integrates quantitative measurements, qualitative observations, and user feedback.

The evaluation framework considers multiple dimensions of accessibility, including entrance and egress conditions, internal

circulation, usability of rooms and services, sanitary provision, way finding systems, and emergency preparedness.

Importantly, the methodology does not rely solely on compliance checks. It incorporates user experience surveys involving people with disabilities, as well as expert on-site inspections. This dual perspective ensures that findings reflect both measurable conditions and lived realities. The use of digital audit tools and precise measurement instruments, such as laser devices for spatial verification, further strengthens the reliability of the assessments.

The selection of case studies follows a deliberate logic. Each country contributes three buildings representing different typologies: museum, place of worship, and hotel. This typological balance allows the analysis to move beyond national regulatory differences and focus instead on functional patterns of accessibility.

Accessibility as a User Journey

A central insight emerging from the OBLIGE case studies is that accessibility is best understood as a continuous user journey. This journey begins outside the building, in the surrounding urban context, and extends through all stages of interaction with the space.

The first phase, arrival, often determines whether access is possible at all. Uneven terrain, unclear pathways, or inaccessible transport links can create barriers before the building is even reached. The second phase, entry, focuses on thresholds, door widths, and the presence or absence of steps. Even minor deviations, such as small threshold differences, can significantly affect usability.

Once inside, the journey continues through internal circulation. Corridors, elevators, and transitions between spaces must allow smooth and independent movement. This includes not only sufficient width and turning space, but also the absence of obstacles and clear spatial organisation. The availability and accessibility of sanitary facilities represent another critical point, often determining whether a building can be used comfortably over longer periods.

Equally important is access to information. Wayfinding systems must support orientation for users with different sensory abilities. This requires the integration of visual, tactile, and auditory cues. Finally, the journey concludes with safe egress, where emergency systems must ensure that all users can evacuate the building effectively.

This journey-based perspective reveals that accessibility failures rarely occur in isolation. Instead, they emerge from breaks in continuity. A building may provide accessible entry but fail in internal navigation. It may offer compliant sanitary facilities but lack clear information systems. True accessibility therefore depends on the alignment of all stages of the user experience.

Comparative Insights from European Case Studies

The nine case studies illustrate how accessibility is implemented across different contexts and building types. While each building reflects specific architectural, cultural, and regulatory conditions, several consistent patterns emerge.

Museums often achieve a relatively high level of physical accessibility, particularly in terms of circulation and sanitary provision. However, they frequently face challenges related to spatial constraints, crowding, and sensory accessibility. Historic

interiors, narrow passages, and uneven surfaces can limit maneuverability. At the same time, information systems may not fully address the needs of users with visual or hearing impairments.

Figure 2 – Museums

Places of worship present a different set of challenges. These buildings often carry strong cultural and architectural significance, which can limit the scope of structural modifications. Accessibility interventions must therefore be discreet and carefully integrated. The case studies show that dignified access can be achieved through subtle measures, such as improved contrast at stair edges, tactile cues, and clearly communicated guidance systems.

Figure 3 – Places of worship

Hotels generally demonstrate the highest level of functional accessibility, driven in part by market demand and tourism standards. Step-free entrances, elevators, and accessible rooms are

often present. However, gaps frequently appear in service delivery and communication. Accessibility information may not be clearly communicated to guests, and staff training can vary. This highlights the importance of operational aspects of accessibility, which extend beyond physical design.

Figure 4 – Hotels

Across all typologies, the most successful examples share a common set of features. These include step-free routes, adequate clear widths, accessible sanitary facilities, and multi-sensory wayfinding systems. They are supported by trained staff and clear communication protocols, which ensure that accessibility features are usable in practice.

Good Practices and Recurring Barriers

The case studies reveal a set of transferable good practices that can be applied across different contexts. These practices are not necessarily complex or expensive. Many involve careful attention to detail and a user-centered approach.

Barrier-free entrances, for example, are achieved through level access, ramps with appropriate gradients, and automatic door systems. Internal circulation is supported by wide corridors,

unobstructed pathways, and accessible vertical connections. Sanitary facilities are designed with sufficient space, appropriate fixtures, and clear usability. Wayfinding systems combine visual clarity with tactile and auditory elements.

At the same time, several recurring barriers persist. Inconsistent application of standards is a common issue, particularly in older buildings. Maintenance problems can reduce the effectiveness of existing accessibility features. Perhaps most importantly, the absence of user-centered design thinking leads to solutions that meet formal requirements but fail in practice.

These findings reinforce the idea that accessibility is not achieved through compliance alone. It requires continuous evaluation, adaptation, and engagement with users.

Universal Design and Broader Implications

The OBLIGE findings align closely with the principles of Universal Design. Concepts such as low physical effort, tolerance for error, and adequate space for use are reflected in the most successful case studies.

Universal Design extends accessibility beyond specific user groups. It improves usability for all people, including those with temporary limitations, elderly users, and families with children. It also contributes to sustainability by reducing the need for future modifications and enabling buildings to adapt to changing needs over time.

From this perspective, accessibility becomes not only a technical requirement but a broader design value. It reflects a commitment to inclusivity, dignity, and social participation.

Discussion

The comparative analysis of the nine case studies highlights a key shift in understanding accessibility. Rather than treating it as a set of isolated interventions, accessibility must be integrated into the overall design and operation of buildings.

This requires a multidisciplinary approach, involving architects, engineers, facility managers, and users. It also requires a shift in mindset, from compliance-driven design to user-centered design. Buildings that perform well are those where accessibility is considered from the earliest stages of planning and continuously evaluated throughout their lifecycle.

The findings also demonstrate the importance of balancing structural and operational measures. Physical adaptations are essential, but they must be supported by clear communication and trained staff. Accessibility is therefore both a design challenge and a management challenge.

Conclusion

The OBLIGE project provides strong evidence that accessible design is achievable across diverse contexts. The case studies show that practical, transferable solutions already exist. The challenge lies in scaling these solutions and ensuring their consistent application.

Accessibility should be understood as a continuous process rather than a fixed state. It requires ongoing evaluation, user engagement, and adaptation. By focusing on the user journey and integrating physical, sensory, and operational aspects, buildings can move closer to truly inclusive environments.

The transition from standards to practice is not only a technical task. It is a cultural shift toward recognizing accessibility as a core quality of architecture and a fundamental condition for participation in society.

Reference:

MOVEO International (2025). Open Buildings of Europe: Good Practices Collection as Tools for Accessibility Audits (OBLIGE). Erasmus+ Project Publication.

MOVEO International (2024). Open Buildings of Europe – Project Overview. Available at: https://moveointernational.com/open-buildings/

United Nations (2006). Convention on the Rights of Persons with Disabilities (CRPD). Article 9: Accessibility. New York: United Nations.

European Committee for Standardization (2021). EN 17210: Accessibility and usability of the built environment – Functional requirements. Brussels: CEN.

International Organization for Standardization (2021). ISO 21542: Building construction – Accessibility and usability of the built environment. Geneva: ISO.

European Union (2019). Directive (EU) 2019/882 on the accessibility requirements for products and services (European Accessibility Act). Brussels: European Commission.