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Housing not for all: the lack of universal accessibility to housing in multi-unit buildings in Spain, Sweden and Germany[1]

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Abstract. *Purpose* – This study aims to explore the current situation of universal accessibility to multi-unit buildings in three European countries (Spain, Germany and Sweden), in view of the lack of effective European rules on this topic, with the aim to identify which legal frameworks and policies may be useful to favour it.
Design/methodology/approach – The results presented in this work are based on empirical data gathered from three surveys conducted in three representative countries of different housing models (Spain, Germany and Sweden). These surveys addressed the grade of accessibility at each point of the route that a person with mobility difficulties, with a physical deficiency or aged +70, has to do to access to their home from a public street or road.
Findings – The current paper shows that, in the end, there is still a long way to go in terms of universal accessibility to multi-unit buildings in, at least, three European Union Member States as, according to this study's findings, the percentage of universally accessible multi-unit buildings is limited to 0.6 per cent in Spain, 2.5 per cent in Sweden and 1.5 per cent in Germany. The study also identifies successful legal frameworks and policies among the studied countries that may be useful to achieve a true universal accessibility to flats located in multi-unit buildings.
Research limitations/implications – The legal frameworks and policies identified in this paper in terms of promoting universal accessibility to housing located in multi-unit buildings may provide guidance to other researchers and policymakers when addressing this topic, thus helping them to reach an egalitarian and inclusive society.
Originality/value – This paper goes one step further than previous works as it is based on up to date empirical data concerning accessibility and it identifies successful legal frameworks and policies in a comparative perspective.

Keywords: Disabled, Elderly, Housing, Condominiums, Multi-unit buildings, Universal accessibility

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1. Introduction

The United Nations Convention on the Rights of Persons with Disabilities (CRPD, 2006)[2] contains accessibility obligations regarding the identification and elimination of obstacles and barriers to accessibility in buildings (Art. 9). Authors even advocate that the CRPD has created self-standing rights imposing obligations of a positive nature, *i.e.* a new human right, the right to accessibility, is contained in Art. 9 CRPD (Broderick, 2019). In the same vein, accessible housing is also included within the elements the right to housing is comprised of as enshrined in Article 11 of the International Covenant on Civil and Political Rights 1966.[3] The promotion and integration of the rights of persons with disabilities is also provided for in the EU Charter of Fundamental Rights (Art. 26), which is in line with Sustainable Development Goal 10 (Reduce inequality within and among countries) of the UN declaration on 'Transforming our world: the 2030 Agenda for Sustainable Development' (Fundamental Rights Agency, 2019).

Even though the EU acceded the UN Convention in December 2010, the Commission's proposal for a European Accessibility Act (2015),[4] which aims to improve the functioning of the internal market for accessible products and services pursuant to the priorities set out in the European Disability Strategy 2010-2020,[5] housing is not included within the scope of the Act. The lack of binding rules concerning the built environment has been the object of some criticism on the part of the Fundamental Rights Agency (Fundamental Rights Agency, 2019a), the European Disability Forum[6] and the ANEC, the European consumer voice in standardisation (ANEC, 2019). The lack of EU rules on housing accessibility means that housing accessibility remains mainly a matter that falls under the jurisdiction of national governments .

In this vein, evidence from the Fundamental Rights Agency shows that EU Member States have adopted mandatory accessibility standards for the construction and alteration of national and local authority buildings (Fundamental Rights Agency, 2015), and the European Federation for Living[7] has produced a comparison leaflet concerning accessible housing in different European countries. Nevertheless, the cross-border study conducted by the Academic Network of European Disability experts (2013)[8] noted that "*the existence of specific accessibility requirements (and general obligations) are far from universal for private housing, by comparison with public buildings, and with less coverage than for work places*", the

[2] Available at: https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html (accessed 8 May 2019).

[3] Available at: http://www.ohchr.org/en/professionalinterest/pages/ccpr.aspx (accessed 8 May 2019). See also the UN Committee on Economic, Social and Cultural Rights (CESCR) General Comment (No. 4) on The Right to Adequate Housing (1991), available at: https://www.escr-net.org/resources/general-comment-4 (accessed 8 May 2019); and the General Comment No. 5 on the Persons with Disabilities (1994) issued by the same Committee. Available at: https://www.refworld.org/docid/4538838f0.html (accessed 8 May 2019).

[4] Proposal for a Directive of the European Parliament and of the Council on the unification of the laws, regulations and administrative provisions of the Member States as regards the accessibility requirements for products and services (COM/2015/0615 final - 2015/0278 (COD). The Proposal received a positive vote by the EU Parliament on 13 March 2019 and was adopted by the EU Council on 9 April 2019. More information available at: https://www.consilium.europa.eu/es/press/press-releases/2019/04/09/improving-accessibility-to-products-and-services-for-disabled-and-elderly-people-council-adopts-the-accessibility-act/ (accessed 8 May 2019).

[5] https://ec.europa.eu/social/main.jsp?catId=89&furtherNews=yes&newsId=933&langId=en (accessed 8 May 2019).

[6] http://edf-feph.org/newsroom/news/disappointing-compromise-eu-accessibility-act (accessed 25 August 2019).

[7] https://www.ef-l.eu/wp-content/files_mf/1463650764EFLLeafletAccessibleHousingDesign.pdf, accessed 8 May 2019).

[8] This Network was established by the European Commission in 2008 to provide scientific support and advice for its Disability and Inclusion Unit.

Eurobarometer on accessibility of 2012[9] showed that 38% of the citizens interviewed or a member of their families had at some time experienced difficulties entering into a building or an open public space, and the EU Project "Free Movements and Equal Opportunities for All" (LivingAll) concluded that little has changed in terms of accessibility (in a broad sense) in some EU Member States in recent decades (Kerbler, 2012). There are also some studies (albeit few) undertaken at national level showing the existence of environmental barriers in housing.[10]As a result, the lack of accessibility in the built environment seems to be a European problem, which is in breach of the duties enshrined in the CRPD.

The lack of housing accessibility could be considered to constitute a discriminatory act (Committee on the Rights of Persons with Disabilities, 2014) as it increases the risk of a lower degree of social participation, which can ultimately lead to poorer self-management, isolation and higher health care needs (Slaug et al., 2017). An accessible built environment plays a key role in achieving a society based on equal rights, as it provides citizens with autonomy and the means for building an active social and economic life (Kerbler, 2012). The link between accessible housing (*i.e.* home modification) and health-related quality of life in terms of increased safety and confidence, improved mobility at home, increased independence, supported care-giving role, increased social participation and ability to return home from hospital, has already been measured (Carnemolla and Bridge, 2016). In a similar vein, EUROSTAT[11] confirmed that people with an activity limitation seem more likely to experience problems associated with housing deprivation (*e.g.* no bath or shower in the dwelling, a leaking roof or the dwelling being too dark, or no bath or shower in their home). In the worst-case scenario, the prevalence of inadequate housing and the lack of accessible and affordable housing stock are factors that lead persons with disabilities to be at an increased risk of becoming homeless (Housing Rights Watch, 2018).

With the aim of monitoring existing regulation on accessibility in three European countries (following one of the approaches provided by the Council of Europe, 1993),[12] to fill the research gap on this topic and to examine whether the accessibility duties enshrined in international conventions are properly fulfilled, this paper goes one step further than previous works as it is based on up to date empirical data (gathered by our team during the years 2017 and 2018)[13]

[9] http://ec.europa.eu/commfrontoffice/publicopinion/flash/fl_345_en.pdf (accessed 8 May 2019).

[10] For Sweden, see Iwarsson and Wilson, 2006, and Petterson et al., 2018); another study highlights that only 7% of homes offer minimal accessibility features in England (Equality and Human Rights Commission, 2018). In Spain, only 2% of condominiums were considered to have reached universal accessibility in November 2017 (which would correspond to 196,295 buildings), according to a report produced by the General Council of Condominiums Managers (Sandra López Letón, El País, *La accesibilidad universal se topa con los vecinos*, 15-11-2017 (https://elpais.com/economia/2017/11/10/actualidad/1510324841_846587.html, accessed 26 February 2018). A comparison of the legislation, policy implementations and recommendations of three EU States (the UK, Ireland and France) with those from Malta and the non-member countries of the USA and Australia is provided by Prideaux and Roulstone, 2009. Lastly, a study investigating the nature of accessibility problems in housing among single-living, very old people in Sweden, Germany and Latvia, over the course of a year , may be found in Iwarsson et al., 2006. In line with the results provided in this paper , this study showed the presence of environmental barriers in these countries in the vast majority of cases.

[11] Source: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Disability_statistics_-_housing_conditions (accessed 8 May 2019).

[12] The Council of Europe suggested six different approaches to improve policies on accessibility, in which not only the diverse capabilities of human beings, the analysis of the existing urban areas in terms of accessibility and the integration of this concept into undergraduate studies should be taken in to consideration, but also the systematic analysis of the measures taken to improve accessibility.

[13] This research paper is based on two reports commissioned by *Fundación Mutua de Propietarios* (https://mutuadepropietarios.es) to the UNESCO Housing Chair of the University Rovira i Virgili (http://housing.urv.cat/en/, accessed 27 May 2019).

concerning accessibility during the whole pathway from the moment the person leaves a public street or road until s/he finally arrives in their flat located within a multi-unit building, including access to the garage and the other common services or facilities of the building. The study also points out successful legal frameworks and policies amongst the countries studied that may be useful for other countries to implement.

2. Methodology issues

2.1. The concept of universal accessibility as a starting point

In order to carry out a presentation that is as enlightening as possible, "universal access"[14] to a flat located within a multi-unit building has been taken as a starting point, following the *pathway* presented in Figure 1, that is, from the moment the person leaves a public street or road (no. 1 in Figure 1) until s/he finally arrives in their flat, having passed through the building's common areas (both exterior and interior) and used the common services or facilities of the building such as a swimming pool, as well as the access to the garage (no. 2 in Figure 1). This pathway is somewhat similar to the "imaginary journey" described by the Council of Europe, which seeks to raise awareness of the barriers a person may encounter when moving through the external environment and traveling on public transport to reach destination buildings (Council of Europe, 1993). The accessibility inside the flat itself (no. 3 Figure 1) is left apart on purpose, as this depends mainly on the persons' own needs, interests and financial means (including the availability of subsidies) rather than on the multi-units' legal framework and related policies, whose efficacy is the main focus of study in this paper.

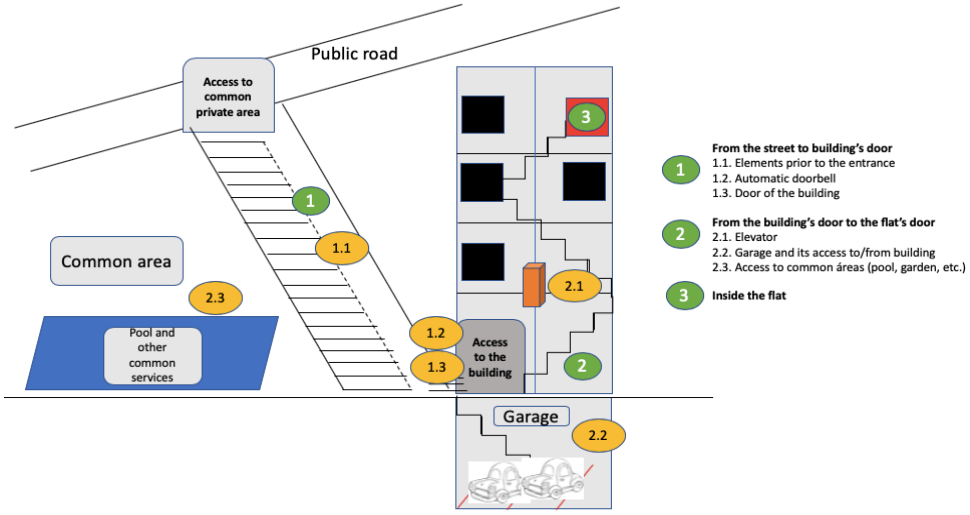

Figure 1. *Work scheme "From the public road to the flat"*. Source: authors' own work

Thus, for the purpose of this paper, a universally accessible multi-unit building is one that allows any person, regardless of age or disability, to move through it independently and safety, having accessed it from a public street and having reached a flat within it. Each of the indicated points may contain a complexity in the form of either physical (*e.g.* ramps or lifts that are either inadequate or entirely absent, narrow parking spaces in a shared garage) or functional barriers (*e.g.* lights accessible for someone in a wheelchair, video intercoms for the deaf, a lift with voice instructions for the blind). As a consequence, the broadest sense of accessibility has

[14] According to article 2 CRPD: "'Universal design' means the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. 'Universal design' shall not exclude assistive devices for particular groups of persons with disabilities where this is needed".

been used, which refers not only to the disabled with reduced mobility, but also to those who are affected by a physical deficiency in one or more of their senses (blindness, deafness, muteness) and all the elderly aged 70 and above.

2.2. Data and study sample

The results presented in this work are based on empirical data gathered from three surveys conducted in Spain via telephone (with a total of 2,027 interviews), and in Germany (1,502) and Sweden (1,500) through a Computer Assisted Web Interviewing (C.A.W.I.) programme. In all cases, the geographical distribution of households throughout each country was taken into consideration.

The fieldwork was carried out by the Netquest company,[15] which holds an ISO 26362 certification for online national and international access panels. The way in which a panel captures, surveys and encourages is key in the reliability of the data obtained. In this sense, Netquest has a wide range of samples that allowed us to have a sample design proportional to the different geographical areas of each of the reviewed countries. Specifically, the system invites panellists to participate in the survey following a geographical sample design. Once the different filters had been passed, each participant was given access to a questionnaire (see below), during this time quality assurance systems were put in place to detect questions answered in a random way or without the person having read them . The statistical analysis was carried out with the statistical program SPSS V.21. Univariate and bivariate analysis were carried out to establish both descriptive and relational analysis, *e.g.* between internal sociodemographic variables in each country or between the different countries involved in the study.

The interviewees were asked to answer a questionnaire that covered a number of issues, such as the characteristics of their primary residence, *i.e.* whether the interviewee lived in a fully-owned property, in a rented property or in cooperative housing, and how the multi-unit building was organised from a legal point of view. Whereas the Spanish survey focused only on condominiums because it is the EU country with the highest proportion of its population living in flats (Eurostat, 2016)[16] and because the vast majority of these constructions are organized as such (very few are organised as genuine cooperatives or associations), in Germany and Sweden the scope of the research was extended to other legal forms of multi-unit buildings, such as cooperatives, which play a greater role in these countries than in Spain. As a result, the characteristics of each country were taken into consideration, *e.g.* in Germany the possible answers about the legal organisation of multi-unit buildings were condominium, housing cooperative and tenancy apartment building (in which case an external private person/company/institution owns the building, with the interviewee being the tenant of the unit); and in Sweden not only was the condominium an option (*Ägarlägenhet*) but also the co-operative housing association (*Bostadsrättsförening*, in which the household is a member of an association, which owns the building, and through his/her membership the resident has an unlimited lease over the unit), the cooperative tenancy association (*Kooperativ hyresrätt*, in which an association owns the building, and through his/her membership he/she is a tenant of the unit) and the tenancy apartment building (*hyresrätt*), were the main possible answers.

[15] https://www.netquest.com/online-surveys-investigation.

[16] Source: https://ec.europa.eu/eurostat/statistics-explained/index.php/Housing_statistics#Type_of_dwelling (accessed 8 May 2019).

The subsequent questions related to the characteristics of the building (*e.g.* year of construction) and aimed to determine the current status of accessibility of the place where they live, focusing on the different areas thereof according to the pathway described in Figure 1 (covering their access from a public street or road to the door of their own flat). So they were asked for instance about the existence of an entry phone system or intercom; or about the presence of steps or stairs outside the door giving access to the multi-unit building; whether the gate leading to the street is wide enough to allow access with a baby buggy, wheelchair or when carrying some bags; whether they have a lift and, if so, whether there are buttons in Braille or if there is sufficient space inside; whether they have a garage and where it is located, etc. Ultimately, we wanted to know what adaptation works were carried out to improve accessibility, the main reasons for carrying out such works and the main barriers for not performing them, as well as to detect future adaptation needs and to analyse the degree of knowledge of accessibility regulations.

2.3. Countries chosen for the comparison

The choice of Sweden and Germany as the countries to make the comparison with Spain was motivated by the need to be successful in providing evidence that shows that universal accessibility to multi-unit buildings is a European problem and not only a national one, despite having different types of housing tenure, multi-unit buildings' organization or prevalent housing policies.[17]

Thus, Southern European countries (such as Italy, Portugal or Malta) share similar housing policies[18] and, in particular, a similar housing tenure system in which property ownership and the organization of buildings into condominiums is predominant. As a result, comparisons among these countries had a more limited interest for our goal. But this is different for the two countries selected, as they follow the Nordic housing model (basically, having stronger Welfare States), while multi-unit buildings are also common (71% in Germany, 49% in Sweden; while Spain is 72%).[19] The choice of Germany is due to its similarity in the structure (multi-storey residential blocks) but not in the type of land tenure (with a greater percentage of the population being tenants and not homeowners, contrary to what takes place in Spain);[20] and the selection of Sweden is due to its membership of the group of Northern European countries, where housing policies and the types of buildings tenures (with the pre-eminence of cooperatives and buildings owned by a single proprietor over condominiums, which were not regulated under Swedish law until 2009) are different from those existent in Southern Europe.

Furthermore, the three countries share the characteristic of having progressively aging populations. While Spain is virtually the country with the lowest birth rate in Europe (Eurostat,

[17] See the classification of Esping-Andersen (1990) into liberal regimes (common in Anglo Saxon countries), conservative and corporatist regimes (Germany, Austria, France) and the social-democratic regimes (in Scandinavian countries). Kemeny (1995), meanwhile, developed a theoretical framework where the structure of the rental sector is the key to analysing housing policies in welfare states.

[18] The southern model of housing has some distinctive characteristics in comparison with the rest of Europe (Azevedo, López-Colas and Módenes, 2016; Allen, 2006; Ferrera, 1996; Leibfried, 1992): high homeownership rates and high rates of second home ownership , low quantities of rental and social housing and the important role of the family in the provision of housing access.

[19] See Eurostat https://ec.europa.eu/eurostat/statistics-explained/images/e/e9/Distribution_of_population_by_dwelling_type%2C_2016_%28%25_of_population%29_YB18.png (accessed 3 November 2018).

[20] See more about the underlying reasons in Nasarre Aznar S. *et al*. (2018).

2017),[21] there will be 18.4 million households with people over 60 years of age in Germany in 2030; and one third of the population in this country will be over 65 in 2060.[22] In Sweden, 20 per cent of the population have passed the standard retirement age of 65, and in 2040, nearly one in four will be 65 years or older.[23]

3. Overview of the general approach in each country concerning accessibility in the built environment

3.1. Legal framework and public subsidies

3.1.1. Spain

Spain has protected owners over 70 years of age or with a disability or reduced mobility in two different ways. First, by progressively forcing condominiums to bear the costs of adapting the building, as long as these modifications are reasonable: any co-owners of a given multi-unit building who meet the subjective conditions prescribed by law (co-owners in whose home or premises, people with disabilities, or who are over seventy years of age, live, work or provide voluntary services), as well as the pertinent public administrations, have a legitimate right to require that the condominium (using its own resources, *i.e.* the monthly instalments made by all co-owners) carries out the works necessary to comply with those standards to achieve true universal accessibility, provided, however, that the upgrades to be made are reasonable, *i.e.* when the annual cost of works to ensure the accessibility of the building, not counting public subsidies, does not exceed twelve ordinary monthly instalments of common expenses (Art. 10.1.b) of the Spanish Condominium Law 49/1960, LPH[24]). And second, by forcing all buildings to comply with the Technical Building Code (TCE)[25] (without prejudice to other regional and local regulations) beginning in December 2017: according to Royal

[21] Source: https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tps00199&plugin=1, accessed 28 May 2019.

[22] *Bevölkerungsvorausberechnung*, available at: https://www.destatis.de/DE/ZahlenFakten/GesellschaftStaat/Bevoelkerung/Bevoelkerungsvorausberechnung/Bevoelkerungsvorausberechnung.html.

[23] Source: Elderly Care in Sweden (https://sweden.se/society/elderly-care-in-sweden/, accessed 28 May 2019).

[24] BOE 23 July 1960, n. 176, accessed 8 May 2019. Even when this amount is exceeded, the improvement works have a binding nature when a public subsidy the condominium is eligible for covers 75% of this amount, according to Royal Decree-Law 7/2019, of March 1st, on urgent measures relating to housing and rental matters (BOE 5 March 2019, n. 55, accessed 8 May 2019). The works that have a non-compulsory nature, *i.e.* when the annual cost exceeds twelve ordinary monthly instalments of common expenses, once the aids and subsidies have been deducted, need approval from the government body of the condominium. In this case, the favourable vote of the majority of the co-owners, who, in turn, represent the majority of the proportional ownership interest , shall be required (Art. 17.2 LPH).

[25] For instance, the CTE establishes that the floors must be adequate to prevent people from slipping , and in order to avoid the risk of falls, technical requirements are established for stairs and ramps. Furthermore, the switches, the intercommunication devices and the alarm buttons will be accessible mechanisms, *e.g.* they must be located at a height between 80 and 120 cm when it comes to control and command elements and they must have chromatic contrast with respect to the environment. There are also rules in the CTE that relate to adequate lighting in transit areas (*e.g.* they must provide a minimum level of illuminance), lifts (*e.g.* dimensions of the cabin, doors, control devices and sounds signals, so the cabin must have a sound signalling system indicating the opening and closing of doors) and parking spaces (*e.g.* the parking space reserved for wheelchair users must be close to the entrance and exit points of the site and must be communicated with both through an accessible route).

Decree 173/2010,[26] all existing residential buildings should comply with the basic universal accessibility standards provided in the Technical Building Code (CTE) without prejudice to other regional and local regulations. In addition, there are works that can be carried out unilaterally by people with disabilities or those over 70 but at their own expense.[27]

The specific Catalan regulation on accessibility[28] is, since 2006, even more flexible than the one provided in the LPH because Article 553-25 Catalan civil code[29] (as amended by Law 5/2015)[30] establishes that the legitimate right to ask the judge to order the execution of the works (provided they are reasonable and proportionate) regardless of the consent of the condominium, is not only afforded to co-owners with disabilities or over 70 years of age, but also to holders of a possessory property right (*e.g.* usufructuaries); and also because the judge has a discretionary power to set the maximum amount of the investment to be paid by all of the co-owners (it is not limited to 12 ordinary monthly payments to the condominium).[31]

We can conclude that Spain has attempted to improve the standard of housing accessibility by legal imposition. Note, in addition, that Spain has focused on condominiums as it is the main form of organization of multi-unit buildings. Thus, it remains to be seen whether owners over 70 years of age or with a disability or reduced mobility living in housing cooperatives are sufficiently protected since State Law 27/1999, on cooperatives (Arts. 89 to 92),[32] makes no reference to the need to carry out works that allow residential buildings to meet the accessibility needs of these groups , nor does this legislation afford any of the members with the right to demand that the improvement works to be carried out by the cooperative.

As for public subsidies, public aid certainly helps to make all buildings accessible and to comply with the aforementioned legal obligation. In this vein, condominiums may apply for public subsidies according to Royal Decree 106/2018, of March 9th, that regulates the State Housing Plan 2018-2021,[33] provided that at least 50% of the units are the primary residences of their owners and that the condominium's board has passed a resolution applying for the subsidy

[26] Royal Decree 173/2010, of February 19th, modifying the Technical Building Code passed by Royal Decree 314/2006, of March 17th (Spanish Official Gazette -BOE- 11 March 2010, n. 61, accessed 8 May 2019). The BOE may be accessed free of charge at: https://boe.es.

[27] Thus, Act 15/1995, of May 30th, on ownership limits on immovables to remove architectural barriers for people with disabilities (BOE 31 May 1995, n. 129, accessed 8 May 2019) allows tenants, sub-tenants, usufructuaries or users of urban properties with disabilities living in condominiums (which are not entitled to protection under the LPH) to force the completion of accessibility works without needing the consent of the owner of the unit in which they live nor the consent of the condominium (it can only oppose works if they are deemed are unreasonable) , although, as previously stated , they must pay for the works themselves. The wide scope of active entitlement is the main attraction of this measure, given that units' owners can already rely on Article 10.1 LPH to oblige the rest of the co-owners to contribute to the cost. Works may include the modification of common elements of the building located between the building and the public road, such as stairs, elevators, corridors, entrance doors or any other architectural element, or those necessary for the installation of electronic devices that favour their communication with the outside.

[28] Spain is a multi-legal system, so six Regions (Autonomous Communities) have their own private law systems on the basis of Article 149.1.8 of the Spanish Constitution, available in English at: https://www.boe.es/legislacion/documentos/ConstitucionINGLES.pdf (accessed 8 May 2019). Catalonia is the only one that has passed its own condominium rules.

[29] BOE 22 June 2006, n. 148, accessed 26 February 2018.

[30] BOE 1 June 2015, n. 130, accessed 26 February 2018.

[31] See in this sense the decision of the Catalan High Court of Justice 21 February 2019. ECLI:ES:TSJCAT:2019:1240. The ECLI reference number may be used at http://www.poderjudicial.es/search/indexAN.jsp.

[32] BOE 17 June 1999, n. 170, p. 27027.

[33] BOE 10 March 2018, n. 6, accessed 8 May 2019.

(Arts. 34.1.b, 35.2.cye, 41.2 and 42.2.c). However, buildings must have been built preferably before 1996, the aid is limited to a maximum of 8,000 euros per unit and the aid should not generally exceed 40% of the cost of the planned works, conditions which largely limits its effectiveness.

3.1.2. Germany

Art. 3(3) of the Basic Law for the Federal Republic of Germany 1949[34] establishes that "No person shall be disadvantaged because of a disability",[35] and the Disability Equality Act 2002 (*Behindertengleichstellungsgesetz*)[36] seeks to ensure the accessibility of disabled people to buildings (section 4) and has introduced the binding nature of regulations, such as DIN standards (see below). Notwithstanding such provisions, and in line with Spanish law, the cooperatives act (*Genossenschaftsgesetz)* does not contain any provision that regulates the legal relationship between the user and the cooperative in relation to accessibility issues. It is surprising, in the same vein, that the German Condominium Law 1951 (*Wohnungseigentumsgesetz*) [37] does not contain any specific provision regarding accessibility in the built environment.

Despite this omission, section 554a German Civil Code (*Bürgerliches Gesetzbuch*, BGB)[38] states that the tenant can demand the approval of the owner for structural changes or other facilities required to make the use of the dwelling or the access to it, adequate for the needs of the disabled; the tenant must therefore have a legitimate interest (the same applies to the users of cooperatives, even though the regulation in force does not mention such a right). The owner can only refuse approval if his interest in keeping the rented house or building unchanged exceeds the interests of the tenant (section 554a (I 2) BGB). This rule stems from the Decision of the Federal Court 28 March 2000 that applied Art. 3(3) of the Law for the Federal Republic of Germany 1949. As for the owners in German condominiums, case law admits that they can force works unilaterally if the barriers prevent them from reaching their apartment (even if it is for the benefit of a regular cohabitant or a tourist tenant) although always weighing their interests against those of the rest of the co-owners. In addition, the costs must be borne by the owner who solicits the upgrade, according to the condominium law.

Regarding public subsidies, the German government reintroduced a public subsidy called the KfW program in 2014. Tenants and private owners can also apply for the subsidy, although this is limited to 10% of the value of the investment.[39] The KfW program provides grants regardless of the applicants' income and age, and covers the adaptation measures to be carried out on the route leading from the public road to the flat, to overcome heights, any modifications needed in common areas , etc. There are also programs led by federal states (the conditions and subsidies granted vary from one state to another) and subsidy programs at a regional level (*e.g.* this program[40] is provided by the city of Manheim and it is available to owners, renters and

[34] Available at: https://www.btg-bestellservice.de/pdf/80201000.pdf.
[35] In Spain, this is also the case, as evidenced when combining Articles 14 and 49 of the Spanish Constitution.
[36] Available at: https://www.gesetze-im-internet.de/bgg/BGG.pdf.
[37] Available at: https://www.gesetze-im-internet.de/woeigg/ (accessed 8 May 2019).
[38] Available at: http://www.gesetze-im-internet.de/bgb/ (accessed 8 May 2019).
[39] KfW Bank, ‚Merkblatt Bauen, Wohnen, Energie sparen', available at https://www.kfw.de/PDF/Download-Center/Förderprogramme-(Inlandsförderung)/PDFDokumente/6000003912_M_455_AU_Zuschuss.pdf. La ayuda del 10% se aplica a costes de inversión no superiores a € 50.000.
[40] https://www.mannheim.de/sites/default/files/page/3089/barrieren_druck.pdf.

users of cooperatives under the same conditions , it covers eligible costs totaling up to 25% of the applicant's expenses).

3.1.3. Sweden

In Sweden, the objectives set out in the CRPD fueled the modification of some laws, such as the Swedish Discrimination Law, with the inclusion of lack of accessibility as another form of discrimination. As pointed out above, although in Spain owners (and some others)[41] who meet the required subjective conditions may demand the completion of the works that are necessary to ensure that they can make appropriate use of the common parts of the building in accordance with their needs, in Sweden this faculty is not provided to the residents of the buildings, meaning that the technical requirements of regulations on accessibility issues are neither binding for the cooperative or for the owner of the building nor can they be imposed or demanded by its residents. The tenants cannot demand these modifications either, since the owner must authorize the changes. Furthermore, the regulation in force (the Planning and Building Act[42] and the Housing Adaptation Grant Act)[43] does not stipulate any technical and obligatory requirements regarding accessibility (beyond the need to have a lift in buildings of more than three (1960) and four floors (1977)) for older buildings (those built prior to 1985, which are the most numerous, making up almost 70% of the total housing stock). This may explain the high number of dwellings that should be rebuilt or adapted (more than 1 million of the multi-unit buildings -out of 2.3 million- have entrances with steps, without a ramp or an elevator; Petterson et al., 2018).

Public subsidies are a fundamental part of the Swedish public policy on accessibility (whose beginnings date back to 1959 and continues to be promoted in 2018) since residents of older buildings can improve the accessibility of the flat or the common areas outside or inside the building. Since 2018, the owner of the building is also entitled to apply for public funds if older people live in it.

3.2. Technical requirements

The Spanish and Swedish technical regulations regarding accessibility address similar aspects, but there are differences in some respects. For example, Spanish regulations require the presence of automatic door entry systems to comply with accessibility regulations (without the video door entry system being necessary), but in the Swedish regulations, the automatic door entry system is not a required feature in terms of accessibility. The same happens with the sound signals in the lifts. In Germany, the steps leading up to the entrance door are not required to have handrails on both sides.

4. Results

4.1. Degree of accessibility to flats in multi-unit buildings

[41] See above.

[42] *Plan- och bygglag* (2010:900). Available at: https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/plan--och-bygglag-2010900_sfs-2010-900 (accessed 15 November 2018). More information about accessibility in the built environment may be found at: https://www.boverket.se/en/start/building-in-sweden/swedish-market/laws-and-regulations/national-regulations/accessibility/ (accessed 8 May 2019).

[43] *Lag* (2018:222) *om bostadsanpassningsbidrag*. Available at: https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/lag-2018222-om-bostadsanpassningsbidrag_sfs-2018-222 (accessed 15 November 2018).

Table 1 summarizes the comparison of the accessibility of the various zones in the pathways to multi-unit buildings in the three countries, zone by zone. It shows how Germany achieves the worst results. It seems that its approach to universal accessibility through the mechanism of "weighing of interests" (see above) is not entirely effective . For their part, Sweden and Spain are tied in terms of the number of zones in which they achieve the best results out of the three countries examined . But Sweden stands out a well above the other two countries in all three aspects in which it excels. On the other hand, Spain only has a relevant lead when it comes to the presence of lifts, partly because this requirement is relatively recent in Sweden (since 1985 for two-story buildings) and as it also flexible (it allows the constructor to install them later in certain cases), as pointed out above.

Zone of the *pathway*	**Spain**	**Germany**	**Sweden**
From the street to the front entrance	42%	32%	64%
Entrance door of the building	36%	38%	35%
Presence of a lift	78%	18%	45%
From the front entrance to the lift	72%	64%	81%
Lift itself	7%	3%	11%
Garage	19%	13%	14%
Common areas	58%	34%	56%

Table 1. *Comparison of the accessibility pathway to multi-unit buildings in the three countries*. Source: authors' own work

As a result, we may conclude the following:

a) Accessibility from the street to the front entrance. Here there is a clear advantage in favour of Sweden, with an accessibility of 64%, the main reason for the difference being that in most buildings there are no steps between the entrance and the building, and if there are any, the ramp that makes the entrance accessible is adequate.

b) Accessibility of the entrance door. There are no significant differences in the accessibility of the entrance door in the three countries.

c) Presence of a lift. With regard to this point, there are important differences, with a lift present in 78% of the multi-unit buildings in Spain, but only 45% in Sweden and an even lower 18% in Germany (even in the most modern flats, this only reaches 61%, while it reaches 91% in Spain and 95% in Sweden). In addition, in Sweden, for example, the main improvement requested by residents in terms of accessibility in multi-unit buildings is the installation of a lift. The root cause of this deficiency is the age of the housing stock (40% were built prior to 1964), when builders had no obligation to install a lift. It is true, however, that the first accessibility regulations issued from 1950 onwards have progressively required (although they have established exceptions to their application) the installation of lifts in buildings of more than four (1960), three (1977) and finally two floors (1985). Furthermore, the law allows the builder to install the lift required since 1985 on a later date, under certain circumstances.

d) However, when focusing on the accessibility of the lift door, the most accessible are the Swedish elevator doors (81%) and the least accessible are the German ones (64%). The same happens with the accessibility of the lift itself (11% in Sweden, 7% in Spain and a scant 3% in Germany), the main difference being the existence of voice announcements (more present in

Swedish lifts than in Spanish ones, although it is not a mandatory feature according to the regulations).

e) Regarding the accessibility of the garage, when it is in the same building[44] (as occurs with 56% of the buildings of the respondents in Spain, 23% in Germany and 18% in Sweden), Spain obtains slightly better results (19%) compared to Germany (13%) and Sweden (14%), especially due to the presence of steps between the garage and the access point to the building (this occurs less often in Spain).

f) On the accessibility of common areas with common services and facilities, Spain and Sweden exceed 50%, but Germany only reaches 34%.

Some reasons for the results described so far could be the following:
a) First, that although in Spain all existing residential buildings as of December 2017 must comply with the basic standards of accessibility[45] (although its universal accessibility index a year after is only of 0.6%), in Sweden it is not mandatory for all buildings to comply with the regulations on accessibility. Furthermore, only people with disabilities or elderly people can apply for public subsidies that help to finance accessibility. Only since 2018, is the owner of the building (*e.g.* a cooperative housing association) also entitled to apply for those public aids, if older people live there. This might explain that the universal accessibility index for Sweden is only 2.5% of the total number of multi-unit buildings.

For its part, Germany allows tenants and cooperative users to ask the owner of the building to undertake adaptation works, it can object only if comparatively, it has a greater objective interest in maintaining the property intact, although it may request additional guarantees to ensure the property is restored to its original state. As for the owners of units in a condominium, jurisprudence[46] establishes that these residents can force improvement works unilaterally if the barriers prevent them from reaching their apartment (Gellwitzki, 2018), although always weighing their interests against those of the rest of the co-owners ("weighting of interests" approach).[47] The universal accessibility for Germany is 1.5%.

The problems leading to the low results both in Germany and in Sweden seem to be due, at least to some extent, to the lower technical standards required by the respective technical regulations. In Germany this is explained by the failure of some *Länder* to transpose the technical regulations, since they are the ones competent to do so,[48] and because the DIN rules[49] only apply to new buildings (the latter case is also applicable to Sweden), although they may

[44] If the garage is outside of the building, its accessibility has already been counted in the section "from the street to the entrance of the building".
[45] These are the ones provided in the CTE (see above), without prejudice to local and regional regulations, which in turn must respect the basic criteria or requirements enshrined in the CTE although, if they wish, they can improve these minimums.
[46] Bundesgerichtshof (BGH), Urteil vom 13.01.2017 – V ZR 96/16, nº 22. It may be consulted at: https://openjur.de/u/948529.html (accessed 8 May 2019).
[47] See below section 3.4 for more details.
[48] The *Föderalismusreform* of 2007 transferred more powers to the Federal States, including the promotion of social housing, and this regulation provides for the requirements of persons with disabilities. Only 11 of the 16 states approved their own regulations, the rest continue to refer to federal regulations, which has implied an unequal application of universal accessibility rights.
[49] Bayerisches Staatsministerium des Innern, für Bau und Verkehr, DIN 18040-1 und DIN 18040-2 – Planungsgrundlagen des barrierefreien Bauens', available at: https://www.stmi.bayern.de/assets/stmi/buw/baurechtundtechnik/planungsgrundlagen_barrierefreies_bauen.pdf (accessed 18 November 2018).

occasionally also be applied to older buildings (on a case-by-case basis). In Spain, however, although the technical requirements are stricter and apply to all buildings, they are not fulfilled.

b) Second, due to the limitations of the samples used for the survey: while the dwellings of respondents in Spain, built between 1995 and 2012, represent 46% of the total, they only represent 13% in Germany (while those built between 1954 or earlier and 1974 represent 56%, the accessibility regulations in Germany -the *Behindertengleichstellungsgesetz*- are from 2002)[50] and 10% in Sweden (whereas those built between 1954 or earlier and 1974 account for 58%). In addition, the German buildings represented in the survey have fewer neighbours and are of less height than those represented in the samples taken for Sweden and Spain.

4.2. Considerations about the differences between the different forms of organisation of multi-unit buildings

When the study for Spain was carried out, there was no distinction made in the way the multi-unit buildings were organised (*i.e.* condominium or others). However, this differentiation is important for Germany and Sweden for two reasons: first, because there is a relevant number of buildings organised as cooperatives: 12% of respondents in Germany and 55% in Sweden (between the two types); and second, because there is a very common type of arrangement in these countries, in which the owner of the building is a single entity (often, in Germany, this might even be an individual) who rents out the apartments (69% of respondents in Germany; 28% in Sweden). That is to say, the condominiums surveyed only represent 16% in Germany and another 16% in Sweden[51].

In view of the zones (*itinerary*) that characterize universal accessibility in multi-unit buildings, the following may be concluded:

a) First, that in no case are multi-unit buildings owned by a single person or entity (tenants' buildings), neither in Sweden nor in Germany, better in terms of accessibility than other modes of property organisation. Sometimes they are even far behind. This shows that there is less concern about accessibility in multi-unit buildings that are organised in this way and that, in general, the quality of the dwellings where tenants live is worse than the quality of the dwellings of homeowners.

b) Second, that for most indicators -individually considered- the situation is considerably better in German condominiums (this is also evident in the general accessibility indicator, with 2.9%) and likewise in Swedish cooperatives. However, in the case of the Swedish general indicator, condominiums prevail (3.9%, compared to 1.9% for cooperatives). So, although for Sweden, the hypothesis of greater concern among the members of these communities is substantiated by some indicators, it is not corroborated for Germany or for Sweden, in relation to their general indicators.

4.3. The works carried out or to be carried out and professional management

The results of the survey show that Spain is the country that has carried out the most accessibility upgrades in its buildings. In Spain, improvements in ramps and elevators stand out as the most frequent; in Germany and Sweden, the entrance door and common service facilities

[50] Available at: https://www.gesetze-im-internet.de/bgg/BGG.pdf (accessed 28 May 2019).

[51] Although the percentage of condominium residents among those answering for Sweden should be necessarily lower than that reflected in the results, given that the Swedish regulation on this form of organising multi-unit buildings is relatively recent (it was introduced in 2009) and it has not given the expected results (there were only a thousand apartments registered under this scheme in 2017).

are the parts that are most frequently upgraded. But there is a big difference in terms of financing: in Spain, 70% of the renovations have been funded by the co-owners with their own funds (either paid by individual owners or using the condominium's funds), while in Germany this accounts for 52% and in Sweden 41%. In Sweden, this percentage (despite the absence of official data) can be explained by the importance of public subsidies.

For its part, Spain is the country where there is a greater perception of the need for works (44%), with Germany being the lowest (25%), confirming that in all three cases, the percentages are higher in the communities with residents who are disabled or who have reduced mobility and where there is professional management (the latter is somewhat less true in Spain, however).

In general terms, it can be concluded that most indicators show that buildings managed by professionals are more accessible and more adaptation works have been performed. This is despite the fact that in Sweden the figure of the property manager is not so relevant *prima facie*, since the aids are specifically intended (up to 2018) for disabled people, who can receive advice directly from public authorities. However, the figure of the property manager has become more relevant with the new reform of 2018, given that the owners of multi-unit buildings are now entitled to request public subsidies to carry out accessibility works. On the other hand, this assertion can only be corroborated by the Spanish general accessibility indicator.

All in all, the percentages of total universal accessibility remain very low (0.6% for Spain, 2.5 for Sweden and 1.5 for Germany), even in those multi-unit buildings where there are people with disabilities currently living (0.9% for Spain, 2.3% in Sweden and 1.7% in Germany). There is still much work to be done.

5. Discussion

This paper shows that, in the end, there is still a long way to go in terms of universal accessibility to multi-unit buildings in, at least, three EU Member States. Given the relevant differences in the housing law and policies of the three jurisdictions studied, it seems to be a feasible hypothesis that the challenge of achieving true universal accessibility to flats located in multi-unit building has a European dimension.

However, further research should be undertaken to include more countries in the comparison with the aim of cataloguing the legal frameworks and policies that favour universal accessibility to housing located in multi-unit buildings and identifying the regulations and measures that constrain universal access in the EU. Furthermore, further research should address the barriers for implementation, and how these differ across Europe.

So far, according to our work, the following may be highlighted:

a) The most efficient way to increase the accessibility percentages of multi-unit buildings is the establishment of mandatory requirements by law, which has not occurred in Sweden, whose approach has encouraged the existence of a dual housing stock in terms of accessibility, based on the age of the building, whose situation, in addition, can be perpetuated in time if its members decide so (*i.e.* denying the authorization of the works). The German approach, based on the "weighting of interests" does not seem to be a totally effective way of achieving universal accessibility either. Therefore, the Spanish approach, consisting of allowing any co-owner with a legitimate need to force the performance of modifications that adapt common parts of their

multi-unit building, works which are paid by all members of the condominium, so long as the required work is considered reasonable , is consistent with the will to achieve universal accessibility in all multi-unit buildings. The issue is that this possibility is widely unknown by those affected and, often, the financial resources of condominiums are limited. This, combined with an insufficient number of public subsidies for this purpose, deters the full success of the measure.

b) In fact, a noteworthy Swedish initiative is the use of economic incentives in the form of subsidies. Its importance is evidenced by the results: 17% of the works that have been carried out in multi-unit buildings have been made possible by the granting of public aid, which were only granted (before the new 2018 regulations) directly to the people with disabilities. The percentage of works financed by public aid is not higher , in our opinion, because the results show that the disabled person has been denied his request by the building owner (in 35% of cases). Indeed, obtaining public aid is subjected to prior acceptance by the owner of the building or its governing body. Therefore, if they reject the request of a resident of the building to make accessibility adjustments, the interested parties will not be able to obtain the government subsidy and will not be able to make the necessary adjustments to improve accessibility. Subsidies have also recently been implemented into Spanish legislation through the State Housing Plan 2018-2021, which includes the program to promote home maintenance, the improvement of accessibility in homes and the housing development program for the elderly and people with disabilities. In Germany, the study has revealed that accessibility works are not carried out because the interested party does not request them, mainly due to the cost or because s/he is not aware that they hold this right .

c) It should also be noted that a relatively high percentage of the surveyed Swedish population (45%) is aware of the possibility of requesting public assistance for the improvement of accessibility, which should inspire the Spanish public authorities to implement specific actions to raise awareness among these vulnerable groups, given that 70% of the respondents were not aware of the possibility of forcing the condominium to agree to execute accessibility works. As a matter of fact, a common concern expressed by the participants in a pan-European study on housing provision and accessibility was that they were unable to take action to improve their housing accessibility due to a lack of knowledge*, e.g.* to prevent accessibility problems (Haak et al., 2015).

d) From Germany, we can highlight the fact that Art. 3(3) of the Law for the Federal Republic of Germany 1949 expressly recognises the right to not be discriminated due to a disability as a fundamental right, which has, to some extent, inspired legislation and jurisprudence in this regard.

Lastly, Table 2 summarizes the main results of this study as regards good and bad practices in terms of promoting universal accessibility to housing.

	Spain	Germany	Sweden
Obligation of all buildings (regardless of their year of construction) to comply with the regulations on accessibility	Yes, since December 2017 (good practice)	Yes, but its application encounters limits in old buildings	No, dual regime of buildings with and without the obligation to adapt to the regulations depending on the year of construction (bad practice)
Possibility of unilaterally obliging the owner of the building to carry out the accessibility works	Yes, in condominiums, with contribution from the co-owners, although with some limitations (*e.g.* the cost has a legal limit) (good practice)	Yes, both in condominiums and cooperatives, also applicable to tenants, but subject to a "balance of interests" among residents and at the applicant's own expense	No (bad practice)
Role of public subsidies in the adaptation of buildings	Secondary role, given that the condominium is legally responsible for part of the cost (according to the study, in 70% of cases the works are financed with own funds) (bad practice)	Limited role	Essential role in public policies on accessibility, but burdened by the possibility that the owner rejects works despite being subsidized (good practice)
Universal accessibility in multi-unit buildings	0.6%	1.5%	2.5% (good practice)
Universal accessibility in buildings with neighbours with disabilities or with reduced mobility, compared to those who do not have disabled residents	Higher (0.9% vs 0.7%)	Higher (1.7% vs 1.4%)	Higher (2.3% vs 1.9%) (good practice)
Number of points in the pathway in which the highest score is achieved[52]	3	1	3 (but by a larger margin)

[52] That includes "From the street to the front entrance"; "The entrance door of the building"; "Presence of a lift"; "From the front entrance to the lift"; "Of the lift itself"; "From the garage"; and "The common areas".

Greater or lesser adaptation depending on the legal organisation of multi-unit buildings	Only condominiums have been analysed	Worse results in buildings owned by a single person or entity. Better results in condominiums with respect to cooperatives	Worse results in buildings owned by a single person or entity. Better results in condominiums with respect to cooperatives
Technical rules	They apply to all buildings and constitutes a minimum in all Autonomous Communities. Higher technical standards are required, which, however, are not fulfilled (good practice)	They do not apply to all buildings directly, nor have they been implemented in all German States. Problems due to the transfer of legislative responsibility . Lower technical standards required	They do not apply to all buildings and constitute a minimum in all Swedish regions. Lower technical standards required
Differences in accessibility among multi-unit buildings managed professionally	Yes, in most indicators, and can be corroborated by the general accessibility indicator (good practice)	Yes, in most indicators, but it cannot be corroborated by the general accessibility indicator	Yes, in most indicators, but it cannot be corroborated by the general accessibility indicator

Table 2. *Main conclusions of the study: good and bad practices in terms of universal accessibility to multi-unit buildings*. Source: authors' own work

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References

Allen, J. (2006), "Welfare Regimes, Welfare Systems and Housing in Southern Europe", *European Journal of Housing Policy*, Vol. 6 No. 3, pp. 251-277.

Academic Network of European Disability (2013), *National accessibility requirements and standards for products and services in the European single market: overview and examples*, Compiled by Mark Priestley on behalf of the ANED, pp. 1-116, available at: https://ec.europa.eu/social/BlobServlet?docId=14840&langId=en (accessed 8 May 2019).

ANEC (2019), Annual Review 2018, pp. 1-27, available at: https://www.anec.eu/images/Publications/annual-reviews/ANEC-Annual-Review-2018.pdf (accessed 24 August 2019).

Azevedo, B. *et al*, (2016), "Home Ownership in Southern European Countries: Similarities and Differeces", *Portuguese Journal of Social Science*, Vol. 15 No. 2, pp. 275-298.

Broderick, A. (2019), "Of rights and obligations: the birth of accessibility", *The International Journal of Human Rights*, pp. 1-22.

Carnemolla, P. and Bridge, C. (2016), "Accessible housing and health-related quality of life: measurements of wellbeing outcomes following home modifications", *International Journal of Architectural Research*, Vol. 10, No. 2, pp. 38-51, available at: <http://www.archnet-ijar.net/index.php/IJAR/article/view/977, accessed 25 August 2019).

Council of Europe (1993), *Accessibility: principles and guidelines: Adaptation of buildings in an accessible built environment*, Council of Europe Publishing, Strasbourg, pp. 1-22. Available at: https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=09000016805a2a24 , accessed 25 August 2019).

De La Escalera C. G. (2018), "Las obras de accesibilidad universal en los inmuebles en el Derecho privado español (estudio especial de la propiedad horizontal", *Revista Crítica de Derecho Inmobiliario*, No. 766, pp. 719-773.

Equality and Human Rights Commission (2018), *Housing and Disabled people. Britain's hidden crisis*, Equality and Human Rights Commission, pp. 1-107. Available at: https://www.equalityhumanrights.com/sites/default/files/housing-and-disabled-people-britains-hidden-crisis-main-report.pdf, accessed 8 May 2019).

Esping-Andersen, G. (1990), *The Three Worlds of Welfare Capitalism*, Polity Press, Cambridge.

Ferrera, M. (1996), "The "Southern" Model of Welfare in Social Europe", *Journal of European Social Policy,* Vol. 6 No. 1, pp. 17-37.

Fundamental Rights Agency (2019a), *Fundamental Rights Report 2019*, Publications Office of the European Union, Luxembourg, pp. 1-241, available at: https://fra.europa.eu/sites/default/files/fra_uploads/fra-2019-fundamental-rights-report-2019_en.pdf, accessed 23 August 2019).

Fundamental Rights Agency (2019b), *Implementing the Sustainable Development Goals in the EU: a matter of human and fundamental rights*, Publications Office of the European Union, Luxembourg, pp. 1-241, available at: https://fra.europa.eu/sites/default/files/fra_uploads/fra-2019-fundamental-rights-report-2019-focus_en.pdf, accessed 23 August 2019).

Fundamental Rights Agency (2015), *Implementing the United Nations Convention on the Rights of Persons with Disabilities (CRPD) An overview of legal reforms in EU Member States*, Publications Office of the European Union, Luxembourg, pp. 1-20, available at: https://fra.europa.eu/sites/default/files/fra-2015-focus-05-2015-crpd_en.pdf, accessed 23 August 2019).

Haak, M. et al. (2015), "Cross-National User Priorities for Housing Provision and Accessibility — Findings from the European innovAge Project", *International Journal of Environmental Research and Public health*, Vol. 12, No. 3, pp. 2670-2686.

Housing Rights Watch (2018), *Homelessness and disabilities: the impact of recent Human Rights developments in Policy and Practice*, available at https://www.housingrightswatch.org/content/homelessness-and-disabilities-impact-recent-human-rights-developments-policy-and-practice%E2%80%8B, accessed 23 August 2019).

Committee on the Rights of Persons with Disabilities (2014), *General comment on Article 9: Accessibility*, Eleventh session 30 March –11 April 2014, pp. 1-12.

Gellwitzki, H-J. (2018), "Zur Rechtsposition des (vermietenden) Wohnungseigentümers hinsichtlich barrierefreier Gestaltung des Gemeinschaftseigentums", *Wohnungswirtschaft & Mietrecht*, No. 6, pp. 330-342, available at: http://www.grundsteuerreform.net/wp-content/uploads/2018/11/2018_Kriese-Loehr_WuM-6.pdf (accessed 8 May 2019).

Iwarsson, S. and Wilson, G. (2006), "Environmental barriers, functional limitations, and housing satisfaction among older people in Sweden: A longitudinal perspective on housing accessibility", *Technology and Disability*, No. 18, pp. 57–66.

Iwarsson, S. et al. (2006), "Environmental Barriers and Housing Accessibility Problems Over a One-Year Period in Later Life in Three European Countries", *Journal of Housing For the Elderly*, Vol. 20, No. 3, pp. 23–43.

Kemeny, J. (1995), *From Public Housing to the Social Market: rental policy strategies in comparative perspective.* Routledge, London.

Kerbler, B. (2012), "'A Toolkit for Detecting and Eliminating the Barriers that People with. Disabilities Face in the Built Environment: A Case of Slovenia, Europe", *METU Journal of the Faculty of Architecture*, Vol. 29, No. 2, pp. 235-257.

Kleinman M. *et al*. (1998), *European Integration and Housing Policy*, Routledge, London.

Leibfried, S. (1992), "Towards a European Welfare State? On Integrating Poverty Regimes into the European Community", in Ferge, Z. and Kolberg, J. (Eds.) *Social Policy in a Changing Europe*, Boulder, CO, Westview Press, pp. 245-279.

National Stadistics Office (2018), *Población por provincias, edad (grupos quinquenales), Españoles/Extranjeros, Sexo y Año*, available at: http://www.ine.es/jaxi/Datos.htm?path=/t20/e245/p08/l0/&file=03002.px (accessed 26 May 2019).

National Stadistics Office (2008), *Encuesta de Discapacidad, Autonomía Personal y Situaciones de Dependencia*, available at: http://www.ine.es/jaxi/Datos.htm?path=/t15/p418/a2008/hogares/p01/modulo1/l0/&file=01001.px (accessed 26 February 2018).

Nasarre Aznar S. *et al*. (2018), "Tenancies as an alternative to homeownership in Spain, Portugal and Malta? The legal drivers in a European context", in Schmid, C. (Ed.), *Tenancy Law and Housing Policy in Europe*, Elgar Land and Housing Law and Policy series, Elgar Law Publishing, Cheltenham/Northampton, pp. 67-117.

Petterson, C. et al. (2018), "Housing accessibility for senior citizens in Sweden: Estimation of the effects of targeted elimination of environmental barriers", *Scandinavian Journal of Occupational Therapy*, Vol. 25, No. 6, pp. 407-418.

Prideaux, S. and Roulstone, A. (2009), "Good practice for providing disabled people with reasonable access to the built environment", *International Journal of Law in the Built Environment*, Vol. 1 No. 1, pp. 59-81.

Slaug et al. (2017), "Improved Housing Accessibility for Older People in Sweden and Germany: Short Term Costs and Long-Term Gains", *International Journal of Environmental Research and Public Health*, Vol. 14, No. 9, pp. 1-13.