Report on access to essential services in the EU
Commission staff working document
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**Key messages**

The rising cost of living is one of the main concerns of people in Europe. According to the Eurobarometer of Autumn 2022 on the key challenges of our times, more than four in ten (42%) see rising prices and the cost of living as the most important issue facing the EU at the moment. Inflationary pressures, demographic challenges and the acceleration of the green and digital transitions have brought the issue of access to essential services at the forefront of the EU policy agenda. Bringing together in a systematised way the available evidence on the structural challenges influencing access to essential services in the EU, this report contributes to better understanding the impact of the current cost of living crisis and underlines the need to ensure that the twin green and digital transitions are fair and inclusive. Its findings will inform future actions at EU level.

**Essential services fulfil basic human needs and are key to well-being and social inclusion, especially for disadvantaged groups.** Principle 20 of the European Pillar of Social Rights states that everyone has the right to access essential services of good quality, including water, sanitation, energy, transport, financial services and digital communications. It stresses that support for access to these services should be available to those in need. Essential services also support access to a wider set of enabling goods and services – among others early childhood education and care, education and training, healthcare, long-term care and social inclusion services – that are key to actively participating in society and in the labour market, in line with principle 14 of the pillar.

Principle 20 and its call for universal access are consistent with the Union’s framework on services of general economic interest. Article 14 of the Treaty on the Functioning of the European Union and Protocol 26 of the Treaty on European Union specify that the shared principles that guide the Union’s action in this field include a high level of quality, safety and affordability, equal treatment, and the promotion of universal access and of users’ rights. The call for support for those in need – stressed by principle 20 – is in line with the EU’s 2030 poverty reduction target and the United Nations’ 2030 agenda for sustainable development.

While the majority of the population in the EU has access to essential services, people at risk of poverty or social exclusion and the most marginalised face the greatest barriers in accessing such services. Price increases have a greater impact on the most disadvantaged, eroding their purchasing power and hindering access to essential services. Supporting their access to essential services can contribute to achieving the EU target of lifting at least 15 million people out of poverty and social exclusion by 2030. For this reason, this report pays special attention to the situation of people of need.

Affordability can constitute an important barrier to equal access. Affordability barriers are greatest for energy, followed by digital communications, transport, and water and sanitation: 9.3% of the EU population are unable to keep their homes adequately warm, 2.4% cannot afford an internet connection for personal use at home, 2.4% cannot afford regular use of public transport, and 1.5% live in households without a bath, shower or flushing toilet, with considerable variations between countries. Being at risk of poverty and belonging to a disadvantaged group, possibly exposed to discrimination, including homeless people and marginalised communities such as Roma, increase the risk of not being able to afford essential services.

Availability and accessibility also pose challenges to access, sometimes linked to other barriers, such as lack of skills or geographical factors (the urban–rural divide, remote and insular regions). The lack of infrastructure or gaps in availability relate mainly to water and sanitation for specific territories and
marginalised communities, such as Roma. The territorial dimension also strongly affects the availability of transport and digital communications, since living in rural areas or remote regions usually implies access to fewer transport services and a lower quality of broadband services. Physical and online accessibility is mostly a concern regarding transport, financial services and digital communications, and particularly affects persons with disabilities and older people. Low skills and insufficient knowledge are a barrier specific to digital communications and financial services, which limits opportunities for labour market participation and integration in society. Access to essential services also usually requires a fixed address, which represents a specific barrier for homeless people. Inequality and discrimination can contribute to all these barriers.

The lack of access to water and sanitation remains mainly an issue for people experiencing severe forms of poverty or deprivation, such as homeless people and rough sleepers or marginalised communities, for example Roma. Almost every household in the EU had basic sanitary facilities in 2020, with on average 1.5% of the population reporting that they were living in households without a bath, a shower or a flushing toilet. However, in Romania this proportion is 21.2%, and Bulgaria, Latvia and Lithuania reported values between 6.4% and 7.0%. Poor infrastructures and the lack of availability of services are the main barriers in these cases. Affordability also plays a key role, since lack of access to water and sanitation disproportionately affects people at risk of poverty (5.1% at EU level, reaching 56.6% in Romania).

Problems with access to energy affect people at risk of poverty to a greater extent, but in some Member States they also affect a large proportion of the middle-income groups. At EU level, the inability to keep one’s home adequately warm affected 9.3% of the total population in 2022, ranging from 1.4% in Finland to 22.5% in Bulgaria. In all Member States it is higher for people at risk of poverty, ranging from 3.9% in Finland to 50.6% in Cyprus, with the EU average at 20.2%. The middle class is also affected, as around half of the EU population unable to keep their homes adequately warm were in the middle-income deciles (1).

The situation is exacerbated by the recent increases in energy prices. Exceptional policy interventions have been undertaken at EU and Member State levels to respond to the ongoing energy crisis, following Russia’s war of aggression against Ukraine. Higher energy costs imply an increased risk of households falling into poverty or exclusion. The Commission has proposed a series of measures to mitigate the impacts of the energy crisis on the most vulnerable but also on low- and middle-income households in a targeted manner that is compatible with preserving incentives for demand reduction and ensures the effectiveness and efficiency of support, including with respect to their impact on public finances. The first set of proposals comprised a toolbox of measures to address the immediate impact of sudden price increases, and the proposal for the REPowerEU plan to strengthen resilience to future shocks. In October 2022, the Council of the EU agreed on a regulation for an emergency intervention to address high energy prices, which includes a revenue cap and a solidarity contribution that should provide approximately EUR 140 billion for supporting households, in particular vulnerable consumers, and businesses. Member States have adopted temporary emergency measures to deal with the exceptional situation, such as new or extended income support schemes, lump sum bonus payments, cuts on value added tax and excise, and bans on disconnections. Measures have also been taken to reduce household expenditure on energy by mobilising investments into energy efficiency and renewable energy. While there is increasing evidence that targeted support is the best way to cushion the impact of high energy prices on energy poor and vulnerable households without fuelling inflation further and while preserving incentives to reduce energy consumption, the bulk of

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1) The third to the eight deciles, inclusives, based on calculations done with data from EU-SILC 2021.
the measures adopted in 2022 (more than 70%, according to the 2023 Annual Sustainable Growth Survey) have been universal. If wholesale energy prices remain stable and lower energy costs are passed on to retail prices as currently foreseen, energy support measures are expected to be phased out, starting with the least targeted measures.

Energy poverty is becoming a public concern amid the current crisis. An EU-wide definition of energy poverty has been agreed between co-legislators in the regulation establishing the Social Climate Fund. This refers to energy as an essential service, and energy poverty as lack of access to it. By providing evidence of the barriers preventing access and analysing trends in energy poverty, the present report helps to increase understanding of the potential implications of the current crisis and can contribute to defining the scope of action at EU level.

A number of dimensions affect the extent to which individuals can access transport, including cost, quality, safety, existing infrastructure and frequency of services, as well as insufficient accessibility for persons with disabilities, persons with reduced mobility and older people. This results in a heterogeneous group facing barriers, including some low-income households that struggle with the cost of transport services, those in rural areas with a deficit of services, older people, persons with disabilities and persons with reduced mobility. While no data are collected regularly on the affordability of transport, the available information indicates that 2.4% of all people in the EU, and 5.8% of those at risk of poverty, could not afford regular use of public transport in 2014 (the latest year for which data are available). Lack of adequate, affordable and accessible transport can also be a barrier to taking up employment. The concept of ‘transport poverty’ is being increasingly discussed. The legislators agreed on a definition of transport poverty in the context of the Social Climate Fund. The findings presented in this report can contribute to further discussions on defining the scope of action on the issue at EU level, in particular on the need to develop indicators and collect data, including on enforced lack of access to transport (i.e. lack of access because of unaffordability).

Lack of or poor access to digital communications remains a challenge for certain groups of people, limiting their participation in society. Those at risk of poverty and those with insufficient digital skills might not be able to use digital solutions, which are key to education and to labour market participation, such as for searching and applying for jobs and carrying out certain occupations. Such challenges also affect persons with disabilities, in particular those with sensory impairments. Affordability remains a concern, with around 2.4% of people in the EU unable to afford an internet connection at home in 2022. The situation varies between Member States, with fewer than 1% of people unable to afford internet access in Denmark, Cyprus, Luxembourg, Netherlands, Austria, Slovenia Finland and Sweden, but 9.1% in Romania and 8.1% in Bulgaria. As is true of the other services, people at risk of poverty are more affected and show higher levels of lack of affordability (7.6% in the EU, 25.0% in Romania, 20.5% in Bulgaria and 16.5% in Hungary). There are also availability (connectivity) issues affecting access to digital communications, most often in some rural/remote areas, where broadband connections and mobile phone networks may be unavailable or of low quality. Lack of skills represents another important barrier, with levels of basic digital skills and above ranging from 79% in Finland and the Netherlands to 28% in Romania in 2021.

Access to financial services in the form of a payment account with basic features is ensured by the payment accounts directive. The Commission is assessing the implementation of the directive and is preparing a report. Data from the World Bank’s 2021 Global Findex database have shown that, in most Member States, the vast majority of people have a bank account and this proportion has increased in recent years. Nevertheless, barriers persist due to, among other things, high fees and lack of information and financial skills. A valid identification document and a domicile are generally
required to open a bank account, which represent a barrier for undocumented migrants and homeless people. Not having a bank account may also represent a barrier to taking up regular employment.

Principle 14 of the European Pillar of Social Rights, on minimum income, also emphasises that everyone lacking sufficient resources has the right to effective access to enabling goods and services. Efficient interaction between minimum income schemes and support for access to essential services, including energy for people lacking sufficient resources, is particularly important. The 2023 Council recommendation on adequate minimum income ensuring active inclusion calls for providing adequate income support, taking into account standards of living, purchasing power and price levels, to ensure a life in dignity. It also recommends that Member States ensure continuity of access to essential services and address financial and non-financial barriers to accessing them. Carrying out a multidimensional needs assessment and drawing up an individualised inclusion plan within 3 months after accessing minimum income should facilitate households’ effective access to identified enabling and essential services.

The recommendation sets out a comprehensive strategy to facilitate the integration of those who can work into sustainable, high-quality employment, along with the provision of sufficient resources to live in dignity, together with support for social participation, for those who cannot. Active inclusion brings together three mutually reinforcing strands of a social safety net: (i) monetary benefits, (ii) measures fostering social inclusion and provision of quality services, and (iii) tailored assistance and incentives to (re)integrate into labour markets. This comprehensive approach is particularly important for people furthest away from the labour market, facing complex barriers to employment and participation in society.

Supporting access to essential services is also key to ensuring that the green transition is fair and inclusive. Increasing prices of energy and transport can aggravate existing barriers and create new forms of exclusion. At the same time, certain measures supporting the transition, such as investing in accessible public transport and energy efficiency, have the potential to improve access to essential services for disadvantaged groups.

Supporting access to essential services, in particular digital communications, is also key to ensuring that the digital transition benefits everyone and that nobody is left behind. Internet and digital technologies are used to work, learn, and access information, goods and services. In December 2022, the European Parliament, the Council and the Commission signed a declaration on European digital rights and principles to promote a sustainable, human-centric vision of a digital transformation shaped by European values. This report highlights the barriers faced by people in vulnerable situations in terms of lack of digital skills and broadband access, including for reasons of affordability, that need to be addressed in order to ensure an inclusive digital transition.

At EU level, access to essential services has traditionally been supported through sectoral legislation, universal and public service obligations, and consumer protection measures. More attention has been given to disadvantaged groups, with the inclusion of dedicated provisions. For instance, the 2014 payment accounts directive calls on Member States to ensure that payment accounts with basic features are offered to vulnerable consumers on particularly advantageous terms or free of charge. The 2018 recast directive establishing the European Electronic Communications Code strengthens existing EU legal obligations concerning the affordability of broadband internet service. The 2019 European Accessibility Act, which includes obligations to make certain transport, banking and digital services and products accessible, is another key initiative promoting access to essential services. The 2020 recast drinking water directive and the 2022 recast urban wastewater treatment directive introduce
measures to ensure better access to water and sanitation facilities, particularly for vulnerable and marginalised groups. The main EU legislation that ensures the protection of energy consumers is the 2019 recast directive on common rules for the internal market for electricity and the 2017 repealing regulation concerning measures to safeguard the security of gas supply. In 2020, the Commission also put forward a recommendation on energy poverty, which provides guidance on how to identify, monitor and support people who lack access to essential energy services. The Council recommendation on ensuring a fair transition towards climate neutrality encourages Member States to ensure access to affordable essential services, in particular energy and transport, and calls for further research and evidence in this area in the context of the green transition towards a sustainable well-being economy.

Funding at EU level also supports investments and programmes that enhance access to essential services in Member States. EU cohesion policy – through the European Regional Development Fund, the European Social Fund Plus and the Just Transition Fund – provides financial support for skills development programmes, training and equipment, and for investments in green, digital and social infrastructures and services. The Recovery and Resilience Facility can support investments and reforms that directly or indirectly enhance access to essential services for disadvantaged groups. 

**Member States** use targeted service-specific measures and social protection, including minimum income schemes, to support access to essential services for disadvantaged groups. There is significant variation among Member States in how access is supported: measures include income support and reduced tariffs; minimum provisions and protection from disconnection; counselling and skills programmes; and home renovation schemes prioritising the most vulnerable. Minimum income schemes play different roles in different countries. In some Member States they are implicitly or explicitly designed to support access to essential services, with benefits taking into consideration the costs of some essential services (typically utility bills but in some cases also public transport). In others, where support to access is provided mostly through service-specific measures, the income threshold used to assess eligibility is in many cases the same as the one used for minimum income, or being a minimum income beneficiary automatically grants access to service-specific schemes.

**Data and monitoring** tools to assess access to essential services and the effectiveness of support measures are scattered and underdeveloped, and important knowledge gaps remain. Information on access to essential services is not regularly collected in a structured way at EU or national level. Administrative data are scarce. Survey data are more developed for some of the services (energy, water, sanitation, digital communications), but no such data are currently collected for transport and financial services.
1. Introduction

Everyone has the right to access essential services of good quality, including water, sanitation, energy, transport, financial services and digital communications. Support for access to such services shall be available for those in need.

European Pillar of Social Rights, principle 20 (2)

Essential services and the EU socio-economic context

Unprecedented high energy prices and inflation rates are adversely affecting the lives of people in Europe. The annual inflation rate for the euro area in December 2022 was 9.2%, with an annual inflation rate for energy of around 25.5% (3). While energy prices have been slowing down since then, inflation still remains historically high (4). The cost-of-living crisis has put the issue of access to essential services at the centre of public concerns and of the political debate.

At the same time, longer-term dynamics, such as demographic change and the green and digital transitions, are also affecting access to and demand of essential services.

Demographic change will have significant consequences on our economies, on our welfare and healthcare systems as well as on housing and infrastructure needs, with regional differences. The Commission report on the impact of demographic change showed that addressing the effects of local and regional demographic change needs to factor in what makes people want to move to or leave a region and stressed that access to services plays a key role in that (5).

With the European Green Deal, the EU has committed to become the world’s first ‘climate-neutral bloc’ by 2050 and to do so in a fair and inclusive way, leaving no person and place behind (6). Accelerating the green transition will have major consequences on the way we live, from the energy we use to the way we move.

Digitalisation and the pace of new technological developments transforming our economies and societies is also accelerating. To reflect this trend, in December 2022, the European Parliament, the Council and the Commission signed a declaration on European digital rights and principles to promote an inclusive digital transition (7).

All these developments point to the importance of ensuring sustainable and effective access to essential services to all in the EU.

Essential services in the European Pillar of Social Rights

The European Pillar of Social Rights (EPSR) dedicates its principle 20 to access to services – including water, sanitation, energy, transport, financial services and digital communications – that are essential to meet basic human needs to live and to participate in society. These services complement and facilitate

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(4) According to the latest flash estimates, the euro area annual inflation is expected to be 7.0% in April 2023, substantially stable compared to March 2023 (6.9%) and to one year earlier (7.4% in April 2022). Eurostat, Euroindicators 52/2023, 2 May 2023 (https://ec.europa.eu/eurostat/documents/2995521/16662671/2-02052023-AP-EN.pdf/a468813c-2-40a5-58a3-8019-27a58c975445/version=1.0kr=1689259566181).


access to other services that fulfil enabling functions, including early childhood education and care, training and education, healthcare, long-term care and social inclusion services. For example, access to transport affects access to work, education and training, healthcare and social services. Having a bank account is often necessary to purchase goods and services, and to receive work-related income, benefits and other forms of support. Likewise, digital communication is becoming increasingly needed to access information, goods and services. Principle 14, on minimum income, also emphasises that everyone lacking sufficient resources has the right to effective access to enabling goods and services.

The ability to access essential services is a critical aspect of social and labour market inclusion, especially for disadvantaged groups, and an important determinant of well-being. In this way, principle 20 of the EPSR is an important element of the EU's broader commitment to fighting poverty, inequality and social exclusion in line with the treaties and international commitments, such as the 2030 agenda for sustainable development (8). The current EU poverty reduction target, which was endorsed at the Porto Social Summit and welcomed by the European Council in 2021, aims to lift at least 15 million people out of poverty by 2030 (9).

**Essential services and services of general interest**

The notion of ‘essential services’ is not part of the EU *acquis*, which refers to services of general interest, to which it dedicates Protocol 26 of the Treaty on European Union (TEU) (10). These are services that public authorities of the EU Member States classify as being of general interest and are therefore subject to specific public service obligations. They can be provided either by the state or by the private sector and are divided into two categories: economic and non-economic.

Services of general economic interest are economic activities that would not be supplied (or would be supplied under different conditions in terms of quality, safety, affordability, equal treatment or universal access) by the market without public intervention (11). They are subject to European internal market and competition rules, although there may be derogations from these rules if necessary to protect citizens’ access. Non-economic services, such as the police or justice system, are not subject to internal market and competition rules. Social services of general interest are those that respond to the needs of vulnerable citizens and are based on the principles of solidarity and equal access. They can be either economic or non-economic in nature.

Article 14 of the Treaty on the Functioning of the European Union (TFEU) and Protocol 26 of the TEU specify the shared principles that guide the Union’s action in this field: a high level of quality, safety and affordability, equal treatment, and the promotion of universal access and users’ rights. These aspects are taken up by principle 20 of the EPSR, which reiterates the importance of universal access and underlines the necessity to support people in need.

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(8) Some of the sustainable development goals (SDGs), such as SDG 6, on clean water and sanitation, SDG 7, on affordable and clean energy, and SDG 11, on sustainable cities and communities, relate directly to the essential services listed in principle 20 of the EPSR.

(9) The poverty target is one of the three 2030 headline targets in the field of employment and social inclusion that the European Commission put forward in the European Pillar of Social Rights Action Plan and were subsequently endorsed at the Porto Social Summit (7–8 May 2021) and welcomed by the European Council (25 June 2021). The target was set on the basis of 2019 levels and builds on the 2020 poverty reduction target, which was agreed in 2010.


(11) Commission staff working document – Guide to the application of the European Union rules on state aid, public procurement and the internal market to services of general economic interest, and in particular to social services of general interest (SWD(2013) 53 final(2)).
Enhancing access to essential services

Member States recognise the ‘essential’ nature of certain services in different ways. For example, provisions indicating a minimum supply of services (e.g. a minimum internet speed that should be available to all) or the necessity to ensure the continuity of the service in the social interest (e.g. bans on disconnection from energy, water and sanitation services, or measures ensuring the existence of suppliers of last resort) are generally in place in various Member States.

Access generally encompasses the affordability of services, their availability (within a reasonable distance) and their accessibility (physical and through ICTs). Significant barriers related to these different dimensions, such as low income, old age, disabilities, territorial inequalities, lack of infrastructure and spatial segregation, still make it difficult for some people in the EU to access essential services.

While the COVID-19 crisis did not directly affect the provision of essential services – whose business continuity was ensured even during the lockdown precisely because they were essential – it may have negatively affected the access of the most vulnerable, for instance because of the fall in households’ disposable income, rising energy consumption and costs, or barriers to accessing online services, such as for home schooling of disadvantaged children. Factors such as a lack of access to basic hygiene and sanitary infrastructure, and limited access to clean water and healthcare services, contributed to disproportionately high negative impacts of the pandemic on disadvantaged groups, such as marginalised Roma communities (12).

Price increases also hinder access to essential services, especially in those Member States where essential goods and services, such as food and energy, make up a higher proportion of consumer spending, and especially for the most disadvantaged, who often have to rely on public support to afford them. While the latest data available and used in this report refer mainly to 2022 and hence allow to capture only the initial (social) impact of existing inflationary pressures, the structural challenges presented below are likely to be made more acute in this situation. The findings of this report can therefore contribute to a better understanding of the impact of the current cost of living crisis.

Enhancing access to essential services is also key to ensuring that the green and digital transitions will be just and inclusive. It can also contribute to tackling environmental inequality, that is, the unequal distribution of environmental hazards, related health risks and access to natural resources, which often affects more poorer households (13).

At EU level, support to access is mainly provided through sectoral policies and regulatory frameworks, which include consumer protection measures, public procurement practices and provisions on ‘universal service obligation’ or ‘public service obligation’. Financial support through cohesion policy, and the Recovery and Resilience Facility (RRF) for eligible reforms and investments, are two other instruments used at EU level. Recent EU initiatives in the social field, such as the European Accessibility Act, the Council recommendation on ensuring a fair transition towards climate neutrality and the Council recommendation on adequate minimum income ensuring active inclusion, are also instrumental to support access to essential services. Other initiatives, such as the long-term vision for EU’s rural areas (14) or


(13) On 22 July 2022, the UN General Assembly declared access to a clean and healthy environment a universal human right.

(14) Commission communication – A long-term vision for the EU’s rural areas – Towards stronger, connected, resilient and prosperous rural areas by 2040 (COM(2021) 345 final).
the strategy for the EU’s outermost regions (15), also stress the importance of taking measures to enhance access to essential services.

Member States are responsible for organising essential services at national, regional or local level. Measures to support access often include reduced tariffs, minimum provisions and protection from disconnection, infrastructure development, counselling and skill programmes, and social protection measures. These last are often linked to minimum income schemes or housing benefits.

The report on access to essential services in the EU

Access to essential services for those in need has not so far been assessed at EU level in a systematic way. This report, announced in the 2021 EPSR action plan, aims to fill this gap, bringing together available evidence and information in a comprehensive and structured way to advance the understanding of the challenges at EU level.

The focus of this report is on access and support for disadvantaged groups and people in need, defined mainly as people living in households that are at risk of poverty or social exclusion (AROPE) (16). Households with dependent children are more prone to poverty, so improved access to essential services for people in need is likely to have a particular impact on children in poverty (this also relates to the focus on access to particular services in the context of the European Child Guarantee). Other issues, such as the design, quality, financing and provision of essential services, are dealt with in the report only when relevant.

This report focuses primarily on affordability, as it affects access to all essential services. Information concerning availability (within a reasonable distance and in rural areas) and accessibility (physical or through ICTs) (17), and other aspects, is included when relevant to provide complementary elements to the analysis (18).

The report is organised in the following way. Chapters 2 to 6 are dedicated to the analysis of each of the essential services listed in principle 20 of the EPSR (19). The first section of each chapter presents the state of play of access to the service in question for people who are AROPE, providing both a qualitative and a quantitative assessment of level, trends and barriers faced in accessing the service at EU and Member State levels. The second section provides information on existing and upcoming measures and actions at EU level. The last section describes existing national and local measures supporting access to the essential service in question, with a specific focus on social policy measures. Chapter 7 complements the analysis, providing additional quantitative evidence and bringing together the information from the previous chapters to look at similarities and common trends between services. The annex provides additional quantitative evidence and charts.

The qualitative analysis of barriers and the country examples of support measures are primarily

(15) Commission communication – Putting people first, securing sustainable and inclusive growth, unlocking the potential of the EU’s outermost regions (COM(2022) 198 final).

(16) At risk of poverty or social exclusion (AROPE) corresponds to being at risk of poverty, or severely materially and socially deprived, or living in a household with very low work intensity.

(17) The right to ‘access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas’ is enshrined in the United Nation Convention on the Rights of Persons with Disabilities (Article 9 – Accessibility), to which the EU and all EU Member States have committed as signatory Parties. References to accessibility in this document are to be understood in this sense.

(18) For example, the issue of availability and accessibility is relevant to explaining barriers in accessing essential transport services for people who are AROPE and living in rural and remote areas, and for persons with disabilities. Considerations of the skills necessary to use some services and their level in the population contribute to the analysis concerning financial services and digital communications, since the lack of financial literacy and digital skills represents a barrier to accessing these essential services. Territorial aspects are relevant to explaining the lack of access to water, sanitation and energy services in deprived and marginalised communities, such as some Roma communities.

(19) Since the provision of water and sanitation is largely regulated and delivered together in practice, the analysis of the two services is presented in a single chapter.
drawn from three main sources and reflect information available at the time of their publication: the 2020 European Social Policy Network (ESPN) report on access to essential services for people on low incomes in Europe (20), the 2022 Eurofound ad hoc report on access to energy, public transport and digital communications for people on low incomes (21) and the 2023 study on access to essential services by Hassan et al. (22). The quantitative analysis also relies on the experimental statistics on affordability of essential services based on the joint distribution of income (European Union Statistics on Income and Living Conditions (EU-SILC)) and consumption (Household Budget Surveys (HBS)) from 2015 (23) as well as on EU-SILC data, mainly from 2022. The analysis refers to households that are AROPE or – depending on data availability – at risk of poverty (AROP).

2. Access to water and sanitation

Only 1.5% of the EU population lives without basic sanitary facilities such as a bath, shower or flushing toilet. However, in some Member States and for some marginalised communities, such as Roma, significant barriers to access remain. In Romania in 2020, 21.2% of the population reports not having access to basic sanitary facilities; in Bulgaria, Latvia and Lithuania this ranges between 6.4% and 7.0%. Lack of access disproportionately affects people who are AROP (5.1% of those AROP at EU level and up to 57% in Romania), which highlights the strong link between reduced access to basic sanitary facilities and poverty.

The EU has a history of over 30 years of policies supporting drinking water and wastewater treatment. These policies ensure that water intended for human consumption can be consumed safely on a lifelong basis, ensuring a high level of health protection, and that urban wastewater is collected and treated in a way that ensures our environment and human health are protected.

Access to safe and clean drinking water and sanitation is recognised as a human right by the United Nations, for their essential role in promoting the full enjoyment of life and all human rights (24). UN sustainable development goal (SDG) 6 calls for ensuring universal access to safe and affordable drinking water, sanitation and hygiene, and ending open defecation. It also aims at improving water quality and the efficiency of water use, and encouraging sustainable abstractions and supply of freshwater.

State of play

Difficulty with access to water and sanitation is not a widespread issue in the EU, but challenges remain in specific areas and for specific groups. Important differences exist between and within Member States, both at aggregate level and when comparing the situations of people above and below the AROP threshold.

It is estimated that still around 23 million people, equivalent to 4% of the EU population, are potentially at health risk stemming from no or limited access to good-quality drinking water (25). In addition, new challenges due to climate change are emerging and can affect continuous access to water and water safety.

When it comes to sanitation, almost every household in the EU had basic sanitary facilities in 2020, and most countries reported that fewer than 1% of their population were living in households without a bath, a shower and a flushing toilet, with this share halving on average over the last decade (Chart 1) (26).

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(26) Data also show that the share of the EU population connected to secondary wastewater treatment has increased continuously since 2000, reaching 80.9% in 2019. For more information, consult the 2022 Eurostat monitoring report Sustainable Development in the European Union.
Despite improvements, the levels remain high in some Member States, in particular in Romania, where figures are far above all other Member States, with 21.2% of the population not having access to basic sanitary facilities in 2020 (Chart 2). Relatively high shares are also reported by Bulgaria, Latvia and Lithuania, with values between 6.4% and 7.0% in the same year. Such high numbers indicate problems of availability in conjunction with affordability issues for these countries.

Source: own computation based on Eurostat data (EU-SILC).
These figures are higher for the population that is AROP, which points to potential affordability issues and highlights the strong link between access to basic sanitary facilities and poverty. Compared with an EU average of 1.5% for the whole population, 5.1% of people AROP had neither a bath nor a shower nor an indoor flushing toilet in their household in 2020. Moreover, in those Member States that perform significantly worse than the EU average and have a generalised problem of lack of connection to sewerage systems and water services, levels are significantly higher for people who are AROP (17.4% in Latvia, 18.1% in Lithuania, 20.6% in Bulgaria and 56.6% in Romania).

The homeless face significant barriers in accessing water and sanitation. In contrast to other essential services, the usage of water and sanitation requires access to stationary infrastructures, either by connection to the collecting and treatment system at home or by accessing sanitation services and water sources in public spaces. People who do not have a fixed domicile, such as the homeless and rough sleepers, can only rely on public infrastructures. However, the provision of drinking water in public spaces is unevenly available in Member States and, while more widespread, public toilets may not be free of charge and may be too expensive for the homeless and people sleeping rough (\(^27\)).

The specific situation of minorities, such as Roma (\(^28\)), whether sedentary or not, and in particular their lack of access to water intended for human consumption, was also acknowledged in the latest survey conducted by the European Union Agency for Fundamental Rights in 2021. The survey shows that one out of five Roma lives in a household that has no tap water inside the dwelling, making it particularly difficult for them to follow prescribed hygiene and prevention measures during the COVID-19 pandemic (\(^29\)).

Alongside these groups, the stakeholder consultation carried out for the Commission proposal to recast the urban wastewater treatment directive, adopted in 2022, also pointed to households living in rural areas with a lack of flush toilets and other sanitation facilities and to cities with insufficient access to public sanitation (\(^30\)).

Collection and treatment of urban wastewater have improved over the last decade: 98% of the generated load is appropriately collected, 92% meets the primary and secondary treatment standards (basic treatment of organic pollution), and another 92% meets more stringent treatment standards (tertiary treatment removing nitrogen and phosphorus) (\(^31\)). Differences remain between Member States, with a limited number of countries still lagging behind, which points to persisting barriers to physical access to water and sanitation due to availability issues and spatial inequalities.

Data on consumption show similar dynamics: the (median) share of water and sanitation expenditure in households’ incomes in the EU is low overall – it reached 1.7% in 2015, ranging from 1% or less to 3% or more (in Austria, Croatia and Hungary) – but it is on average significantly higher (2.9%) among households that are AROPE (Chart 3). The gap ranges from 0.6 percentage points (pp) in Finland and Malta to 4.4 pp in Austria (\(^32\)).

\(^{27}\) Mapping the availability of public tap water and toilets is complicated, as it is generally a municipal (or, at most, regional) competence. No systematic studies about the Member States have been identified.

\(^{28}\) For whom antigypsyism and discrimination can further exacerbate vulnerability and contribute to the intergenerational transmission of poverty (see the staff working document accompanying the EU Roma strategic framework for equality, inclusion and participation).


\(^{32}\) More information on specific household categories is provided in the annex.
Chart 3 – Median expenditure on water and sanitation across households in total population, AROPE and not AROPE, 2015 (% of disposable income)

NB: weighted average of Member States excluding Italy and Germany. Data not available for Italy and Germany. AROPE is based on the old definition of at risk of poverty or social exclusion (definition used in EU2020 strategy). Water and sanitation proxied by classification of individual consumption according to purpose (COCOIP): CP044 excluding CP0444.


EU measures supporting access

The EU has a wide range of policies and regulations in place to protect the quality of Europe’s water resources and ensure their sustainable and efficient use.

The 1991 urban wastewater treatment directive (33) regulates the collection, treatment, and discharge of domestic and industrial urban wastewater in the EU. It led to investments in the sector across the EU, which included the connection of a significant number of households to wastewater treatment infrastructures. On 26 October 2022, the Commission proposed the revision of the directive (34) in line with the results of an evaluation and on the basis of an extensive impact assessment, which confirmed that access to sanitation remains an issue preventing the EU from fully implementing SDG 6 (35). The proposal for a recast of the directive includes provisions to improve access to sanitation, especially for the most vulnerable and marginalised, in a manner fully consistent with the recently revised drinking water directive. It is proposed that Member States have the obligation to identify people without access, or with limited access, to sanitation facilities, and to assess the reasons for such lack of access and the possibilities of improving the situation. Moreover, for all agglomerations of 10 000 population equivalent (p.e.) (36) and above, Member States are encouraged to establish a sufficient number of freely and (especially for women) safely accessible sanitation facilities in public

(36) The standard unit for measuring pollution is the population equivalent (p.e.). It describes the average pollution released by one person per day. As well as discharges from EU citizens, centralised treatment facilities also treat wastewaters from small and medium-sized enterprises connected to the public collection networks.
spaces (37). The proposal is now being considered by the co-legislators, the Council and Parliament.

The drinking water directive (38) is the cornerstone of the EU water policy regulating drinking water supply, and the most relevant piece of EU legislation supporting access to clean water for all. Originally from 1980 (39), it was recast in 2020, in response to the Right2Water campaign (40) – the first European citizens’ initiative to gather the required number of signatories – which called on the Commission to ensure that all EU citizens enjoy the right to water and sanitation (41).

The revised directive has introduced measures to ensure better access to water, particularly for disadvantaged and marginalised groups. Member States now have an obligation to identify people without access, or with limited access, to water intended for human consumption, to assess the reasons for such lack of access and the possibilities of improving the situation, and to take appropriate measures to ensure access for all (42). Other provisions of the recast directive, concerning access to water in public spaces and the promotion of the use of tap water, could also contribute to improving access to water (43). Facing the challenge of water scarcity, the directive also addresses improving the efficiency of the water supply infrastructure: Member States will have to assess their leakage rates and take appropriate measures to reduce rates that are higher than a set threshold value.

The 2020 EU Roma strategic framework for equality, inclusion and participation for 2020–2030 (44), complemented by the related 2021 Council recommendation (45), sets an EU-level target of at least 95% of Roma having access to tap water by 2030.

Ensuring access to water and sanitation for all requires substantial investments in infrastructure building and maintenance. The EU has been supporting this through its cohesion policy, notably the European Regional Development Fund (ERDF) and the Cohesion Fund, which are the primary EU sources of investment in water and wastewater treatment infrastructures, in particular in those Member States that are working to meet their basic needs and to comply with the requirements of the EU acquis. For example, the funds contribute to the availability and security of drinking water through financing the construction and upgrading of water purification plants and distribution networks, especially in areas where the population has no access to adequate water provision, including infrastructure for the reuse of wastewater for urban irrigation or other uses in those regions that are facing problems of water scarcity or drought due to climate change. Support for wastewater treatment infrastructures mainly includes the construction or upgrading of wastewater treatment plans and sewerage networks, but also sewage sludge management.

Member States allocate different amounts to various water investments: in water infrastructure for human consumption, in water management and drinking water conservation, and in wastewater treatment. This last represents the biggest category of investment for most of the countries. The most significant improvements are recorded in those countries that still have to meet their basic needs and that record the highest numbers of people still lacking access to essential water and sanitation

(37) See Article 19, ‘Access to sanitation’.
(40) https://right2water.eu/.
(41) As stated in the preamble of the directive, this was included as a follow-up to the Right2Water initiative, which identified the problem that part of the population – and especially certain marginalised groups – have no access to water intended for human consumption, and that providing such access is a commitment under the SDGs.
(43) Article 16(2) provides that Member States ensure that outdoor equipment and indoor equipment are set up in public spaces. Member States may take measures to promote the use of tap water (e.g. by raising awareness or launching campaigns).
services, notably Bulgaria and Romania. In 2021–2027, cohesion policy will invest EUR 10.8 billion (EUR 13.6 billion with the corresponding national co-financing) in drinking water and wastewater infrastructure, with sizeable investments in Bulgaria, Greece, Spain, Croatia, Italy, Poland, Portugal, Romania and Slovakia. As a result of these investments, it is estimated that more than 45,000 km of public water supply pipes will be built and reconstructed, ensuring better access to drinking water for 16 million people, predominantly in less-developed regions in the EU. Investments in the wastewater treatment network will allow an additional 8 million people to be connected to wastewater treatment plants.

The RRF also supports investments in infrastructures that will enhance access to water and sanitation for disadvantaged groups, including in some of the Member States that face the greatest challenges. For example, the Romanian national recovery and resilience plan includes investments to support the connection of families and individuals with incomes below the minimum wage to water and sewerage networks. The measure is to be implemented by local authorities through public water and sewerage operators, and cover the cost of connection works to a maximum of EUR 2,000 per household, with the goal of connecting at least 88,400 additional households to water and sewerage services (+). In Bulgaria, another country with insufficient access to drinking water and urban wastewater treatment and with major regional disparities, the national recovery and resilience plan supports investments in the construction, reconstruction and modernisation of water supply and sewerage systems, and of drinking and wastewater treatment plants in small agglomerations where a large part of the population has a relatively low income (–). The national recovery and resilience plan of Poland also includes measures aimed at increasing the availability of water and sewerage infrastructure in rural areas, where the proportion of the population connected to wastewater networks remains low (–).

**Member States’ measures supporting access**

The provision of water and sanitation services usually takes place at regional and local levels, with its management typically based on public and delegated private management models, and the water infrastructure generally being owned by public authorities. Measures taken by Member States to support access to water and sanitation are also largely implemented at regional or local level, with fewer instances of national schemes.

The support to access water and sanitation typically takes the form of reduced tariffs or cash benefits, and to a lesser extent in-kind benefits or basic/uninterrupted supply of water, and is targeted at people on low incomes.

In 12 Member States (Belgium, Germany, Estonia, France, Croatia, Cyprus, Hungary, Lithuania, the Netherlands, Romania, Finland, Sweden), cash benefits are used to compensate for the impact of the costs of water and sanitation services on the disposable income of low-income households. In Belgium, Germany, Estonia, Lithuania, the Netherlands and Finland, such cash benefits are available at national level. The nature of these cash benefits varies significantly between the countries. In Germany, the Netherlands and Finland, it is provided as part of the minimum income benefit system, which explicitly takes into consideration the costs of these (and other) essential services. In Estonia, there is a specific cash benefit for people on low incomes, the subsistence benefit. The cash benefits

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(47) Commission staff working document – Analysis of the recovery and resilience plan of Bulgaria accompanying the document Proposal for a Council implementing decision on the approval of the assessment of the recovery and resilience plan for Bulgaria (SWD(2022) 106 final).

(48) Commission staff working document – Analysis of the recovery and resilience plan of Poland accompanying the document Proposal for a Council implementing decision on the approval of the assessment of the recovery and resilience plan for Poland (SWD(2022) 161 final).
in Lithuania consist of specific compensation provided to people (e.g. minimum income beneficiaries) whose cold water costs exceed 2% of the household’s or person’s income. Similarly, in Malta, low-income households are entitled to the ‘energy benefit’, which covers water, electricity and gas. People who qualify for the energy benefit (e.g. people in difficult social circumstances and beneficiaries of specific means-tested benefits) receive a subsidy in respect of the water meter rent. The Swedish social assistance programme and housing allowance provide indirect support, in the sense that water costs are included in the rent and thereby included in the calculation of the cash benefit under each programme. In France, Croatia and Hungary, low-income households may be eligible for cash benefits in only some regions or municipalities.

In 11 Member States (Belgium, Greece, Spain, France, Croatia, Italy, Cyprus, Malta, the Netherlands, Poland, Portugal), reduced tariffs on water and/or sanitation are used. Of these, only in Greece and Malta are reduced tariffs available at national level from all supplying companies, although there is evidence of regional disparities in the amount of support provided. Reduced tariffs are widely available in several countries (e.g. Spain, Croatia, Cyprus, Portugal) where this mechanism has been put in place in most regions and/or municipalities. However, the eligibility criteria and the implementation of these schemes vary according to the providers. It appears that in Belgium and France reduced tariffs are available only in a few regions or local areas.

In 10 EU Member States (Belgium, Greece, Spain, Hungary, Italy, Lithuania, Malta, Romania, Slovakia, Finland), price reductions or in-kind benefits at national, regional or local level have been introduced to facilitate the access of low-income households to water and sanitation services. In Belgium, ‘protected clients’ (49) may ask for a free ‘water scan’ (50) or request specific payment arrangements to facilitate the payment of their bills. In Italy, low-income households may be entitled to obtain the ‘water bonus’, through which they receive 50 litres of water per day, per person, free of charge. In Lithuania and Romania, municipalities cover all or some of the costs of connecting low-income households to the water and sewage system. In Spain, a social fund is run by water companies that have been granted the concession to provide home water services and is used to pay the water bills of people living in severe poverty or social emergency situations.

Some Member States also provide advice/training or information services aimed at facilitating access for people on low incomes to water and sanitation services. They are usually available for the general population and, thus, for low-income households too. Information is usually promoted through suppliers’ web pages, social assistance offices (online or on-site), one-stop customer information points and awareness campaigns. Few specific initiatives and/or services are reported that directly target people on low incomes to facilitate their access to support measures, advice or assistance. In Belgium, regular information campaigns are organised by the regional water regulation agencies to inform people of special tariffs, services and ways to save water. Since people on low incomes are a hard-to-reach group, public social welfare centres, social non-governmental organisations and anti-poverty organisations actively invest through their own networks to inform people on low incomes of their rights. In the Netherlands, besides information and advice mechanisms regarding general benefits and reductions provided by municipalities and water authorities, a digital drinking water map provides an overview of all free public water taps in the country.

In some Member States, emergency measures ensuring access to water and sanitation were introduced for a limited duration during the COVID-19 pandemic. For example, in Belgium, the Flemish

(49) Belgium has introduced the formal status of protected client to support the most vulnerable customers.
(50) A water scan is a test carried out by the water company to check whether the client’s water consumption is within ‘normal’ bounds (taking account of the composition of their household), and to advise them if it is not.
government declared civil emergency situations from March 2020 to July 2020 and from October 2020 to February 2021, during which the public water distribution network operators could not shut off their subscribers’ water or limit its flow, except in cases of an immediate threat to public health. In Portugal, a guarantee of access to some essential services, including water, was introduced through the provision of an uninterrupted supply, but ceased to be implemented on 31 March 2022. In Italy, the 2020 budget law introduced an increase in the annual indicator of the equivalised economic condition threshold entitling people to subsidies for, among other things, water and sanitation. From 2021, minimum income beneficiaries are automatically entitled to these subsidies, with no need to reapply every year.

While not widespread, examples also exist of social measures supporting access to other disadvantaged groups than people who are AROP, such as the homeless and Roma. The Commission’s 2023 assessment report of national Roma strategic frameworks indicates that several Member States have developed measures to improve access to essential services for Roma, in particular access to running water. In some bigger cities, keys or passes to public toilets are provided for people sleeping rough, or access is ensured throughout the day to specific houses/places that provide toilet access to complement the support of shelters, which are typically open only at night. Special initiatives to provide Roma with access to water and sanitation services are found in some Member States. This is the case in France, where municipalities of over 5,000 inhabitants are obliged to provide access to drinking water and sanitation in stopping places for Roma. Slovakia has also implemented a project focusing on providing access to drinking water in municipalities where there are marginalised Roma communities, which is co-financed by the ERDF.

(51) Commission communication – Assessment report of the Member States’ national Roma strategic frameworks (COM(202)7 final)
### 3. Access to energy

Energy is the essential service for which gaps in access are the highest. At EU level, the inability to keep one’s home adequately warm (\(^{12}\)), which is one of the key indicators to monitor energy poverty, affected 9.3% of the total population in 2022, ranging from 1.4% in Finland to 22.5% in Bulgaria, with eastern and southern European countries recording levels significantly higher than the EU average. People who are AROP face a significantly higher risk of being unable to keep their home adequately warm, with an EU average of 20.2% and levels ranging from 3.9% in Finland to 50.6% in Cyprus. At the same time, energy poverty also affects the middle class, as around half (46%) of the EU population who could not keep their homes adequately warm in 2021 were in the middle-income deciles (the third to the eighth, inclusive).

Access to energy is key to ensuring people’s health and a decent standard of living. Energy is used to ensure the adequate heating, cooling and lighting of households and to power appliances. Energy is also necessary to enjoy other essential services, such as digital communications, which can be an enabling factor for labour market participation.

Hindered access to energy services has a severe impact on the quality of life of the people affected, with negative consequences for health and social inclusion. The EU has explicitly included provisions concerning energy poverty in its sectoral regulatory framework since 2009, and one of the main goals of the European Green Deal is to ensure a just and inclusive transition that leaves no one behind. This is also in line with international commitments, such as SDG 7, which calls for ensuring access to affordable, reliable, sustainable and modern energy for all.

Energy poverty is a persistent problem in the EU, and the analysis in the current chapter looks primarily at structural issues and does not aim to comprehensively cover the current energy crisis, for which exhaustive data are not yet available (\(^{13}\)). The analysis of structural aspects is however key to better understanding the impact of the current spike in energy prices and the available qualitative information on measures adopted at EU and Member States level to deal with is extensively presented below. According to various available simulations, which do not incorporate the impact of targeted government interventions or households’ possible behavioural adjustments, the energy price increases registered since spring 2021 could lead to a significant increase in the number of energy-poor individuals.

**State of play**

The lack of access to (affordable) essential energy services is generally described at EU level as a state of energy poverty. This is a multidimensional phenomenon that results from a mix of different drivers: low levels of income, high expenditure on energy, and low energy efficiency of buildings and appliances, which implies higher energy consumption and consequently higher costs, especially in a context of high energy prices.

An EU-wide definition of energy poverty has been agreed between co-legislators in the regulation

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\(^{12}\) The EU-SILC question on this topic is about affordability (ability to pay) to keep the home adequately warm, regardless of whether the household actually needs to keep it adequately warm. See Eurostat, *Methodological Guidelines and Description of EU-SILC Target Variables* [https://circabc.europa.eu/sd/a/8f853f33-58b3-45be-4d66-a81fe687e50/Methodological%20guidelines%202021%20operation%20v4%202009%2012%202020.pdf](https://circabc.europa.eu/sd/a/8f853f33-58b3-45be-4d66-a81fe687e50/Methodological%20guidelines%202021%20operation%20v4%202009%2012%202020.pdf), p. 140.

\(^{13}\) The most recent available data are from EU-SILC 2022. Surveys for these issues are generally conducted in the first half of the year, in the period from January to June of the relevant year, so data from 2022 do not reflect yet the situation of last winter (2022). According to available simulations, however, the energy price increases registered since spring 2021 could lead to a significant increase in the number of energy-poor individuals. For more details, see the simulations done by the Joint Research Centre (JRC) in the framework of the project on ‘Assessing and monitoring the employment and distributional impacts of the twin transition, and notably of the Green Deal’ (GD-AMEDI), jointly implemented with the Directorate-General for Employment, Social Affairs and Inclusion [https://ec.europa.eu/social/main.jsp?langId=en&catId=1588](https://ec.europa.eu/social/main.jsp?langId=en&catId=1588).
establishing the Social Climate Fund, which corresponds to the Commission proposal (for an EU-wide definition of energy poverty) put forward in the recast of the energy efficiency directive (54). The definition and measurement of energy poverty vary across Member States, where other terms are sometimes used together with or instead of ‘energy poverty’, such as ‘fuel poverty’ (e.g. in Ireland) or ‘energy insecurity’ (e.g. in France).

The rate of inability to keep one’s home adequately warm is one of the main indicators used to monitor energy poverty (Chart 4) (55). The latest data available refer to 2022 and capture the initial impact of the spike in energy prices that started in the second half of 2021 and was further aggravated in 2022. They provide relevant information on structural issues, trends, and differences and similarities between Member States. The inability to keep one’s home adequately warm varies greatly between Member States, ranging from 1.4% of the total population in Finland in 2022 to 22.5% in Bulgaria, with the EU-27 average at 9.3%. It is higher in all Member States for people who are AROP, ranging from 3.9% in Finland to 50.6% in Cyprus, with the EU average at 20.2%. The gap between those who are and are not AROP is 13.0 pp on average in the EU but reaches 31.4 pp in Cyprus.

Chart 4 – Inability to keep home adequately warm by Member State, 2022 (%)

Source: own computation based on Eurostat data (EU-SILC).

As a result of the crisis, the proportion of the total population unable to keep their homes adequately warm increased of 2.4 pp in the EU in 2022, inverting a trend that saw this share constantly declining over the period 2015-2021 (Chart 5) (56). The rate for people AROP has been increasing faster, by 3.8 pp against 2.2 pp for people not AROP.

(54) Regulation (EU) 2023/955 of the European Parliament and of the Council of 10 May 2023 establishing a Social Climate Fund and amending Regulation (EU) 2021/1060: ‘energy poverty’ means a household’s lack of access to essential energy services that underpin a decent standard of living and health, including adequate warmth, cooling, lighting, and energy to power appliances, in the relevant national context, existing social policy and other relevant policies.


(56) The increase in 2020 is partly due to a break in data from Germany.
While people who are AROP are more often unable to keep their homes adequately warm, this also affects middle-income households to a non-negligible extent. Around half of the population of the EU-27 who could not keep their homes adequately warm was in the third to eighth income deciles (inclusive), according to data from 2021 (Chart 6).

Chart 6 – Decomposition by income decile of population unable to keep home adequately warm, EU, 2021 (%)
Access to affordable energy services for residential energy purposes differs greatly across Member States and is much higher for people who are AROP. Access to affordable energy services was, at least at EU level, improving in recent years (before the recent energy crisis) and in particular for people who are AROP.

Energy inefficiency – caused by low efficiency of the housing stock and of infrastructures and equipment – represents another important driver of energy poverty. Households that are AROP are the most obvious disadvantaged population, since they have fewer own resources to use for investments in energy efficiency. This is further aggravated when low-income households do not own their dwellings, since this often prevents them from implementing solutions that might otherwise increase energy efficiency and improve their situation.

In the current context of very high energy prices, the affordability of energy services has been negatively affected and there is a risk of an increase in energy poverty. Households, especially those AROP, bear the cost of high or volatile energy prices, which can make them fall into arrears due to high bills (and low income), reduce consumption below the minimum levels that ensure health and decent standards of living, or cut expenses on other goods and services to keep costs down. The median expenditure on residential energy in the EU in 2015 amounted to 5.9% of households’ disposable income, ranging from between 2% and 3% (in Malta, Sweden, Finland and France) to 10% or more (in Bulgaria, Croatia, Hungary, Romania and Slovakia) (Chart 7). It is on average significantly higher (9.7%) in households that are AROPE than in those that are not (5.1%), the gap ranging from 0.2 pp in Finland to 9.9 pp in Croatia (57). This suggests that the current spike in energy prices, which started in 2021 and was further aggravated by the current context, will probably have a disproportionate impact on the most disadvantaged, hindering access to essential energy services across the EU.

Chart 7 – Median expenditure on residential energy across households in total population, AROPE and not AROPE, 2015 (% of disposable income)

NB: EU (weighted average of Member States excluding Italy). Data not available for Italy. AROPE is based on the old definition of at risk of poverty or social exclusion (definition used in EU2020 strategy). Residential energy proxied by COCOIP: CP045.


(57) More information on specific household categories is provided in the annex.
Groups that may face barriers to affording energy include single-parent households (most of which are led by women), larger households with dependent children, low-income pensioners, the unemployed, (quasi-)jobless households, households living in older dwellings, people living in segregated communities (notably Roma), persons with disabilities, households in rural areas and remote regions (e.g. outermost regions), beneficiaries of social assistance allowances and households lacking access to energy support benefits.\(^{58}\)

**EU measures supporting access**

Various initiatives have been adopted at EU level in recent years to address energy poverty, support access to essential energy services for all and ensure that the green transition is a just and inclusive one.

Energy poverty is a key concern of the Clean Energy for All Europeans legislative package\(^{59}\), designed to facilitate a fair energy transition, in particular in the 10-year integrated national energy and climate plans (NECPs), which must, in cases of a significant number of households in energy poverty, include national objectives, indicators and related measures, including social policy measures, to address energy poverty. In 2023, Member States will report progress on the implementation of their NECPs and prepare the draft updates of their NECPs, which is a key opportunity to strengthen their planning and actions to address energy poverty.

The Commission has also given guidance to Member States on appropriate indicators for measuring energy poverty through the Commission recommendation on energy poverty\(^{60}\). The Commission also provides information on emerging good practices and underlines the importance of the policies associated with the NECPs and with long-term renovation strategies to tackle these problems.

Both the electricity directive\(^ {61}\) and the gas directive\(^ {62}\) require that Member States take appropriate measures to tackle energy poverty wherever it is identified, including measures addressing the broader context of poverty.

Moreover, all initiatives under the Fit for S5 package\(^ {63}\) to implement EU’s 2030 climate and energy objectives have been consistently designed to exploit synergies, in order to mitigate potentially negative distributional effects, including between Member States and on the most disadvantaged and energy poor.

Improving energy efficiency contributes to alleviating energy poverty and overcoming some of the potential negative distributional impacts of pricing measures, but the most vulnerable often face barriers to accessing renovation schemes (split incentives between owners and tenants, administrative barriers, large upfront costs, problems in accessing credit). To address this, the energy efficiency directive recast proposal introduces an obligation for Member States to implement and finance energy efficiency improvement measures as a priority among vulnerable customers, people affected by energy poverty and, where applicable, people living in social housing, to alleviate energy poverty. It is

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\(^{59}\) Commission communication – Clean energy for all Europeans (COM(2016) 860 final).


\(^{63}\) Commission communication – ‘Fit for S5’: Delivering the EU’s 2030 climate target on the way to climate neutrality (COM(2021) 550 final).
worth highlighting the increasing importance given to energy communities (64). The electricity directive states that ‘Community energy can also advance energy efficiency at household level and help fight energy poverty through reduced consumption and lower supply tariffs. Community energy also enables certain groups of customers to participate in the electricity markets, who otherwise might not have been able to do so’ (recital 43) (65).

In addition, the Social Climate Fund addresses in particular the energy poverty challenges for disadvantaged households and vulnerable microenterprises. It will support measures to promote energy efficiency, energy saving and the use of renewable forms of energy as structural solutions to eradicate the root causes of energy poverty and address any pre-existing vulnerabilities and inequalities.

The Council recommendation on ensuring a fair transition towards climate neutrality (66) also provides policy guidance for preventing and alleviating energy poverty with a view to supporting access to affordable essential energy services, in particular for people and households in vulnerable situations. In the recommendation, the Council welcomes the Commission’s intention to further strengthen data, the evidence base on fair transition policies, and monitoring and foresight analysis on energy poverty developments and risks, including social and distributional aspects.

The Commission also acted swiftly to address the impact of increasing energy prices in autumn 2021, with a dedicated communication (67) in October 2021 that set out a toolbox of specific measures through which Member States can address the most immediate impact of the situation, in particular on the most disadvantaged. It includes measures such as emergency income support to households, state aid for companies and targeted tax reductions.

As high energy prices persist, and are further exacerbated by Russia’s aggression against Ukraine, the Commission set out further measures in the REPowerEU Plan (68), released in May 2022 to contain the negative impact of soaring prices. The communication provided guidance on how, in the current exceptional circumstances, Member States can set regulated prices for vulnerable consumers, households and microenterprises in order to help protect them.

In addition, at the end of 2022, the co-legislators agreed on a set of targeted amendments to the 2014–2020 common provisions regulation, granting additional flexibility to Member States in responding to the immediate impacts of the crisis. In this context, each Member State can make use of up to 10% of its original allocations for 2014–2020 cohesion policy funds to support measures targeting the most vulnerable households, and small and medium-sized enterprises, particularly affected by the energy prices increase.

Moreover, the Commission put forward, and Council adopted in October 2022, a regulation on an emergency intervention to address high energy prices, which introduced common measures to reduce electricity demand, and to collect surplus profits from the energy sector and solidarity contributions from fossil-fuel based industries (up to a maximum of EUR 140 billion according to estimates), most taking effect on 1 December 2022, and redistribute them to European citizens and companies (69).

(65) Energy communities also enable their members, including people on low incomes, to act as ‘energy citizens’, with an active role in the energy transition beyond the passive role of consumer, by controlling resources, by contributing to the energy decision-making processes and, in doing so, by making their energy needs recognised. See Della Valle, N. and Czako, V., ‘Empowering energy citizenship among the energy poor’, Energy Research & Social Science, Vol. 89, 2022, 102654.
(69) Council Regulation (EU) 2022/2578 of 22 December 2022 establishing a market correction mechanism to protect Union citizens and the economy against excessively high prices.
EU funding is also supporting investments and projects that can enhance access to energy services (70). The RRF and cohesion policy finance various measures that will contribute to improving access to energy for disadvantaged groups in the EU, including in some of the countries that show the highest levels of energy poverty. For example, the national recovery and resilience plan of Cyprus includes a system of grants to support vulnerable households, especially those with persons with disabilities, to improve the energy efficiency of their dwellings. In addition to financial support, personalised counselling services for social and energy guidance will be offered to alleviate the incidence of energy poverty in selected households. The RRF will support Greece in implementing its energy poverty action plan, which includes measures for the energy upgrade of the residential buildings of energy vulnerable households and other deprived groups. The Czech national recovery and resilience plan includes measures to support the replacement of coal-fired boilers with low-carbon solutions that will help reduce the cost of green investment for the low-income groups and contribute to alleviating energy poverty (71).

Within cohesion policy, in the 2021–2027 programming period, about EUR 6.2 billion of EU funding, leading to EUR 8.6 billion in total support, will be invested across the EU in the energy efficiency of housing, including for vulnerable households and in social housing. It will build on past assistance to Member States in supporting energy efficiency in dwellings of vulnerable households with large-scale programmes such as in France or Lithuania. Specific projects dealing with energy poverty with a social inclusion angle were also supported by the 2014–2020 Interreg Europe programme (72) and the urban innovative actions, such as with the Energy Poverty Intelligence Unit project in Getafe, Spain (73).

Moreover, the European Commission has set up the Energy Poverty Advisory Hub (74) as a follow-up to the EU Energy Poverty Observatory, which represents a platform of energy poverty expertise in Europe for local authorities and all stakeholders interested in taking action to combat energy poverty in Europe by providing direct support, online training and research results and by building a collaborative network of interested stakeholders.

Another example is ‘STEP – Solutions to tackle energy poverty’ (2019–2021), funded by Horizon 2020 and covering several countries, such as Bulgaria, Cyprus, Czechia, Latvia, Lithuania, Poland, Portugal, Slovakia and the United Kingdom. The project aims to alleviate energy poverty by promoting changes in consumer behaviour, informing consumers affected by energy poverty about the opportunities to save energy costs and sharing good practices from other countries that help reduce energy poverty (75).

**Member States’ measures supporting access**

Member States have in place structural, targeted measures to support access to energy for low-income or poor households. National approaches to support access to essential energy services vary considerably. Most Member States implement only national support measures; in other countries national-level measures are combined with local and regional support. In a small number of countries, measures only exist at regional or local level.

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(70) Reviewing best practices from European projects and initiatives, Della Valle and Czako have identified mechanisms that can address energy poverty, See Della Valle, N. and Czako, V., ‘Empowering energy citizenship among the energy poor’, Energy Research & Social Science, Vol. 89, 2022, 102654.


(75) https://www.stepenergy.eu/
The most common measures are social policy measures (monetary benefits, reduced tariffs), direct interventions in the price of supply of energy to energy-poor consumers, energy vouchers, credit lines and subsidies, and tax exemptions or reductions to support building renovation and energy efficiency. Other measures include bans on disconnection, and in-kind benefits, including general consumer empowerment measures, and counselling, audits or low-cost measures to help households reduce their energy consumption, including advice on behaviour and investments (76).

The considerable rise in energy prices that has occurred since 2021 has posed a specific challenge for the affordability of essential energy services, and most Member States have adopted temporary, emergency measures to mitigate the situation. The bulk of these measures are not targeted at people on low incomes but have universal coverage and could be categorised as price policies, aiming at reducing energy costs for all end users in the economy. While there are instances of social tariffs for supported groups being adjusted, the extent of the relief provided by these measures to people on low incomes or groups in specific vulnerable situations is difficult to identify so far. This is in line with the findings of the Annual Sustainable Growth Survey (ASGS) 2023, which stressed that more than 70% of supporting measures in 2022 have not been targeted. The ASGS 2023 called for targeted support to vulnerable households, which would allow the effective prevention of energy poverty and poverty in general, while not adding to inflation limiting the budgetary impact and preserving incentives to reduce energy consumption and promote energy efficiency (77). This has been confirmed in the 2024 fiscal policy guidance that recommends starting the phasing out of national support measures with the least targeted ones (78).

The measures adopted by Member States include tax reduction, price regulation and income support. General reductions in value added tax were introduced in spring 2022 in Belgium, Croatia, Cyprus, Lithuania, Poland and Slovenia. Excise duty reduction is planned in Hungary. Other tax reductions have been put forward in Germany, Spain, Italy, Cyprus, the Netherlands, Austria, Poland and Slovenia. Frozen prices or price caps are applied in one form or another in 17 Member States now. There are also other costs included in the final price, such as network costs, reduced in Estonia, Luxembourg and Poland, and distribution costs, reduced in Finland, Latvia and Slovenia (79). Other countries have extended existing targeted measures. This is the case in Italy (gas and electricity subsidy), Belgium (national social tariffs for gas and electricity) and Greece (discount policies and heating allowance). Ireland introduced a moratorium on disconnection.

Some Member States have extended the coverage or increased the amount of existing targeted cash benefits. This is the case in Bulgaria and Lithuania (coverage), Czechia and Greece (coverage and amount), Italy (amount) and the Netherlands (extra amount for lower-income groups). In Croatia, there are plans to increase the scope and amount of the firewood grant. Several Member States have introduced what could be considered new income benefits, mostly targeted at the most disadvantaged and of a temporary nature: Denmark (heating cheque), Germany (10% increase in housing benefit), Estonia, Ireland (electricity costs emergency scheme), France (inflation allowance), Latvia, Luxembourg (energy subsidy), Austria (energy cost compensation voucher), Poland (allowance subsidising energy bills for the poorest families as part of an anti-inflation shield package), Romania (aid for heating the home and aid for energy consumption), Slovenia (one-off solidarity allowance) and Sweden (electricity price compensation).

(79) In Slovenia and Finland, these costs are decreased through lowering the profit rate for electricity companies.
Other important measures introduced recently that may have a significant impact in the longer term are those that aim to facilitate the green transition, such as household retrofitting schemes (Estonia, France, Ireland, Cyprus, Lithuania, Austria, Portugal), measures aimed at improving energy efficiency (Croatia, Cyprus, Lithuania, the Netherlands, Portugal, Romania, Slovakia) and various other forms of incentives and support, including tax reductions for switching to renewable energy sources (Denmark, Sweden). As disadvantaged groups might face barriers in accessing these schemes (split incentives between owners and tenants, administrative barriers, large upfront costs, problems in accessing credit), some targeting of part of the funding to people on low incomes contributes to ensuring inclusiveness.
4. Access to transport

Access to transport is influenced by a number of factors, including cost, quality, infrastructure and frequency of services, as well as (digital and physical) accessibility. This results in a large number of groups that may struggle with access to transport, such as those in rural areas and remote regions (e.g. outermost regions) where there may be a deficit of services, marginalised Roma communities, older people and persons with disabilities or reduced mobility, who may find available options physically inaccessible. The decision on whether to use transport services or private means of transport is also based on personal preferences or safety considerations, which makes the monitoring of affordability more challenging. In contrast to other essential services, no EU indicators exist to monitor the affordability of transport services. Information collected in 2014 points to the fact that affordability barriers affect transport, as they do other essential services: 2.4% of the EU population and 5.8% of those who were AROP could not afford regular use of public transport.

Mobility is a basic human need. People need to move to access goods and services, to work, to get to school, training institutions and university, to access health and care services, and to develop and maintain social relationships and participate fully in economic and social life. They do this through private means of transport, public transport services or a combination of the two (80). The choices made depend on a set of factors that include access (availability, affordability and digital/physical accessibility of transport) as well as cultural and personal preferences (81). The concept of transport poverty is being increasingly discussed and often used to describe the situation of people who are unable to meet the costs of private or public transport or do not have access (including availability), especially to public transport. The co-legislators agreed on a definition of transport poverty in the context of the Social Climate Fund (82). Since the focus of this report is on essential services, the analysis and information included in this chapter refer to public means of transport and transport services only, such as coach, bus, trolleybus, tram, train, metro, ferry and micro-mobility (shared urban transport). Such services can be delivered by public or private providers and are characterised by a certain regularity in the service provision and collective use.

The green and digital transitions have major consequences for transport services, requiring significant changes in the individual mobility patterns and preferences of people in the EU. Facilitating access to sustainable transport services rather than individual car usage is in line with the European Green Deal’s aims of addressing climate change and environmental degradation. This is generally the case when people shift from private cars to public transport use, which tends to be more energy efficient. The use of more sustainable means of transport could also be good for the population’s health, through improved air quality, more physical activity (notably in the case of micro- and active mobility), noise pollution reduction and increased traffic safety. Highlighting the benefits of rail as a sustainable, smart and safe means of transport, reducing air pollution, is likely to benefit lower socioeconomic groups proportionally more (83).


(81) Transport acceptability is another dimension often mentioned and includes issues of ‘time-budget’ and ‘ease of travel’ from a quality or safety perspective. ‘Exposure to externalities’ is another dimension of acceptability that could affect transport choices and is worth considering, especially if linked with health-related (e.g. respiratory) problems. The ‘cognitive dimension’ of access relates to not knowing the available mobility options, which can have an effect on the choices made. See Lucas, K., Mattioli, G., Verlinghieri, E and Guzman, A., ‘Transport poverty and its adverse social consequences’, Proceedings of the Institution of Civil Engineers – Transport, Vol. 169, No 6, 2016, pp. 353–365 (https://doi.org/10.1680/jtran.15.00073).

(82) Regulation (EU) 2023/955 of the European Parliament and of the Council of 10 May 2023 establishing a Social Climate Fund and amending Regulation (EU) 2021/1060: ‘transport poverty’ means individuals’ and households’ inability or difficulty to meet the costs of private or public transport, or their lack of or limited access to transport needed for their access to essential socio-economic services and activities, taking into account the national and spatial context.

(83) European Environment Agency, Unequal Exposure and Unequal Impacts: Social vulnerability to air pollution, noise and extreme temperatures in Europe.
Different groups of people have different needs as transport users, and it is important to ensure that the transport system is inclusive and available to all. Transport services play a crucial role in mitigating the social exclusion of disadvantaged groups, affecting their access to other essential goods and services, as well as employment and social relationships (84). This is also the case for persons with disabilities and persons with reduced mobility when transport is not accessible.

SDG 11 on sustainable cities and communities, which aims to make cities and human settlements inclusive, safe, resilient and sustainable, includes a public transport-related target. It aims, by 2030, to provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in disadvantaged situations, women, children, persons with disabilities and older people.

**State of play**

A number of dimensions affect the extent to which individuals can access transport, including cost (affordability), infrastructure and frequency (availability) of services, as well as ensuring that both physical carriages and online interfaces are accessible for persons with disabilities and persons with reduced mobility to achieve access for all on an equal basis (digital/physical accessibility). This also results in a large number of possible disadvantaged groups, including low-income households and marginalised Roma communities that may struggle with the cost of transport; those in rural and remote areas where there may be a deficit of services; women or people with caregiving duties who might perceive the services as unsafe or spend an excessive portion of their time in transit; and older people, persons with disabilities and persons with reduced mobility.

The concentration of older people on low incomes in rural areas poses a growing number of mobility challenges. The rural population is more likely to have lower incomes, it needs access to affordable transport, and, as the population ages, people have greater accessibility concerns and less access to personal vehicles; as a result, they are more reliant on public transport (85).

Persons with disabilities are, overall, a disadvantaged group in terms of being able to access public transport. This is compounded by the fact that a wide range of conditions may constitute a barrier that interacts with, inter alia, psychological conditions and other impairments (physical, mental, intellectual or sensory) and with reduced mobility. While some EU Member States (e.g. the Netherlands, Finland, Sweden) indicate that they have procedures in place for guaranteeing taxi or similar services for these target groups, service provision often varies significantly between and within countries, as public transport is generally operated at regional level. While this touches on issues of availability, there is also an aspect of affordability in whether these special transport services are available to persons with disabilities, who otherwise face either the challenge of paying out of their pockets or abstaining from travel.

Women and men have different mobility patterns, habits and preferences, which are often related to their labour market representation and caregiving duties. Women often combine work with unpaid activities, such as accompanying children and other dependents to different locations and are more likely to walk or use public transport. This results in longer total travel divided into shorter, more frequent, more dispersed and complex trips during the day, making use of different transport modes.

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This situation often results in women facing complex challenges and may imply a differentiated set of unmet needs, based on availability and affordability (\(^86\)).

Unlike the services discussed in the previous chapters, no appropriate EU indicators exist to regularly monitor the affordability of transport services. Information collected ad hoc by Eurostat in 2014 points to the fact that affordability concerns play a role in transport as they do in the other essential services: 2.4% of all people in the EU, and 5.8% of those who were AROP, could not afford regular use of public transport in 2014 (Chart 8) (\(^86\)). The geographical distribution of transport services means that some (especially rural and remote) areas lack sufficient transport services, affecting all households in the area but especially those that cannot afford a private car.

**Chart 8 – Inability to afford regular use of public transport by Member State, 2014 (%)**

![Chart showing the inability to afford regular use of public transport by Member State, 2014](image)

Source: based on Eurostat data (EU-SILC ad hoc module).

Availability constraints may arise from the underdevelopment or uneven distribution of transport networks within countries. This could be the case in rural and remote areas, but also in suburbs and segregated neighbourhoods in urban areas. Availability problems include situations in which stops are too far or hard/unsafe to reach, timetables do not suit individual needs of users, connections are inadequate, travel time is too long and people do not feel safe while using public transport.

The growing importance of accessible, affordable and reliable transport in these areas arises in a context of increasing challenges for transport operators to run economically viable networks. Reductions in service decrease its attractiveness and consequently its viability. In many Member States, rationalisation of public transport in rural and remote areas has resulted in higher costs for users or

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(87) New data on affordability of public transport will be collected by Eurostat in 2024, as part of the new ad hoc module on access to services. See Commission Implementing Regulation (EU) 2022/2498 of 9 December 2022 specifying technical items of data sets of the sample survey in the income and living conditions domain on access to services pursuant to Regulation (EU) 2019/1700 of the European Parliament and of the Council.
the abandoning of previously served routes, exacerbating high existing levels of unmet mobility needs among users. Some Member States, however, make use of the possibility, opened up by EU law, of imposing public service obligations to ensure the existence of public passenger transport services that are in the general interest and that market operators would not assume, or would not assume to the same extent or under the same conditions (frequency, time, quality, tariffs, stops served, etc.), without compensation or exclusive rights.

Digitalisation is being applied in public transport use, for instance in ticket purchasing systems, real-time information and travel planning. This facilitates access for some, but also creates barriers, especially for older people, for persons with disabilities, when systems are not accessible, and for individuals lacking digital skills. Beyond digital skills, this is also an issue for those users without a smartphone, such as older people and people with very low incomes, or without an accessible smartphone in the case of some persons with disabilities. When non-digital alternatives are provided for ticket purchasing, these may address access problems, but can be more expensive for the user than digital alternatives and may pose further barriers to access (e.g. waiting times).

Data on consumption show that people who are AROP spend a higher share of their disposable income on transport than the rest of the population, with differences ranging from 0.3 pp in Slovakia to 3.0 pp in Finland (Chart 9). In 2015, at EU level, the median share of expenditure on public transport in households’ incomes was 1.5% across all households, 2.6% across households that were AROPE and 1.3% across households that were not AROPE (88).

Chart 9 – Median expenditure on public transport across households in total population, AROPE and not AROPE, 2015 (% of disposable income)

NB: EU (weighted average of Member States excluding Italy). Data not available for Italy. Cyprus data not available for AROPE. AROPE is based on the old definition of at risk of poverty or social exclusion (definition used in EU2020 strategy). Public transport proxied by COCOIP: CP073 excluding CP0733 and CP0734.


(88) More information on specific household categories is provided in the annex.
To examine the relation between transport expenditure and household characteristics, a recent study on essential services (89), commissioned to inform the publication of this report, looked at transport expenditure as a share of households’ disposable income. Private transport expenditure was also included in the analysis to give a more complete picture, as expenditure on private transport represents a higher share of disposable income across all quintiles of the income distribution (90).

The study shows the disproportionate impact that transport expenditure has on households with lower incomes: households in the bottom quintiles of the income distribution tend to spend a higher share of their disposable income on transport than households in the highest quintiles. The analysis also looks at characteristics other than income and finds a general correspondence between quantitative findings and the main groups identified as being at risk in the literature on access to transport: being part of an ethnic minority or of a household with three or more children entails higher shares of transport expenditure, which might point to an affordability problem. Households with older people or persons with disabilities tend to spend comparatively less on public transport, which may hint at accessibility issues and that they need to use more expensive private transport services as an alternative. Finally, location also seems to play a role when it comes to the choice of transport: households in rural and remote areas tend to spend more on private means of transport, which may point to bottlenecks and availability issues in the public transport system.

EU measures supporting access

The main objective of European public transport policy is to provide safe, efficient and high-quality passenger transport services that take social, environmental and regional development factors into account. Many public passenger transport services of general interest for society cannot be run commercially, so the relevant national, regional or local authorities must be able to make certain they are provided, respecting the EU regulatory framework that provides for public service obligations in different modes of transport (91).

Moreover, various documents set the framework defining the approach to transport policies at EU level, including on its importance for sustainability and social inclusivity. The first of these documents is the 2007 Green Paper on urban transport. In this publication, the Commission argued that accessibility of public transport in urban mobility systems is of key importance to increasing its usage among the population, thus decreasing pollution and making urban areas more accessible (92). This was reinforced by the 2009 action plan on urban mobility, in which the Commission for the first time presented a comprehensive support package in the field of urban mobility (93), and by the 2011 White Paper on transport, in which the Commission stressed that the ‘quality, accessibility and reliability of transport services will gain increasing importance’ in the future (94).

The 2013 urban mobility package (95) introduced, among other things, the EU concept of sustainable urban mobility planning; a focus on people and supporting public transport – and its accessibility – is a central part of that approach. This concept has proved successful in making transport in EU cities

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(90) This higher share of private transport in disposable income is detailed in the annex.


greener, more effective and inclusive. The 2020 sustainable and smart mobility strategy acknowledges that, stressing that this development should leave nobody behind, through transport services that are available and affordable for all, and accessible for persons with disabilities and persons with reduced mobility, and through better connected rural and remote regions (96). The new EU urban mobility framework (97), adopted in December 2021, aims to create an enabling EU framework for Member States, regions and cities to develop safe, accessible, inclusive, smart, resilient and zero-emission urban mobility well ahead of 2050. Public transport, accompanied by shared mobility solutions, is one of its priority areas, partly because it provides low-emission, affordable and inclusive mobility options, enabling social cohesion and local economic development. The framework underlines that public transport must be at the centre of sustainable urban mobility planning, be available and attractive to all, and offer barrier-free access.

Beyond the sectoral work, legislation in the internal market with a social objective has been adopted that improves access to essential transport services for persons with disabilities. The European Accessibility Act, for example, includes obligations to make certain elements of passenger transport services accessible for persons with disabilities, for instance transport-related information and interfaces such as websites and self-service terminals, including in urban and suburban transport (98).

More recently, other initiatives have been proposed to address possible affordability challenges emerging from the mobility and transport changes required by the green transition. For example, the Social Climate Fund regulation (99) includes provisions concerning the financing of support measures and investments that should enhance access to zero- and low-emission mobility and transport, including infrastructure for recharging and refuelling, and incentivise the use of affordable and accessible public transport, with a specific focus on vulnerable households, vulnerable microenterprises and vulnerable transport users.

The Council recommendation on ensuring a fair transition towards climate neutrality (100) also addresses access to essential transport services, calling for further research and evidence concerning the definition, monitoring and evaluation of progress towards the provision of adequate access to essential services, in particular by developing the concept of transport poverty if appropriate (101).

EU funding – in particular cohesion policy funds and the RRF – is supporting investments and projects in sustainable transport. In some cases, the measures put forward by Member States have the potential to enhance access to transport services for disadvantaged groups. For example, the component on sustainable mobility of the Portuguese national recovery and resilience plan aims to enhance public transport by expanding the networks, making them more accessible, and strengthening public transport planning capabilities, which is expected to encourage the modal shift from private cars to public transport, increasing the number of public transport users, and to promote better transport management and planning capabilities. This is expected, in turn, to increase social cohesion in metropolitan areas, as improved and affordable public transport in these areas is set to reduce the mobility costs of low-income families and ensure broader access to services and employment opportunities (102).

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(100) Council recommendation of 16 June 2022 on ensuring a fair transition towards climate neutrality (2022/C 243/04).
Poland, the national recovery and resilience plan includes a comprehensive package of reforms and investments to promote sustainable mobility (on both roads and railways), multimodality, road safety and sustainable public transport. In a country where around 65% of the rural population has no access to public transport, the planned investments in the provision of low- and zero-emission rolling stock for bus connections in areas with poor transport accessibility are expected to help connect remote regions to economic centres and to facilitate the economic and social inclusion of the population in less-developed regions (103). Investments supported under the plan’s component on sustainable transport in Estonia are expected to contribute indirectly to the convergence between regions in the country. Improving the transport network and the connectivity between urban and rural areas should promote citizens’ access to education, employment, and other essential and enabling services, with positive effects especially for the most disadvantaged (104).

In the 2021–2027 programming period, EU Member States plan to invest EUR 14.9 billion of cohesion funds in urban transport infrastructure, rolling stock and digitalisation. For example, in Portugal more than EUR 1.5 billion of the ERDF, cohesion funds and the Just Transition Fund have been allocated to urban transport, and EUR 1.3 billion to railway transport. In Poland, EUR 3.9 billion will be invested in urban transport, EUR 5.7 billion in roads outside the core trans-European transport network, and EUR 7.1 billion in railway transport. Moreover, EU rules make accessibility requirements compulsory for the Member States to benefit from shared management funds (105), and buying accessible goods, services and infrastructure is an obligation in public procurement (106).

The Connecting Europe Facility for Transport is another key funding instrument for investing in European transport infrastructure as identified in the trans-European transport network. It aims to support investments in building new transport infrastructure in Europe or rehabilitating and upgrading the existing one, contributing to enhancing access to transport in the EU.

**Member States’ measures supporting access**

Member States use reduced tariffs, monetary benefits, cost reimbursements, tax rebates or in-kind benefits to support access to public transport for specific groups in the population. The support measures are mostly decided and applied at local or regional level, with some countries having national-level provisions as well, and some support measures requiring prior authorisation by the Commission. Reduced tariffs or social cards are by far the most widespread measure.

The prevailing policy approach addressing affordability of public transport is based on targeting specific groups based on their characteristics (for example older people, persons with disabilities and persons with reduced mobility, children and students), regardless of their income and socioeconomic status. For example, reduced fees or free public transport are offered to persons with disabilities in a number of countries (for instance, Germany, Ireland and Malta provide persons with disabilities with free public transport).

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(103) Commission staff working document – Analysis of the recovery and resilience plan of Poland accompanying the document Proposal for a Council implementing decision on the approval of the assessment of the recovery and resilience plan for Poland (COM(2022) 268 final) (SWD(2022) 161 final).


It is fairly common in the EU for retirees to be able to travel at reduced fees or even for free. Usually, countries apply an age limit, entitling them to free (Malta for people aged 70+, Ireland for 66+, Hungary for 65+) or reduced fee travel. Sometimes the entitlement is connected to receiving a pension. For instance, in Denmark and Sweden there is an age limit (65+), but below that limit pension recipients also qualify, including early retirees and disability pension recipients.

In the EU, children under a certain age are often entitled to free public transport (under 7 years of age in Greece, under 6 in Slovakia, under 5 in Ireland, under 4 in Malta and the Netherlands). Young people and students are often entitled to reduced fees.

A special case is that of Luxembourg, where since 2020 public transport has been provided for free to everybody. Malta has introduced a similar measure for buses as of October 2022 for all residents with a bus pass. Public transport is also sometimes provided for free to residents locally, such as in Tallinn in Estonia, and in 4 out of 60 municipalities in Lithuania.

Since public transport is generally used more by people with low incomes than by people with high incomes, it can be considered that these measures supporting access universally or for specific demographic groups benefit low-income groups more than the rest of the population.

Measures using income criteria to target those on low incomes are applied in some countries and regions (Spain, France, Italy, Cyprus, Austria, Portugal). In Cyprus, measures to facilitate access to public transport for people on a low income include free school bus tickets for all pupils coming from minimum income household beneficiaries, a 50% discount for all social card holders and free transport for all recipients of assistance for people on low pensions. Portugal has introduced the ‘Passe Social +’ in the metropolitan areas of Lisbon and Porto, which grants a reduction of 50% to beneficiaries of minimum income and of the solidarity supplement for older people, and a reduction of 25% for specific low-income pensioners, unemployed people and households. In Utrecht, in the Netherlands, families earning up to 125% of the minimum income can request a card on which EUR 120 a year is loaded, which covers public transport among other services. In Vienna, people receiving minimum income / social assistance or minimum pensions are entitled to subsidised public transport through the ‘Mobile Pass’ scheme.

Sometimes support for public transport is included in the existing monetary benefits for low-income groups. For instance, in Germany the estimated public transport expenditure is part of the basket on which the benefit calculation is based.

However, more often, support for low-income households is not available to all low-income households, but only in combination with specific socioeconomic criteria (e.g. referring to a disadvantaged situation beyond income). This includes persons with disabilities, carers, children, unemployed people or pensioners with low incomes. For instance, in Zagreb, free public transport is available to low-income pensioners and older people, persons with disabilities, full-time students from low-income families and people who have been granted asylum. Different income thresholds are defined to be able to benefit from the scheme. In Poland, costs of travel to work/training can be reimbursed by public authorities for a maximum of 1 year to job seekers who have been referred by the public employment services up to a predefined income threshold. In Belgium in 2020, the federal government and SNCF and Infrabel (the national railway companies) agreed on a transport plan to improve disadvantaged groups’ (physical) access to public transport by 2023, such as assistance and autonomous access at stops for persons with disabilities and persons with reduced mobility.
In the area of public transport, the availability of transport networks to meet the existing needs remains an important dimension beyond affordability. In a broad social and policy context, certain needs could gain more recognition at present, such as the accessibility of digital ticketing and information services for persons with disabilities; making sure that transport services take into account the needs of caregivers for people with caregiving needs; and increasing the range of options for active mobility.

Member States also have measures in place to address accessibility and availability issues, and to enhance access to transport in rural and isolated areas. For instance, in Finland, the long distances make it difficult to receive social, health and dental care and other services that demand face-to-face encounters. To help, reimbursed taxis or taxis that replace public transport exist, but their availability is often limited. This mostly affects people on low incomes, for whom alternatives are not affordable. Subsidised or free taxis are available for travel to access medical services.
5. Access to digital communications

While many Europeans use the internet regularly, access to digital communications remains a challenge for some groups and in some Member States. In 2020, 91% of households had access to the internet at home, and 86% of individuals were regular internet users. For those without internet access, affordability is one of the barriers, especially in some Member States. On average, around 2.4% of people in the EU could not afford to have an internet connection in 2022. This share is higher among people who are AROP (7.6% on average in the EU), with Romania, Bulgaria and Hungary recording values of 25.0%, 20.5% and 16.5% respectively. Lack of digital skills represents another important barrier, with significant differences between Member States (with levels of basic digital skills and above ranging from 79% in Finland and the Netherlands to 28% in Romania in 2021). There are also availability (connectivity) issues affecting access to digital communications, most often in some rural/remote areas, where broadband connections and mobile phone networks may be less available, of lower quality or more expensive than in urban areas. Generally, the vulnerable population with regard to access to digital communications includes people with low incomes or with low digital literacy, older people and persons with disabilities.

‘Digital communications’ refers to access to the internet (in particular broadband) and other ICTs. Accessing these services is essential to live and participate in society and in the labour market. Internet and digital technologies are used to work, learn, and access information, goods and services.

These services are increasingly needed to access other essential services, such as energy, transport and financial services. Using digital communications allows the use of financial applications, which contribute to accessing financial services. Access to digital communications, in particular mobile internet, is becoming increasingly important, as it allows access to information on transport solutions and timetables, and online ticketing, which facilitate access to transport services.

Moreover, access to digital communications is important for access to public services, as these are more and more accessible digitally, and in some Member States some services are accessible only digitally. The COVID-19 pandemic has further accelerated this trend, with increased need for and use of digital technologies to continue accessing education, health services and participate in the labour market.

In December 2022, the European Parliament, the Council and the Commission signed a declaration on European digital rights and principles to promote an inclusive and sustainable digital transformation (107). The EU’s objectives in terms of the digital transition can indeed be achieved only if everyone in Europe has access to digital communication technologies and the necessary skills to be empowered to use them.

State of play

While many Europeans use the internet regularly, issues of affordability, accessibility and lack of digital skills still prevent some people from benefiting from digitalisation.

According to the latest report of the EU’s Digital Economy and Society Index (DESI) (108), in 2021, 78% of households had subscribed to fixed broadband. National take-up rates ranged from 61% to 97%. The Netherlands, Cyprus, Luxembourg and Malta registered the highest figures, while Finland, Bulgaria, Latvia, Romania, Lithuania and Poland registered the lowest. The relatively low take-up rates in Finland

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(107) European declaration on digital rights and principles for the digital decade (COM(2022) 28 final).
may partly be due to fixed–mobile substitution (109). In Bulgaria, Latvia, Romania and Poland, the very low levels of basic digital skills could contribute to the low take-up of fixed broadband. There is also a large difference between figures regarding urban and rural areas. Only 70% of rural households have a fixed broadband subscription compared with 83% of households in cities. The rural–urban gap is largest in Finland (46% versus 76%), Romania (53% versus 78%) and Bulgaria (48% versus 72%). In 2021, 87% of people used a mobile device to access the internet (up from 73% in 2016), which corresponds to the number of regular internet users.

 Previous DESI reports also provide information concerning the barriers to accessing digital communications that persisted in Member States. The main reasons for not having internet access at home in 2019 remained lack of need or interest (45% of households without internet access), insufficient skills (45%), equipment costs (25%) and high cost barriers (23%). The deterring effect of each of these factors varied significantly between Member States. For example, only 5% of Estonian households without internet access mentioned costs as a barrier, but as many as 53% did so in Portugal. A lack of relevant skills is an important factor deterring households from having internet access at home.

 Generally, digital inequalities exacerbate already existing social inequalities. The disadvantaged population with regard to access to digital communications includes people with low incomes or with low digital literacy, marginalised Roma communities, and some older people and persons with disabilities. These groups often lack affordable and accessible devices and internet access, experience barriers in navigating user interfaces, have no access to secure information and/or lack locally relevant services in local languages, in addition to equipment or services being incompatible with assistive technologies.

 One factor affecting access is the pricing of digital services and the risk of affordability issues. According to EU-SILC data, on average around 2.4% of people in the EU cannot afford to have an internet connection for personal use at home in 2022, a share that has significantly declined over the last decade (from 7% in 2014) (Chart 10).

 109) Fixed–mobile substitution, usually abbreviated to FMS, is the trend of progressive replacement of fixed, wired telephones with mobile phones.
The share of people unable to afford internet access for personal use at home is higher among those who are AROP (7.6% on average in the EU). In addition, inability to afford internet access is also correlated with other material deprivation factors, such as the inability to face unexpected financial expenses, to afford holidays and to afford to replace worn-out furniture. Significant differences also exist between Member States, with Romania, Bulgaria and Hungary recording values of 25.0%, 20.5% and 16.5% respectively (Chart 11).

**Chart 11 – Share of the population who cannot afford internet connection for personal use at home, by Member State, 2022 (%)**

Source: Eurostat data (EU-SILC).

People with insufficient levels of digital skills are also faced with significant barriers to accessing digital communications. The magnitude of the issue differs across the EU, since the percentage of individuals with at least basic overall digital skills varied significantly in 2021, from 79.2% in Finland and 78.9% in the Netherlands to 31.2% in Bulgaria and 27.8% in Romania (110).

Persons with disabilities, including those with sensory, physical, mental or intellectual impairments, as well as people with learning difficulties and other conditions, are also significantly at risk of not being able to access digital services when digital interfaces are not accessible.

Besides these barriers, there are also availability issues affecting access to digital communications, mainly related to connectivity. These are most often observed in some rural/remote areas, where fixed broadband connections network may be less available, of lower quality or more expensive than in urban areas, as shown for instance by the DESI indicators. 4G mobile network coverage is almost

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(110) DESI key indicators (https://digital-agenda-data.eu/datasets/digital_agenda_scoreboard_key_indicators/visualizations)
ubiquitous, with 99.8% of populated areas covered by at least one operator in the EU and is even more widely available than fixed broadband (97.9%). In the last 3 years, the gap between rural and overall mobile (4G) network coverage narrowed. Rural coverage stood at 99.6% in 2021. All Member States have well above 95% coverage of 4G. On the other hand, fixed broadband coverage of rural areas remains challenging, as 8.5% of households are not covered by any fixed network.

When looking at consumption patterns, in 2015 the median expenditure share (as a share of a household’s disposable income) on digital communications at EU level was 3.0% across all households, 4.5% across households that were AROPE and 2.7% across households not AROPE. Chart 12 shows that, in all Member States for which information is available, the median share of expenditure on digital communications was higher across households that were AROPE than across households that were not AROPE, with the difference ranging from 0.5 pp in Hungary to 3.2 pp in Slovenia. When expressed as a percentage of median expenditure share in households that were not AROPE, this difference ranged from 9% in Slovakia to 105% in Austria (111).

Chart 12 – Median expenditure on digital communications across households in total population, AROPE and not AROPE, 2015 (% of disposable income)

**NB:** EU (weighted average of Member States excluding Italy and Germany). Data not available for Germany and Italy. AROPE is based on the old definition of at risk of poverty or social exclusion (definition used in EU2020 strategy). Digital communications proxied by COCOIP: CP083.


(111) More information on specific household categories is provided in the annex.
EU measures supporting access

The EU has a wide range of policies and regulations in place to support access to essential digital communications services for all.

Already in 2002 the universal service directive (112) introduced a universal service obligation in the field of electronic communications, establishing the rights of end users and the corresponding obligations on undertakings that provide publicly available electronic communications networks and services.

Through its revision in 2018, which led to the recast directive establishing the European Electronic Communications Code (113), existing EU legal obligations have been strengthened, in particular concerning affordability. The revised directive obliges Member States to ensure that all consumers in their territories have access – at an affordable price – to an adequate broadband internet service. The quality of this broadband access may be specified in their territories, supporting at least a minimum set of services. This universal service is to be provided at a fixed location, but Member States may decide to ensure the affordability of mobile service, where they consider this to be necessary to ensure consumers’ full social and economic participation in society (114). This legislation also provides for equivalent access for end users with disabilities, including access to emergency services through electronic communications services. Member States had to incorporate these obligations into their national laws by 21 December 2020.

WiFi4EU (115) – an EU initiative supporting the installation of Wi-Fi equipment in public spaces across Europe – also indirectly supports access to digital communications for all, complementing the above-mentioned initiatives through enhanced connectivity in public spaces. However, it has to be noted that, while increasing the availability of free Wi-Fi in public places is a good way to increase access, this does not replace secure and private connections, which should be affordable to all.

EU cohesion policy is also making a key contribution in this area, in particular through financial allocations from the ERDF, which totalled more than EUR 14 billion of EU financing over the 2014–2020 investment period, complemented by national public and private co-financing. The focus of digital investments under cohesion policy is to overcome the digital divide both socially and geographically, including by fostering the roll-out of broadband in remote and rural regions, so that no EU region is left behind. For 2021–2027, nearly EUR 13.6 billion has been put forward and negotiated in national and regional programmes to support the digital transition: EUR 11.2 billion for digital services and the digitalisation of business and 25 000 public administrations, and EUR 2.3 billion for high-speed mobile and fixed digital infrastructures. This is further supplemented by similar investments through the RRF. When it comes to digital accessibility for persons with disabilities, a number of EU initiatives were adopted in the last decade that contain relevant provisions, such as the European Accessibility Act, the web accessibility directive, the Electronic Communications Code and the audiovisual media services directive (116). In particular, the European Accessibility Act sets EU-wide accessibility require-


(114) See Articles 84 (Affordable universal service), 85 (Provision of affordable universal service) and 86 (Availability of universal service).

(115) The budget of the WiFi4EU initiative was EUR 120 million for 2018–2020 (more information is available at https://wifi4eu.ec.europa.eu/#/home).

ments for key digital products and services, which may also be used in educational settings, such as computers, smartphones and e-books.

The European skills agenda (117) sets the goal for 70% of EU citizens aged 16–74 to have at least basic digital skills by 2025 (against 54% in 2021). Furthermore, Europe’s Digital Decade (118) aims to ensure that 80% of EU citizens aged 16–74 years old have at least basic digital skills by 2030. As to connectivity, it aims that, by 2030, all EU households will have gigabit connectivity and all populated areas should be covered by mobile networks in the 5G standard. The EU’s 2020 digital strategy ‘Shaping Europe’s digital future’ recognises digital literacy and skills as being important both for jobs and for participation in contemporary society (119).

EU funding, in particular the European Social Fund Plus and the Digital Europe programme, provides financial contributions for projects supporting basic and advanced digital skills. The RRF supports reforms and investments aiming to promote the roll-out of very high-capacity networks, and the development of basic and advanced digital skills, among other measures contributing to the digital transition or addressing the challenges resulting from it (120). It also supports intervention that will enhance access to digital communications for disadvantaged groups. For example, a number of Member States, including Czechia, Ireland, Cyprus and Spain, have included in their national recovery and resilience plans measures addressing material barriers through the provision of equipment to students, with a particular focus on low-income families. Others, such as Belgium and France, include measures addressing skills barriers with the aim of providing disadvantaged groups with basic digital skills and fostering digital inclusion. Some Member States intend to do both; for example, Romania aims to enhance the basic digital skills of about 100,000 citizens living in disadvantaged communities, which currently have limited access to training. The investment included in the Romanian national recovery and resilience plan consists in the conversion of 105 libraries located in communities with marginalised groups into hubs for the development of digital skills, underpinned by additional funds to allow 1,030 libraries to change/upgrade their information technology equipment (121).

Member States’ measures supporting access

Measures to increase access to digital communications vary across Member States, with the main ones being reduced tariffs, the provision of digital devices and free access to the internet. Monetary benefits, in-kind benefits, advice and informational user support are also used. Disadvantaged groups that are generally targeted are households in rural areas, low-income families, older people and, in some cases, persons with disabilities.

Some Member States use more than one type of measures, with most of them using reduced tariffs and in-kind benefits. Only four Member States (Germany, Lithuania, Portugal, Finland) ensure basic supply or no interruption in the supply of digital connectivity for households. In Portugal, the measure (guarantee against being cut off from electronic communications) was put in place during the pandemic and is only temporary. In Finland, broadband connection is considered an essential service, which is ensured by the Finnish Transport and Communications Agency.

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(120) Beyond a general requirement to contribute to the digital transformation pillar, each Member State must dedicate at least 20% of its recovery and resilience plan’s total allocation to measures contributing to the digital transition or to addressing the challenges resulting from it.
Reduced tariffs are more widespread. Such lower tariffs are usually implemented by the service providers of digital communications. There are nine Member States (Belgium, Hungary, Italy, Cyprus, Malta, the Netherlands, Austria, Portugal, Slovenia) that use reduced tariffs to support access to digital communications, all implemented at national level. In Malta, for instance, a provider of digital communications services was chosen by the Malta Communication Authority to provide reduced tariffs to people that had difficulties in affording them. In Italy, there is a reduced tariff (50% discount) for low-income people, but the basis on which this discount is computed has not been recently updated; that may make the reduced tariff outdated and in fact more expensive than the market price, which has decreased in the meantime. While not a reduced tariff per se, a maximum price limit for the end user has been put in place in Estonia for people joining an internet network in rural areas.

There have also been developments in the last 2 years in designing such tariffs, with existing measures being adapted to improve access to digital communications in today’s society. Belgium’s new, comprehensive telecom law (adopted in 2021, coming into force in 2022) revised the regulations on the social tariffs of telecom operators, available to people on minimum income, low-income older people and low-income persons with disabilities, if their annual household income is below income threshold for enhanced reimbursement of healthcare costs. The new legislation aims to extend the law to mobile telephone/internet access. Portugal, in November 2021, updated the social tariff’s targeting consumers from disadvantaged socioeconomic backgrounds or with special social needs, to include the provision of fixed or mobile broadband internet access services.

Only four Member States (Germany, Austria, Finland, Sweden) use monetary benefits to support access to digital communications. In Germany, Finland and Sweden, specific allowances for digital communications are integrated into the computation of national minimum income and social allowances. In addition, in Finland and Sweden there are also extra allowances for digital communications available at municipal level. In Austria, low-income people receiving at least one social benefit can apply for a ‘telephone fee grant’ to improve the affordability of digital communications.

In-kind support or reduced prices for digital communications can take different forms, such as providing free internet access or covering part of the installation costs for high-speed connection. Several Member States offer monetary benefits to enable specific population groups to purchase information technology equipment, or to install or activate an internet connection. In Sweden, for instance, for certain households, part of the cost of installing a broadband connection is covered by the Post and Telecom Authority. Moreover, in Italy, a connectivity benefit was available to low-income households during the pandemic. Italy also recently provided a new ‘digitalisation kit’ benefit to low-income households that have at least one member enrolled at school or university. Greece also provides a subsidy (of EUR 200) for the purchase of technological equipment (tablet, laptop, desktop), to help citizens meet their needs for access to educational services. In Poland, low-income people can benefit, through municipalities, from support to purchase digital communication services.

Several Member States also provided in-kind support or reduced prices to students during the pandemic to support remote learning. In Hungary, a temporary measure was put in place to ensure that internet access was provided free of charge to families with at least one child mandated to study online during the closure of secondary schools in the COVID-19 pandemic. In March–May 2021, primary school students were also eligible. In Italy, qualifying households can access a free loan of a mobile phone, laptop or desktop computer for 1 year. Similarly, Malta provided access to free laptops and the internet for 2 300 households to seek to bridge the digital divide.
Several Member States (for instance Belgium, Germany, Estonia, Greece, Spain, France, Croatia, Lithuania, Luxembourg, Hungary, the Netherlands and Sweden) have put in place advice / informational support to potential users in order to address digital skill gaps, among other reasons. In Germany, for instance, there are several special programmes in place to improve the digital skills of older people. In many Member States, there is also ICT training available to improve the digital skills of the labour force.

Several Member States, such as Bulgaria, Germany, Estonia, Austria, Finland and Sweden, have also set targets concerning the availability of digital communications and the improvement of general connectivity. These targets relate to providing broadband connection to all households, including in remote areas.
6. Access to financial services

In three Member States fewer than 90% of individuals aged 15 and above hold a bank account (88% in Hungary, 84% in Bulgaria and 69% in Romania). The main barriers to opening a bank account for disadvantaged groups are high fees, lack of information and legal requirements, which represent a barrier for people on low incomes, homeless people and undocumented migrants. Other vulnerable groups include individuals who lack financial literacy and those who have low digital skills. Persons with disabilities and older people also face problems because of lack of, or limited, accessibility.

Having access to a bank account and a payment card is key to fully participating in societies and the labour market. On the one hand it allows one to buy needed and desired goods and services, including on the internet – a trend that accelerated significantly during the pandemic. On the other hand, it is becoming increasingly used for receiving income, both in the form of wages from employers and as benefits from public authorities.

While the range of financial services could be broad and could include different products – from insurance to mortgages, from savings to investment – the analysis in the framework of this report is primarily focusing on having access to a bank account and connected means of payment.

State of play

No appropriate EU indicators are available for monitoring access to financial services. Data from the World Bank’s Global Findex database illustrates the proportion of individuals aged 15 or above in EU Member States who hold an account with a financial institution. In most Member States, the vast majority of people have a bank account (Chart 13). Figures vary among Member States but, overall, the percentage of people aged 15 or above in the EU without a bank account is quite low and has decreased in recent years. Only in Hungary (88%), Bulgaria (84%) and Romania (69%) has the proportion of those who have access not crossed the 90% threshold.

Chart 13 – Proportion of people aged 15 or above with a bank account, 2021 (%)

NB: data for Luxembourg are for 2017. Note that the definition in the database is ‘account with a financial institution’. It has been interpreted by the research team that the most likely financial institution with which to hold an account is a bank.
High fees and lack of information, as well as legal requirements concerning residency and identity documents, can pose barriers to accessing payment accounts in the EU. Despite the obligation set by EU legislation to provide access for all consumers legally resident in the EU to a payment account with basic features free of charge or for a reasonable fee, the level of fees varies considerably across the EU and could still remain high for the most disadvantaged people in some Member States (122).

In terms of availability, there is no significant lack of financial products, services and/or intermediaries in Europe (123). More problems exist in terms of availability of bank branches and automated teller machines (ATMs), as indicated by a recent study by the Commission that points to the reduction in their number (124). In addition, the problem of lack or limited accessibility for persons with disabilities or persons with reduced mobility is illustrated as, for example, barriers to physical access to bank branches or inaccessible ATMs.

It also relates to problems concerning lack of digital skills. While the digitalisation of financial services can facilitate access for the majority of people in our societies by ensuring the availability of services outside office hours, the increasing digitalisation of bank and financial services, especially if coupled with a steady decrease in the availability of physical bank offices, can act as a barrier to access for people who have low digital skills or who lack the transport means to travel for errands. This especially affects older people, for whom it may be difficult to learn to use the new services, and who in the past have relied both on a bank branch and on the availability of physical means of payment. The resulting risk of financial exclusion has been raised, for example by the European Banking Authority (125).

More generally, a lack of financial literacy – meaning ‘financial education, such as basic economics, statistics and numeracy skills combined with the ability to employ these skills in making financial decisions’ (126) – also often leads to difficulties, in particular over-indebtedness and financial exclusion. According to a recent survey by the Organisation for Economic Co-operation and Development (which did not include all EU Member States), financial literacy overall was low across the countries surveyed, especially for women, young people, and disadvantaged groups such as people with low digital skills (127).

The lack of valid identification documents and of a fixed address also represent barriers, since these are generally required to open a bank account. In this case, the most affected groups are homeless people and migrants.

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122) The main reason is the fact that the EU directive has been transposed and implemented in different ways by Member States. For more information on the level of fees, see Deloitte, Study on EU Payment Accounts Market – Final report, Publications Office of the European Union, Luxembourg, 2021.
As regards access to cash, the findings of the Euro Legal Tender Expert Group report (128), European Systemic Risk Board reports and European Central Bank studies point to a rather heterogeneous and sometimes problematic situation regarding cash access among the Member States. Cash access seems to remain strongest in those Member States that are already cash intensive, while in others access is gradually but structurally deteriorating (129).

In addition, persons with disabilities (physical, mental, intellectual or sensory) might experience difficulties in operating ATMs or digital applications, if these are not designed and implemented in an accessible way.

**EU measures supporting access**

The payment accounts directive (PAD) aims to provide a right of access to a payment account with basic features for all consumers legally resident in the EU, including consumers with no fixed address, asylum seekers, and consumers who are not granted a residence permit but whose expulsion is impossible for legal or factual reasons. Such an account must include a number of services – cash withdrawals, credit transfers, direct debits, payment transactions through a payment card – and has to be offered by all credit institutions in a Member State or a sufficient number of credit institutions to guarantee access thereto for all consumers in the territory. The payment account with basic features must be offered for free or for a reasonable fee. In addition, the directive calls on Member States to provide that payment accounts with basic features are offered to disadvantaged consumers on particularly advantageous terms, such as free of charge. The PAD entered into force in September 2014, and Member States had until 18 September 2016 to adopt the measures necessary to comply with the directive. As set out above, the 2021 Global Findex database has shown that the proportion of the population aged 15 or more who have a bank account increased in the EU between 2017 and 2021, and some Member States reached 100% in 2021. The Commission is assessing the application of the directive and is preparing a report. The European Accessibility Act (130) includes provisions requiring accessibility for banking services in order to remove barriers to the use of these products and services. Such provisions improve the opportunities for the older people and persons with disabilities to access certain financial products and services, through their websites and mobile device-based applications.

The EU is also supporting financial inclusion and financial literacy, which are closely intertwined. The Commission published in January 2022 the joint EU/OECD–International Network on Financial Education financial competence framework for adults (131). The framework promotes a shared understanding of financial competences for adults (aged 18 years and over). It defines 564 competences (including digital and sustainable finance competences) that adults need in order to make efficient personal finance decisions and to improve their financial well-being. The goal is that Member States, educational institutions, industry and individuals will use the framework to develop public policies, financial literacy programmes and educational materials. The work on a similar competence framework for youth and children is ongoing.

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129) The Commission is assessing possible ways forward following the set of principles included in the Euro Legal Tender Expert Group report.
Member States’ measures supporting access

In some Member States, national legislation – including provisions for ensuring access to basic bank accounts – was already in place before the transposition of the PAD.

In France, a broader banking inclusion approach was promoted by the existence of (i) a specific option for customers in financial difficulties, with limits on the payment default charges; and (ii) the bank access features offered by the post office bank (La Banque Postale), which allows people with no bank current account to open a savings account, similar to a bank current account with some restrictions. In Estonia, access to a free bank account was already provided by the largest banks in the country, although restricted to Estonian residents. In Lithuania, the 1999 Law on Payments already guaranteed consumers the right to open and use payment accounts with basic features, including withdrawals, bank transfers and debit cards. In 2017, the Bank of Lithuania set up a reduced monthly tariff (EUR 0.75) for people receiving the social assistance benefit, for the basic payment service package offered by commercial banks and credit unions. In the Netherlands, pre-existing rights to a basic payment account provided more limited guarantees than the PAD, regarding both the group of consumers eligible for an account and the scope of the rights ensured (it was solely focused on the right to have a bank account and bank card).

In other Member States, the PAD had a direct positive impact on consumer rights. In Austria, prior to the PAD, banks often rejected potential clients who exhibiting problems with financial liquidity or over-indebtedness, and blacklists were shared among credit institutions documenting such problems; transposition of the PAD into national legislation even paved the way for the development of innovative and inclusive financial solutions.

In Ireland, the PAD was important in moving access to standard bank accounts forward, following the pilot stage initiated in 2012. However, progress seems to be hampered by a lack of proactive engagement by the banks, trust issues regarding financial institutions and relatively low financial literacy in low-income sectors. In Slovakia, consumers’ rights to open and use a payment account improved following transposition of the PAD: in addition to the introduction of the payment account with basic features, a ‘basic banking product’ was introduced in 2016 (a payment account designed for people on low incomes), provided free of charge and granted only to people whose net monthly income does not exceed 1.1 times the minimum wage.

Many Member States have adopted specific strategies to improve financial literacy among disadvantaged groups. For instance, Estonia adopted a financial literacy development plan for 2021–2030, whose main focus is on education measures. In Italy, there is a national committee to promote financial literacy and financial education (Comitato EduFin), which includes representatives from the main financial authorities of the country (Bank of Italy, Consob, Ivass, Isvap). In 2021, the Minister for Education and the Bank of Italy signed an agreement to introduce financial education in schools. Some pilot initiatives are in progress. Austria launched its national financial literacy strategy in 2021 with the aim of guiding the actions of Austrian stakeholders for the next 5 years. It includes over 40 action tools to support the strategy’s implementation. In France, 400 budget advice services were created in 2020 to support people in financial difficulties who had problems with budget management and were already over-indebted. Although these services do not have the direct aim of supporting access to financial services, they can inform users of their rights and increase the visibility of existing support measures.
In a limited number of Member States, physical access to financial services is being tackled by specific strategies. By way of example, Lithuania has adopted measures to increase access to cash. In 2021, the Bank of Lithuania and other financial and credit institutions signed a memorandum of understanding: signatories agreed that within 1 year 90% of the Lithuanian population should have access to cash withdrawal points within 10 km of their declared place of residence, or 99% of the population within 20 km, including by installing 100 new ATMs by 1 July 2022 in smaller settlements in the country (with a population of up to 4 000). Similar measures have been adopted in Ireland, Spain and Finland.
7. Common trends

In 2022, people who were AROP experienced significantly higher level of arrears on utility bills (heating, electricity, gas, water, etc.) than the overall population (15.6% compared with 6.9%). The rate varies greatly between Member States, ranging from 1.5% of total population in the Netherlands in 2022 to 34.1% in Greece (and from 5.0% in the Netherlands to 50.8% in Greece for households that were AROP). As regards the proportion of essential services in households’ budgets, in 2015 the median expenditure (as a share of a household’s disposable income) on all essential services (excluding financial services) was 11.8% across all households in the EU, and 18.5% across households that were AROPE. Being AROP and living in rural and remote areas have a significant impact on the possibility of accessing essential services. Quantitative analyses confirm that being AROP amplifies the access challenges of disadvantaged groups (such as household with housing costs perceived as a heavy burden, households with persons with disabilities, families with three or more children and female-headed single-parent households).

The previous chapters have focused on the individual essential services listed in principle 20 of the EPSR, presenting evidence on the state of play concerning access and on the support measures available at EU and Member State levels. This chapter brings this information together, providing additional quantitative evidence and pointing to common aspects across services.

Access or lack of access to one of the services listed in principle 20 can influence access to the others. For example, energy is necessary to use digital communications. Access to transport can compensate for lack of availability of financial services or digital communications when services would otherwise be too distant. Access to digital communications facilitates access to energy, transport and financial services, since it allows the use of financial applications, payment of bills and for tickets, and the consultation of information concerning offers and timetables. Having a bank account facilitates access to all the other essential services that require payments. While the services listed in principle 20 are of different natures, they all support access to a wider set of enabling goods and services that are key to actively participating in society and in the labour market.

On top of the analysis of access to specific essential services provided in former chapters, another relevant – although indirect – aspect is facing arrears on utility bills, which cover heating, electricity, gas, water, etc. In 2022, people who were AROP experienced a much higher level of arrears on utility bills than the overall population (15.6% compared with 6.9%). The rate varies greatly between Member States, ranging from 1.5% of the total population in the Netherlands to 34.1% in Greece (Chart 14). Arrears on utility bills are higher in all Member States for people who were AROP; in 2022 it ranged from 5.0% in the Netherlands to 50.8% in Greece. The gap between those who are and are not AROP is 10.4 pp for the EU as a whole, but reaches 20.6 pp in Greece.
On average in the EU, the rate of arrears on utility bills for the total population has been dropping in recent years until 2021, with a drop of 3.0 pp over 2015–2021 (Chart 15). The decline has been quicker for people who are AROP – 6.0 pp over 2015–2021 – but the positive trend has slowed down in recent years, with values increasing again in 2020 and stabilising in 2021. Interestingly, values for 2022, that show the first impact of the cost of living crisis, point to a moderate increase of arrears for people not AROP and the whole population, but a small decline for AROP people.
It is also important to consider whether there are overlaps in difficulties of access to the various essential services. A recent study[^133] aimed to assess lack of access to one or more of the essential services listed in principle 20 of the EPSR by considering inability to keep home adequately warm, inability to afford an internet connection and inability to own a shower/bath for sole use, as proxies for energy, digital communications, water and sanitation services[^134]. The analysis confirms that the inability to afford an item is likely to be correlated with the inability to afford another item, which underlines that households that are not able to afford one service might not be able to afford others. For example, households that are not able to afford internet might not be able to adequately heat their homes or afford a shower (or bathtub) for sole use[^135].

As regards overlaps, 11.3% of the population is estimated not to be able to afford at least one service (Chart 16). Among these, 83% are unable to access one service only, 15% cannot afford two services and 2% cannot afford access to all three services considered (water and sanitation are analysed together). For each of those categories, the study also shows which services are the ones that people are more or less frequently unable to afford[^136]. It appears that inability to keep home adequately warm is the item for which people tend to be most often flagged, which points to the fact that energy services are the ones with the greatest affordability barriers.

**Chart 16 – Lack of access to one or more items (services) based on EU-SILC (2020)**

<table>
<thead>
<tr>
<th>Having no access to</th>
<th>Percentage of those without access to at least one service</th>
<th>Percentage of total population</th>
<th>Services breakdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>One service only</td>
<td>83</td>
<td>9.4</td>
<td>![Chart showing services breakdown]</td>
</tr>
<tr>
<td>Two services only</td>
<td>15</td>
<td>1.7</td>
<td>![Chart showing services breakdown]</td>
</tr>
<tr>
<td>All three services</td>
<td>2</td>
<td>0.3</td>
<td>![Chart showing services breakdown]</td>
</tr>
<tr>
<td>Total without access to at least one service</td>
<td>100</td>
<td>11.3</td>
<td>![Chart showing services breakdown]</td>
</tr>
</tbody>
</table>


[^134]: As discussed in Chapters 5 and 6, no regularly published indicators on affordability exist for transport and financial services.

[^135]: The correlation matrix between the items, which shows that variables are positively correlated (although correlations are relatively weak), can be found in the annex.

[^136]: This is shown in the last column of the chart and also includes arrears on utility bills, which refers to energy, water and sanitation.
As regards the characteristics of people who cannot afford one or more services, the shares of women, persons with disabilities, older people and members of households with children stay relatively stable across the different groups (lacking one, two or all three services considered), while the shares of people living in rural areas and people who are AROP sharply increase among those individuals who lack more than one service (Chart 17). More than 60% with access issues for all three indicators live in rural areas and almost 80% are AROP. This points once more to the fact that being AROP and living in rural areas have a significant impact on the possibility of accessing essential services.

Chart 17 – Characteristics of individuals who cannot afford (i.e. lack access to) one or more items (services), EU, 2020 (%)

NB: a little bit more than 50% of the people without access to one service are women and 40% live in rural areas. While the share of women remains quite stable across the panels, the share of rural people increases; around 65% of people lacking access to all three services live in rural areas.

An econometric analysis (137) also confirms that being AROP amplifies the access problems of disadvantaged groups. Being AROP and part of a disadvantaged group increases the risk of not being able to afford the essential services. Households with persons with disabilities, families with three or more children and female-headed single-parent households are other groups identified as more at risk.

As regards the proportion of essential services in households’ budgets, in 2015 the median expenditure (as a share of a household’s disposable income) on essential services (excluding financial services) at EU level was 11.8% across all households, 18.5% across households that were AROPE, and 10.4% across households not AROPE (Chart 18). This means that households that were AROPE spent almost twice as large a proportion of their income on these services as households that were not (138).

137) More information on the multivariate analysis performed in the study can be found in the annex.
138) This means that the median expenditure share across households that were AROPE was 196% of the median expenditure share of households that were not
Chart 18 – Median expenditure on total of essential services across households in total population, AROPE and not AROPE, 2015 (% of disposable income)

NB: EU (weighted average of Member States excluding Germany, Italy and Cyprus). Data not available for Germany, Italy and Cyprus. Total of essential services (excluding financial services) proxied by COCOIP: (CP044 – CP0444) + (CP045) + (CP073 – CP0733 – CP0734) + (CP083). In this analysis, the median expenditure share (as a percentage of household disposable income) on the total of essential services (excluding financial services) does not necessarily correspond to the sum of the median expenditure shares of the various essential services. This is because the median of the sums is not necessarily equal to the sum of the medians.


The previous chapters have also shed light on remaining important knowledge gaps. Data and monitoring tools to monitor access to essential services and assess the effectiveness of support measures are scattered and underdeveloped at both national and EU levels.

Information on access to essential services is not regularly collected in a structured way. Administrative data are scarce and do not allow for comparability across Member States. Survey data are more developed for some services, with indicators available from EU-SILC and HBS that make it possible to identify situations of enforced lack (i.e. lack of access because of unaffordability). Energy is the service for which most evidence is available, with available indicators on (perceived) affordability from EU-SILC and on (under- and over-)consumption from HBS. These indicators can be associated with income and other socioeconomic characteristics, which allows for a more granular analysis. The situation is similar for water and sanitation, with indicators on the number of people living in households without basic sanitary facilities and on connection to wastewater treatments, as well as data on consumption patterns. Information is also available for digital communications, with EU-SILC data on the number of people who cannot afford to have a computer and internet access for personal use at home. The situation is different for transport and financial services. No data are collected on the affordability of transport services, while on financial services there is limited information available from international sources (such as the World Bank’s Global Findex database).
The lack of administrative data and the limitations of survey data on affordability mean that no monitoring framework and tools are in place and regularly used at Member State or EU level to assess the effectiveness and efficiency of available measures to support access to essential services for disadvantaged groups. Collecting administrative and survey data, creating new indicators for those services for which information on affordability is lacking, and improving the granularity and frequency of existing surveys would be important steps to strengthen the evidence base, advance the understanding of the issue at EU and national levels, and inform future work in the area.
Annex

Water and sanitation

Access to water and sanitation may vary along several breakdowns. The table below details how the rate of inability to afford a shower for sole use varied across several breakdowns in 2020 for the EU-27. It appears, for instance, that 8% of people in the lowest income quintile could not afford a shower/bath for sole use.

Percentages of people who cannot afford the item, for several breakdowns, EU, 2020

<table>
<thead>
<tr>
<th>Item</th>
<th>Education</th>
<th>Housing costs</th>
<th>Activity status</th>
<th>Income quintiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Heavy burden</td>
</tr>
<tr>
<td>Owning shower for sole use</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

NB: low education means ISCED level 0–2, medium 3–4 and high 5–8. Housing costs indicate the extent to which they are perceived as a financial burden. The activity status ‘retired or inactive’ includes ‘retired’, ‘inactive’ and ‘other inactive’.


Data on expenditure on water and sanitation can also be analysed by several breakdowns. The chart below shows the median expenditure in 2015 (as a share of a household’s disposable income) on (the sum of) water and sanitation at EU level for various breakdowns. It shows that this share tended to be higher for low-income households (which is logical, as it is expressed as a percentage of household income), for households that were AROPE, for households composed of a single adult, for households living in rural areas, for households with main respondent unemployed or inactive (other than retired), for households with main respondent aged 65 or above, for households with main respondent having a low level of education and for households with housing costs overburden. The biggest differences (in percentage points at EU level) between the categories within a given breakdown were observed for disposable income status (with a difference of 3.3 pp between the median expenditure share for households in the first income decile and the median expenditure share for households in the top income decile) and for AROP status (with a difference of 1.9 pp between AROP households and not AROP households).
Median expenditure on water and sanitation across households in specific breakdowns, EU, 2015 (% of disposable income)

NB: EU (weighted average of Member States excluding Germany and Italy). Water and sanitation proxied by COCOIP: CP044 excluding CP0444. For household composition breakdown, categories are from left to right: household composed of only one adult, household composed of one adult with dependent children, household composed of two adults with dependent children.

Energy

Access to energy may vary along several breakdowns. The table below details how the rate of inability to keep home adequately warm and the rate of arrears on utility bills vary along several breakdowns. It appears, for instance, that 15% of people in the lowest income quintile lived in a household that could not afford to keep its home adequately warm in 2020.

Percentages of people who cannot afford the item, for several breakdowns, EU, 2020

<table>
<thead>
<tr>
<th>Item</th>
<th>Education</th>
<th>Housing costs</th>
<th>Activity status</th>
<th>Income quintiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Heavy burden</td>
</tr>
<tr>
<td>Having utility bills arrears</td>
<td>9</td>
<td>7</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Inability to keep home adequately warm</td>
<td>11</td>
<td>7</td>
<td>4</td>
<td>16</td>
</tr>
</tbody>
</table>

NB: low education means ISCED level 0–2, medium 3–4 and high 5–8. Housing costs indicate the extent to which those are perceived a financial burden. The activity status ‘retired or inactive’ includes ‘retired’, ‘inactive’ and ‘other inactive’.


Data on expenditure on energy can also be analysed by several breakdowns. The chart below shows the median expenditure share in 2015 (as a share of a household’s disposable income) on residential energy at EU level for various breakdowns. It shows that this share tended to be higher for low-income households (which is logical, as it is expressed as a percentage of household income), for households that were AROPE, for households composed of a single adult, for households living in rural areas, for households with main respondent unemployed or inactive (other than retired), for households with main respondent aged 65 or above, for household with main respondent having a low level of education and for households with housing costs overburden. The biggest difference (in percentage points at EU level) between the categories within a given breakdown was observed for disposable income status (with a difference of 10.1 pp between the median expenditure share for households in the first income decile and the median expenditure share for households in the top income decile) and for AROP status (with a difference of 5.6 pp between AROP households and not AROP households).
Median expenditure on residential energy across households in specific breakdowns, EU, 2015 (% of disposable income)

Median share (in % of household disposable income) of expenditure on RESIDENTIAL ENERGY: overview of breakdowns (EU excl. IT, 2015)

NB: EU (weighted average of Member States excluding Italy). Residential energy proxied by COCOIP: CP045. For household composition breakdown, categories are from left to right: household composed of only one adult, household composed of one adult with dependent children, household composed of two adults with dependent children.

Residential energy in households by use

In the EU, the main use of energy by households is for heating their homes (62.8% of final energy consumption in the residential sector, i.e. residential energy consumption in households). Electricity used for lighting and most electrical appliances represents 14.5% (this excludes the use of electricity for powering the main heating, cooling or cooking systems), while the proportion used for water heating is slightly higher, representing 15.1%. The main cooking devices require 6.1% of the energy used by households, while space cooling and other end uses cover 0.4% and 1.0% respectively. Heating of space and water represents 77.9% of the final energy consumed by households (Eurostat, ‘Energy consumption in households’).

Final energy consumption in the residential sector by use, EU, 2020 (%)

This high share (62.8%) of space heating in final residential energy consumption in households suggests that the indicator ‘inability to keep home adequately warm’ – which focuses only on space heating – would be a rather good proxy, at EU level at least, for issues related to energy poverty. However, it is important to point out that, in a few Member States (where the temperature is usually warmer), space heating represents a much smaller share of final residential energy consumption in households, as can be seen in the figure below.
Source: Eurostat

Disaggregated final residential energy consumption of households, based on quantities, 2020 (%)

NB: data not available for space cooling in Denmark, Estonia, Ireland, Spain, Lithuania and Sweden, and for other end use in Bulgaria, Estonia, Greece, France, Croatia, Hungary, Poland, Romania and Slovenia.

Source: own computation based on Eurostat data.
Transport

Monthly transport expenditures by income quintile, EU, 2020

<table>
<thead>
<tr>
<th>Transport expenditure</th>
<th>First quintile</th>
<th>Second quintile</th>
<th>Third quintile</th>
<th>Fourth quintile</th>
<th>Fifth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public transport expenditure</td>
<td>in absolute numbers (PPP EUR)</td>
<td>27</td>
<td>35</td>
<td>40</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>as share of income (%)</td>
<td>3.5</td>
<td>2.1</td>
<td>1.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Private transport expenditure</td>
<td>in absolute numbers (PPP EUR)</td>
<td>127</td>
<td>170</td>
<td>208</td>
<td>240</td>
</tr>
</tbody>
</table>

NB: PPP, purchasing power parity. Households in the first quintile of the income distribution tend to spend on average 3.5% of their disposable income on public transport and around 13% on private transport.


Data on expenditure on public transport can also be analysed by several breakdowns. The chart below shows the median expenditure in 2015 (as a share of a household’s disposable income) on public transport at EU level for various breakdowns. It shows that this share tended to be higher for low-income households (which is logical, as it is expressed as a percentage of household income), for households that were AROPE, for households composed of a single adult, for households living in urban areas and those living in rural areas, for households with main respondent unemployed or inactive (other than retired), for households with main respondent below 35 years, for households with a lower level of education and for households with housing costs overburden. The biggest difference (in percentage points at EU level) between the categories within a given breakdown was observed for disposable income status (with a difference of 3.7 pp between the median expenditure share for households in the first income decile and the median expenditure share for households in the top income decile) and for AROP status (with a difference of 1.9 pp between AROP households and not AROP households).
Median expenditure on public transport across households in specific breakdowns, EU, 2015 (% of disposable income)

**Output of tobit regression analysis for transport services, by quintile, 2020 (regression run on microdata for all Member States)**

<table>
<thead>
<tr>
<th></th>
<th>(5a)</th>
<th>(5b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public transport expenditure as share of income</td>
<td>Private transport expenditure as share of income</td>
</tr>
<tr>
<td>Female responsible for the accommodation</td>
<td>Not sig</td>
<td>–</td>
</tr>
<tr>
<td>(reference: male responsible)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>Not sig</td>
<td>–</td>
</tr>
<tr>
<td>Country of birth:</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>EU (excl. reporting country)</td>
<td>–</td>
<td>Not sig</td>
</tr>
<tr>
<td>Other (third countries)</td>
<td>–</td>
<td>Not sig</td>
</tr>
<tr>
<td>(reference: national of the reporting country)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>(reference: renter)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing expenditures as share of income</td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>Household size</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>Household with:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 child</td>
<td>–</td>
<td>Not sig</td>
</tr>
<tr>
<td>2 children</td>
<td>–</td>
<td>Not sig</td>
</tr>
<tr>
<td>3 or more children</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>(reference: w/o children)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household with older person(s)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>(reference: w/o old-age)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household with disabled person(s)</td>
<td>–</td>
<td>Not sig</td>
</tr>
<tr>
<td>(reference: w/o disabled)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household location:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thinly populated</td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>Intermediate</td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>(reference: densely populated)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education level (ISCED):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium (3–4)</td>
<td>Not sig</td>
<td>+</td>
</tr>
<tr>
<td>High (5–8)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>(reference: low (0–2))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owning a car</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No – cannot afford it</td>
<td>++</td>
<td>–</td>
</tr>
<tr>
<td>No – other reasons</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>(reference: owning a car)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household with very low work intensity</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>(reference: not very low work intensity)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing costs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somewhat of a burden</td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>Not a burden at all</td>
<td>+</td>
<td>Not sig</td>
</tr>
<tr>
<td>(reference: heavy burden)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household AROP</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>(reference: not AROP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income quintile</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Observations</td>
<td>110 094</td>
<td>213 719</td>
</tr>
<tr>
<td>Country FE</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>
NB: models (5a) and (5b) are tobit regressions. Transport expenditures are monthly. Fixed effects included to account for unobserved differences between countries (controlling for regional differences did not significantly change estimates). Explanatory income variables, housing expenditures and dependent variables in purchasing power parity (EUR). Households with negative shares or shares above 100% have been excluded from the calculations. Negative shares stem from negative (disposable or gross) income reported in EU-SILC. Shares above 100% stem from an income reported that is lower than the expenditures on transport. Reasons for having a negative, or too low, income reported include tax burden higher than income (e.g. if the person is unemployed, or time lag between the reference year for taxes and the current year for receiving income), self-employed individuals starting their business and registering initial losses, etc. Increasing the size of the household increases the expenditure share on public transport and decreases the share for private transport. Similarly, not owning a private car (due to affordability or other reasons) increases the expenditure on public transport and decreases expenditure on private transport, compared with those owning a private car.


Digital communications

Data on expenditure on digital communications can be analysed by several breakdowns. The chart below shows the median expenditure in 2015 (as a share of a household’s disposable income) on digital communications at EU level for various breakdowns. It shows that this share tended to be higher for low-income households (which is logical, as it is expressed as a percentage of household income), for households that were AROPE (as seen above), for households composed of one adult with children, for households living in towns/suburbs and those living in rural areas, for households with main respondent unemployed or inactive (other than retired), for households with main respondent aged 54 years or below, for households with main respondent having a lower level of education and for households with housing costs overburden. The biggest difference (in percentage points at EU level) between the categories within a given breakdown was observed for disposable income status (with a difference of 4.4 pp between the median expenditure share for households in the first income decile and the median expenditure share for households in the top income decile) and for AROP status (with a difference of 2.6 pp between AROP households and not AROP households).

Median expenditure on digital communications across households in specific breakdowns, EU, 2015 (% of disposable income)
Total of essential services

Data on combined expenditure on all essential services considered can be analysed along different breakdowns. The chart below shows the median expenditure in 2015 (as a share of a household’s disposable income) on all essential services (excluding financial services) at EU level for various breakdowns. It shows that this share tended to be higher for low-income households (which is logical, as it is expressed as a percentage of household income), for households that were AROPE (as seen above), for households composed of only one adult, for households living in towns/suburbs and those living in rural areas, for households with main respondent unemployed or inactive (other than retired), for households with main respondent aged 65 or above, for household with main respondent having a low level of education and for households with housing costs overburden. The biggest difference (in percentage points at EU level) between the categories within a given breakdown was observed for disposable income status and for AROP status (with a difference of 10 pp between AROP households and not AROP households).

Median expenditure on total of essential services across households in specific breakdowns, EU, 2015 (% of disposable income)

The chart below shows the difference (i.e. variation) between the median expenditure share for households in the last disposable income decile and the share for those in the first disposable income decile (with this difference computed for total of consumption and for total of essential services).

**Differences between median expenditure share for households in the first and last income deciles, by Member State and EU, 2015 (%)**

![Chart showing differences between median expenditure share for households in the first and last income deciles](chart.png)

**NB:** the difference for total of essential services (for instance) is computed as (median expenditure share on total of essential services for households in last income decile – median expenditure share on total of essential services for households in first income decile) / (median expenditure share on total of essential services for households in total population). Median expenditure share is the share of expenditure in a household’s disposable income. Total of essential services excludes financial services and is proxied by COCOIP: \((CP044 – CP0444) + (CP045) + (CP073 – CP0733 – CP0734) + (CP083)\). Total consumption is COCOIP CP00. EU is computed on EU-27 excluding Italy (weighted average) for total consumption and on EU-27 excluding Germany, Italy and Cyprus (weighted average) for total of essential services, owing to data availability.

**Source:** based on Eurostat data (experimental statistics on affordability of essential services based on EU-SILC and HBS, [https://ec.europa.eu/eurostat/databrowser/view/icw_aff_03/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/icw_aff_03/default/table?lang=en)).

The chart below shows this for the AROPE status breakdown, reflecting the fact that the variation (139) (i.e. gradient) in the median expenditure share – between households that are not AROPE and households that are – is higher when looking at expenditure on the total of essential services (140) than when looking at total consumption. This suggests that essential services reinforce differences in capacity to afford between AROPE statuses more than total consumption does. In more detail (for the EU, 2015), the variation is 69% for total of essential services against 38% for total consumption. The variation is higher (more negative) for total of essential services than for total consumption in all Member States except in Romania.

(139) This variation is expressed as a percentage of the median expenditure share for the total household population.

(140) In this analysis, total of essential services does not include financial services.
Difference (i.e. variation) between the median expenditure share for households at risk of poverty or social exclusion and those not at risk of poverty or social exclusion, by Member State and EU, 2015 (%)

NB: the difference for total of essential services (for instance) is computed as (median expenditure share on total of essential services for households that are not AROPE – median expenditure share on total of essential services for households that are AROPE) / (median expenditure share on total of essential services for households in total population). Median expenditure share is the share of expenditure in a household’s disposable income. Total of essential services excludes financial services and is proxied by COCOIP: \((CP044 - CP0444) + (CP045) + (CP073 - CP0733 - CP0734) + (CP083).\) Total consumption is COCOIP CP00. EU is computed on EU-27 excluding Italy (weighted average) for total consumption and on EU-27 excluding Germany, Italy and Cyprus (weighted average) for total of essential services, owing to data availability.


Correlation (at micro level for EU-27 survey respondents) between items based on EU-SILC data, EU, 2020

<table>
<thead>
<tr>
<th>Variable</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Inability to afford internet</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Inability to keep home adequately warm</td>
<td>0.196</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Inability to avoid having arrears on utility bills</td>
<td>0.170</td>
<td>0.211</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>(4) Inability to own a shower/bath for sole use</td>
<td>0.170</td>
<td>0.083</td>
<td>0.067</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Output of logit regression analysis for digital communications, energy, and water and sanitation, 2020 (regression run on microdata for all Member States)

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inability to afford internet</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Inability to adequately heat home</td>
<td>Not sig</td>
<td>+</td>
<td>+</td>
<td>Not sig</td>
</tr>
<tr>
<td>Having arrears on utility bills</td>
<td>Not sig</td>
<td>Not sig</td>
<td>Not sig</td>
<td>Not sig</td>
</tr>
<tr>
<td>Not owning shower/bath for sole use</td>
<td>Not sig</td>
<td>+</td>
<td>+</td>
<td>Not sig</td>
</tr>
</tbody>
</table>

Female responsible for accommodation (reference: male responsible)

Age

Country of birth:

EU (excl. reporting country)

Other (third countries) (reference: national of the reporting country)

Owner (reference: renter)

Household size (1)

Household with:

1 child

2 children

3 or more children (reference: w/o children)

Household with older person(s) (reference: w/o old-age)

Household with disabled person(s) (reference: w/o disabled)

Household location:

Thinly populated (reference: densely populated)

Education level (ISCED):

Medium (3–4)

High (5–8) (reference: low (1–2))

Income quintiles

Household AROP (reference: not AROP)

Household with very low work intensity (reference: not very low work intensity)

Housing costs:

Somewhat of a burden

Not a burden at all (reference: heavy burden)

Energy prices

Leaking roof etc.

Observations

Country FE

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country FE</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Observations</td>
<td>335 483</td>
<td>335 483</td>
<td>336 022</td>
</tr>
</tbody>
</table>

NB: Not sig, variable has no explanatory power, magnitude and direction cannot be interpreted; +/-, higher/lower likelihood of inability to afford the service; ++/–, particularly strong impact. Model (1) is a multinomial logit regression; models (2)–(4) are binary logit regressions. Output on not having a toilet for sole use not included as
very similar to model (4). For indicator variables, the reference group is specified below. The responsible person is the person owning or renting the accommodation (the oldest is considered in cases of shared responsibility). Low education means ISCED level 0–2, medium 3–4 and high 5–8. Income quintiles are computed at Member State level. Households are AROP if the equivalised disposable income is below the AROP threshold (i.e. 60% of the national median equivalised disposable income after social transfers). Densely populated areas have at least 1 500 inhabitants per km² and a minimum population of 50 000; intermediate areas have at least 300 inhabitants per km² and a minimum population of 5 000; thinly populated areas are areas outside urban clusters. Households have very low work intensity if working-age members worked a working time equal or less than 20% of their total work-time potential during the year. The indicator was constructed using the Eurostat definition of low work intensity, taking into account the working-age population of the household (those aged 18–64, but excluding students aged 18–24). Fixed effects included to account for unobserved differences between countries. Energy prices and income variables are included in purchasing power parity. The unit of measure for energy price is kilowatt-hour. Energy prices only capture differences between Member States, not over time. This is due to the nature of the regression analysis, which only focuses on 2020. Missing data were handled through listwise deletion (i.e. row with missing value is omitted). How to read the table: increasing household size increases the risk of not being able to afford internet access. In contrast, perceiving housing costs as somewhat of a burden or not a burden at all decreases the risk of not being able to afford internet access, relative to those perceiving housing costs as being a heavy burden.

(a) Some of the variables included may be correlated; the choice of including them relies on the extent of value added. For instance, household size is a continuous variable and captures the impacts of increasing the size on accessibility, whereas household with children is an indicator variable and compares the impact of having 1, 2, or 3 or more children with households without children.
